C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

Novozymes is the world's leading biotech powerhouse. We have a world-class biotech toolbox, from enzymes to proteins and microorganisms, one-of- a-kind scale-up ability, and a global presence in more than 130 countries. Our biological solutions can be found everywhere, from the products that clean your clothes, to the food you eat, and the ethanol that powers your car. The industries we serve have very differing needs. Novozymes' Consumer Biosolutions division unites consumer-facing industries at the front of the value chain such as Household Care, Baking, Beverages, Food and Protein, with a focus on making consumer products better, healthier, and higher performing, based on clear end-consumer needs. Our Agriculture and Industrial Biosolutions division, focused on improved performance in agriculture and industrial processes, including higher yields, less waste and better health for plants and animals. Our solutions help shrink carbon footprint in laundry, cut emissions from bread waste, capture emissions from industry, produce low climate-impact proteins, enable the development of low-carbon fuels for the transport sector.

We are delivering on our strategy "Unlocking growth – powered by biotech", and we are confident that we will achieve our long-term ambition of doubling our sales by 2030. We expect to unlock additional growth opportunities and accelerate our strategic ambition by the proposed combination of Novozymes and Chr. Hansen to create a leading global BioSolutions partner. Together, we will be able to continue the momentum of the two companies and further leverage growth synergies from cross-selling and strong innovation capabilities. We are very excited about the potential of this combination. By bringing together these two high performing, complementary companies with a shared purpose and advanced capabilities, we can unleash the full potential of BioSolutions and generate significant value for our customers, employees, shareholders, and society at large.

In 2022, we generated total revenue of DKK 17553 million, and our sales grew by 9% organically - 76% of our revenue came from products that contribute to reduction in CO2 emissions by reducing the use of fossil-based energy and chemicals.

Climate action is an integral part of Novozymes' business strategy. We have been leading the way for many years. As a manufacturing company, we have significant climate impact in our value chain. Novozymes was among the first few companies to set a validated Science-Based Target in line with the 1.5°C pathway. We are committed to Science Based Targets (SBT) and to achieving Net Zero by 2050. With the new SBT guidance in 2021, we raised our ambition to 50% reduction in absolute emissions from operations & supply chain (Scopes 1+2+3) by 2030 (previously 50% from operations and 15% from purchased goods and services (compared to a 2018 baseline)).

As a global leader, we are committed to help building a net-zero future. In 2022, we reduced the CO2 emissions from our operations by 63%, from a 2018 baseline, and we sourced 82% of our electricity from renewable sources. Additionally, we have taken bold steps to reduce carbon emissions from our entire supply chain with the aim of reaching net-zero by 2050. We are proud to be among the first companies in the world to have our net-zero target across scopes 1, 2 and 3 validated by the Science Based Targets initiative. To reach the Paris Agreement's target to limit the increase in global warming to 1.5°C, we need to act fast, and we need to act together. Novozymes is constantly working to learn more from our partner organizations and our customers. Together, we are finding new and better ways to use biotechnology solutions to accelerate towards a climate-neutral society. Examples include, helping companies reach their own climate and net-zero targets; advocating for clear emissions reduction markets and frameworks; helping countries see the potential of biotech by working with countries to show how NDCs can fulfil their potential and how biotechnology can help. We have strategic global partnerships for climate action – for example with the World Economic Forum, International Chamber of Commerce, The B-Team, and others.

Novozymes' position paper on Biodiversity and Gene Editing captures the method in which we interact with biodiversity and how we contribute towards sustainable development. We are committed to sharing our knowledge about the potential of biology and industrial biotechnology with the public and other stakeholders outside of Novozymes.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data and indicate whether you will be providing emissions data for past reporting years.

Reporting year

Start date
January 1 2022

End date
December 31 2022

Indicate if you are providing emissions data for past reporting years
No

Select the number of past reporting years you will be providing Scope 1 emissions data for
<Not Applicable>

Select the number of past reporting years you will be providing Scope 2 emissions data for
<Not Applicable>

Select the number of past reporting years you will be providing Scope 3 emissions data for
<Not Applicable>

C0.3

(C0.3) Select the countries/areas in which you operate.
Argentina
Brazil
Canada
China
Denmark
India
United States of America

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.
DKK

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.
Operational control

C0.8

(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, an ISIN code	0060336014

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?
Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual or committee	Responsibilities for climate-related issues
Board Chair	In accordance with Danish legislation, Novozymes has a two-tier management system comprising the Board of Directors ('The Board') and the Executive Leadership team ('ExLT'), with no individual being a member of both. The Board is accountable to Novozymes' shareholders and stakeholders for the way the company conducts its business. The Board's overall expertise is the sum of the individual board members' competencies because The Board operates as a collegial body. The highest position responsible on the Board is the Board Chair. The Board together with Novozymes' Executive Leadership Team (ExLT), develops the company's overall strategies and monitors their implementation. One of the main responsibilities of The Board is to oversee and control the financial, social, and environmental performance and strategy including climate-related issues, and related planning and reporting systems. Sustainability forms an integral part of Novozymes' purpose and strategic direction and is governed by The Board and the ExLT. The Board is responsible for overseeing financial and environmental, social and governance (ESG) performance as part of the ExLT's day-to-day running of the company. An example of a climate-related decision made is to approve Novozymes' climate strategy and Science-based Targets (SBT). In 2022, the Board of Directors approved Novozymes net zero roadmap, reported in the 2022 annual report (page 22). The Board of Directors also continued to discuss sustainability integration in Novozymes from a commercial and operational perspective, and it was a key topic at an off-site meeting during the year. They further agreed to include an annual sustainability deep-dive as a fixed item on the Board agenda, where different topics will be covered. Furthermore, the Board focused on ensuring that Novozymes is on the right track to reach net-zero emissions from our operations and supply chain by 2050, and the Board will continue to regularly review progress on our nonfinancial targets. The Board also considered sustainable conduct and held digital meetings to reduce the CO2 footprint of travel and enable better access for members across the world.
Board-level committee	Novozymes has a Board-level Audit Committee comprising three members, who are members of the Board of Directors ('The Board'). The Audit Committee assists the Board in overseeing aspects relating to accounting, auditing, risks, internal controls and financial, environmental, social and governance reporting. The Audit Committee also assists The Board in reviewing selected business risks and related actions as well as monitoring and reviewing the adequacy of the risk management system to include climate-related risks. This committee has oversight specifically on ESG and climate reporting, material ESG and climate issues, emerging risks (including climate-related issues) – it reviews and discusses Novozymes' integrated annual report. An example of a climate-related decision made by the Board-level Committee (Audit Committee) is to annually review Novozymes' performance on material environmental, social and governance issues, which also includes any climate-related issues. The review includes performance against our sustainability/climate targets and any significant commitments and investments needed to meet our targets. This was successfully conducted in 2022.

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Scope of board-level oversight	Please explain

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Scope of board-level oversight	Please explain
Scheduled – some meetings	Reviewing and guiding annual budgets Overseeing major capital expenditures Overseeing acquisitions, mergers, and divestitures Reviewing innovation/R&D priorities Overseeing and guiding employee incentives Reviewing and guiding strategy Overseeing and guiding the development of a transition plan Monitoring the implementation of a transition plan Overseeing the setting of corporate targets Monitoring progress towards corporate targets Overseeing and guiding public policy engagement Overseeing value chain engagement Reviewing and guiding the risk management process	<Not Applicable>	Sustainability forms an integral part of Novozymes' purpose and strategic direction and is governed by The Board and the Executive Leadership Team (ExLT). The Board is responsible for overseeing financial and environmental, social and governance (ESG) performance as part of the Executive Leadership Team's day-to-day running of the company. Specifically, the overall goals, strategies, action plans and policies on stakeholder and corporate social responsibility of the company, identification and analysis of the most important business risks associated with the realization of the company's strategy and overall goals are reviewed and discussed. The Audit committee of the Board is responsible for reviewing and guiding our risk management policies, including climate risk management. Twice a year as part of our multi-disciplinary Enterprise Risk Management (ERM) process which, also includes climate-related risks, the Audit committee reviews our key risks to business including financial impacts and mitigation plans. In 2022, the Board of Directors continued to discuss sustainability integration in Novozymes from a commercial and operational perspective, and it was a key topic at an off-site meeting during the year. They further agreed to include an annual sustainability deep-dive as a fixed item on the Board agenda, where different topics will be covered. Furthermore, the Board focused on ensuring that Novozymes is on the right track to reach net-zero emissions from our operations and supply chain by 2050, and the Board will continue to regularly review progress on our nonfinancial targets. In 2022, the Board approved Novozymes net zero roadmap, reported in the 2022 annual report (page 22). The Board also considered sustainable conduct and held digital meetings to reduce the CO2 footprint of travel and enabled better access for members across the world. The Board also reviewed and approved the remuneration structure of the Long-term Incentive Program (LTIP) for the ExLT that are linked to sustainability targets (including the climate target) and approved our integrated annual report.

C1.1d

(C1.1d) Does your organization have at least one board member with competence on climate-related issues?

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues	Primary reason for no board-level competence on climate-related issues	Explain why your organization does not have at least one board member with competence on climate-related issues and any plans to address board-level competence in the future
Row 1	Yes	Novozymes is the world leader in biological solutions. We produce enzymes and microorganisms for a diverse range of industries. We help our customers contribute to a healthier planet through the application of our solutions, we set ambitious operational targets, and we work together with others to drive the sustainability and climate agenda. Novozymes' Board of Directors ('The Board') is accountable to all Novozymes' shareholders and stakeholders for the way the company conducts its business. The Board's overall expertise is the sum of the individual board members' competencies because The Board operates as a collegial body. The assessment of The Board's composition takes place on an ongoing basis. The competency profile is reviewed and discussed at least once a year by the Board's Nomination and Remuneration Committee. Some specific criteria we use to assess The Board's competence on climate-related issues include: ● The experience base of the Board should always include: Sustainability including Climate, Stakeholder Management and Corporate Social Responsibility experience, executive R&D, innovation and pipeline management experience from biotech or related industries, executive sales, marketing and/or business operations management experience from or related to FMCG companies, among other key competencies as listed in 'The Competency Profile of the Board of Directors of Novozymes' document published at Novozymes.com. ● As described in C1.1a and C1.1b, one of the main responsibilities of The Board is to oversee and control the financial, social, and environmental performance and strategy including climate-related issues, and related planning and reporting systems. The Board together with Novozymes' Executive Leadership Team (ExLT), develops the company's overall strategies and monitors their implementation. ● The Board approved Novozymes' climate strategy and Science-based Targets (SBT). In 2022, the Board of Directors continued to discuss sustainability integration in Novozymes from a commercial and operational perspective. They focused on ensuring that Novozymes is on the right track to reach net-zero emissions from operations and supply chain by 2050 and will continue to regularly review progress on our nonfinancial targets. In 2022, the Board approved Novozymes net zero roadmap, reported in the 2022 annual report (page 22). The Board considered sustainable conduct and held digital meetings to reduce the CO2 footprint.	<Not Applicable>	<Not Applicable>

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Position or committee
Chief Executive Officer (CEO)

Climate-related responsibilities of this position
Managing annual budgets for climate mitigation activities
Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)
Managing climate-related acquisitions, mergers, and divestitures
Providing climate-related employee incentives
Developing a climate transition plan
Implementing a climate transition plan
Integrating climate-related issues into the strategy
Setting climate-related corporate targets
Monitoring progress against climate-related corporate targets
Managing public policy engagement that may impact the climate
Managing value chain engagement on climate-related issues
Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities
<Not Applicable>

Reporting line
Reports to the board directly

Frequency of reporting to the board on climate-related issues via this reporting line
Quarterly

Please explain
Climate is fully integrated in Novozymes' steering and governance, and is an integral part of Novozymes' purpose and strategic direction governed by the Board of Directors ('The Board') and the Executive Leadership Team (ExLT). The responsibility for the day-to-day management of the company and the group is vested collectively among the ExLT appointed by the Board. The whole EXLT has collective responsibility to deliver on our strategy and targets which is sufficiently guided by climate-change and related impacts, (e.g., reductions in CO2 emissions, and growth of renewable energy use), both in terms of opportunities and risks, and are responsible to manage impacts affecting the company's operations and supply chain.

Novozymes' ExLT members include our President and CEO who has overall oversight, and is instrumental in shaping and setting Novozymes' climate strategy and targets which are ultimately approved by the Board, COO and EVP Operations, Supply & Quality, CFO and other Executive Vice Presidents ('EVP') - EVP Agriculture & Industrial Biosolutions, CSO and EVP Research & Development, EVP Consumer Biosolutions, EVP Strategy & Business Transformation and the EVP People, Sustainability & Brand.

Novozymes' Corporate Sustainability Committee (CSUC) is responsible for the integration of sustainability into Novozymes' business strategies and innovation pipeline to deliver solutions that meet the needs of society and drive sales growth. It is also responsible for setting Novozymes' strategic direction, ambitious sustainability targets, and securing a strong internal foundation of responsible business practices. The CSUC consists of permanent members including our COO and EVP Operations, Supply & Quality, EVP People, Sustainability & Brand, EVP Strategy & New Business Development, Head of Global Sustainability, Head of Public Affairs. Ad-hoc participants include Novozymes' EVP Consumer Biosolutions, EVP Agriculture & Industrial Biosolutions, VP People & Organization, VP Global Communications and Regional Presidents.

Position or committee
Chief Financial Officer (CFO)

Climate-related responsibilities of this position
Managing annual budgets for climate mitigation activities
Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)
Managing climate-related acquisitions, mergers, and divestitures
Providing climate-related employee incentives
Developing a climate transition plan
Implementing a climate transition plan
Integrating climate-related issues into the strategy
Setting climate-related corporate targets
Monitoring progress against climate-related corporate targets
Managing public policy engagement that may impact the climate
Managing value chain engagement on climate-related issues
Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities
<Not Applicable>

Reporting line
CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line
Quarterly

Please explain
Climate is fully integrated in Novozymes' steering and governance, and is an integral part of Novozymes' purpose and strategic direction governed by the Board of Directors ('The Board') and the Executive Leadership Team (ExLT). The responsibility for the day-to-day management of the company and the group is vested collectively among the ExLT appointed by the Board. The whole EXLT has collective responsibility to deliver on our strategy and targets which is sufficiently guided by climate-change and related impacts, (e.g., reductions in CO2 emissions, and growth of renewable energy use), both in terms of opportunities and risks, and are responsible to manage impacts affecting the company's operations and supply chain

Novozymes' ExLT members include our President and CEO who has overall oversight, and is instrumental in shaping and setting Novozymes' climate strategy and targets which are ultimately approved by the Board, COO and EVP Operations, Supply & Quality, CFO and other Executive Vice Presidents ('EVP') - EVP Agriculture & Industrial Biosolutions, CSO and EVP Research & Development, EVP Consumer Biosolutions, EVP Strategy & Business Transformation and the EVP People, Sustainability & Brand.

Novozymes' Corporate Sustainability Committee (CSUC) is responsible for the integration of sustainability into Novozymes' business strategies and innovation pipeline to deliver solutions that meet the needs of society and drive sales growth. It is also responsible for setting Novozymes' strategic direction, ambitious sustainability targets, and securing a strong internal foundation of responsible business practices.

The CSUC consists of permanent members including our COO and EVP Operations, Supply & Quality, EVP People, Sustainability & Brand, EVP Strategy & New Business Development, Head of Global Sustainability, Head of Public Affairs. Ad-hoc participants include Novozymes' EVP Consumer Biosolutions, EVP Agriculture & Industrial Biosolutions, VP People & Organization, VP Global Communications and Regional Presidents.

Position or committee
Chief Operating Officer (COO)

Climate-related responsibilities of this position
Managing annual budgets for climate mitigation activities
Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)
Managing climate-related acquisitions, mergers, and divestitures
Providing climate-related employee incentives
Developing a climate transition plan
Implementing a climate transition plan
Integrating climate-related issues into the strategy
Setting climate-related corporate targets
Monitoring progress against climate-related corporate targets
Managing public policy engagement that may impact the climate
Managing value chain engagement on climate-related issues
Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities
<Not Applicable>

Reporting line
CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line
Quarterly

Please explain
Climate is fully integrated in Novozymes' steering and governance, and is an integral part of Novozymes' purpose and strategic direction governed by the Board of Directors ('The Board') and the Executive Leadership Team (ExLT). The responsibility for the day-to-day management of the company and the group is vested collectively among the ExLT appointed by the Board. The whole EXLT has collective responsibility to deliver on our strategy and targets which is sufficiently guided by climate-change and related impacts, (e.g., reductions in CO2 emissions, and growth of renewable energy use), both in terms of opportunities and risks, and are responsible to manage impacts affecting the company's operations and supply chain.

Novozymes' ExLT members include our President and CEO who has overall oversight, and is instrumental in shaping and setting Novozymes' climate strategy and targets which are ultimately approved by the Board, COO and EVP Operations, Supply & Quality, CFO and other Executive Vice Presidents ('EVP') - EVP Agriculture & Industrial Biosolutions, CSO and EVP Research & Development, EVP Consumer Biosolutions, EVP Strategy & Business Transformation and the EVP People, Sustainability & Brand.

Novozymes' Corporate Sustainability Committee (CSUC) is responsible for the integration of sustainability into Novozymes' business strategies and innovation pipeline to deliver solutions that meet the needs of society and drive sales growth. It is also responsible for setting Novozymes' strategic direction, ambitious sustainability targets, and securing a strong internal foundation of responsible business practices.

The CSUC consists of permanent members including our COO and EVP Operations, Supply & Quality, EVP People, Sustainability & Brand, EVP Strategy & New Business Development, Head of Global Sustainability, Head of Public Affairs. Ad-hoc participants include Novozymes' EVP Consumer Biosolutions, EVP Agriculture & Industrial Biosolutions, VP People & Organization, VP Global Communications and Regional Presidents.

In addition, Novozymes is certified according to the ISO 14001:2004 standard. The requirements of ISO 14001:2015 have been included in the NZ-Environment Management System. The COO is responsible for the management review

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Position or committee
Chief Sustainability Officer (CSO)

Climate-related responsibilities of this position
Managing annual budgets for climate mitigation activities
Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)
Managing climate-related acquisitions, mergers, and divestitures
Providing climate-related employee incentives
Developing a climate transition plan
Implementing a climate transition plan
Integrating climate-related issues into the strategy
Setting climate-related corporate targets
Monitoring progress against climate-related corporate targets
Managing public policy engagement that may impact the climate
Managing value chain engagement on climate-related issues
Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities
<Not Applicable>

Reporting line

CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line
Quarterly

Please explain
Climate is fully integrated in Novozymes' steering and governance, and is an integral part of Novozymes' purpose and strategic direction governed by the Board of Directors ('The Board') and the Executive Leadership Team (ExLT). The responsibility for the day-to-day management of the company and the group is vested collectively among the ExLT appointed by the Board. The whole EXLT has collective responsibility to deliver on our strategy and targets which is sufficiently guided by climate-change and related impacts, (e.g., reductions in CO2 emissions, and growth of renewable energy use), both in terms of opportunities and risks, and are responsible to manage impacts affecting the company's operations and supply chain

Novozymes' ExLT members include our President and CEO who has overall oversight, and is instrumental in shaping and setting Novozymes' climate strategy and targets which are ultimately approved by the Board, COO and EVP Operations, Supply & Quality, CFO and other Executive Vice Presidents ('EVP') - EVP Agriculture & Industrial Biosolutions, CSO and EVP Research & Development, EVP Consumer Biosolutions, EVP Strategy & Business Transformation and the EVP People, Sustainability & Brand (i.e. Chief Sustainability Officer).

Novozymes' Corporate Sustainability Committee (CSUC) is responsible for the integration of sustainability into Novozymes' business strategies and innovation pipeline to deliver solutions that meet the needs of society and drive sales growth. It is also responsible for setting Novozymes' strategic direction, ambitious sustainability targets, and securing a strong internal foundation of responsible business practices.

The CSUC consists of permanent members including our COO and EVP Operations, Supply & Quality, EVP People, Sustainability & Brand, EVP Strategy & New Business Development, Head of Global Sustainability, Head of Public Affairs. Ad-hoc participants include Novozymes' EVP Consumer Biosolutions, EVP Agriculture & Industrial Biosolutions, VP People & Organization, VP Global Communications and Regional Presidents.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	Novozymes' remuneration policy supports our strategy, long-term interests & sustainability. Since 2020, the Board of Directors has issued annual long-term incentive-based program (LTIP) grants with overlapping three-year performance periods, allowing them to re-assess targets for each annual grant cycle to ensure the targets are sufficiently demanding, incentivizing & aligned with the strategy. The new LTIP for the Executive Management covering the performance period 2022–2024 took effect in 2022. The LTIP consists of 50% shares and 50% share options, similar to the LTIP 2021. The targets of LTIP 2022 reflects 40% weight on organic sales growth, 20% weight on EBIT margin, 20% weight on ROIC, and 20% weight on nonfinancial targets, such as our emission reduction targets. The targets are aligned with the strategy & the measures of business success for the period 2022-2024. Nonfinancial targets are set on four parameters covering environmental and social perspectives, including climate.

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive
Corporate executive team

Type of incentive
Monetary reward

Incentive(s)
Shares

Performance indicator(s)
Board approval of climate transition plan
Progress towards a climate-related target
Achievement of a climate-related target
Reduction in absolute emissions
Increased engagement with suppliers on climate-related issues
Increased engagement with customers on climate-related issues

Incentive plan(s) this incentive is linked to
Long-Term Incentive Plan

Further details of incentive(s)
Since 2020, the Board of Directors ('The Board') has issued annual long-term incentive program (LTIP) grants with overlapping three-year performance periods. This allows the Board to re-assess targets for each annual grant cycle to ensure the targets are sufficiently demanding, incentivizing and aligned with the strategy. The new LTIP for the Executive Management covering the performance period 2022–2024 took effect in 2022. The LTIP consists of 50% shares and 50% share options. The LTIP consists of 50% shares and 50% share options, similar to the LTIP 2021. The targets of LTIP 2022 reflects 40% weight on organic sales growth, 20% weight on EBIT margin, 20% weight on ROIC, and 20% weight on nonfinancial targets.

Like the previous LTIP, the targets of the LTIP 2021 reflects 40% weight on the target on organic sales growth, 40% weight on the target on economic profit generation, and total 20% weight on nonfinancial targets. The targets are aligned with the strategy and the measures of business success for the period 2022-2024. . Nonfinancial targets are set on four parameters covering environmental and social perspectives; Climate, water & circular, workplace, and diversity. The nonfinancial component will only be unlocked if Novozymes, by the end of 2024, performs above the floor levels across all four sustainability parameters. Once the floor is reached on all four parameters, the nonfinancial component will be released as per the performance against each parameter on a pro-rata basis. The annual LTIP cannot exceed 19 months' base salary (value at conditional grant). Further, the program includes a maximum value clause allowing the Board of Directors to choose to limit the total allocation of share options and

shares if the intrinsic value exceeds twice the full annual conditional grant

For more information refer Novozymes' Remuneration Report at Novozymes.com and the Annual Report.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan
At Novozymes, Sustainability is governed at the highest level by the Board of Directors and the Executive Leadership Team, and Novozymes' performance on key environmental, social, and governance (ESG) matters is linked to executive remuneration through nonfinancial targets. The whole EXLT has collective responsibility to deliver on our strategy and targets which is sufficiently guided by climate-change and related impacts, (e.g., reductions in CO2 emissions, and growth of renewable energy use), both in terms of opportunities and risks, and are responsible to manage impacts affecting the company's operations and supply chain

Novozymes' ExLT members include our President and CEO who has overall oversight, and is instrumental in shaping and setting Novozymes' climate strategy and targets which are ultimately approved by the Board, COO and EVP Operations, Supply & Quality, CFO and other Executive Vice Presidents ('EVP') - EVP Agriculture & Industrial Biosolutions, CSO and EVP Research & Development, EVP Consumer Biosolutions, EVP Strategy & Business Transformation and the EVP People, Sustainability & Brand.

Novozymes' Corporate Sustainability Committee (CSUC) is responsible for the integration of sustainability including climate, into Novozymes' business strategies and innovation pipeline to deliver solutions that meet the needs of society and drive sales growth. It is also responsible for setting Novozymes' strategic direction, ambitious sustainability targets, and securing a strong internal foundation of responsible business practices.

Entitled to incentive
Management group

Type of incentive
Monetary reward

Incentive(s)
Shares

Performance indicator(s)
Board approval of climate transition plan
Progress towards a climate-related target
Achievement of a climate-related target

Incentive plan(s) this incentive is linked to
Long-Term Incentive Plan

Further details of incentive(s)
The remuneration of Novozymes' senior leadership (vice presidents and directors) is consistent with the general remuneration policy. Incentive programs for vice presidents and directors have been established for the 2022-2024 period. The programs follow the same mechanisms as the program for the Executive Management – including climate target component.

For more information refer Novozymes' Remuneration Report at Novozymes.com and the 2022 Annual Report

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan
At Novozymes, Sustainability is governed at the highest level by the Board of Directors and the Executive Leadership Team, and Novozymes' performance on key environmental, social, and governance (ESG) matters is linked to executive remuneration through nonfinancial targets. The whole EXLT has collective responsibility to deliver on our strategy and targets which is sufficiently guided by climate-change and related impacts, (e.g., reductions in CO2 emissions, and growth of renewable energy use), both in terms of opportunities and risks, and are responsible to manage impacts affecting the company's operations and supply chain

Novozymes' ExLT members include our President and CEO who has overall oversight, and is instrumental in shaping and setting Novozymes' climate strategy and targets which are ultimately approved by the Board, COO and EVP Operations, Supply & Quality, CFO and other Executive Vice Presidents ('EVP') - EVP Agriculture & Industrial Biosolutions, CSO and EVP Research & Development, EVP Consumer Biosolutions, EVP Strategy & Business Transformation and the EVP People, Sustainability & Brand.

Novozymes' Corporate Sustainability Committee (CSUC) is responsible for the integration of sustainability including climate, into Novozymes' business strategies and innovation pipeline to deliver solutions that meet the needs of society and drive sales growth. It is also responsible for setting Novozymes' strategic direction, ambitious sustainability targets, and securing a strong internal foundation of responsible business practices.

Entitled to incentive
All employees

Type of incentive
Monetary reward

Incentive(s)
Other, please specify (Stock options)

Performance indicator(s)
Progress towards a climate-related target
Achievement of a climate-related target

Incentive plan(s) this incentive is linked to
Long-Term Incentive Plan

Further details of incentive(s)
Novozymes has established stock-based incentive programs for the Executive Leadership Team, vice presidents, directors, and other employees. The purpose of these programs is to ensure an alignment of interests of the Management, employees and shareholders. Allocation of programs has been, and remains, dependent on profit, value-creation and, in some cases, sustainability targets (including climate target component, and other targets Water & Circular, Workplace and Employees) being achieved, and are made based on individual base salary.

For other employees, a new stock option-based incentive program was also established in 2022 covering the performance period 2022–2024.T he employee program follows the same requirements and targets as the program for the Executive Leadership Team and the program for vice presidents and directors. The Executive Leadership Team and other senior management, who are already included in an existing incentive program, are excluded from this new program.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan
The performance indicator is in line with our SBTi verified Net Zero by 2050 target.

At Novozymes, Sustainability is governed at the highest level by the Board of Directors and the Executive Leadership Team, and Novozymes' performance on key environmental, social, and governance (ESG) matters is linked to executive remuneration through nonfinancial targets. The whole EXLT has collective responsibility to deliver on our strategy and targets which is sufficiently guided by climate-change and related impacts, (e.g., reductions in CO2 emissions, and growth of renewable energy use), both in terms of opportunities and risks, and are responsible to manage impacts affecting the company's operations and supply chain.

Novozymes' ExLT members include our President and CEO who has overall oversight, and is instrumental in shaping and setting Novozymes' climate strategy and targets which are ultimately approved by the Board, COO and EVP Operations, Supply & Quality, CFO and other Executive Vice Presidents ('EVP') - EVP Agriculture & Industrial BioSolutions, CSO and EVP Research & Development, EVP Consumer BioSolutions, EVP Strategy & Business Transformation and the EVP People, Sustainability & Brand.

Novozymes' Corporate Sustainability Committee (CSUC) is responsible for the integration of sustainability including climate, into Novozymes' business strategies and innovation pipeline to deliver solutions that meet the needs of society and drive sales growth. It is also responsible for setting Novozymes' strategic direction, ambitious sustainability targets, and securing a strong internal foundation of responsible business practices.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?
Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	1	For Novozymes, short-term time horizon considers trends/themes affecting our business in the next 12 months.
Medium-term	1	3	Strategic risks, opportunities and trends considered in the medium-term horizon are those that have the potential to impact our business in the next (rolling) 1-3 years.
Long-term	3		Long-term time horizon considers strategic and fundamental risks which can influence Novozymes' business beyond 3 years, including climate change/ESG risks.

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

At Novozymes, substantive financial impact (medium term) is measured on EBIT impact above 30 MDKK – if the impact is recurrent, it is calculated as 3 years accumulated. In recognition of that, all risks can be captured by financial measurement, Novozymes supplements the medium-term risk presentation with non-financial (i.e. image) risks.

The long term risks are measured by (low/medium/high) impact on Novozymes' ability to achieve our strategic ambition (2030) and/or exposure to Novozymes' foundation (e.g., not remaining a Sustainability leader), where feasible there are underlying financial quantification.

For all medium term risks identification and assessment the process requires that consideration is given to ESG risks and risk perspectives, which includes Climate change risks. The long term risks also includes ESG perspectives and was in part designed to capture Climate change impact etc. as these often do not have substantive impact on the medium term.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered
Direct operations
Upstream
Downstream

Risk management process
Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment
More than once a year

Time horizon(s) covered
Short-term
Medium-term
Long-term

Description of process
Our solutions could be key in addressing many of the climate-related risks facing the world today. At Novozymes, climate-related risks and opportunities are integrated into and increasingly inform our long-term business strategies. In shaping our refreshed strategy Unlocking growth – powered by biotech, opportunities identified as part of our assessment of climate-related risks provided the foundation for our 2030 commitments, and we identified specific innovation opportunities to invest in, for example in carbon capture. Our solutions could be key in addressing many of the climate-related risks facing the world today.

Climate risk management is an integral part of our multi-disciplinary company-wide Enterprise Risk Management (ERM) process during which key risks to the company across the value chain stages – Direct operations, Upstream, and Downstream, are identified, managed, and reported at different levels in the organization. This process is managed by our Head of Risk Management and is anchored in Corporate Finance built by ensuring there is a high level of risk awareness, and accountability throughout the organization. We monitor most risks through half-yearly reviews. (medium term) Risks are assessed based on a two-dimensional heat map rating system that estimates the impact of a risk on financials or reputation and the likelihood of that risk materializing. The most significant risks are reviewed and assessed by the Executive Leadership Team and the Board of Directors.

Short term risks are monitored by quarterly Business review meetings and crisis response Committee, and mitigated by contingency plans.

Long term risks are reviewed once a year based on a (outside-in) trend analysis and status of strategic must-win-battles, assessed on a two-dimensional heat map; impact on Novozymes' strategic ambition/foundation by 2030 (low/medium/high) versus the influence/control of Novozymes on the risk (low/medium/high). Likelihood was not found a good parameter to select top risk as some climate events may not be fully acknowledge in such a way. The long term risk heat map is reviewed and assessed by the Executive Leadership Team and the Board of Directors.

The medium term risk process, which is the most mature and tangible, involves:

1. Risk Identification: The Risk Management & Controls department is responsible for identifying risks across the value chain stages in collaboration with the organization and for ensuring that senior management promotes risk awareness, engagement, and ownership across the organization and identify relevant risks to their business/function. Following this, a global risk inventory is developed and managed as a live list with regular review and discussion at various levels in the organization. At an asset level, Novozymes identifies ESG (incl. climate change related) risks based on a systematic risk mapping process, that include risks such as fire, earthquakes, drought, flooding, policy, and regulatory changes, etc. The Global Environmental Services team conducts periodic assessment of environmental impact at all significant production sites and third parties are engaged to conduct periodic risk assessments/reviews.

2. Assessment: Once the risks are identified at the company and asset level, all of them are mapped on a matrix with respect to the likelihood (probability of occurrence) and the potential impact (impact on earnings over three years, and / or the impact on image) to understand the financial and/or reputational risk. Substantive financial impact is measured against EBIT impact above 30 MDKK over 3 years. We also consider if there are any new initiatives, or changes in the existing environment that may alter the assessment of a previously identified risk.

3. Review and Management: After reviewing the risks across the value chain stages with VPs from different functions and geographies, top strategic and reputational risks are selected. These are then discussed and challenged within the risk management team and a heat map is prepared to understand the intensity of impact. Based on this discussion top 10 financial risks and top 5 reputational risks are identified and presented to the full Executive Management team – including the CEO, CFO, COO, Leaders of our business divisions and Leaders of Strategy, Research & Technology and People Sustainability & Brand functions. These risks are then reviewed in the Audit Committee (BoD members) and discussed by the full Board of Directors in Spring every year. The risk list is reviewed again in the Fall and discussed with the Audit committee and the BoD. A summary of the top risks is then presented in our Annual Report. In 2020, the Audit Committee, on behalf of the Board of Directors, made deep dives into selected risks and risk processes.

The long term risk process takes a starting point in the medium term risk process, supplemented with input from Novozymes' Strategy function and sometimes external sources.

Climate-related opportunities:
Novozymes has a two-pronged approach in identifying and managing opportunities which are assessed at the industry level as well as the company level - addressing climate change adaptation and mitigation is a key parameter we use to identify opportunities:
I. At industry level, each industry conducts an innovation workshop where industry representatives from departments such as Research & Development, Marketing, etc. brainstorm to identify growth drivers for the industry, e.g. demand for low carbon solutions
II. At the company level, our Scouting and Venturing team is continuously engaged in identifying new opportunities and chalking out plans to harness maximum potential.

The opportunities identified, both at the industry level and the company level, are prioritized based on the market potential, the likelihood of achieving the potential and relevance to Novozymes and important stakeholders. Climate change is one of the focus areas where we look for technology/solution development through key partnerships. These processes help to identify and develop opportunities into projects such as investments in low-carbon energy, conversion of waste into energy, optimization of transportation of goods, etc.

Company-wide risks and opportunities are also captured through the cross functional annual sustainability materiality assessment process and analysis of the global macro trends spearheaded by the Global Sustainability department. The results from these assessments and discussed and reviewed by the Corporate Sustainability Committee (CSUC) which consists of the Head of Global Sustainability and members of the executive management representing various functions.

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Regional and global regulations related to climate change impacts are included in our enterprise risk management assessments (ERM). Additionally, our environmental services department also monitors and assesses current and upcoming regulation. We also conduct yearly trend spotting exercises that identify and assess the relevant risks and opportunities around current and upcoming regulation. Risk example: Our Denmark facilities (Bagsværd, Fuglebakken, Copenhagen area) are currently covered under EU Emission Trading Scheme (ETS). These facilities were allocated 87,028 emission allowances for the period 2013-2020. For the period 2021-2025, the total preliminary CO2 allowances allocated amount to 34200 i.e. 6840 CO2 allowances each year. In 2022, the total allowance in our account is 7773 CO2 allowances. As per the scheme, Novozymes is obliged to limit emissions to our allotted allowances and return the emission allowances equivalent to CO2 emissions from our Denmark operations. There is a risk that of exceeding these allowances. In case the CO2 emissions from our Denmark operations exceed the allocated allowances, we are required to buy carbon credits from the market at an additional cost. Also, increases of prices for emission certificates/allowances can have an impact on our cost of production. Hence, a team including operations, utility procurement and sustainability professionals is tasked to continuously analyze and monitor our risk of exceeding the allowances and the potential financial impact of purchasing additional certificated. Currently the likelihood of this risk is determined to be low.
Emerging regulation	Relevant, always included	Regional and global upcoming regulations related to climate change impacts are always included in our ERM. Additionally, our environmental services department also monitors and assesses current and upcoming regulation. We also conduct yearly trendspotting exercises that identify and assess the relevant risks and opportunities around current and upcoming regulation. Risk example: Overall, Novozymes supports the ambition of the Green Deal. It's a crucial strategy to accelerate the green transition through a wide range of different regulation, Directives, Delegated Acts. However there are certain unfortunate elements of the implementation of the Green Deal into concrete regulation that may inhibit the use of biotech solutions in the future due to the lack of understanding of the impact and categorization of BioSolutions, e.g. the fact that enzymes, are categorized as harmful substances in e.g. REACH regulation. That is why, to minimize the risk from a political and regulatory side, Novozymes works directly and indirectly to increase the understanding of biotech to position BioSolutions as key enablers for green transition. The regulatory framework in EU is to a high extent build in the technologies of the past (e.g. fossil fuels and chemicals), but to reach it's ambitious target, EU must implement regulation that enable the use of sustainable solutions with a positive impact on climate and environment, such as BioSolutions
Technology	Relevant, always included	Each business division is responsible for assessing and monitoring technology risks specific to their industries. Low-carbon technologies are developing rapidly and may potentially bring transition risks to some of our businesses. Our Research and Technology (R&T) function also continuously monitors the development of both complementary and competing technologies relevant to our business. Any relevant risks are included in our ERM. Risk example: Over the years Novozymes has invested in the development of enabling technologies to produce fuel ethanol from agricultural residues(2G). The development of this technology is extremely complex and involves many value chain players to work together to advance the technology to be economically feasible. The technology has been proven in pilot and commercial scale in a few cases. But Novozymes deems a specific risk in the slower than expected technology development and commercialization of 2G fuel ethanol technologies in comparison to competing low-carbon transportation technologies like battery-powered EVs. This may potentially lead to a scenario where investments and lack of policy mandates resulting in the market not materializing resulting in a financial risk to our investments in developing this technology. Our business and technology leaders have assessed the risk from such a scenario and are continuously working on an action plan to minimize our risk. Key elements that our mitigation plan is supporting is further technological advancement by working with value chain partners and collaborating with commercial clients in policy advocacy and securing investments.
Legal	Relevant, always included	Novozymes continuously monitors legal and compliance risks, and the risks coming from litigation cases (existing ones and potential new ones) are always included in risk assessments. In addition to the standard reporting process for risks via the ERM process, our legal department is always ensuring we have an overview of necessary compliances to global and national laws we are expected to adhere to, and reputational risks too. Even though the legal landscape surrounding climate change is evolving and risks from climate-related litigation claims and lawsuits are more frequent, Novozymes has currently not identified any material climate-related legal risks. We also maintain a separate reporting process on existing, open litigation cases. Currently, we have no material open litigation cases that are climate-related.
Market	Relevant, always included	We are vigilant regarding competition and closely monitor the market to assess risks. Increased competition could come from enzyme manufacturers offering new solutions or from new players with broader technology platforms. With increased digitalization, competition could also relate to how solutions are implemented in customer production and so on. Risk example: Shifting consumer preferences to higher demand to switch to electric vehicles is an emerging market risk we identify impacting our Bioenergy business. A key part of our bioenergy business is enabling the production of fuel ethanol which is blended with gasoline to produce low-carbon liquid transportation fuels for passenger cars. Many markets today mandate ethanol blending in liquid transportation fuels to reduce their carbon intensity. But as consumers shift to electric vehicles driven by favorable incentives in many markets like US, EU and China, the demand for liquid transportation fuels will reduce. Global sales of electric cars in 2021 tripled since 2018. Subsequently the demand for fuel ethanol and our solutions to produce fuel ethanol may see a contraction and potentially result in lower revenues from this segment.
Reputation	Relevant, always included	Reputation and image related risks are an integral part of our ERM process. Novozymes enjoys a strong reputation as a sustainability leader among customers and external stakeholders. We advocate in favour of the transition to a lower-carbon economy on various global and regional platforms. Any potential damage to our brand image poses a reputational risk to our business and stakeholder relations. Risk example: Our ERM risks process identified a specific risk to our reputation from a potential scenario where investors and other stakeholders believe Novozymes is not doing everything we can towards mitigating Climate Change and related impacts, particularly the risk from increasing water stress driven by unmitigated climate change. Our management team assessed this risk and committed to address this by developing a robust and comprehensive water stewardship plan. Our global operations team together with sustainability assessed the leading frameworks to support companies to address water stress and risks. As a result, we have developed context-based water programs for our production sites and are piloting the drafted Science Based Targets methodology for water. We support our water stewardship agenda further with external engagements including the UN Global Compact, the CEO Water Mandate, the Worldwide Fund.
Acute physical	Relevant, always included	Our Global Environmental Services team conducts periodic assessment of environmental impact at all significant production sites, engaging third party reviews. Any relevant risks from these reviews such as extreme weather events, including cyclones, hurricanes, droughts, or floods are included in the ERM. Risk example: Increased water stress is a key chronic and acute risk driven by climate change. According to WRI Aqueduct Tool, we found that Novozymes' operational sites in China are exposed to general long term water stress. We conducted a comprehensive water risk assessment, and found risks associated with water compliance, water restrictions and water availability with an impact level of medium to high in our site in Tianjin, China. These risks could impact our production capacity as the production of Novozymes' solutions is a water-intensive process and generates a considerable amount of wastewater. As a mitigation plan, we are taking a context-based approach to water management in our operations and are collaborating more with local communities to manage water as per the local basin conditions. WWF support us in piloting Science Based Target Methodology for water, taking into consideration the local context. We are co-leading a multi-stakeholder collaboration on a wetland and ecosystem conservation plan in Jincang Wetland in Taihu basin and Qilhai wetland in Bohai Bay, China. Our goal is to gradually convert the wetland from a landscape functional park to a thriving wetland with enhanced ecosystem services. Additionally, we are working with Green Partnership of Industrial Parks, TEDA and academic to develop water stewardship guidance for TEDA industrial park.
Chronic physical	Relevant, sometimes included	Our Global Environmental Services team conducts periodic assessment of environmental impact at all significant production sites, engaging third party reviews. This sometimes results in identification of chronic long-term physical risks. Risk example: Increased long-term water stress is a key chronic risk driven by climate change. Our operational sites in China are exposed to general long-term water stress and climate change may impact the severity of this. We conducted a comprehensive water risk assessment to determine the water risk at these sites. We identify a specific risk of future water restrictions/shortages to our site in TEDA in China and thereby impacting or production capacity. As a mitigation plan, we worked with WWF to develop context-based water management plan for China. This comprehensive plan is being implemented between now and 2030.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier
Risk 1

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

Chronic physical	Water scarcity

Primary potential financial impact
Increased indirect (operating) costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Increased long-term pressure on our water resources is a key chronic risk driven by climate change and we rely on water to maintain our production capacity. Many of our raw materials are agricultural and water intensive to produce. In 2022, our total expenditure on agricultural raw materials was ~4-6% of our 2022 revenue. To determine our water risks, we conducted a preliminary assessment based on the WRI Aqueduct 3.0 tool in 2019. This showed us water risks in China, US and Latin America. Thus, we conducted a comprehensive third-party water risk assessment for all our 15 production sites by 2022. Any disruptions in water supply (e.g.: flooding, drought or restricted water supply) will impact our production capacity & may lead to production losses or delay in production and meeting customer demand. Thus, we are developing context-based water programs for our production sites and piloting the drafted Science Based Targets methodology for water to address these risks. We support our water stewardship agenda further with external engagements including the UN Global Compact, the CEO Water Mandate, the Worldwide Fund for Nature (WWF) and the Science Based Targets Network (SBTN).

For example, our operational sites in China are exposed to general long-term water stress and climate change may impact the severity of this. We conducted a comprehensive water risk assessment, and found risks associated with water compliance, water restrictions and water availability with an impact level of medium to high in our site in TEDA, China. These risks could impact our production capacity as the production of Novozymes' solutions is a water-intensive process and generates a considerable amount of wastewater. As a mitigation plan, we are taking a context-based approach to water management in our operations and collaborating more with local communities to manage water as per the local basin conditions. WWF support us in piloting Science Based Target Methodology for water, taking into consideration the local context. We are co-leading a multi-stakeholder collaboration on a wetland and ecosystem conservation plan in Jincang Wetland in Taihu basin & Qilhai wetland in Bohai Bay, China. Additionally, we are working with Green Partnership of Industrial Parks, TEDA and academic to develop water stewardship guidance for TEDA industrial park.

Time horizon
Medium-term

Likelihood
More likely than not

Magnitude of impact
Low

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
1160000

Potential financial impact figure – maximum (currency)
1392000

Explanation of financial impact figure
The total expenditure for procuring water in China in 2022 was approximately 11.6 million DKK, which is 10% of the overall expenditure of procuring water i.e. 116 million DKK. We expect an increase of 10-12% in the cost of procuring water in China (estimated at a country/site level) due to the chronic risk of increased long-term pressure on our water resources driven by climate change. Thus, this will result in an additional expenditure of approximately DKK 1.16.-1.39 million [(10%* 11,600,000 =1,160,000) and (12%*11,600,000 =1,392,000)] at our site in China.

Cost of response to risk
15000000

Description of response and explanation of cost calculation
Our long-term ambition is to manage water in balance with local conditions at our production sites by 2030 and develop context-based water management programs for them by 2022. To support this strategy, in September 2020 we partnered with WWF to co-develop these programs. At the end of 2022 all our 15 production sites had programs with actions to help us address local water challenges. Effective water management needs a local approach that is informed by science and context and collective action from various stakeholders as actions in isolation cannot alone solve the local and global water challenges. Context based approach allows us to do this as it prioritizes actions informed by local context and knowledge, and water-related issues that are specific to that region and basin. This approach has allowed us to identify actions to address this risk.

In response to this risk, in 2022, we developed a context-based water management program for our operations in China and as a result, decided to collaborate more with local communities to manage water as per the local basin conditions. We are doing this by:
1. Partnering with WWF in piloting the Science Based Target Methodology for water by 2023 and we will take into consideration the local context.
2. Co-leading a multi-stakeholder collaboration on a wetland and ecosystem conservation plan in Jincang Wetland in Taihu basin China. Our goal is to restore the Jincanghu Wetland to provide a habitat for wildlife and provide stronger ecosystem services. A new model of multi-stakeholder participatory wetland management will be demonstrated and contribute to the wetland city accreditation in Suzhou.
3. In 2023, we will work with the Green Partnership of Industrial Parks, TEDA and academics to develop water stewardship guidance for TEDA industrial park.

The total cost of response includes our costs at a company level for:

a) implementation of contextual water management plans which includes external engagement with WWF and other local expertise (2,000,000 DKK)
b) investments in water efficiency projects in China, particularly recycling treated wastewater for cooling by reverse osmosis (10,000,000 DKKK) and
c) investments in global and regional partnership development and collective action activities such as developing wetland restoration and industrial park collaborations (3,000,000 DKK).

Thus, the cost of response to this risk is 15,000,000 DKK (2,000,000+10,000,000+3,000,000= 15,000,000)

Comment
These climate risks are representative examples of how we identify, assess, and manage climate risks. This section is not be considered as our comprehensive climate risk report, as there may be other climate related risks not presented here as they are currently not deemed strategic risks for our business and operations.

Identifier
Risk 2

Where in the value chain does the risk driver occur?
Upstream

Risk type & Primary climate-related risk driver

Market	Increased cost of raw materials

Primary potential financial impact
Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Agriculture-based (Ag) raw materials are a major constituent of our production processes for the production of industrial enzymes by submerged fermentation. Ag raw material procurement costs formed approximately 4-6% of our revenue (our total revenue in 2022 was DKK 17,553 million) in 2022, and constitute approximately 30% of all our raw materials purchased globally.

Changes in weather patterns may induce changes in natural resources and may result in either shifts in agricultural patterns and/or impact agricultural yields. For example, corn is a key feedstock used for producing our raw materials and scientific studies have already shown the impact of changing weather patterns in the production of corn in the US. Research from Stanford university estimates that climate change models indicate that corn yields could decline as much as 15% over the next 50 years. Climate change may potentially lead to an increased frequency and severity of extreme weather events like flooding or drought in the US mid-west for example, which is a major production region for corn.

These changes may result in agricultural losses and further result in price fluctuations and impacts our cost of production. This needs to be included when formulating a procurement strategy as it can increase our procurement cost but also create price optimization opportunities as other crops can possibly gain from these weather effects. Supply chain disruptions owing to externalities like COVID-19 could also lead to shortage and lower production capacity in the worst-case scenario thereby affecting the financial impact.

Time horizon
Long-term

Likelihood
About as likely as not

Magnitude of impact
Low

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
7000000

Potential financial impact figure – maximum (currency)
105000000

Explanation of financial impact figure
Our total expenditure on agricultural raw materials in 2022 was approximately 4-6% of our revenue (our total revenue in 2022 was DKK 17553 million).

An internal analysis on the impact of supply disruptions to our agricultural raw materials is estimated to be in the range 1-10%. This estimate has been derived based on historical raw material trends with various scenarios on price development, primarily driven by supply shortages owing to extreme weather events. Such an analysis shows that our exposure to increased prices based on our raw material portfolio can be estimated to be between 1-10%. And this corresponds to an additional cost of DKK 7-105 million in raw material prices in this scenario.

Cost of response to risk
1780000

Description of response and explanation of cost calculation
Our approach to responsible sourcing is defined by our Responsible Purchasing Standards (RPS) and managed through our Supplier Performance Management (SPM) process and the Supplier Ethical Data Exchange (SEDEX) platform.

To enable us to respond to this risk (increase in agriculture raw material prices as a result of supply disruptions including climate change) we have invested in the following:
a. A dedicated budget of approximately DKK 780,000 in platforms such as Mintec, ICIS etc. Our investment in these platforms assists our sourcing team to identify key price drivers including climate change impacts and price developments in the market to potentially assess and manage the impact from rising procurement costs.
- These platforms provide up-to-date market intelligence for key agricultural commodities (ex: Corn, Wheat) among others, and this helps to increase price visibility thereby assisting in making better and informed decisions on pricing. We have invested in these platforms since 2021 and our membership is renewed annually and this allows us to identify and mitigate potential rising raw material costs .

And,

b. DKK 1,000,000 in developing our Supplier Performance Management system and the Supplier Ethical Data Exchange (SEDEX) platform
- We use the SEDEX platform to drive our supplier engagement and assess supplier performance management as part of our Responsible Sourcing program (RPS). As part of their compliance to the RPS we require our suppliers to monitor and assess environmental issues including climate change related risks in their processes, products and activities and be able to respond quickly and effectively to potential risks. This is done annually.
- Our investment in the SEDEX platform to engage and assess our suppliers will improve our ability to identify and manage any potential climate-related/sustainability risks including increased cost of agricultural-based raw materials risks in our supply chain, in addition to the SPM and RPS.

Thus, estimated cost of response to this risk DKK 1,780,000.

Comment
These climate risks are representative examples of how we identify, assess, and manage climate risks. This section is not to be considered as our comprehensive climate risk report, as there may be other climate related risks not presented here as they are currently not deemed strategic risks for our business and operations.

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?
Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier
Opp1

Where in the value chain does the opportunity occur?
Downstream

Opportunity type
Products and services

Primary climate-related opportunity driver
Development of new products or services through R&D and innovation

Primary potential financial impact
Increased revenues resulting from increased demand for products and services

Company-specific description
To limit global warming to 1.5°C and to reach net-zero, the world needs to capture carbon from the generating source directly. In the high emitting sectors like cement and energy, current technologies and capacity need to be expanded significantly to reduce industrial emissions, even after renewable energy is widely adopted. The Center for Climate and Energy Solutions states that carbon capture and storage technologies can cover 14% of the reductions in GHG emissions needed by 2050 for the sector to achieve net zero emissions by 2070. Enzymes can help make carbon capture less energy intensive, more environmentally friendly and potentially also more economically viable. Thus, this directly presents a significant opportunity for Novozymes.

Traditional carbon capture processes relies on solvents in the form of hazardous chemicals (amines) and highly capital-intensive assets, creating products that can harm people and the environment. Enzymatic carbon capture, on the other hand, uses carbonates and biological enzymes (carbonic anhydrase) to extract CO2 and does so at lower temperatures. This way, enzymes can enable a more reliable carbon capture process that requires less energy and produces no toxic waste, aerosols, or contaminants.

In September 2021, Novozymes launched its 2025 strategy, Unlocking growth – powered by biotech, defining carbon capture as a growth opportunity area and part of our ambition to Explore tomorrow's biosolutions. In 2022, we matured our collaboration with Saipem in enzymatic carbon capture, which is cleaner and more cost-effective method of carbon capture compared to traditional processes. Saipem's demo plant in Canada has proven the capabilities of the technology and potential of enzyme-based carbon capture. The collaboration focuses on developing and commercializing solutions for enzymatic carbon capture, a biological and cost-effective alternative to traditional carbon capture. The ambition is to bring advanced enzyme-based carbon capture processes to the market.

Time horizon
Long-term

Likelihood
More likely than not

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
If successful, a part of the total addressable market is likely to be captured, and also at a very low capturing of the total market potential this is an attractive opportunity for

Novozymes.

Carbon capture market is an early-stage market today and we are in the early stages of commercial deployment of our carbon capture technology. We foresee an increased demand for carbon capture solutions driven by favorable legislations that are expected to be implemented by governments over the next decade, but various barriers still need to be overcome for this market to materialize like CO2 infrastructure for transport and storage, and legal framework for storage and use. When this happens, we estimate that 600 – 1000 megatons of CO2 will be captured annually. We estimate the existing solvents on the market to cost 30 DKK/ton of CO2 captured. Assuming this remains stable, the total addressable market would then be in the range of 18 – 30 billion DKK. Imagining a minor market capture of a low single digit percentage of the total market value would still make this an attractive opportunity for sustainable, enzymatic capturing. However, the market may not materialize as fast as currently anticipated, hence there is significant uncertainty in the numbers.

Cost to realize opportunity
150000000

Strategy to realize opportunity and explanation of cost calculation
The factors we consider to estimate the cost to realize this opportunity include: As part of Novozymes strategy, in 2019, we announced our decision to invest an additional DKK 150 million between 2020-2023 to drive innovations in new strategic opportunity areas, where climate-change is one of the factors determining our new strategic opportunity areas.

In addition, in 2021, we announced that Novozymes will turn proportionally more of the company's overall investments and focus to high growth areas while investing to secure solid performance in core businesses. The strategy also allows for a more structured venture approach to Explore future growth bets such as carbon capture.

In order to realize the specific Carbon Capture opportunity, we have set up a collaboration with Saipem where we are jointly developing and commercializing enzymatic carbon capture. In this collaboration, Novozymes' role is to produce and supply enzymes, whereas Saipem designs and constructs the carbon capture plants. In 2022, we matured our collaboration with Saipem in enzymatic carbon capture, which is cleaner and more cost-effective method of carbon capture compared to traditional processes. Saipem's demo plant in Canada has proven the capabilities of the technology and potential of enzyme-based carbon capture

The enzymatic carbon capture process has been rated at Technology Readiness Level 8 by Global CCS Institute, which means that the technology is ready broad market commercialization. Saipem has a demo plant in Canada which is up and running, we are actively promoting the technology and are engaging in conversations with multiple potential customers. The sales process in this industry is long, and even after landing a contract, we can first expect to see sales coming in after the construction of the carbon capture plant is completed, which will take minimum 3 years.

Comment
These climate-related opportunities are representative examples of how we identify, assess, and pursue opportunities in our business while addressing climate change. Any numbers indicating the potential financial impacts and costs to realize the opportunities are only current internal estimates and can be expected to change driven by several internal and external factors.

Novozymes fully recognizes the potential to grow our business while innovating transformative solutions for the climate. We have therefore decided to invest in strategic opportunity areas, including biological alternatives to synthetic fertilizers, carbon capture and advanced protein solutions.

Together we're finding new and better ways to use biotechnology solutions to accelerate towards a climate-neutral society. For more information refer this page at our website https://biosolutions.novozymes.com/accelerate

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Identifier
Opp2

Where in the value chain does the opportunity occur?
Downstream

Opportunity type
Products and services

Primary climate-related opportunity driver
Development of new products or services through R&D and innovation

Primary potential financial impact
Increased revenues resulting from increased demand for products and services

Company-specific description
In our ambition to accelerate to climate-neutral society, Novozymes is helping companies reach their own climate and net-zero targets. The Science Based Targets Initiative estimates 2100+ companies have committed to net-zero and 2800+ companies have set science-based targets. This development along with increasing new ESG related disclosure requirements and regulations, and higher carbon prices in key markets, brings in a specific opportunity for Novozymes.

Approximately 13 of our 20 largest customers by revenue have already set science-based targets and are seeking to engage with us as a supplier in contributing to their net-zero or Scope-3 emission reduction targets. Since our inception, Novozymes has been investing in developing biological solutions that enable a lower carbon footprint in the life cycle of our customer applications. As an example, one of our solutions for textile production saves 350 kg of CO2 per ton of fabric produced. In 2022, Novozymes solutions to the Bioenergy industry helped avoid an estimated 65 million tons of CO2 emissions. We have also been pioneers in studying and documenting the carbon footprint reductions through externally reviewed ISO standard Life Cycle Assessments. This further strengthens our position to deliver credible carbon footprints and reductions to our customers. Hence, we see the adoption of science-based targets potentially increasing the demand and adoption of our low-carbon solutions by our customers. We have observed that, in the last 2 years the number of our customers setting science-based targets and seeking partners in their supply chain to develop low-carbon products has increased. Novozymes proactively engages with such customers to determine how we can innovate for our customers to reach their science-based targets. In 2022, we have had 5+ engagements with some of our biggest customers on this agenda. These engagements today are centered around 3 themes – improving data quality, asking suppliers to commit to climate action and enabling customers to reduce their own emissions.

Time horizon
Medium-term

Likelihood
Likely

Magnitude of impact
Low

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
175000000

Potential financial impact figure – maximum (currency)
525000000

Explanation of financial impact figure
Our total revenue in 2022 was approx. DKK 17.5 billion. A conservative estimate of an increase of 1-3% of low-carbon solutions we estimate an opportunity of approximately DKK 175-525 million in additional revenue by 2030. Some specific segments where we expect to see an increased demand for our low-carbon products are in agriculture/bioenergy/house-hold care. We are considering a conservative estimate here because the setting and implementation of science-based targets more broadly in our customer base will take time. While many of solutions can enable our customers to achieve their climate targets, in some cases we will need to invest in new innovation together with our customers which may require operational and logistical investments.

Cost to realize opportunity
2000000000

Strategy to realize opportunity and explanation of cost calculation
Our strategy to realize this opportunity is to continue developing new low-carbon biological solutions for our customers. To do so, Novozymes spends approximately DKK 2 billion in annual R&D expenses to develop innovations across all our business segments. This is the primary contributor to our cost in realizing this opportunity.

For many years, Novozymes has believed and observed an increasing demand for low-carbon products. Since the SDGs were instituted in 2015, we have also established an SDG assessment framework to assess the potential impacts (including climate change mitigation) of our pipeline New Products Development (NPD) projects. Projects with high impact potential in addition to market potential will be prioritized. In this situation, Novozymes has continuously invested in the development of low-carbon products.

As a result of this, we have developed several biological solutions to help our customers reduce carbon footprints in the life cycle of their applications. We have been developing enzymes for bioenergy for three decades now because we recognized the opportunity to reduce carbon emissions in transportation fuels. But, in response to the opportunity to drive down carbon intensity of fuels further we began developing yeast solutions in 2018 for conventional biofuels. In 2022 we launched our newest Frontia® Prime solution was brought to market to enable corn starch and sweetener manufacturers increase yields, save energy and cut CO2 emissions.process. Together, enzymes/our solutions today can help reduce the CO2 footprint of conventional gasoline by 1100 kg CO2 per 1000 L of ethanol.

Additionally, Novozymes will invest in reducing by 2030 our Scope 1+2 emissions by 75% and scope 3 emissions by 35%, and source 100% Renewable Electricity by 2025. This should further reduce the already low carbon footprint of our solutions compared to current industry alternatives, making it even more attractive for customers with science-based targets to choose our solutions. Lastly, we will actively engage with our customers with science-based targets to collaborate and partner to develop new transformative solutions with a potential to significantly reduce carbon footprints in specific applications.

Comment
These climate-related opportunities are representative examples of how we identify, assess, and pursue opportunities in our business while addressing climate change. Any numbers indicating the potential financial impacts and costs to realize the opportunities are only current internal estimates and can be expected to change driven by several internal and external factors.

Novozymes fully recognizes the potential to grow our business while innovating transformative solutions for the climate. We have therefore decided to invest in strategic opportunity areas, including biological alternatives to synthetic fertilizers, carbon capture and advanced protein solutions.

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C3. Business Strategy

C3.1

(C3.1) Does your organization's strategy include a climate transition plan that aligns with a 1.5°C world?

Row 1

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

Publicly available climate transition plan
Yes

Mechanism by which feedback is collected from shareholders on your climate transition plan
We have a different feedback mechanism in place

Description of feedback mechanism
We receive feedback on our climate strategy via different mechanisms, including inventor meetings, and investor questionnaires.

Frequency of feedback collection
Annually

Attach any relevant documents which detail your climate transition plan (optional)
Please refer to pages 19, 27-29 and 138- 141 of Novozymes' 2022 annual report attached.
PDF_PDF_The_Novozymes_Report_2022.pdf

Explain why your organization does not have a climate transition plan that aligns with a 1.5°C world and any plans to develop one in the future
<Not Applicable>

Explain why climate-related risks and opportunities have not influenced your strategy
<Not Applicable>

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

	Use of climate-related scenario analysis to inform strategy	Primary reason why your organization does not use climate-related scenario analysis to inform its strategy	Explain why your organization does not use climate-related scenario analysis to inform its strategy and any plans to use it in the future
Row 1	Yes, qualitative and quantitative	<Not Applicable>	<Not Applicable>

C3.2a

(C3.2a) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Physical climate scenarios: RCP 8.5	Company-wide	<Not Applicable>	At Novozymes, we use a 1.5°C scenario as our core transition scenario, aligning to our 2030 and net-zero climate targets. We also consider other climate scenarios to understand potential need to mitigate and adapt our business to the changing climate. For the physical operating environment, Novozymes has used scenario analysis to assess how water stress can impact our production sites. We have used WRI's Aqueduct tool and its "pessimistic" scenario for water stress at the basin level for 2030.This scenario is in alignment with SSP3/ RCP8.5 and it represents a fragmented world with uneven economic development, higher population growth, lower GDP growth, and lower rate of urbanization, all of which potentially affects water use and availability. As per the computations, 5 of our sites United states and China are expected to be under high to extremely high water stress by 2030. This analysis was validated during the completion of our 2022 milestone target of developing our context-based water management plans for all our production sites, and their implementation which will guide our actions in the coming years. We have identified site-specific risks, opportunities and actions aimed at improving the health of our operational basins. In the long term, we are committed to having 100% of our sites* manage water in balance with local conditions by 2030. * The target does not include sites with activities considered not to have a significant environmental impact, e.g. sales offices, R&D labs, etc.
Transition scenarios: IEA B2DS	Company-wide	<Not Applicable>	At Novozymes, we use a 1.5°C scenario as our core transition scenario, aligning to our 2030 and net-zero target. Novozymes has undertaken partially, a company-wide qualitative scenario-analysis to inform our strategic roadmap in one our key business areas – Bioenergy. In the past years, there has been momentum around the electrification of the transport sector and our stakeholders raised questions about Novozymes' investments in bioenergy. To determine the role of bioenergy solutions in different future energy scenarios (focus on transportation sector), we conducted a study to understand and validate the role of biofuels in the green transition for the energy sector. As part of this we studied the IEA 2DS and IEA B2DS scenarios. They were chosen as they have a more robust analysis of the transportation sector informed by the detailed energy technology perspectives analysis by the IEA. In our analysis we considered the time horizon to be 2060 and covered the global Bioenergy business at Novozymes. As a result, we authored and published a strategic report in 2018 with a new vision for climate change mitigation in the transport sector from a 2030 and beyond perspective. The vision presents a pathway to unite green technologies in the future energy matrix based on their complementarity. It highlights the potential role of biorefining as a flexible platform to provide low-carbon liquid fuels for transport segments that cannot easily be electrified. This report found that there is no one silver bullet to green transport sector. A mix of green technologies will be required to achieve this transition and biofuels will play a key role. Following this, Novozymes also set a specific target in 2019 - to save 60 million tons of CO2 by enabling low-carbon fuels in the transport sector in 2022. In 2022, our bioenergy solutions helped the transport sector save 65 million tons of CO2 by enabling low-carbon fuels 2022 - increased sales in bioenergy and innovative new products further increasing the yield of biofuels from feedstock are the main drivers that helped achieve this target. We also explored how we can enable China's climate transition plan and identified six pathways that can speed up China's green transition. i.e. CO2 capture and utilization, facilitate traditional industrial transformation, optimize transportation energy mix, re-use organic waste to enable circular economy, transform food system and reduce food waste, and reduce chemical use and pollution.
Transition scenarios: Bespoke transition scenario	Company-wide	1.5ºC	During our previous strategy process in 2019, Novozymes conducted a qualitative scenario analysis to determine which emission reduction pathway could inform our strategy and target setting process. We relied on the SBTi scenarios and specifically on the four illustrative pathways listed in the IPCC 1.5-degree report. SBTi scenarios are drawn primarily from the Integrated Assessment Modeling Consortium (IAMC) and the International Energy Agency (IEA). We have chosen a time horizon of 10 years, which matches our long-term strategy to address climate risks and opportunities. Case study: The results of this analysis have directly influenced our climate action roadmap. In 2021, in response to the latest climate science, we raised our ambition by committing to a 50% reduction of emissions from our operations and supply chain (scopes 1+2+3) by 2030, which is the weighted average of a 75% reduction of emissions from our operations (scopes 1+2) and a 35% reduction from our supply chain (scope 3), from a 2018 baseline. In 2022, the Science Based Targets initiative (SBTi) validated our net-zero target and re-validated our 2030 emissions reduction targets and our 2025 renewable electricity targets. Our new climate targets are aligned with the 1.5C scenario for Scopes 1+2 and WB2C for Scope 3. This approach was in line with pathway 2 (P2) which describes a scenario with a broad focus on sustainability and a general shift towards low carbon innovation but limited societal acceptance for BECCS by 2030. The current roadmap which is primarily focused on energy efficiency and switching to renewables is not dependent on offsets or CDR certificates. We do believe there will be a need for some form of carbon removal technology in the long run, but in the short-term we want to peak emissions as fast as possible. Our Scenario analysis process also supported our work in identifying global and regional trends to strengthen our business strategy e.g. in a 1.5-degree pathway scenario we see increasing climate related regulation (e.g.: EU Green Deal) in many countries that we operate in and such policy developments specifically in Agriculture and Low-carbon transportation helps us identify potential long-term opportunities in our relevant business segments. We recognize the value in using climate scenario analysis to understand the implications of climate change on our business, in guiding our overall strategy and in preparing for the future.

C3.2b

(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.

Row 1

Focal questions

Some of the key focal questions we are seeking to address using climate-related scenario analysis are:
1. What are some climate change adaptation actions we need to take in operations and across value chain (e.g.: water stress in operations)?
2. What do our customer's decarbonization pathways look like and how can we help our customers deliver CO2 savings?
3. Which new areas pose significant opportunities for Novozymes to accelerate towards a climate-neutral society? Or potential risks?
4. What are the key climate policy developments that help strengthen our business strategy?
5. What is climate-science telling us about business needs to do to accelerate towards a climate-neutral society? Which emission reduction pathways could inform our strategy and target setting process?

Results of the climate-related scenario analysis with respect to the focal questions

During our previous strategy process in 2019, we conducted a qualitative scenario analysis to determine which emission reduction pathway could inform our strategy and target setting process. We relied on the SBTi scenarios and specifically on the four illustrative pathways listed in the Intergovernmental Panel on Climate Change's (IPCC) 1.5-degree report. The results of this analysis have directly influenced our climate action roadmap. We use a 1.5°C scenario as our core transition scenario, aligning with our 2030 and net zero climate targets. We also consider other climate scenarios to understand potential need to mitigate and adapt our business to the changing climate. In 2022, the Science Based Targets initiative (SBTi) validated our net zero target and re-validated our 2030 emissions reduction targets and our 2025 renewable electricity targets. Our new climate targets are aligned with the 1.5C scenario for Scopes 1+2 and WB2C for Scope 3.

For the physical operating environment, Novozymes uses WRI's Aqueduct tool and its "pessimistic" scenario for water stress at the basin level for 2030 to establish an overview of local water challenges across our production sites. Between 2021-2022 we validated the results for each site through engaging with relevant stakeholders and conducting operational water risk assessments. In 2022, we developed context-based water management plans for all our production sites.

Novozymes' solutions can contribute significantly to decarbonization and in 2022, 76% of our revenue came from products that contribute to reduction in CO2 emissions by reducing the use of fossil-based energy and chemicals. In 2022, we launched a sustainability training for commercial functions. It includes a module on Scope 3 and supporting customers in reaching their climate targets.

Scenario analysis also supported our work in identifying global and regional trends to strengthen our business strategy e.g. we considered pathways in a well-below 2 degree scenario to achieve SDG 7 and SDG 13, and according to the IEA estimates Carbon Capture will be the fourth largest contributor to the cumulative emission savings in 2060.

Low-carbon transition is creating demand for new goods and services across all sectors and it is driven by favorable policy developments and changing consumer needs alike. Novozymes recognizes the potential to grow our business while innovating transformative solutions for the climate. We are investing an additional DKK 150 million between 2020-2023 to drive innovations in new strategic opportunity areas, where climate-change is one of the factors determining our new strategic opportunity areas, and we will turn proportionally more of the company's overall investments and focus to high growth areas while investing to secure solid performance in core businesses. The strategy also allows for a more structured venture approach to explore future growth bets such as carbon capture.

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	Novozymes develops low-carbon products. Our enzymes and microbial solutions enable a significant net saving of CO2 in most of the applications they are used in, and this has been established through life cycle assessments of representative products. However, with our recent strategy update we do see some risks and opportunities impacting the demand of our products and services. Examples include the impacts from a dynamic policy landscape for bioenergy and the opportunity for an increasing demand for low carbon solutions in agriculture. These have been reviewed by our management and led to a strategic decision to help drive the adoption of our products and services in these sectors. These include our decision to continue investing in development of low-carbon products for transport and agriculture, establish partnerships to expand market reach, and support policy development directly and through industry associations and other partners. Novozymes fully recognizes the potential to grow our business while innovating transformative solutions for the climate. We are also investing in biological alternatives to synthetic fertilizers, carbon capture and advanced protein solutions. Examples of strategic decisions to address our strategy for products and services driven by climate-related R&O in our business include: 1. To continue investing significantly in the development of products that help further reduce the carbon footprints for our customers. A specific example of a product being developed driven by climate-related opportunities is Fortiva® Hemi which allows ethanol plants to express >10% more corn oil and accesses more fiber-bound starch for ethanol conversion. This reduces the carbon intensity of ethanol-blended fuels even further. 2. To support partnerships and policy developments to drive the low-carbon transition which may potentially lead to an increased adoption of our solutions. In India, Novozymes has, through the Confederation of Indian Industry (CII), extensively engaged with government and industry stakeholders in shaping the National Policy on Biofuels. 3. Novozymes has invested DKK 2 billion in a new state-of-the-art production line for advanced protein solutions in Blair, Nebraska. This capital investment, a substantiate capital allocation decisions concluded by Novozymes will span the period 2021-2023.
Supply chain and/or value chain	Yes	As part of our strategy update process, we assessed the impacts of climate change in both our supply chain and value chain of the many different industries we provide solutions for. The increasing call for decarbonization of products and services serves as an opportunity for Novozymes in the long term through 2030. We know the CO2 footprint of producing our biological solutions is low and our products enable our customers avoid CO2 emissions in the life cycle use of their applications. This opportunity has specifically impacted our own supply chain strategy where we are looking to further reduce the carbon footprint of our products. This is driven by our SBTi verified targets to be net zero by 2050, reduce 35% of our supply chain emissions by 2030 and commit to source 100% RE by 2025. By reducing our carbon footprint we expect to see an increase in demand for our low-carbon solutions. We're finding new and better ways to use biotechnology solutions to accelerate towards a climate-neutral society. One way we are doing this is by helping our customers and partners to use biotech to reach their net-zero targets and providing insights to help shape industry standards. For example, we launched innovative solutions together with our alliance partner DSM. Our latest phytase technology, new Proact360 enables animals to get more nutrients from feed by releasing natural phosphorus, which, in turn, lowers phosphorous emissions to the environment. We work with our customers, especially our global strategic accounts, to disclose product carbon footprints and further reduce the impact of our own solutions. In 2022, we delivered a total of 235 product carbon footprints to our customers. We had specific engagements with many customers such as P&G, Nestle, Unilever, AB Inbev, Henkel and more on their supplier sustainability engagement programs. We continue to engage with key suppliers to better understand our supply chain emissions and our suppliers' climate maturity, in support of our efforts to reduce emissions from our supply chain (Scope 3). Climate change can also impact agricultural productivity and also bring a risk of price volatility and in extreme cases supply security for our agricultural raw materials. We rely on our Responsible Sourcing Standards as part of which we expect our suppliers to manage and mitigate any environmental problems in their operations.
Investment in R&D	Yes	Since our inception Novozymes has spent a significant share of our revenue in R&D. We spend approximately 11.4% of our revenue in R&D and innovation in developing products that enable CO2 reduction when used in various applications. We see consumers and policy makers become increasingly aware of climate related impacts their shifting preferences to climate friendly products. This has informed our strategic decision to continue investing significantly in R&D to develop more low-carbon products. It has also helped us identify potential future growth areas in the long term (horizon 2030). Example: Carbon capture can achieve an estimated 14% of the global greenhouse gas emissions reductions needed by 2050, according to the Center for Climate and Energy Solutions, an independent, nonpartisan, nonprofit organization working to forge practical solutions to climate change. It's also considered the only practical way to achieve deep decarbonization in the industrial sector. Novozymes enzymes aim to efficiently capture carbon.The enzymatic carbon capture process uses the biological enzyme carbonic anhydrase instead of conventional chemicals to extract CO2 from the flue gas. The traditional method creates degradation products that can harm people and the environment. Carbonic anhydrase is active in the human lung and in all living creatures every time an organism breathes. It can convert HCO3- (bicarbonate) into CO2 just as effectively as it can convert CO2 into HCO3-. One of nature's fastest-working enzymes, carbonic anhydrase reacts 1 million times per second.
Operations	Yes	As a manufacturing company, we have significant climate impact in our value chain. In 2022, the Science Based Targets initiative (SBTi) validated our Net-Zero by 2050 target and re-validated our 2030 emissions reduction targets (absolute emission reduction by 75% in Scope 1+2, and 35% in scope 3 from 2018 baseline) and our 2025 renewable electricity targets. In 2022 we achieved 63% emission reduction in scopes 1+2. Additionally, we remain committed to having 100% of our sites manage water in balance with local conditions by 2030. We are also working to pioneer a science-based approach to water stewardship. And, we are committed to ensuring that zero waste from our operations is sent to the landfills by 2030 through active site-specific waste management. In 2022, we met our milestone target to develop context-based water management programs at 100% of our sites. In 2022, In Kalundborg, Denmark, we announced a collaboration with Novo Nordisk and Kalundborg Forsyning (Utility) to invest in a new district cooling system that uses ocean water. It also has the ambition to use the excess heat collected to supply renewable heating to households in both Kalundborg and Holbæk municipalities. When a distribution solution is found, it could potentially contribute significantly to the green transition in Denmark. Increased long-term water stress is a key chronic risk driven by climate change. Increasing water stress driven by severe drought or reduced water supply can impact our ability to produce and market low-carbon products cost-effectively. For example, reduced water availability in the long term could either reduce capacity or increase water costs for our sites in China. A review of this risk by our executive management led to a strategic decision to drive water stewardship in balance with local conditions and develop context-based water management plans at all our major sites. As a result, we expect our operations will significantly minimize and mitigate any chronic long term water risks at our production sites and minimize any risk drop in production capacities driven by reduced water accessibility. We support our water stewardship agenda further with external engagements including the UN Global Compact, the CEO Water Mandate, the World Wide Fund for Nature (WWF) and the Science Based Targets Network (SBTN).

C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Direct costs Indirect costs Capital allocation Access to capital	The climate related risks and opportunities we have defined here can potentially have a significant impact on our financial planning and have been accounted for in our financial planning with respect to Revenues and Cost developments in the in our latest strategy update period. Capital allocation: As part of the strategy refresh, Novozymes identified future strategic growth opportunities to invest in. Climate-related risks and opportunities strongly influenced and informed the strategy to determine future growth investment areas. Advanced Protein Solutions was identified as one of the new strategic opportunity areas which is driven by the need to reduce consumption of carbon-intensive proteins from traditional sources. This opportunity is driven by an increased awareness in consumers on the climate impacts of traditional protein sources and the desire to shift to alternative proteins. As a result of this, Novozymes has invested DKK 2 billion in a new state-of-the-art production line for advanced protein solutions in Blair, Nebraska. This capital investment, a substantiate capital allocation decisions concluded by Novozymes will span the period 2021-2023 – it started in the second half of 2021 and with expected completion by the end of 2023. Most of the investment activities are planned for 2022 and 2023. An accumulated amount of DKK 1,661 million has been incurred since the investment was initiated (2021: DKK 170 million). This has been accounted for in our financial planning for the current strategy period and up to 2030. Direct and Indirect costs: We are committed to 100% Renewable Electricity purchase by 2025. Today in most markets, renewable electricity prices are at a premium compared to electricity from traditional sources. Hence, we expect and have planned for an increase in our direct costs. As of internal estimates from 2023, our commitment to 100% Renewable Electricity by 2025 may increase our costs by approximately DKK 6-7 million per year, relative to 2022 when we already sourced 82% RE. As of internal estimates from 2020, our commitment to 100% Renewable Electricity by 2025 may increase our costs by approximately DKK 40-60 million. This is estimated on average premiums for RE in markets relevant for our operations. This has been accounted for in our financial planning for the current strategy period and up to 2030.

C3.5

(C3.5) 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	Indicate the level at which you identify the alignment of your spending/revenue with a sustainable finance taxonomy
Row 1	Yes, we identify alignment with our climate transition plan	<Not Applicable>

C3.5a

(C3.5a) Quantify the percentage share of your spending/revenue that is aligned with your organization's climate transition.

Financial Metric
Revenue/Turnover

Type of alignment being reported for this financial metric
Alignment with our climate transition plan

Taxonomy under which information is being reported
<Not Applicable>

Objective under which alignment is being reported
<Not Applicable>

Amount of selected financial metric that is aligned in the reporting year (unit currency as selected in C0.4)
17553000000

Percentage share of selected financial metric aligned in the reporting year (%)
76

Percentage share of selected financial metric planned to align in 2025 (%)
0

Percentage share of selected financial metric planned to align in 2030 (%)
0

Describe the methodology used to identify spending/revenue that is aligned
The methodology is based on LCA according to ISO 14040/ISO14067 and revenue figure is audited by PwC.

As a world leader in BioSolutions, we use the power of biotech to help our customers grow their businesses while preserving the planet's resources and enabling better lives. Novozymes produces enzymes and microorganisms. Enzymes are biological catalysts that speed up biological processes and are harnessed to catalyze processes in manufacturing since they can break down complex substances into smaller fractions and transform them as required. Furthermore, enzymes are fully biodegradable, stable, and can speed up processes under milder conditions as compared to chemicals.

Novozymes' biological solutions in many industries (example: Household care, Baking etc.) allow our customers to produce more and sometimes better products with fewer inputs, thereby reducing their GHG emissions and other environmental impacts, but it also helps them reduce costs because of savings in energy, raw material consumption, and treatment of waste generated.

We have estimated 76% of our revenue coming from products and applications that save fossil fuels, save heat, save electricity, save raw materials, save chemicals, improve yields, reduce CH4 emissions, reduce N2O emissions and thus, contribute to net greenhouse gas emissions reduction. However, the percentage share of the selected financial metric planned to align in 2025 and 2030 is stated 0. This is because it is difficult to estimate the growth in the share of our revenue from products that contribute towards a climate-neutral society. However, as climate is an integral part of Novozymes business and operations., we expect it to be a significant part of our revenue in the coming years.

Guided by our purpose, "Together we find biological answers for better lives in a growing world - Let's rethink tomorrow", we work with our customers, consumers, governments, academia, and many others around us to enable a healthier planet. For this reason, our strategy starts with our 2030 commitments: "Accelerate towards a climate-neutral society", "Transform food systems" and "Enable healthier lives".

Novozymes aims to use and expand biological capacities to benefit people and planet – we are committed to accelerate towards a climate-neutral society. We are rethinking how to reduce CO2 emissions by enabling industries to move away from fossil-based energy and chemicals. We pave the way for the bio-based society – from solutions that enable lower CO2 emissions to carbon capture – to reach carbon neutrality by 2050.

Please refer to our published LCA studies at Novozymes.com (https://www.novozymes.com/en/about-us/sustainability/lca)

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?
Absolute target

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number
Abs 1

Is this a science-based target?
Yes, and this target has been approved by the Science Based Targets initiative

Target ambition
1.5°C aligned

Year target was set
2022

Target coverage

Company-wide

Scope(s)
Scope 1
Scope 2

Scope 2 accounting method
Market-based

Scope 3 category(ies)
<Not Applicable>

Base year
2018

Base year Scope 1 emissions covered by target (metric tons CO2e)
38000

Base year Scope 2 emissions covered by target (metric tons CO2e)
399000

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)
<Not Applicable>

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)
<Not Applicable>

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year total Scope 3 emissions covered by target (metric tons CO2e)
<Not Applicable>

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)
437000

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1
62

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2
100

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)
<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)
<Not Applicable>

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)
<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)
<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)
<Not Applicable>

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)
<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)
<Not Applicable>

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)
<Not Applicable>

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes
95

Target year
2030

Targeted reduction from base year (%)
75

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

Scope 1 emissions in reporting year covered by target (metric tons CO2e)
46000

Scope 2 emissions in reporting year covered by target (metric tons CO2e)
115000

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

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)
<Not Applicable>

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)
161000

Does this target cover any land-related emissions?
Yes, it covers land-related CO2 emissions/removals associated with bioenergy and non-land related emissions (e.g. non-FLAG SBT with bioenergy)

% of target achieved relative to base year [auto-calculated]

Target status in reporting year
Revised

Please explain target coverage and identify any exclusions
Novozymes commits to reach net-zero GHG emissions across the value chain by 2050 from a 2018 base year. Near-Term Targets: Novozymes commits to reduce absolute scope 1 and 2 GHG emissions 75% by 2030 from a 2018 base year.

In accordance with the SBTi guidance, our exclusions account for >5% of our total scope 1 and 2 emissions. These exclusions are:

1. Activities excluded: We have excluded the N2O emissions from wastewater treatment in the activated sludge process since the N2O emissions account for <5% of our total Scope 1 and 2 emissions in 2018 and 2021.

2. Operations excluded: Energy from smaller sites such as sales offices forms less than 1% of the total consumption with insignificant effect on our operations. Therefore, these have been excluded from the reporting boundary.

3. Other exclusions: We have excluded biogenic CH4 as its impact is 0.1% of our Scope 1 and 2 emissions in 2018 and 2021. Please find more information on this in section 2.3 Bioenergy questions.

Plan for achieving target, and progress made to the end of the reporting year
In 2022, the CO2 emissions from our operations (scopes 1 + 2) decreased by 26% to 161,000 tonnes from 218,000 tonnes in 2021. These reductions were mainly driven by our continued focus on energy efficiency and increased sourcing of renewable electricity. The major contributor was Novozymes' production site in Hongda, China, for which we in 2022 procured green electricity via RECs resulting in a reduction of approximately 65,000 tonnes of CO2.

In addition, we reduced our absolute emissions from our operations (scopes 1 + 2) by 63% relative to our 2018 baseline and thereby achieved our 2022 milestone target of reducing absolute CO2 emissions from our operations by 40%.

Moving forward, we will accelerate our decarbonization efforts by executing our journey to net-zero. We will invest in renewable energy, production efficiency and energy recovery opportunities. We will expand our collaboration with suppliers towards meaningful and actionable engagements to decarbonize our common value chain. We will continue taking the global stage and advocating for change, and collaborating with our customers, policymakers and partners to drive market transformation.

List the emissions reduction initiatives which contributed most to achieving this target
<Not Applicable>

Target reference number
Abs 2

Is this a science-based target?
Yes, and this target has been approved by the Science Based Targets initiative

Target ambition

1.5°C aligned

Year target was set
2019

Target coverage
Company-wide

Scope(s)
Scope 1
Scope 2

Scope 2 accounting method
Market-based

Scope 3 category(ies)
<Not Applicable>

Base year
2018

Base year Scope 1 emissions covered by target (metric tons CO2e)
38000

Base year Scope 2 emissions covered by target (metric tons CO2e)
399000

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)
<Not Applicable>

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)
<Not Applicable>

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year total Scope 3 emissions covered by target (metric tons CO2e)
<Not Applicable>

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)
437000

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1
100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2
100

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)

<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)
<Not Applicable>

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)
<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)
<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)
<Not Applicable>

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)
<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)
<Not Applicable>

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)
<Not Applicable>

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes
100

Target year
2022

Targeted reduction from base year (%)
40

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

Scope 1 emissions in reporting year covered by target (metric tons CO2e)
46000

Scope 2 emissions in reporting year covered by target (metric tons CO2e)
115000

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

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)

<Not Applicable>

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)
161000

Does this target cover any land-related emissions?
No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]

Target status in reporting year
Achieved

Please explain target coverage and identify any exclusions
Full coverage. No exclusions

Plan for achieving target, and progress made to the end of the reporting year
<Not Applicable>

List the emissions reduction initiatives which contributed most to achieving this target
In 2022, we reduced our absolute emissions from our operations (scopes 1 + 2) by 63% relative to our 2018 baseline and thereby achieved our 2022 milestone target of reducing absolute CO2 emissions from our operations by 40%. The CO2 emissions from our operations (scopes 1 + 2) decreased by 26% to 161,000 tonnes from 218,000 tonnes in 2021. These reductions were mainly driven by our continued focus on energy efficiency and increased sourcing of renewable electricity. The major contributor was Novozymes' production site in Hongda, China, for which we in 2022 procured green electricity via RECs resulting in a reduction of approximately 65,000 tonnes of CO2.

Target reference number
Abs 3

Is this a science-based target?
Yes, and this target has been approved by the Science Based Targets initiative

Target ambition
Well-below 2°C aligned

Year target was set
2022

Target coverage
Company-wide

Scope(s)
Scope 3

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
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 5: Waste generated in operations
Category 6: Business travel

Base year
2018

Base year Scope 1 emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 2 emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)
536000

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)
<Not Applicable>

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)
95000

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)
63000

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)
7000

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)
14000

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year total Scope 3 emissions covered by target (metric tons CO2e)
715000

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)
715000

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1
<Not Applicable>

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2
<Not Applicable>

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)
98

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)
<Not Applicable>

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

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

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

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

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)
<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)
<Not Applicable>

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)
<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)
<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)
<Not Applicable>

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)
<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)
<Not Applicable>

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)
93

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes
93

Target year
2030

Targeted reduction from base year (%)
35

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

Scope 1 emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 2 emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)
545000

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

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)
109000

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
67000

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)
7000

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)
6000

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)
734000

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)
734000

Does this target cover any land-related emissions?
Yes, it covers land-related CO2 emissions/removals associated with bioenergy and non-land related emissions (e.g. non-FLAG SBT with bioenergy)

% of target achieved relative to base year [auto-calculated]

Target status in reporting year
Underway

Please explain target coverage and identify any exclusions
Novozymes commits to reach net-zero GHG emissions across the value chain by 2050 from a 2018 base year. Near-Term Targets: Novozymes further commits to reduce absolute scope 3 GHG emissions from purchased goods and services, fuel and energy related activities, upstream transportation and distribution, waste generated in operations and business travel 35% by 2030 from a 2018 base year.

Plan for achieving target, and progress made to the end of the reporting year
We will accelerate our decarbonization efforts by executing our journey to net-zero which includes investing in renewable energy, production efficiency and energy recovery opportunities. We will expand our collaboration with suppliers towards meaningful and actionable engagements to decarbonize our common value chain. We will continue taking the global stage and advocating for change, and collaborating with our customers, policymakers and partners to drive market transformation.

The key reduction levers for our scope 3 target are:
• Engage with key suppliers to ensure full transparency of emissions and explore joint decarbonization opportunities
• Pursue supply chain partnerships to develop decarbonization technologies
• Explore sourcing of raw materials from regenerative agriculture
• Scale up decarbonization in logistics together with freight forwarders

List the emissions reduction initiatives which contributed most to achieving this target
<Not Applicable>

Target reference number
Abs 4

Is this a science-based target?
Yes, and this target has been approved by the Science Based Targets initiative

Target ambition
1.5°C aligned

Year target was set
2019

Target coverage
Company-wide

Scope(s)
Scope 1
Scope 2
Scope 3

Scope 2 accounting method
Market-based

Scope 3 category(ies)

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 5: Waste generated in operations
Category 6: Business travel

Base year
2018

Base year Scope 1 emissions covered by target (metric tons CO2e)
38000

Base year Scope 2 emissions covered by target (metric tons CO2e)
399000

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)
536000

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)
<Not Applicable>

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)
95000

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)
63000

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)
7000

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)
14000

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year total Scope 3 emissions covered by target (metric tons CO2e)
715000

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)
1152000

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1
62

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2
100

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)
98

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)
<Not Applicable>

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

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

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

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

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)
<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)
<Not Applicable>

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)
<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)
<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)
<Not Applicable>

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)
<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)
<Not Applicable>

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)
93

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes
94

Target year
2050

Targeted reduction from base year (%)
100

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

Scope 1 emissions in reporting year covered by target (metric tons CO2e)
46000

Scope 2 emissions in reporting year covered by target (metric tons CO2e)
115000

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)
545000

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

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)
109000

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
67000

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)
7000

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)
6000

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)
734000

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)
895000

Does this target cover any land-related emissions?
Yes, it covers land-related CO2 emissions/removals associated with bioenergy and non-land related emissions (e.g. non-FLAG SBT with bioenergy)

% of target achieved relative to base year [auto-calculated]

Target status in reporting year
Underway

Please explain target coverage and identify any exclusions
Novozymes commits to reach net-zero GHG emissions across the value chain by 2050 from a 2018 base year. Near-Term Targets: Novozymes commits to reduce absolute scope 1 and 2 GHG emissions 75% by 2030 from a 2018 base year1. Novozymes also commits to increase annual sourcing of renewable electricity from 37% in 2018 to 100% by 2025. Novozymes further commits to reduce absolute scope 3 GHG emissions from purchased goods and services, fuel and energy related activities, upstream transportation and distribution, waste generated in operations and business travel 35% by 2030 from a 2018 base year. Long-Term Targets: Novozymes commits to reduce absolute scope 1 and 2 GHG emissions 90% by 2050 from a 2018 base year1. Novozymes also commits to reduce absolute scope 3 GHG emissions from purchased goods and services, fuel and energy related activities, upstream transportation and distribution, waste generated in operations and business travel 90% within the same timeframe. The targets boundary includes biogenic emissions and removals associated with the use of bioenergy.

In accordance with the SBTi guidelines ,we have made the following exclusions:

Activities excluded: We have excluded the N2O emissions from wastewater treatment in the activated sludge process since the N2O emissions account for <5% of our total Scope 1 and 2 emissions in 2018 and 2021.

Operations excluded: Energy from smaller sites such as sales offices forms less than 1% of the total consumption with insignificant effect on our operations. Therefore, these have been excluded from the reporting boundary.

Other exclusions: We have excluded biogenic CH4 as its impact is 0.1% of our Scope 1 and 2 emissions in 2018 and 2021. Please find more information on this in section 2.3 Bioenergy questions.

Plan for achieving target, and progress made to the end of the reporting year
In 2022, the CO2 emissions from our operations (scopes 1 + 2) decreased by 26% to 161,000 tonnes from 218,000 tonnes in 2021. These reductions were mainly driven by our continued focus on energy efficiency and increased sourcing of renewable electricity. The major contributor was Novozymes' production site in Hongda, China, for which we in 2022 procured green electricity via RECs resulting in a reduction of approximately 65,000 tonnes of CO2.

In addition, we reduced our absolute emissions from our operations (scopes 1 + 2) by 63% relative to our 2018 baseline and thereby achieved our 2022 milestone target of reducing absolute CO2 emissions from our operations by 40%.

Moving forward, we will accelerate our decarbonization efforts by executing our journey to net-zero. We will invest in renewable energy, production efficiency and energy recovery opportunities. We will expand our collaboration with suppliers towards meaningful and actionable engagements to decarbonize our common value chain. We will continue taking the global stage and advocating for change, and collaborating with our customers, policymakers and partners to drive market transformation.

The key reduction levers for our net zero target are:
• Engage with key suppliers to ensure full transparency of emissions and explore joint decarbonization opportunities
• Pursue supply chain partnerships to develop decarbonization technologies
• Explore sourcing of raw materials from regenerative agriculture
• Scale up decarbonization in logistics together with freight forwarders
• Shift to renewables electricity across sites
• Produce more with less by continuing to make operations more efficient

• Recover energy to use in operations or by local communities
• Shift to greener heat, steam, and other energy sources
• Pilot emerging technologies to further decarbonize operations e.g. climate smart cooling

We are committed to high standards and ambitious actions to improve our footprint on the climate across scopes 1, 2 and 3. We will balance the remaining up to 10% emissions through trusted third-party verified offsets that benefit people and societies.

List the emissions reduction initiatives which contributed most to achieving this target
<Not Applicable>

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?
Target(s) to increase low-carbon energy consumption or production
Net-zero target(s)
Other climate-related target(s)

C4.2a

(C4.2a) Provide details of your target(s) to increase low-carbon energy consumption or production.

Target reference number
Low 1

Year target was set
2019

Target coverage
Company-wide

Target type: energy carrier
Electricity

Target type: activity
Consumption

Target type: energy source
Renewable energy source(s) only

Base year
2018

Consumption or production of selected energy carrier in base year (MWh)
295000

% share of low-carbon or renewable energy in base year
37

Target year
2025

% share of low-carbon or renewable energy in target year
100

% share of low-carbon or renewable energy in reporting year
82

% of target achieved relative to base year [auto-calculated]

Target status in reporting year
Revised

Is this target part of an emissions target?
Abs 1, Abs 2

Is this target part of an overarching initiative?
RE100
Science Based Targets initiative

Please explain target coverage and identify any exclusions
In 2019 we joined the RE100 initiative and set a company-wide target to achieve 100% renewable electricity consumption by 2030, from a base year of 2018 at 37%. This target was revised in 2022 and the Science Based Targets initiative (SBTi) re-validated our 2025 renewable electricity targets.

This target is a key lever to reach our absolute emissions reduction for Scope 1+2 (abs1)

Plan for achieving target, and progress made to the end of the reporting year
We have developed a renewable electricity strategy with elevated focus on accelerating decarbonization of fossil-fuel-intensive grids. Through this, we are taking a further holistic approach towards the end-to-end sourcing process, ensuring high quality and impactful projects for our local communities and maturing projects for several sites across Novozymes global footprint.

In 2022, we sourced 82% of electricity from renewable sources and the major contributor was Novozymes' production site in Hongda, China, for which we in 2022 procured green electricity via RECs resulting in a reduction of approximately 65,000 tonnes of CO2.

List the actions which contributed most to achieving this target
<Not Applicable>

C4.2b

(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.

Target reference number
Oth 1

Year target was set
2019

Target coverage
Business division

Target type: absolute or intensity
Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Renewable fuel production	Other, please specify (Tons of CO2 emissions avoided by enabling low-carbon fuels in the transport sector)

Target denominator (intensity targets only)
<Not Applicable>

Base year
2018

Figure or percentage in base year
53000000

Target year
2022

Figure or percentage in target year
60000000

Figure or percentage in reporting year
65000000

% of target achieved relative to base year [auto-calculated]

Target status in reporting year
Achieved

Is this target part of an emissions target?
No. Novozymes has committed to help the world limit the increase in global warming to 1.5°C by saving 60 million tonnes of CO2 by enabling low-carbon fuels in the transport sector in 2022.

Is this target part of an overarching initiative?
No, it's not part of an overarching initiative

Please explain target coverage and identify any exclusions
Novozymes had committed to help the world limit the increase in global warming to 1.5°C by saving 60 million tonnes of CO2 by enabling low-carbon fuels in the transport sector in 2022. There are no exclusions.

Plan for achieving target, and progress made to the end of the reporting year
<Not Applicable>

List the actions which contributed most to achieving this target
Our World targets were set in 2019 towards 2022. They have guided our efforts to strengthen the positive impact of our biosolutions on the world by helping our customers reduce CO2 emissions, enabling better production processes, and working
to ensure clean water by replacing chemicals in laundry detergents.

In 2022, our bioenergy solutions helped the transport sector potentially save 65 million tonnes of CO2 emissions in 2022 by enabling the production of low-carbon fuels.

Going forward, we will continue to expand the reach of our biosolutions to have a positive impact on the world. This is anchored in our strategy, which starts with our 2030 long-term commitments to a healthy planet: "Accelerate towards a climate-neutral society", "Transform food systems" and "Enable healthier lives". We will also continue to disclose the revenue share of our commitments in our annual reporting.

C4.2c

(C4.2c) Provide details of your net-zero target(s).

Target reference number
NZ1

Target coverage
Company-wide

Absolute/intensity emission target(s) linked to this net-zero target
Abs1
Abs3
Abs4

Target year for achieving net zero
2050

Is this a science-based target?
Yes, and this target has been approved by the Science Based Targets initiative

Please explain target coverage and identify any exclusions
In line with Science-Based Targets, Novozymes aims to abate at least 90% of its 2018 baseline emissions. At the time that net zero is reached, emissions that are not feasible to abate will be neutralized with equivalent measure of CO2 removals.

Novozymes commits to reach net-zero GHG emissions across the value chain by 2050 from a 2018 base year. Near-Term Targets: Novozymes commits to reduce absolute scope 1 and 2 GHG emissions 75% by 2030 from a 2018 base year1. Novozymes also commits to increase annual sourcing of renewable electricity from 37% in 2018 to 100% by 2025. Novozymes further commits to reduce absolute scope 3 GHG emissions from purchased goods and services, fuel and energy related activities, upstream transportation and distribution, waste generated in operations and business travel 35% by 2030 from a 2018 base year. Long-Term Targets: Novozymes commits to reduce absolute scope 1 and 2 GHG emissions 90% by 2050 from a 2018 base year1. Novozymes also commits to reduce absolute scope 3 GHG emissions from purchased goods and services, fuel and energy related activities, upstream transportation and distribution, waste generated in operations and business travel 90% within the same timeframe. 1 The targets boundary includes biogenic emissions and removals associated with the use of bioenergy.

Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year?
Yes

Planned milestones and/or near-term investments for neutralization at target year
In 2022, SBTi verified our Net Zero target. In 2022, the CO2 emissions from our operations (scopes 1 + 2) decreased by 26% to 161,000 tonnes from 218,000 tonnes in 2021. These reductions were mainly driven by our continued focus on energy efficiency and increased sourcing of renewable electricity. The major contributor was Novozymes' production site in Hongda, China, for which we in 2022 procured green electricity via RECs resulting in a reduction of approximately 65,000 tonnes of CO2.

In addition, we reduced our absolute emissions from our operations (scopes 1 + 2) by 63% relative to our 2018 baseline and thereby achieved our 2022 milestone target of reducing absolute CO2 emissions from our operations by 40%.

Moving forward, we will accelerate our decarbonization efforts by executing our journey to net-zero. We will invest in renewable energy, production efficiency and energy recovery opportunities. We will expand our collaboration with suppliers towards meaningful and actionable engagements to decarbonize our common value chain. We will continue taking the global stage and advocating for change, and collaborating with our customers, policymakers and partners to drive market transformation.

The key reduction levers for our net zero target are:
• Engage with key suppliers to ensure full transparency of emissions and explore joint decarbonization opportunities
• Pursue supply chain partnerships to develop decarbonization technologies
• Explore sourcing of raw materials from regenerative agriculture
• Scale up decarbonization in logistics together with freight forwarders
• Shift to renewables electricity across sites
• Produce more with less by continuing to make operations more efficient
• Recover energy to use in operations or by local communities
• Shift to greener heat, steam, and other energy sources
• Pilot emerging technologies to further decarbonize operations e.g. climate smart cooling

We are committed to high standards and ambitious actions to improve our footprint on the climate across scopes 1, 2 and 3. We will balance the remaining up to 10% emissions through trusted third-party verified offsets that benefit people and societies.

Planned actions to mitigate emissions beyond your value chain (optional)
Refer this page on our website for more information:

https://biosolutions.novozymes.com/accelerate

C4.3

(C4.3) 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.
Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	6	915.38
To be implemented*	4	3294.6
Implementation commenced*	0	0
Implemented*	7	3899.87
Not to be implemented	3	784.5

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Energy efficiency in buildings	Lighting

Estimated annual CO2e savings (metric tonnes CO2e)
11.76

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 2 (market-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
68000000

Investment required (unit currency – as specified in C0.4)
8000000

Payback period
<1 year

Estimated lifetime of the initiative
16-20 years

Comment
Replaced T8 fixtures in production & office areas with LED.

Initiative category & Initiative type

Energy efficiency in production processes	Smart control system

Estimated annual CO2e savings (metric tonnes CO2e)
951.19

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 2 (market-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
1094000

Investment required (unit currency – as specified in C0.4)
100000

Payback period
1-3 years

Estimated lifetime of the initiative
16-20 years

Comment
Install capacitive filters that help to improve electricity quality, removing interferences. Reduce electricity consumption.

Initiative category & Initiative type

Energy efficiency in production processes	Machine/equipment replacement

Estimated annual CO2e savings (metric tonnes CO2e)
525.98

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
1656000

Investment required (unit currency – as specified in C0.4)
2400000

Payback period
1-3 years

Estimated lifetime of the initiative
16-20 years

Comment
Optimization of centrifugal pump of cooling tower(TEDA)

Initiative category & Initiative type

Energy efficiency in production processes	Machine/equipment replacement

Estimated annual CO2e savings (metric tonnes CO2e)
805.56

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 2 (market-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
873000

Investment required (unit currency – as specified in C0.4)
2600000

Payback period
1-3 years

Estimated lifetime of the initiative
16-20 years

Comment
Optimization of 4°C chiller and system(TEDA)

Initiative category & Initiative type

Energy efficiency in production processes	Waste heat recovery

Estimated annual CO2e savings (metric tonnes CO2e)
1186.46

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 2 (market-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
891000

Investment required (unit currency – as specified in C0.4)
200000

Payback period
1-3 years

Estimated lifetime of the initiative
16-20 years

Comment
Heat recovery from IA compressor

Initiative category & Initiative type

Energy efficiency in production processes	Waste heat recovery

Estimated annual CO2e savings (metric tonnes CO2e)
0

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 2 (market-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
870000

Investment required (unit currency – as specified in C0.4)
2400000

Payback period
1-3 years

Estimated lifetime of the initiative
16-20 years

Comment
Instead of 'flaring' the biogas we use it for heat production in a boiler. There were no Co2 savings, but we generated 7200 GJ of steam.

Initiative category & Initiative type

Energy efficiency in production processes	Motors and drives

Estimated annual CO2e savings (metric tonnes CO2e)
247.9

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 2 (market-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
0

Investment required (unit currency – as specified in C0.4)
1200000

Payback period
4-10 years

Estimated lifetime of the initiative
16-20 years

Comment
Replace low efficiency motor for 60M3 main fermenter

Initiative category & Initiative type

Energy efficiency in production processes	Waste heat recovery

Estimated annual CO2e savings (metric tonnes CO2e)
0

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 2 (market-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
155000

Investment required (unit currency – as specified in C0.4)
800000

Payback period
4-10 years

Estimated lifetime of the initiative
16-20 years

Comment
Recovered flash steam energy to district heat system. No CO2 savings, however we saved 372 MWH in District Heat

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Initiative category & Initiative type

Energy efficiency in production processes	Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)
171.02

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 2 (market-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
15383333

Investment required (unit currency – as specified in C0.4)
500000

Payback period
<1 year

Estimated lifetime of the initiative
16-20 years

Comment
Added recirc line and automation to chiller. The start/stop will save energy by providing better temp control on tanks.

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Dedicated budget for energy efficiency	We have a dedicated budget for efficiency projects including energy and water efficiency and waste to energy projects. This ensures that energy projects are prioritized over other capex projects even though the business case may not be that strong.
Dedicated budget for other emissions reduction activities	As part of our climate strategy, we are focusing on reaching 100% renewable electricity by 2030, implementing energy efficiency projects and investing in waste to energy projects. All of these are emission reduction activities and have dedicated budget.
Employee engagement	Regional water and energy coordinators are managing the energy consumption and execution and development of energy efficiency portfolios together with site utility responsible employees. Our global Sustainability Manager in Supply Operations coordinates these efforts. Further, employees are recognized for presenting energy/CO2 reduction ideas at some of our sites.
Internal incentives/recognition programs	The energy efficiency and renewable electricity targets are anchored with top management and meeting the targets are high priority. Employees are recognized for presenting energy/CO2 reduction ideas at some of our sites. They are rewarded for ensuring good performance on various Sustainability activities at the site - this is region-specific. For example, in our APAC operations, employees are rewarded for ensuring good performance on water/ energy saving percentage, waste recycle rate.
Lower return on investment (ROI) specification	In general, projects with a Return on Investment (ROI) period of less than 3 years, i.e. shorter payback time, have a high probability of being implemented. Over the years our window for acceptable ROI for energy/CO2 reduction projects has been widened and now projects up to 5 years and beyond ROI are also considered. This is to support our more aggressive CO2 goals.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?
Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products.

Level of aggregation
Group of products or services

Taxonomy used to classify product(s) or service(s) as low-carbon
Other, please specify (The assessment of avoided emissions resulting from the use of Novozymes' products is in accordance with the Greenhouse Gas protocol "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" (Section 9.5: "Accounting for avoided emissions").)

Type of product(s) or service(s)

Other	Other, please specify (Enzymes and microorganisms)

Description of product(s) or service(s)
Our products are enzymes and microorganisms. Enzymes are biological catalysts that speed up biological processes and are harnessed to catalyze processes in manufacturing since they can break down complex substances into smaller fractions and transform them as required. Furthermore, enzymes are fully biodegradable, stable, and can speed up processes under milder conditions as compared to chemicals. They provide an intelligent, efficient system by detecting the organics present in the application and only catalyzing the exact reaction needed. Novozymes' biological solutions in many industries (example: Household care, Baking etc.) allow our customers to produce more and sometimes better products with fewer inputs, thereby reducing their GHG emissions and other environmental impacts, but it also helps them reduce costs because of savings in energy, raw material consumption, and treatment of waste generated.

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

Methodology used to calculate avoided emissions
Other, please specify (Life cycle assessment (LCA) according to ISO14040)

Life cycle stage(s) covered for the low-carbon product(s) or services(s)
Cradle-to-grave

Functional unit used
We have several uses of our products and use different functional units. For example:
• Produce 1 ton of biobased detergent
• Produce 1000 chickens with digestibility improving enzymes
• Produce 1 gallon fuel ethanol

Reference product/service or baseline scenario used
This is specific to application of our productions. For example:
• Produce an equivalent amount of laundry detergent with conventional chemicals
• Produce 1000 chickens with conventional feed composition
• Produce an equivalent amount of gasoline

Life cycle stage(s) covered for the reference product/service or baseline scenario
Cradle-to-grave

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario
130

Explain your calculation of avoided emissions, including any assumptions
Small amount of enyzmes replace a large amount of surfactants in detergent and this leads to net CO2 savings at production stage (130 kg CO2e per ton of detergent).

Digestibility improving enzymes enable feed savings and reduces manure generation per unit of animal product produced. This leads to GHG savings throughout the value chain of animal production (130 kg CO2e per 1000 chickens).

Enzymes are enabling bioethanol production. Bioethanol replaces gasoline as fuels for cars. Bioethanol has a lower carbon footprint than gasoline and net GHG emissions reductions are achieved in the transportation sector (1100 kg CO2e per 1000 liters of ethanol).

Refer our published LCA studies at Novozymes.com (https://www.novozymes.com/en/about-us/sustainability/lca).

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year
76

C5. Emissions methodology

C5.1

(C5.1) Is this your first year of reporting emissions data to CDP?
No

C5.1a

(C5.1a) 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?

Row 1

Has there been a structural change?
Yes, an acquisition

Name of organization(s) acquired, divested from, or merged with
Synergia Life Sciences

Details of structural change(s), including completion dates
On December 10, 2021, Novozymes acquired 60% of the shares in Synergia Life Sciences. Synergia Life Sciences is a leading player within spore probiotics and vitamin K2-7. Synergia Life Sciences has a global footprint and adds strong developing and manufacturing capabilities in spore probiotics and vitamin K2-7 from three production sites in India. The Integration of environmental data of synergia will be completed in 2023 and we will include synergia in Novozymes' reporting from 2023

C5.1b

(C5.1b) 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?	Details of methodology, boundary, and/or reporting year definition change(s)
Row 1	No, but we have discovered significant errors in our previous response(s)	<Not Applicable>

C5.1c

(C5.1c) Have your organization's base year emissions and past years' emissions been recalculated as a result of any changes or errors reported in C5.1a and/or C5.1b?

	Base year recalculation	Scope(s) recalculated	Base year emissions recalculation policy, including significance threshold	Past years' recalculation
Row 1	No, because the impact does not meet our significance threshold	<Not Applicable>	Novozymes annually monitors all relevant categories of its Scope 1, 2 and 3 inventory. In accordance with the GHG protocol, Novozymes' recalculates base year emissions when relevant and at a minimum when significant changes in the company structure or inventory methodology occur and compromises the consistency and relevancy of the reported GHG emissions information, this includes: • Structural changes in the reporting organization, such as mergers, acquisitions, divestments, outsourcing, and insourcing • Changes in calculation methodologies, improvements in data accuracy, or discovery of significant errors • Changes in the categories or activities included in the scope 3 inventory Significant changes are defined when exclusions in the inventory or target boundary have exceeded the SBTI's allowable exclusion limits i.e. more than 5% of scope 1 and 2 emissions and/or more than 33% of scope 3 emissions.	Yes

C5.2

(C5.2) Provide your base year and base year emissions.

Scope 1

Base year start
January 1 2018

Base year end
December 31 2018

Base year emissions (metric tons CO2e)
38000

Comment
No change

Scope 2 (location-based)

Base year start
January 1 2018

Base year end
December 31 2018

Base year emissions (metric tons CO2e)
452000

Comment
No change

Scope 2 (market-based)

Base year start
January 1 2018

Base year end
December 31 2018

Base year emissions (metric tons CO2e)
399000

Comment
No change

Scope 3 category 1: Purchased goods and services

Base year start
January 1 2018

Base year end
December 31 2018

Base year emissions (metric tons CO2e)
536000

Comment
Updated baseline emissions and reported them in 2022 Annual Report

Scope 3 category 2: Capital goods

Base year start
January 1 2018

Base year end
December 31 2018

Base year emissions (metric tons CO2e)
9100

Comment
Updated baseline screening methodology

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

Base year start
January 1 2018

Base year end
December 31 2018

Base year emissions (metric tons CO2e)
95000

Comment
Updated baseline emissions and reported them in 2022 Annual Report

Scope 3 category 4: Upstream transportation and distribution

Base year start
January 1 2018

Base year end
December 31 2018

Base year emissions (metric tons CO2e)
63000

Comment
Updated baseline emissions and reported them in 2022 Annual Report

Scope 3 category 5: Waste generated in operations

Base year start
January 1 2018

Base year end
December 31 2018

Base year emissions (metric tons CO2e)
7000

Comment
Updated baseline emissions and reported them in 2022 Annual Report

Scope 3 category 6: Business travel

Base year start
January 1 2018

Base year end
December 31 2018

Base year emissions (metric tons CO2e)
14000

Comment
Updated baseline emissions and reported them in 2022 Annual Report

Scope 3 category 7: Employee commuting

Base year start
January 1 2018

Base year end
December 31 2018

Base year emissions (metric tons CO2e)
7200

Comment
Updated baseline screening methodology

Scope 3 category 8: Upstream leased assets

Base year start
January 1 2018

Base year end
December 31 2018

Base year emissions (metric tons CO2e)
0

Comment
Not relevant for Novozymes because all upstream leased assets in NZ are under Novozymes operational control, unless the lease contract are less than one year.

Scope 3 category 9: Downstream transportation and distribution

Base year start
January 1 2018

Base year end
December 31 2018

Base year emissions (metric tons CO2e)
8750

Comment

Scope 3 category 10: Processing of sold products

Base year start
January 1 2018

Base year end
December 31 2018

Base year emissions (metric tons CO2e)
100

Comment

Scope 3 category 11: Use of sold products

Base year start
January 1 2018

Base year end
December 31 2018

Base year emissions (metric tons CO2e)
0

Comment
Not relevant

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

Base year start
January 1 2018

Base year end
December 31 2018

Base year emissions (metric tons CO2e)
25100

Comment

Scope 3 category 13: Downstream leased assets

Base year start
January 1 2018

Base year end
December 31 2018

Base year emissions (metric tons CO2e)
0

Comment
Not relevant

Scope 3 category 14: Franchises

Base year start
January 1 2018

Base year end
December 31 2018

Base year emissions (metric tons CO2e)
0

Comment
Not relevant as Novozymes does not have Franchises

Scope 3 category 15: Investments

Base year start
January 1 2018

Base year end
December 31 2018

Base year emissions (metric tons CO2e)
134

Comment

Scope 3: Other (upstream)

Base year start
January 1 2018

Base year end
December 31 2018

Base year emissions (metric tons CO2e)
0

Comment
Not relevant

Scope 3: Other (downstream)

Base year start
January 1 2018

Base year end
December 31 2018

Base year emissions (metric tons CO2e)
0

Comment
Not relevant

C5.3

(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.
European Union Emission Trading System (EU ETS): The Monitoring and Reporting Regulation (MMR) – General guidance for installations
IEA CO2 Emissions from Fuel Combustion
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

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)
46000

Start date
<Not Applicable>

End date
<Not Applicable>

Comment
In 2022, our revenue grew by 9% while, the CO2 emissions from our operations (scopes 1 + 2) decreased by 26% to 161,000 tonnes from 218,000 tonnes in 2021. These reductions were mainly driven by our continued focus on energy efficiency and increased sourcing of renewable electricity. The major contributor was Novozymes' production site in Hongda, China, for which we in 2022 procured green electricity via RECs resulting in a reduction of approximately 65,000 tonnes of CO2.
In addition, we reduced our absolute emissions from our operations (scopes 1 + 2) by 63% relative to our 2018 baseline and thereby achieved our 2022 milestone target of reducing absolute CO2 emissions from our operations by 40%.

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based
We are reporting a Scope 2, location-based figure

Scope 2, market-based
We are reporting a Scope 2, market-based figure

Comment
At Novozymes, marked-based reported CO2 emissions differ from location-based emissions for emissions mainly from electricity purchased at all Danish sites, in Brazil, China and in Franklinton, US. Sources differ between regions where we use wind in Denmark, Biomass in China, Hydropower in Brazil and Solar in US. This made up to 82% of the total electricity consumption in 2022

In 2022, our revenue grew by 9% while, the CO2 emissions from our operations (scopes 1 + 2) decreased by 26% to 161,000 tonnes from 218,000 tonnes in 2021. These reductions were mainly driven by our continued focus on energy efficiency and increased sourcing of renewable electricity. The major contributor was Novozymes' production site in Hongda, China, for which we in 2022 procured green electricity via RECs resulting in a reduction of approximately 65,000 tonnes of CO2.
In addition, we reduced our absolute emissions from our operations (scopes 1 + 2) by 63% relative to our 2018 baseline and thereby achieved our 2022 milestone target of reducing absolute CO2 emissions from our operations by 40%.

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based
332000

Scope 2, market-based (if applicable)
115000

Start date
<Not Applicable>

End date
<Not Applicable>

Comment
Location based figures for 2022 are based on third party validated CO2 factors or CO2 emission factors from IEA. The location-based emissions from 2021 to 2022 have increased due to changes in the grid.

C6.4

(C6.4) 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?
Yes

C6.4a

(C6.4a) 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.

Source of excluded emissions

Smaller sites such as sales offices

Scope(s) or Scope 3 category(ies)
Scope 1
Scope 2 (location-based)
Scope 2 (market-based)

Relevance of Scope 1 emissions from this source
Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source
Emissions are not relevant

Relevance of market-based Scope 2 emissions from this source
Emissions are not relevant

Relevance of Scope 3 emissions from this source
<Not Applicable>

Date of completion of acquisition or merger
<Not Applicable>

Estimated percentage of total Scope 1+2 emissions this excluded source represents
3

Estimated percentage of total Scope 3 emissions this excluded source represents
<Not Applicable>

Explain why this source is excluded
Sites with activities considered not to have a significant environmental impact are not included. Such sites comprise sales offices, R&D labs, and sites with limited blending and storage of products.

However, measures are taken to ensure that at least 97% of the total Novozymes quantity of the measured environmental parameter is included in the reported numbers.

Explain how you estimated the percentage of emissions this excluded source represents
We get approximate data from sites with insignificant impacts – we annually verify that these sites are insignificant, if they are not then we redefine the relevant sites as significant sites that are included in the estimates.

Source of excluded emissions
N2O emissions from wastewater treatment

Scope(s) or Scope 3 category(ies)
Scope 1

Relevance of Scope 1 emissions from this source
Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source
<Not Applicable>

Relevance of market-based Scope 2 emissions from this source
<Not Applicable>

Relevance of Scope 3 emissions from this source
<Not Applicable>

Date of completion of acquisition or merger
<Not Applicable>

Estimated percentage of total Scope 1+2 emissions this excluded source represents
4

Estimated percentage of total Scope 3 emissions this excluded source represents
<Not Applicable>

Explain why this source is excluded
We have excluded the N2O emissions from wastewater treatment in the activated sludge process since the N2O emissions account for <5% of our total Scope 1 and 2 emissions in our baseline year, 2018.

Explain how you estimated the percentage of emissions this excluded source represents
N2O emissions from wastewater treatment are calculated based on site-specific Total Nitrogen (TN) content. Default N2O emission factor from IPCC is used to convert TN to N2O-N. Based on stoichiometry, N2O-N is further converted to N2O emissions. Finally, the global warming potential of emitted N2O is calculated using emission factor from IPCC .

Source of excluded emissions
Packaging emissions from Scope 3 category 1

Scope(s) or Scope 3 category(ies)
Scope 3: Purchased goods and services

Relevance of Scope 1 emissions from this source
<Not Applicable>

Relevance of location-based Scope 2 emissions from this source
<Not Applicable>

Relevance of market-based Scope 2 emissions from this source
<Not Applicable>

Relevance of Scope 3 emissions from this source
Emissions are relevant and calculated, but not disclosed

Date of completion of acquisition or merger
<Not Applicable>

Estimated percentage of total Scope 1+2 emissions this excluded source represents
<Not Applicable>

Estimated percentage of total Scope 3 emissions this excluded source represents
2

Explain why this source is excluded
We have excluded emissions from packaging in purchase goods and services as it only made up 2% of the total scope 3 category 1 emissions.

Explain how you estimated the percentage of emissions this excluded source represents
We have estimated these emissions based on the packaging materials used. We have assumed that all packaging material is virgin and have used relevant emission factors from EcoInvent.

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
545000

Emissions calculation methodology
Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Reported in Novozymes' 2022 Annual report is part of our Net Zero target boundary.

Purchased goods related CO2 emissions are calculated based on principles described in the GHG protocol. Reported quantities include GHG emissions from purchased goods in a cradle to Novozymes' gate perspective, from main raw materials (>90% w/w of total consumption) for all production processes in Novozymes. GHG emissions from packaging material consumption, services such as catering and housekeeping, indirect purchases such as office and laboratory supplies are excluded. This is because GHG emissions from packaging make up approximately 2% of impact from included raw materials. Impact of indirect purchase is assumed to be negligible in comparison as well because Novozymes is a raw material-intensive production company. We have not been able to document this due to lack of data at this level of granularity and due to lack of methods. CO2 emissions from purchased goods are calculated using the average data method of the GHG protocol and use literature-based emission factors from Ecoinvent 3.1 database.

Capital goods

Evaluation status
Not relevant, calculated

Emissions in reporting year (metric tons CO2e)
3644

Emissions calculation methodology
Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Not relevant as per Novozymes' accounting policy for Scope 3 wherein we have decided to exclude any category that accounts for <5% of total Scope 3 baseline emissions unless it is strategically relevant. In 2018 it accounted for 1% of our total Scope 3 emissions.

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

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
109000

Emissions calculation methodology
Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Reported in Novozymes' 2022 Annual report. Part of our Net Zero target boundary.

CO2 emissions from fuel and energy related activities (not included in Scope 1 and 2) are calculated based on principles described in the GHG protocol. Reported quantities include GHG emissions from upstream (Well-to-Tank) GHG emissions from generation of fuels purchased and consumed by Novozymes; upstream (Well-to-Tank) GHG emissions of purchased electricity, heating, cooling and steam in Novozymes; and GHG emissions from upstream activities and combustion including electricity, steam, heating, and cooling that is consumed (lost) as transmission and distribution losses. GHG emissions from generation of electricity, steam, heating, and cooling that is purchased by the reporting company and sold to end users is not included as this is not applicable to Novozymes.

Upstream transportation and distribution

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
67000

Emissions calculation methodology
Hybrid method
Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
61

Please explain
Reported in Novozymes' 2022 Annual report. Part of our Net Zero target boundary.

Transport-related CO2 emissions (scope 3) are calculated based on principles described in the GHG Protocol. Reported quantities comprise CO2 emissions related to transport from all primary enzyme production sites to customers where Novozymes pays for the freight. Transport between production sites is also included. Reported quantities also include screening level estimates of transport of raw materials to a production site by assuming an average distance of 500 KM. Emissions are calculated based on distance and emission factors from the GHG Protocol and Ecoinvent. CO2 emissions generated at external warehouses are not included.

Exclusions
We do not account for shipment from distributor or warehouse to end customer, we have also not considered emissions from storage of raw materials/products in warehouses (internal and external).

Waste generated in operations

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
7000

Emissions calculation methodology
Waste-type-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Reported in Novozymes' 2022 Annual report. Part of our Net Zero target boundary.

CO2 emissions from waste generated in operations are calculated based on principles described in the GHG protocol. Reported quantities include emissions from third-party disposal and treatment of all solid waste and wastewater generated in Novozymes. The total emissions are a sum of GHG emissions from solid waste and wastewater treatment and direct N2O emissions from wastewater treatment. The emission factors are sourced from DEFRA for solid waste, CITEPA for hazardous waste (incineration), Ecoinvent 3.8 for CO2 emissions for wastewater treatment and IPCC emission factors for N2O emissions of wastewater treatment.

Business travel

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
6000

Emissions calculation methodology
Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Please explain
Reported in Novozymes' 2022 Annual report. Part of our Net Zero target boundary.

CO2 emissions from business travel are calculated based on principles described in the GHG protocol. Reported quantities include GHG emissions from Novozymes' employees' business travel through air, road, and rail. GHG protocol states that it is optional to include emissions from hotel stays of employees and therefore have not been included in the emissions in business travel. CO2 emissions from business travel are calculated using the distance-based method of the GHG protocol and we use emission factors from US-EPA and DEFRA. Novozymes obtains CO2 emissions data related to its business travel from its travel partners directly.

Employee commuting

Evaluation status
Not relevant, calculated

Emissions in reporting year (metric tons CO2e)
4069

Emissions calculation methodology
Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
This is a screening level estimate based on average data.

Upstream leased assets

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
This category is not relevant for Novozymes because all upstream leased assets in NZ are under Novozymes operational control, unless the lease contract are less than one year.

Downstream transportation and distribution

Evaluation status
Not relevant, calculated

Emissions in reporting year (metric tons CO2e)
6500

Emissions calculation methodology
Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Emissions from transport of products to customers or warehouses or to our own sites where we do not pay for freight. Novozymes solutions are transported via air, sea and truck. We assume that the % of products that we transport where we do not pay for the freight is ~20%. We assume that all transportation of Novozymes raw material is paid by Novozymes and is thus, included in category 4.

Processing of sold products

Evaluation status
Not relevant, calculated

Emissions in reporting year (metric tons CO2e)
129

Emissions calculation methodology
Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
According to the GHG protocol, Category 10: Processing of sold products includes emissions from the processing of sold intermediate products by third parties subsequent to sale by the reporting company. .Thus, to estimate emissions in this category, we assume that all Novozymes products are elevated 3 meters by pumping and identify Novozymes products that require mixing with other products during their processing.

Use of sold products

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Novozymes solutions are intermediate products with multiple downstream applications (i.e. processing, use and end-of-life treatment scenarios). We believe that it not relevant to include this category because:

1. Diverse/complex downstream application
2. Several qualitative scenarios show that emissions from the processing or use phase or disposal of sold product at end of life are not significant because our solutions are minor components in the final product. Moreover, significant emissions from our products happen during the production of raw materials of our products and in actual production of enzymes (our solutions) and compared with this, the emissions from the use phase is low.
3.Level of influence towards emission reductions at our customers and at end-consumers is relatively low
4. We look at our products' impact using avoided emission calculations

End of life treatment of sold products

Evaluation status
Not relevant, calculated

Emissions in reporting year (metric tons CO2e)
20225

Emissions calculation methodology
Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
The fate of Novozymes' products vary from industry to industry . To estimate the emissions in this category, we estimated the quantity of products that go directly to wastewater and calculated the corresponding emissions generated. We have assumed that all products which do not degrade in fermentation or the field, or have not been catabolized by the stomach are subject to waste water treatment.

Downstream leased assets

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
This category is not relevant for Novozymes as we don't have any downstream leased assets.

Franchises

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Not applicable; Novozymes does not have any franchises

Investments

Evaluation status
Not relevant, calculated

Emissions in reporting year (metric tons CO2e)
89.6

Emissions calculation methodology
Spend-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Negligible emissions; Novozymes has some minor investments and minority stakes. Our investments are too small to influence the partners and emissions from these are negligible.

Other (upstream)

Evaluation status
Not evaluated

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain

Other (downstream)

Evaluation status
Not evaluated

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?
Yes

C6.7a

(C6.7a) Provide the emissions from biogenic carbon relevant to your organization in metric tons CO2.

	CO2 emissions from biogenic carbon (metric tons CO2)	Comment
Row 1	2444	In 2022, the biogenic emissions from biogas combustion was 2444 tonnes CO2e.

C6.10

(C6.10) 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.

Intensity figure
0.0000091722

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
161000

Metric denominator
unit total revenue

Metric denominator: Unit total
17553000000

Scope 2 figure used
Market-based

% change from previous year
45.69

Direction of change
Decreased

Reason(s) for change
Change in renewable energy consumption
Other emissions reduction activities

Please explain
In 2022, the CO2 emissions from our operations (scopes 1 + 2) decreased by 26% to 161,000 tonnes from 218,000 tonnes in 2021. These reductions were mainly driven by our continued focus on energy efficiency and increased sourcing of renewable electricity. The major contributor was Novozymes' production site in Hongda, China, for which we in 2022 procured green electricity via RECs resulting in a reduction of approximately 65,000 tonnes of CO2. In addition, we reduced our absolute emissions from our operations (scopes 1 + 2) by 63% relative to our 2018 baseline and thereby achieved our 2022 milestone target of reducing absolute CO2 emissions from our operations by 40%.

In 2022, our bioenergy solutions helped the transport sector potentially save 65 million tonnes of CO2 emissions in 2022 by enabling the production of low-carbon fuels.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?
Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	46000	IPCC Fifth Assessment Report (AR5 – 100 year)

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/area/region.

Country/area/region	Scope 1 emissions (metric tons CO2e)
Argentina	86
Brazil	2251.8
Canada	2168.8
China	2031.9
Denmark	12113.3
United States of America	25629
India	1719.2

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By facility

C7.3b

(C7.3b) Break down your total gross global Scope 1 emissions by business facility.

Facility	Scope 1 emissions (metric tons CO2e)	Latitude	Longitude
Araucaria, Brazil	2251.8	-25.521182	-49.341617
Bagsværd, Denmark	3473.6	55.757114	12.454741
Beijing, China	5.7	40.0224	116.1836
Blair, US	0	41.538169	-96.112089
Franklinton, US	22348	36.107092	-78.408394
Fuglebakken, Denmark	8639.7	55.697022	12.533641
Hongda, China	409.2	30.886905	121.802673
Kalundborg, Denmark	0	55.671204	11.121418
Milwaukee, US	997.6	43.082446	-87.903242
Ottawa, Canada	1289.2	45.33618	-75.688932
Pilar, Argentina	86	-34.573864	-58.446751
Salem, US	2283.4	37.263449	-80.167043
Saskatoon, Canada	879.6	52.198914	-106.678255
Shenyang, China	38.6	41.4554	123.1706
Tianjin, China	1578.4	39.059716	117.709236
Patalganga, India	1719.2	18.48	73.4

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/area/region.

Country/area/region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Argentina	136	136
Brazil	1820	0
Canada	1326	1326
China	186183	53050
Denmark	37761	851
India	5995	5995
United States of America	98917	53817

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By facility

C7.6b

(C7.6b) Break down your total gross global Scope 2 emissions by business facility.

Facility	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Araucaria, Brazil	1820	0
Bagsværd, Denmark	4151.89	711.37
Beijing, China	2388.98	2388.98
Blair, US	51463.11	51463.11
Franklinton, US	45100	0
Fuglebakken, Denmark	6928.14	8.92
Hongda, China	13119.04	13119.04
Kalundborg, Denmark	25977.5	0
Milwaukee, US	503.1	503.1
Ottawa, Canada	1067.63	1067.63
Pilar, Argentina	135.8	135.8
Salem, US	1850.66	1850.66
Saskatoon, Canada	258.08	258.08
Shenyang, China	405.74	405.74
Tianjin, China	170269.33	37136.33
Patalganga, India	5994.83	5994.83
Lyngby, Denmark	703.57	130.8

C7.7

(C7.7) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?
No

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?
Decreased

C7.9a

(C7.9a) 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 emissions (metric tons CO2e)	Direction of change in emissions	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	62000	Decreased	28	In 2022, our total emissions decreased from 218,000 tonnes CO2e to 161,000 Tonnes CO2e. In 2022, we increased renewable energy consumption from 42% in 2021 to 50% in 2022 and thus, decrease our emissions by 62,000. The main change in our renewable energy was driven by sourcing renewable electricity. Thus, based on the formula in the explanation terms, the change in emissions due to shift in renewable energy is 28% [(62000/218000)*100]
Other emissions reduction activities	3899.97	Decreased	2	In 2022, we saved 3899.87 tonnes Co2 from energy efficiency projects. Our scope 1 and 2 emissions in 2022 were 161,000 tonnes Co2. Thus, based on the formula in the explanation terms, the change in emissions due to other emission reduction activities was 2% [(3899.97/218000)*100]
Divestment	0	No change	0	
Acquisitions	0	No change	0	
Mergers	0	No change	0	
Change in output	0	No change	0	
Change in methodology	0	No change	0	
Change in boundary	0	No change	0	
Change in physical operating conditions	0	No change	0	
Unidentified	0	No change	0	
Other	8899.97	Increased	4	In 2022, our organic sales growth was recorded at 9%, while energy consumption increased by 3%. Thus, we also saw an increase in our emissions due to growth of our company and updated emission factors. Based on the formula in the explanation terms, the change in emissions due to other activities was 2% [(8899.97/218000)*100]

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 15% but less than or equal to 20%

C8.2

(C8.2) 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)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	Yes
Consumption of purchased or acquired steam	Yes
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating value)	5789	222524	228313
Consumption of purchased or acquired electricity	<Not Applicable>	628890	140619	769510
Consumption of purchased or acquired heat	<Not Applicable>	39201	15239	54440
Consumption of purchased or acquired steam	<Not Applicable>	0	289349	289349
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	2544	<Not Applicable>	2544
Total energy consumption	<Not Applicable>	676424	667732	1344156

C8.2b

(C8.2b) 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	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	Yes
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Sustainable biomass

Heating value
LHV

Total fuel MWh consumed by the organization
0

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment

Other biomass

Heating value
LHV

Total fuel MWh consumed by the organization
0

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment

Other renewable fuels (e.g. renewable hydrogen)

Heating value
LHV

Total fuel MWh consumed by the organization
5789

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
5789

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment

Coal

Heating value
LHV

Total fuel MWh consumed by the organization
0

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment

Oil

Heating value
LHV

Total fuel MWh consumed by the organization
10785

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment

Gas

Heating value
LHV

Total fuel MWh consumed by the organization
211739

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment

Other non-renewable fuels (e.g. non-renewable hydrogen)

Heating value
LHV

Total fuel MWh consumed by the organization
0

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment

Total fuel

Heating value
LHV

Total fuel MWh consumed by the organization
228313

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
5789

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment

C8.2d

(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	11173	11173	11173	11173
Heat	6059	2544	6059	2544
Steam	1169	1169	1169	1169
Cooling	0	0	0	0

C8.2g

(C8.2g) Provide a breakdown by country/area of your non-fuel energy consumption in the reporting year.

Country/area
Brazil

Consumption of purchased electricity (MWh)
19228.91

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
No

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

Country/area
Denmark

Consumption of purchased electricity (MWh)
264116.53

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
No

Consumption of purchased heat, steam, and cooling (MWh)
158243.83

Consumption of self-generated heat, steam, and cooling (MWh)
3713

Total non-fuel energy consumption (MWh) [Auto-calculated]

Country/area
United States of America

Consumption of purchased electricity (MWh)
246256.59

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
No

Consumption of purchased heat, steam, and cooling (MWh)
58520

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

Country/area
China

Consumption of purchased electricity (MWh)
219507.22

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
No

Consumption of purchased heat, steam, and cooling (MWh)
129803.61

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

Country/area
Canada

Consumption of purchased electricity (MWh)
11609.48

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
No

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

Country/area
India

Consumption of purchased electricity (MWh)
8320.74

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
No

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

Country/area
Argentina

Consumption of purchased electricity (MWh)
470.13

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
No

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

C8.2h

(C8.2h) Provide details of your organization's renewable electricity purchases in the reporting year by country/area.

Country/area of consumption of purchased renewable electricity
Denmark

Sourcing method
Physical power purchase agreement (physical PPA) with a grid-connected generator

Renewable electricity technology type
Wind

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)
264116.53

Tracking instrument used
GO

Country/area of origin (generation) of purchased renewable electricity
Denmark

Are you able to report the commissioning or re-powering year of the energy generation facility?
Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2021

Vintage of the renewable energy/attribute (i.e. year of generation)
2022

Supply arrangement start year
2020

Additional, voluntary label associated with purchased renewable electricity
No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity
United States of America

Sourcing method
Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type
Solar

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)
128721.56

Tracking instrument used
US-REC

Country/area of origin (generation) of purchased renewable electricity
United States of America

Are you able to report the commissioning or re-powering year of the energy generation facility?
Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2017

Vintage of the renewable energy/attribute (i.e. year of generation)
2022

Supply arrangement start year
2022

Additional, voluntary label associated with purchased renewable electricity
No additional, voluntary label

Comment
We are sourcing RECS from 9 solar facilities in the USA

Country/area of consumption of purchased renewable electricity
China

Sourcing method
Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type
Sustainable Biomass

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)
216823.33

Tracking instrument used
I-REC

Country/area of origin (generation) of purchased renewable electricity
China

Are you able to report the commissioning or re-powering year of the energy generation facility?
Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2015

Vintage of the renewable energy/attribute (i.e. year of generation)
2022

Supply arrangement start year
2022

Additional, voluntary label associated with purchased renewable electricity
No additional, voluntary label

Comment
In our TEDA Site, we use I-REC issued from Project Shandong Kenli Biomass located in China. For Hongda site, we use I-REC issued from Pizhou Biomass power plant in China of COD in October, 2015. The biomass projects are not fitted with BECCS.

Country/area of consumption of purchased renewable electricity
Brazil

Sourcing method
Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type
Sustainable Biomass

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)
19228.91

Tracking instrument used
I-REC

Country/area of origin (generation) of purchased renewable electricity
Brazil

Are you able to report the commissioning or re-powering year of the energy generation facility?
Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2010

Vintage of the renewable energy/attribute (i.e. year of generation)
2022

Supply arrangement start year
2022

Additional, voluntary label associated with purchased renewable electricity
No additional, voluntary label

Comment

C8.2i

(C8.2i) Provide details of your organization's low-carbon heat, steam, and cooling purchases in the reporting year by country/area..

Sourcing method
Heat/steam/cooling supply agreement

Country/area of consumption of low-carbon heat, steam or cooling
Denmark

Energy carrier
Steam

Low-carbon technology type
Other biomass

Low-carbon heat, steam, or cooling consumed (MWh)
40211

Comment

C8.2j

(C8.2j) Provide details of your organization's renewable electricity generation by country/area in the reporting year.

C8.2k

(C8.2k) Describe how your organization's renewable electricity sourcing strategy directly or indirectly contributes to bringing new capacity into the grid in the countries/areas in which you operate.

Guiding principles

Novozymes has committed to source 100% of its global electricity load from renewable sources by 2025, to enable global CO2 reduction target.

Novozymes is conducting its RE sourcing with a pragmatic and open approach, considering several different alternatives in terms of electricity sources and procurement options as viable parts of its global RE roadmap. Following principles serves as guidance when sourcing RE, to ensure required quality level of each project:

1. **Transparency and accountability** All contractual instruments must convey exclusive ownership rights, and claims should be reliably tracked, traded on recognized platform and asset specific

2. **Vintage** All contractual instruments must be generated within 21-months of electricity use (up to 6 months prior to reporting year, and 3 months after reporting year), but preferably in the same calendar year as Novozymes electricity consumption. This aligns with the green-e certification window, regulating acceptable vintage requirement in North America, and is accepted by RE100 and CDP

3. **Proximity** All instruments must be sourced from assets that are relatively close geographically to the main load (i.e. within the same state or province), but preferably connected to the same grid as Novozymes offtake. Proximity serves as a more important factor if additionality is not achievable for a RE sourcing project

4. **High impact opportunities** In accordance with the Product Strategy, high impact projects which either have additionality or promotes/maintains existing renewable electricity assets, or having a positive social or community impact (e.g. job creation) in Novozymes regions of operations are prioritized for areas with high emission factor

C8.2l

(C8.2l) In the reporting year, has your organization faced any challenges to sourcing renewable electricity?

	Challenges to sourcing renewable electricity	Challenges faced by your organization which were not country/area-specific
Row 1	Yes, in specific countries/areas in which we operate	<Not Applicable>

C8.2m

(C8.2m) Provide details of the country/area-specific challenges to sourcing renewable electricity faced by your organization in the reporting year.

Country/area	Reason(s) why it was challenging to source renewable electricity within selected country/area	Provide additional details of the barriers faced within this country/area
United States of America	Lack of credible renewable electricity procurement options (e.g. EACs, Green Tariffs) Lack of market data Lack of electricity market structure supporting bilateral PPAs Limited supply of renewable electricity in the market Other, please specify (licensing investment for renewable electricity take 2-5 years, in selected states)	There are limited options to source renewable power in the USA, with heavy dependence on energy certificates. Limited market opportunities to support PPAs and regulatory and licensing challenges.
China	Other, please specify (Changing policy landscape in China with push towards domestic certificate (GEC) from local government)	Changing policy landscape in China with push towards domestic certificate (GEC) from local government,

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

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

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Reasonable assurance

Attach the statement
PDF_PDF_The_Novozymes_Report_2022.pdf
Novozymes - CDP erklæring Scope 1 & Scope 2_FINAL.pdf

Page/ section reference
Please refer the attached:
1. The independent auditors report and the assurance statement - Pages 162-167 from Novozymes Annual Report 2022.
2. PwC verification report – Pages 1-4

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach
Scope 2 market-based

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Reasonable assurance

Attach the statement
PDF_PDF_The_Novozymes_Report_2022.pdf
Novozymes - CDP erklæring Scope 1 & Scope 2_FINAL.pdf

Page/ section reference
Please refer the attached:
1. The independent auditors report and the assurance statement - Pages 162-167 from Novozymes Annual Report 2022.
2. PwC verification report – Pages 1-4

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
100

Scope 2 approach
Scope 2 location-based

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Reasonable assurance

Attach the statement
PDF_PDF_The_Novozymes_Report_2022.pdf

Page/ section reference
1. The independent auditors report and the assurance statement - Pages 162-167 from Novozymes Annual Report 2022.

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
100

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category
Scope 3: Purchased goods and services
Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)
Scope 3: Upstream transportation and distribution
Scope 3: Waste generated in operations
Scope 3: Business travel

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
Novozymes - CDP erklæring Scope 3_FINAL.pdf

Page/section reference
PwC verification report – Pages 1-6

Relevant standard
ISAE 3410

Proportion of reported emissions verified (%)
100

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C4. Targets and performance	Progress against emissions reduction target	International Standards on Auditing (ISAs)	Progress against our operational energy and CO2 targets is verified as part of the verification of our Annual Report by PwC (C4.2a). The verification follows an annual cycle and is company wide. The Independent Auditors Report and assurance statement covers all Environmental Data.
C4. Targets and performance	Other, please specify (Annual CO2 savings through target for bioenergy division)	International Standards on Auditing (ISAs)	Progress against our target to save 60 million tons of CO2 by enabling low-carbon fuels in the transport sector in 2022 is verified as part of the verification of our Annual Report by PwC (C4.2b). The verification follows an annual cycle and is company wide. The Independent Auditors Report and assurance statement covers all Environmental Data.
C4. Targets and performance	Other, please specify (Renewable electricity consumption target)	International Standards on Auditing (ISAs)	The verification follows an annual cycle and is company wide. Energy consumption data are verified as part of the verification of our Annual Report by PwC. The Independent Auditors Report and assurance statement covers all Environmental Data.

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

Yes

C11.1a

(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.

EU ETS

C11.1b

(C11.1b) Complete the following table for each of the emissions trading schemes you are regulated by.

EU ETS

% of Scope 1 emissions covered by the ETS
18.5

% of Scope 2 emissions covered by the ETS
0

Period start date
January 1 2022

Period end date
December 31 2022

Allowances allocated
7773

Allowances purchased
0

Verified Scope 1 emissions in metric tons CO2e
8537

Verified Scope 2 emissions in metric tons CO2e
0

Details of ownership
Facilities we own and operate

Comment
Novozymes' strategy for complying with the EU ETS is closely related to our efforts towards improving our own productivity by investing in energy efficiency and low carbon energy.

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

Novozymes strategy Unlocking growth- powered by biotech, is the driving force that pushes us to contribute to reducing impacts of climate change along our operations and value chain. Through our solutions we enable our customers to reduce CO2 emissions, and improve their energy and water efficiency. At Novozymes, we aim to improve productivity of our own activities and operations and accordingly undertake emission reduction activities including investing in energy efficiency improvement through equipment and process changes, and sourcing low carbon energy. All energy for powering Novozymes' large production site in Kalundborg, Denmark, is from renewable sources.

Under the EU ETS, large emitters of carbon dioxide within the EU must monitor their CO2 emissions and annually report them, as they are obliged every year to return an amount of emission allowances to the government, that is equivalent to their CO2 emissions in that year. To neutralize annual irregularities in CO2 emission levels that may occur due to extreme weather events (such as harsh winters or very hot summers), emission credits for any plant operator subject to the EU ETS are given out for a sequence of several years at once (a 'Trading Period'). Our sites in Bagsværd and Fuglebakken, Copenhagen area are covered under the EU Emission Trading Scheme (ETS), which covers energy consumption slightly greater than 20 MWh. For the period of 2013 – 2020, our sites in Denmark were allocated 87,028 CO2 allowances. Novozymes has sold surplus allowances at market price. For the period 2021-2025, the total preliminary CO2 allowances allocated amount to 34,200 i.e. 6840 CO2 allowances each year. In 2022, the total CO2 allowances in our account is 14587.

In 2022, of the approximately 320+ Danish installations/companies in the EU ETS system, Novozymes' Fugelbakken site is listed as a large emitter of CO2 in Denmark.

Novozymes' strategy for complying with the EU ETS is closely related to our efforts towards improving our own productivity by investing in energy efficiency and low carbon energy. All these activities are linked to our science-based climate targets that aim to reduce emissions in line with the 1.5-degree pathway.

C11.2

(C11.2) Has your organization canceled any project-based carbon credits within the reporting year?
No

C11.3

(C11.3) Does your organization use an internal price on carbon?
Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Type of internal carbon price
Implicit price

How the price is determined
Cost of required measures to achieve emissions reduction targets
Other, please specify (We use an implicit form of carbon price i.e. allowing higher payback time as compared with normal standard payback period of capex projects and considering additional cost for souricng renwable electricity , heat and steam)

Objective(s) for implementing this internal carbon price
Change internal behavior
Drive energy efficiency
Drive low-carbon investment

Scope(s) covered
Scope 1
Scope 2

Pricing approach used – spatial variance
Differentiated

Pricing approach used – temporal variance
Evolutionary

Indicate how you expect the price to change over time
In 2022, Novozymes used an implicit carbon price of DKK 84/metric ton. The pricing has been calculated by factoring in cost for Novozymes to implement emission reduction projects including energy-efficiency upgrades and renewable energy purchases. Historically, we have used a shadow pricing, while evaluating the global portfolio of operational eco-efficiency projects. However, this was paused during our strategy update driven by development in society on need for accelerating towards carbon neutrality. As we proceed forward, we are evolving our investment mechanisms for business cases, that would support us in our journey of to reduce absolute emissions by 75% in scope 1 and 2 and 35 % in scope 3 by 2030 and be net zero by 2050.

We assume the constant cost per metric tonne on average due to the dynamic market and environment. Check with NRZ

Actual price(s) used – minimum (currency as specified in C0.4 per metric ton CO2e)
84

Actual price(s) used – maximum (currency as specified in C0.4 per metric ton CO2e)
84

Business decision-making processes this internal carbon price is applied to
Capital expenditure
Operations
Procurement

Mandatory enforcement of this internal carbon price within these business decision-making processes
Yes, for all decision-making processes

Explain how this internal carbon price has contributed to the implementation of your organization's climate commitments and/or climate transition plan
In 2022, Novozymes used an implicit carbon price of DKK 84/metric ton. The pricing has been calculated by factoring in cost for Novozymes to implement emission reduction projects including energy-efficiency upgrades and renewable energy purchases. Historically, we have used a shadow pricing, while evaluating the global portfolio of operational eco-efficiency projects. However, this was paused during our strategy update driven by development in society on need for accelerating towards carbon neutrality. As we proceed forward, we are evolving our investment mechanisms for business cases, that would support us in our journey of to reduce absolute emissions by 75% in scope 1 and 2 and 35 % in scope 3 by 2030 and be net zero by 2050.

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?
Yes, our suppliers
Yes, our customers/clients

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement
Engagement & incentivization (changing supplier behavior)

Details of engagement
Run an engagement campaign to educate suppliers about climate change

% of suppliers by number
4

% total procurement spend (direct and indirect)
20

% of supplier-related Scope 3 emissions as reported in C6.5
60

Rationale for the coverage of your engagement
Our supplier engagement strategy is based on our SBTi-approved science-based target to reduce emissions from operations and supply chain (scope 1, 2 and 3) by 50% by 2030, which is the weighted average of a 75% reduction of emissions from our operations (scopes 1+2) and a 35% reduction from our supply chain (scope 3), from a 2018 baseline. We are committed to reducing our scope 3 emissions from purchased goods and services, fuel and other energy related emissions, upstream transportation and distribution, waste generated in operations and business travel.

In 2022, 74.2% of our scope 3 emissions come from category 1- purchased goods and services. Thus, we are committed to engage with our key suppliers, that account for 80% of our baseline (2018) scope 3 category 1 emissions and 60% of our total Scope 3 emission, with the aim to ensure full transparency of their emissions and explore joint decarbonization opportunities to impact our scope 3 emissions. We have set internal targets to ensure that we meet our overall goal.

We have already engaged with suppliers that account for 60% of our scope 3 emissions to better understand our supply chain emissions and our suppliers' climate maturity, in support of our efforts to reduce emissions from our supply chain (Scope 3). Under this initiative, we engaged with our key- suppliers through 1-1 dialogue/meetings, where we encouraged knowledge sharing (e.g.: guidance on setting science-based targets), presented Novozymes' climate strategy, discussed our suppliers' climate strategy, plans and targets – as well as requested them to provide carbon footprint or best available data for the products they deliver to Novozymes. In 2022, we continued engaging with suppliers on climate and sustainability during our regular meetings and check-ins. In addition, based on our learnings from engagements with our key suppliers, we developed a supplier segmentation model that will moving forward inform our supplier engagement strategy and we have developed engagement charters for each key supplier which will be implemented in 2023.

In 2022, we received emissions report from business travel through our vendor and our logistic providers provided us with GHG emission reports of the transportation and distribution of our products sold.

Impact of engagement, including measures of success
As an outcome of the engagement, we have been successful in engaging with all prioritized suppliers in a collaborative dialogue. Some suppliers were able to deliver product-specific greenhouse gas emissions (GHG) data, and few had targets to save energy and/or reduce GHG emissions in the coming decade. Our engagement with our suppliers enables us to present our climate change strategy and inform suppliers on our approach. It also helps us evaluate our suppliers' progress towards addressing their climate change impact and in identifying opportunities to achieve reductions, taking us closer to our target.

Another measure of success of supplier engagement on climate is the identification of opportunities to collaborate with suppliers on unique climate change related programs. For example, in Nebraska, Novozymes is collaborating with one of our suppliers to jointly approach the local utility provider to provide options to purchase renewable electricity for both companies to help Novozymes reduce its Scope 1, 2 and 3 emissions, as well as bring new renewables to the state grid. A main criterion of selection of our supplier here is the geographical location as we are in the same cluster of companies in the region. A clear measure of success and a clear threshold would be meeting 100% of our scope 3 target.

Comment

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement & Details of engagement

Collaboration & innovation	Run a campaign to encourage innovation to reduce climate change impacts

% of customers by number
100

% of customer - related Scope 3 emissions as reported in C6.5
0

Please explain the rationale for selecting this group of customers and scope of engagement
Novozymes' research & development are focused on innovation of sustainable biological solutions that enable CO2 reduction for our customers. One major contribution we will make towards the Paris Agreement is to continue to invest in developing solutions that enable many of our customers reduce CO2 emissions from the life cycle of their applications and products. We help our customers & partners to use biosolutions to reach their net-zero targets & we also provide insights to help shape industry standards. We run focused campaigns with our customers, across multiple industries to jointly develop products with reduced CO2 impacts across the value chain. We proactively seek to engage with our customers in a bilateral dialogue on our respective climate ambitions & how we could collaborate & jointly develop and market low-carbon solutions. It is important for all companies to contribute to addressing climate change & given our large number of customers, we choose to engage with 100% of our customers over many years. The scope of the engagement includes showcasing the benefits of biological solutions in enabling our customers reduce their carbon footprints & meeting their own climate targets, developing low-carbon products & supporting the increased adoption of such products. As a result, we seek to identify opportunities for joint collaboration & development of low-carbon solutions in multiple industries including BioAg, Bioenergy, Laundry & Cleaning etc. In 2022 we launched a sustainability training for commercial functions, which among other things better equips our sales & marketing teams to translate our customer's sustainability targets into commercial opportunities, it has a specific module on Scope 3 & supporting our customers in reaching their own climate targets. Over the years, such engagements on climate-related issues have resulted in Novozymes developing solutions together with partners to address climate change e.g. in 2022, we released a new study making the case for biological detergents as a means to shrink the carbon footprint of doing laundry. We also see direct recognition from our customers on how they view us as a trusted partner in their decarbonization journeys. In their 2022 Sustainability Report, Henkel highlighted a specific example of how an innovation will enable them to save 1000

tCO2 per year in the production of liquid detergent.

Impact of engagement, including measures of success
Our approach of proactive and continuous engagement with our customers on climate-change has resulted in helping Novozymes identify potential innovation opportunities and develop low-carbon solutions across all our industries (eg.:Bioenergy, BioAg, Animal Health and Nutrition etc.). The measure of success is the number of innovations we develop and market together with our customers annually, which contribute to lowering the impacts of climate change, with a threshold of at least 2 innovations to help our customers address climate change. In 2022, Novozymes launched 9 innovations that enable our customers to reduce CO2 emissions in the life-cycle of the respective applications . We have observed that in the last 2 years the number of our customers setting Science-based Targets and seeking partners in their supply chain to develop low-carbon products has increased. Novozymes proactively engages with such customers to determine how can we innovate for our customers to reach their science-based targets. Customer engagement on sustainability is a key part of our business priorities and our regional sustainability managers have high allocation to support and deliver sustainability related commercial engagement. In 2022, we have had 8+ engagements with some of our biggest customers on this agenda.

Another measure of our success is by the impact we have had through the potential lifecycle emission reductions for our customers in Bioenergy, with the threshold being to save 60 million tonnes of CO2. In 2022, we helped save an estimated 65 million tons of CO2 emissions from the use of our solutions in transportation fuels, thus exceeding our target. We will continue to measure both the number of engagements, number of innovations launched and the impact from our low-carbon solutions. We have also been pioneers in studying and documenting the carbon footprint reductions through externally reviewed ISO standard LCAs. This further strengthens our position to deliver credible carbon footprints and reductions to our customers. Hence, we see the adoption of SBTs potentially increasing the demand and adoption of our low-carbon solutions by our customers. In 2022 we engaged with 3-5 of our large customers to jointly determine how we can contribute to their climate targets with our current solutions and future innovations.

Type of engagement & Details of engagement

Education/information sharing	Run an engagement campaign to education customers about your climate change performance and strategy

% of customers by number
100

% of customer - related Scope 3 emissions as reported in C6.5
0

Please explain the rationale for selecting this group of customers and scope of engagement
Novozymes is committed to our long-term goal of achieving net zero across operations and supply chain by 2050.

We proactively seek to engage with our customers in a dialogue on our respective climate ambitions and how we could collaborate and jointly develop and market low-carbon solutions. We choose to engage with 100% of our customers because we believe it is important for all companies to contribute to addressing climate change. However, given the large number of customers we do business with, we will do this over many years. The scope of the engagement will include to share our climate strategy, ambitions and roadmaps. We seek inspiration from our customers' climate ambitions, roadmaps and how we could contribute to reducing their Scope-3 emissions or other climate ambitions. We also engage in developing joint initiatives on how we could educate and share insights on the benefits of our joint products to and consumers. In addition, in 2022 we launched a sustainability training for commercial functions, which among other things better equips our sales and marketing teams to translate our customer's sustainability targets into commercial opportunities – it has a specific module on Scope 3 and supporting our customers in reaching their own climate targets. Our target is 85% of relevant employees are trained and it will commence in 2023.

Novozymes discloses climate performance data (eg. absolute CO2 emissions from our operations) in our integrated annual report, annually, available for all our customers. For example, in our 2022 annual report, we reported our progress on our 2022 targets - we achieved 63% reduction of our absolute emissions (scope 1 + 2) compared to our 2018 baseline, allowing us to exceed our 2022 target of 40%.

Through the year, we also engage with several customers to address queries on our climate change related performance and strategy, providing them with information on our climate-related initiatives in the year and any relevant Scope-3 data requested. We have set up an internal system dedicated to responding to customer questionnaires covering all ESG topics including climate change that is managed by Quality and Global Sustainability team.

Novozymes also presents our sustainability performance and strategy to our customers in 1 on 1 customer meetings to educate them on our climate change related performance and initiatives.

Impact of engagement, including measures of success
Our climate-related engagements with our customers so far have resulted in several successful initiatives. Case example: As a result our engagement with one of our largest customers in Animal Health and Nutrition we identified a specific initiative to improve the awareness of the low climate change impacts that our joint solutions have to our end-consumers, the farmers. As a result we have co-developed and successfully run several end-customer knowledge sharing and training platforms showcasing the benefits of enzymes in animal health and nutrition and how their use could help farmers address climate change. This has resulted in further interest for such initiatives in other regions we operate in. Our measure of success for such engagement is the number of initiatives and actions we work on with a threshold of at least 5 engagements. In 2022, we have had approximately 8+ engagements with some of our customers on this agenda.

For climate related disclosures, we measure the success of our engagement by:
a. monitoring the number of customers who request climate performance and strategy data and the time and quality of response. Through 2021-2022, we received and responded to 300+ queries related to climate change (threshold is to respond to 100% of climate-related queries for and from our customers).
b. monitoring the impressions and/or users of our webpages containing our annual report and social media content. In 2022, we recorded 7000+ users (threshold is to engage at least 1000 users on our webpages/annual report).
c. We also measure success by sharing our ESG rating and response with key customers which contains key climate change related information – for example, Novozymes has been awarded a Platinum Medal and placed among the top 1% of companies assessed by Ecovadis in 2022. Ecovadis is a global collaborative platform providing sustainability ratings for procurers, and all our customers who request our submission have full access to our responses through the Ecovadis platform (threshold is to achieve 'Gold' or higher rating by Ecovadis).

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?
Yes, climate-related requirements are included in our supplier contracts

C12.2a

(C12.2a) Provide details of the climate-related requirements that suppliers have to meet as part of your organization's purchasing process and the compliance mechanisms in place.

Climate-related requirement
Complying with regulatory requirements

Description of this climate related requirement
Novozymes' approach to responsible sourcing is defined by our Responsible Purchasing Standards (RPS) and managed through our Supplier Performance Management (SPM) process and the Supplier Ethical Data Exchange (SEDEX) platform.

We require for all our contracted suppliers to comply with the RPS which cover various ESG criteria including environmental performance, as well as, when requested, to complete questionnaires and to accept visits and audits relevant for confirmation of compliance with these standards. Novozymes reserves the right to demand immediate corrective actions or terminate the supply agreement, if a supplier of Novozymes does not comply with these standards. For the avoidance of doubt, such termination shall not entitle supplier to claim any kind of compensation, damages or the like from Novozymes. If more extensive requirements than the ones below have been agreed elsewhere between Novozymes and the Supplier, the most extensive requirements shall prevail.

% suppliers by procurement spend that have to comply with this climate-related requirement
100

% suppliers by procurement spend in compliance with this climate-related requirement
93

Mechanisms for monitoring compliance with this climate-related requirement
Supplier self-assessment
Grievance mechanism/Whistleblowing hotline
Supplier scorecard or rating

Response to supplier non-compliance with this climate-related requirement
Retain and engage

Climate-related requirement
Climate-related disclosure through a non-public platform

Description of this climate related requirement
Novozymes' approach to responsible sourcing is defined by our Responsible Purchasing Standards (RPS) and managed through our Supplier Performance Management (SPM) process and the Supplier Ethical Data Exchange (SEDEX) platform.

We require for all our contracted suppliers to comply with the RPS which cover various ESG criteria including environmental performance, as well as, when requested, to complete questionnaires and to accept visits and audits relevant for confirmation of compliance with these standards. Novozymes reserves the right to demand immediate corrective actions or terminate the supply agreement, if a supplier of Novozymes does not comply with these standards. For the avoidance of doubt, such termination shall not entitle supplier to claim any kind of compensation, damages or the like from Novozymes. If more extensive requirements than the ones below have been agreed elsewhere between Novozymes and the Supplier, the most extensive requirements shall prevail.

% suppliers by procurement spend that have to comply with this climate-related requirement
93

% suppliers by procurement spend in compliance with this climate-related requirement
93

Mechanisms for monitoring compliance with this climate-related requirement
Supplier self-assessment
Grievance mechanism/Whistleblowing hotline
Supplier scorecard or rating

Response to supplier non-compliance with this climate-related requirement
Retain and engage

C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?

Row 1

External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the climate
Yes, we engage directly with policy makers
Yes, our membership of/engagement with trade associations could influence policy, law, or regulation that may impact the climate
Yes, we fund organizations or individuals whose activities could influence policy, law, or regulation that may impact the climate

Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?
Yes

Attach commitment or position statement(s)

Source: https://www.novozymes.com/en/about-us/positions-policies

Novozymes policy statement on sustainability
We want to drive the world towards sustainability together with our customers and partners, while improving our own sustainability performance.

To meet our objectives:
We will maintain robust management systems to monitor and control the social and environmental impact of our business processes.
We will continually improve our resource efficiency, prevent pollution, and minimize emissions and waste in our operations through regular assessments and maintenance.
We will set ambitious sustainability goals and targets and communicate on our performance.
We will actively seek dialogue with key stakeholders in order to gain insight into their expectations and promote sustainable development.
We will communicate expectations on sustainability to our suppliers and follow up on their performance.
We will build close relations in the communities in which we operate, and act as a good citizen.
We will develop biosolutions and make quantitative assessments of the impact of our products in a life-cycle perspective.
We will ensure safe handling of the microorganisms we use and comply with all relevant biosafety regulations.
We will live up to the commitments we have made to globally-recognized principles on the utilization of genetic resources according to the United Nations Convention on Biological Diversity.
We will comply with all relevant legal and authority requirements, and with our commitment to the United Nations Global Compact.

Novozymes' position statement on climate change
Climate action is an integral part of Novozymes' business strategy, and we are committed to a net zero future. Our ambitious climate commitment, Accelerate towards a climate-neutral society, launched under our refreshed strategy as part of our commitments to a healthy planet, and it guides our approach to addressing climate change issues.

Many Novozymes' biological solutions deliver climate benefits. And, we fully recognize the potential to grow our business while innovating transformative solutions for the climate. We have therefore decided to invest in strategic opportunity areas, including biological alternatives to synthetic fertilizers, carbon capture and advanced protein solutions.

We take relevant measures to address climate impacts across our operations and value chain, and we are committed to Science Based Targets. Through the application of our solutions, we enable our customers and end users to reduce their CO2 emissions. We believe that effective implementation of robust climate change policies and strong corporate actions will help provide a clear roadmap for businesses to drive the world towards a low carbon future. We have a tradition of integrated reporting and we continue to transparently disclose our climate change impacts.

Lowering Novozymes' operational carbon footprint
Novozymes has invested significantly in energy efficiency projects and renewable energy to reduce CO2 emissions from its operations over the past decade, and continues to do so. We also pursue a strategy where we recover energy or heat from previous waste, and use biomass as a source for biogas production. The produced energy is either used at our sites, going into the grid or used in local communities.

We are committed to high standards and ambitious actions to improve our climate footprint across scopes 1, 2 and 3 with the aim of reaching net-zero by 2050. Our net-zero target has been validated by the Science Based Targets initiative. We are committed reduce absolute CO2 emissions (from 2018 baseline) from operations by 75% and to reduce absolute CO2 emissions (from 2018 baseline) from supply chain by 35%.

Mitigating climate change impacts across the value chain
Novozymes conducts peer-reviewed cradle-to-grave life cycle assessment (LCA) studies to document the environmental impact of our solutions. These studies are used to keep our stakeholders informed and to demonstrate to our customers´ways to reduce their CO2 emissions and leverage the positive impact on climate change that Novozymes' solutions can enable. Our published LCAs are available here.

We are working with our suppliers and further defining strategies to drive supply chain emission reductions (Scope 3). Our Scope 3 boundary is composed of purchased goods and services, fuel and energy-related activities, upstream transportation and distribution, waste generated in operations and business travel.

Enabling a low carbon future
Novozymes actively engages in global discussions, partnerships and advocacy for robust policy framework to decarbonize the global economy with key stakeholders. Here are some examples of Novozymes' global advocacy for climate action:

> In Denmark, Novozymes is part of the 'Climate Partnership for Life Science & Biotech' whose aim is to give recommendations on how each industrial sector can contribute to reducing GHG-emissions and reach the Danish government's target of reducing absolute GHG emissions by 70% by 2030, compared to 1990 levels.
> In the EU, through its representation in various industry organizations such as EuropaBIO, ePURE, EBIC, Novozymes supports the EU Green Deal, which articulates a roadmap for how Europe will live up to its ambitious climate commitments and make its economy circular, biobased and sustainable
> In the US, Novozymes has supported key climate legislation, such as the Renewable Fuel Standard (which pushes for higher blended volumes of renewable fuels in the fuel mix) and the Growing Climate Solutions Act (which will enable farmers to participate in carbon credit markets).
> In Brazil, Novozymes was a founding member of Association of Industrial Biotechnology (ABBI), which played a key role in establishing the RenovaBio program, which seeks to reduce the emissions intensity of the Brazilian transport sector in line with its commitment to the Paris Agreement.
> In China, Novozymes supports the overall objective of the clean energy strategy in the 14th National Five-year Plan, and advocate for more policy support and subsidies for the advanced bioethanol sector due to its contribution to China's circular economy.
> We welcome opportunities to engage directly with governments and other key stakeholders to strengthen climate and clean energy policies and develop more ambitious Nationally Determine Contributions as part of their commitment to the Paris Agreement.

Transparent climate disclosure
At Novozymes, we recognize that improving climate-related disclosures can further help us to manage climate-related issues better and significantly impact decision-making in support of further resilient strategy setting and sustainable business continuity. We therefore strongly support the recommendations of the Taskforce on Climate-related Financial Disclosures (TCFD), and in alignment with these recommendations, we include climate-related disclosures in our integrated annual report. We also disclose climate change impacts through CDP annually.

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

In Novozymes, we have dedicated regional and global departments for public affairs, regulatory affairs and sustainability. In collaboration, these departments work to ensure we a) reach Novozymes climate targets and b) influence regulation and policy makers to introduce political and regulatory frameworks that incentivize uptake of greener technologies, accelerating green transition and reducing industry's impact on environment and climate. Novozymes' solutions enable accelerated green transition in a wide range of industrial sectors. From a public affairs and regulatory side, we work directly/indirectly with interest organizations, ministries, policy makers and NGOs to influence and propose policies that ensure green transition in the regions we're active and on a global level. This includes proposing regulation such carbon taxes, stricter criteria for the use of environmental and climate-friendly solutions.

Primary reason for not engaging in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

<Not Applicable>

Explain why your organization does not engage in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

<Not Applicable>

C12.3a

(C12.3a) On what policy, law, or regulation that may impact the climate has your organization been engaging directly with policy makers in the reporting year?

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

Several files under European Green Deal

Category of policy, law, or regulation that may impact the climate

Climate change mitigation

Focus area of policy, law, or regulation that may impact the climate

Climate-related targets

Policy, law, or regulation geographic coverage

Regional

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

Europe

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

Support with minor exceptions

Description of engagement with policy makers

Direct/indirect engagements with MEPs, EU Commission and Denmark (policy makers, ministries and agencies) as member state

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

Overall, Novozymes supports the ambition of the Green Deal. It's a crucial strategy to accelerate the green transition through a wide range of different regulation, Directives, Delegated Acts. However there are certain unfortunate elements of the implementation of the Green Deal into concrete regulation that may inhibit the use of biotech solutions in the future due to the lack of understanding of the impact and categorization of biosolutions, e.g. the fact that enzymes, are categorized as harmful substances in e.g. REACH regulation. That is why, from a political and regulatory side, Novozymes works directly and indirectly to increase the understanding of biotech to position biosolutions as key enablers for green transition. The regulatory framework in EU is to a high extent build in the technologies of the past (e.g. fossil fuels and chemicals), but to reach it's ambitious target, EU must implement regulation that enable the use of sustainable solutions with a positive impact on climate and environment, such as biosolutions

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

Policy initiatives under the Green Deal is central to achieving Novozymes' transition plans, as it lays the foundation to enable real climate change impact, and enable the development of markets for low-carbon low-carbon products and services that 1) Novozymes uses in our transition pland and 2) enables broader uptake of sustainable solutions, such as biosolutions, in other industry segments. There are however also barriers ingrained in regulation proposals under the Green Deal that hinders uptake of biosolutions, which inhibits climate and environmental action.

The Green Deal is mainly crucial for ensuring the impact of biosolutions, which can help other industries achieving their climate transition plans

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

EU Taxonomy for sustainable finance

Category of policy, law, or regulation that may impact the climate

Climate change mitigation

Focus area of policy, law, or regulation that may impact the climate

Climate-related reporting

Policy, law, or regulation geographic coverage

Regional

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

Europe

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

Support with major exceptions

Description of engagement with policy makers

Direct/indirect engagements with MEPs, EU Commission and Denmark (policy makers, ministries and agencies) as member state

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

Novozymes highly supports the intention of the Taxonomy for Sustainable Finance, which can help steer public and private funding and investments towards green technologies. However, the Taxonomy (in it's current version) entails certain challenges. For example, it fails to recognize the role of biotech as an enabling technology for green transition in a wide range of sectors and is impacted by the lack of understanding of the impact and categorization of biosolutions, e.g. the fact that enzymes, are

categorized as harmful substances in e.g. REACH regulation.

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?
The EU Taxonomy for sustainable finance is not central to achieving Novozymes' own climate transition, but is crucial for ensuring the impact of biosolutions, which can help other industries achieving their climate transition plans.

Specify the policy, law, or regulation on which your organization is engaging with policy makers
Recast of Renewable Energy Directive (REDIII)

Category of policy, law, or regulation that may impact the climate
Climate change mitigation

Focus area of policy, law, or regulation that may impact the climate
Climate-related targets
Emissions – CO2
Low-carbon, non-renewable energy generation
Renewable energy generation

Policy, law, or regulation geographic coverage
Regional

Country/area/region the policy, law, or regulation applies to
Europe

Your organization's position on the policy, law, or regulation
Support with minor exceptions

Description of engagement with policy makers
Direct/indirect engagements with MEPs, EU Commission and Denmark (policy makers, ministries and agencies) as member state

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation
Novozymes supports the very ambitious targets of the EU to decarbonize, e.g. in the transport sector. Novozymes believes that the role of biofuels should not be limited, as they are key solutions to decarbonize the transport sector – both road, aviation and marine, but current proposals may limit the role of crop-based and waste-based bioethanol as well as waste-based biodiesel, which would inhibit the ability to decarbonize the sector fast enough to stay on the path to 1.5 degrees.

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?
REDIII is not central to achieving Novozymes' own climate transition, but is crucial for ensuring the impact of biosolutions, which can help other industries achieving their climate transition plans.

Specify the policy, law, or regulation on which your organization is engaging with policy makers
Green Tax Reform

Category of policy, law, or regulation that may impact the climate
Carbon pricing, taxes, and subsidies

Focus area of policy, law, or regulation that may impact the climate
Carbon taxes

Policy, law, or regulation geographic coverage
National

Country/area/region the policy, law, or regulation applies to
Denmark

Your organization's position on the policy, law, or regulation
Support with minor exceptions

Description of engagement with policy makers
Direct/indirect engagement with members of Danish parliament, ministries and agencies, e.g. through the Alliance for Biosolutions, the Danish Climate Partnerships and the Green Business Forum.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation
Novozymes highly supports the Danish government's and supporting parties proposal to enforce a new carbon tax for industry and agriculture. Novozymes believes it should be high and cover all sectors to enable a fast and green transition.

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?
Green Tax Reform is not central to achieving Novozymes' own climate transition, but is crucial for ensuring the impact of biosolutions, which can help other industries achieving their climate transition plans.

C12.3b

(C12.3b) Provide details of the trade associations your organization is a member of, or engages with, which are likely to take a position on any policy, law or regulation that may impact the climate.

Trade association
Other, please specify (European Biostimulants Industry Council (EBIC))

Is your organization's position on climate change policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?
Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
The European Biostimulant Industry Council (EBIC) promotes the contribution of plant biostimulants to make agriculture more sustainable and resilient and in doing so promotes the growth and development of the European Biostimulant Industry.

Novozymes is a member of EBIC to promote an operating environment that creates a truly European market for biostimulants and recognizes their contribution to sustainable agricultural production, green innovation and economic growth. One key focus area is to facilitate EU market access for biostimulants via the revision EU Fertilisers Regulation

Aim of funding: EBIC helps Novozymes position and increase the understanding of biotech as a key enabler for green transition, specifically focusing on the role of biological alternatives to chemical fertilizers in public domain, in state and EU agencies and at political level. To Novozymes, bio-agriculture is a key priority for future business in Europe and globally.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding
<Not Applicable>

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

Trade association
Other, please specify (ePURE)

Is your organization's position on climate change policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?
Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
ePURE is the association representing the European Renewable Ethanol Sector. The association promotes the use of sustainable biofuels (renewable ethanol) to decarbonize transport. ePURE works closely with the European institutions to demonstrate the importance of low carbon liquid alternative transport fuels to achieve the EU climate and energy objectives in the short, medium and longer term.

Novozymes became a full member of ePURE in 2015. We are a member of the board and contribute to the work of several working groups. The focus of the work is on demonstrating to policy-makers the role of the renewable ethanol industry, both conventional and advanced ethanol in decarbonizing road transport by 2030 via the adoption of a series of measures: binding target to reduce GHG emissions of fuels, specific blending mandate for advanced biofuels and higher ethanol blending standards (E20).

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding
<Not Applicable>

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

Trade association
Other, please specify (European Chamber of Commerce in China)

Is your organization's position on climate change policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?
Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
The mission of EU Chamber of Commerce in China is to seek greater market access and improved operating conditions for European companies in China. Its Energy working group is engaged with political level engagement, best practice exchange and links between the government, academia and the business community to further the commitment to sustainable practices. Its focus covers: Energy efficiency & the low-carbon approach, Innovation, "clean" and sustainable production and products, and the promotion of environmentally and socially responsible behavior (or good governance).

Novozymes is an Advisory Council Member of the EU Chamber of Commerce in China and a member of its energy working group', and supports its policy agenda. Specifically, we provide comments and suggestions on clean energy policy through this chamber.
In its position paper, we suggested attaching importance of bioenergy such as its impact on environmental protection, people's livelihood and social benefits in this draft.

Aim of funding: European Chamber of Commerce in China helps Novozymes position and increase the understanding of biotech as a key enabler for green transition, as well as creating greater markets access in China, which is a key market for Novozymes.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding
<Not Applicable>

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

Trade association
Other, please specify (China Association of Circular Economy (CACE))

Is your organization's position on climate change policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?
Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
CACE functions as a bridge to construct resource recycling systems that cover the entire society, to increase the efficiency of the utilization of resources, as well as to prevent and control environmental pollution sources. CACE is striving for green, circular, low- carbon, lasting and sustainable economic development

We continue to promote our expertise and cooperate with members in focus areas such as recycling of wastewater, comprehensive utilization of crop straws, green consumption, etc.

Aim of funding: CACE supports Novozymes position and increase the understanding of biotech as a key enabler for green transition, and works to shape regulation that benefits the market uptake of biosolutions.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding
<Not Applicable>

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

Trade association
Other, please specify (Biotechnology Industry Organization (BIO))

Is your organization's position on climate change policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?
Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
BIO is the world's largest trade association representing biotechnology companies, academic institutions, state biotechnology centres and related organizations across the United States and in more than 30 other nations. BIO members are involved in the research and development of innovative healthcare, agricultural, industrial and environmental biotechnology products. BIO believes we should mitigate climate change through biotechnology by using renewable carbon to reduce fossil carbon. BIO helped pass tax incentives that spur the development of renewable energy projects and associated feedstocks.

Novozymes works with BIO to encourage the development of technologies that make our lives and environment cleaner, safer and healthier. Novozymes is a board member of the Food and Agriculture Section and is a member of the Industrial and Environmental (I&E) section. In this capacity, Novozymes collaborates with international organizations, the US Congress, federal agencies such as the US Department of Energy, the Environmental Protection Agency and the US Department of Agriculture, and helps develop policy on relevant issues such as the use of industrial enzymes in the manufacturing process, and guidelines for the use of biotechnology products in environmental remediation.

Aim of funding: BIO supports Novozymes position and increase the understanding of biotech as a key enabler for green transition, and works to shape regulation that benefits the market uptake of biosolutions.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding
<Not Applicable>

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

Trade association
Other, please specify (United States Council for International Business (USCIB))

Is your organization's position on climate change policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?
Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
USCIB promotes appropriate environmental protection and energy security measures, integrated with open trade and investment. USCIB advances continuous improvement in technological innovation and deployment within the context of economic growth as fundamental to sustainable development. USCIB involves a wide range of sectors, and emphasizes the supply and value-chain connections across those sectors. Its advocacy reflects an integrated approach to mutually reinforcing policy areas and emphasizes the importance of enabling frameworks from business solutions to energy, environmental, social and economic challenges. USCIB engages on issues related to climate change and energy through the work of its Environment Committee, and considers climate change issues in the context of other relevant public policy areas such as the Sustainable Development Goals (SDGs) and Financing for Development (FfD). USCIB is the US affiliate of the International Chamber of Commerce (ICC). In addition, the group focuses on extending its influence in a range of strategic international forums such as the UN Framework Convention on Climate Change (UNFCCC), the UN Environment Programme (UNEP), the Organization for Economic Cooperation and Development (OECD), the International Energy Agency (IEA), and the Strategic Approach to International Chemicals Management (SAICM). USCIB is also a member of OECD-BIAC.

Novozymes maintained its support for the work of both the United States Council for International Business (USCIB) and the USCIB Foundation in 2020, with Novozymes' President and CEO Ester Baiget being elected to the Board of Trustees. USCIB's work across Biodiversity, Climate, Circular Economy and its ongoing support for inclusive multilateralism and the role of the U.S. in key international negotiations and processes such as the UNFCCC Paris Agreement were at the center of Novozymes' engagements with the organization.

Aim of funding: USCIB supports Novozymes position and increase the understanding of biotech as a key enabler for green transition, and works to shape regulation that benefits the market uptake of biosolutions

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding
<Not Applicable>

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

Trade association
Other, please specify (Confederation of Danish Industry)

Is your organization's position on climate change policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?
Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
In Denmark, the Confederation of Danish Industries plays a key role in representing Danish industry in political and regulatory discussions, representing a wide range of sectors.

The Confederation of Danish Industries has in collaboration with Novozymes and other Danish biotech companies established DI Bio in an effort to better position biosolutions as a key enabler for green transition, thereby building political support in Denmark and Europe to incentivize the uptake of biosolutions and improving framework conditions for doing business in Denmark and Europe.

Aim of funding: Confederation of Danish Industries supports Novozymes position and increase the understanding of biotech as a key enabler for green transition, and works to shape regulation that benefits the market uptake of biosolutions.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding
<Not Applicable>

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

Trade association
Other, please specify (Alliance for Biosolutions)

Is your organization's position on climate change policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?
Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
Novozymes, the Danish Chamber of Commerce and other Danish biotech companies have established The Alliance for Biosolutions in 2020 in an effort to better position biosolutions as a key enabler for green transition, thereby building political support in Denmark and Europe to incentivize the uptake of biosolutions and improving framework conditions for doing business in Denmark and Europe.
Aim of funding: The Alliance for Biosolutions supports Novozymes position and increase the understanding of biotech as a key enabler for green transition, and works to shape regulation that benefits the market uptake of biosolutions.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding
<Not Applicable>

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

C12.3c

(C12.3c) Provide details of the funding you provided to other organizations or individuals in the reporting year whose activities could influence policy, law, or regulation that may impact the climate.

Type of organization or individual
Other, please specify (Industry Group)

State the organization or individual to which you provided funding
EuropaBio

Funding figure your organization provided to this organization or individual in the reporting year (currency as selected in C0.4)
600000

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate
EuropaBio is the association representing the biotechnology sector in Europe. The association promotes the transition towards a bio-economy that can help achieve the EU's climate objectives. EuropaBio works closely with the European Commission, European Parliament and the Council to demonstrate the role of biotechnology as a key enabling technology for reducing GHG emissions in various industrial processes, improving environmental impact and reducing the dependence on fossil fuels and fossil-based chemicals. EuropaBio is the association representing the biotechnology sector in Europe. The association promotes the transition towards a bio-economy that can help achieve the EU's climate objectives. EuropaBio works closely with the European Commission, European Parliament and the Council to demonstrate the role of biotechnology as a key enabling technology for reducing GHG emissions in various industrial processes, improving environmental impact and reducing the dependence on fossil fuels and fossil-based chemicals.

We play an active role in the association as member of the board and through our work in the Industrial Biotech Council, which is leading the association's efforts on the promotion of a sustainable bio-economy in Europe. The focus of the Industrial Biotech Council has been on successfully promoting the following to the EU institutions: (i) the use and access of sustainable feedstock for the bio-economy, (ii) the development of new financing mechanisms for the deployment of greener bio-based products (e.g. through the establishment of public private partnerships), and (iii) legislation to support the market uptake of climate friendly bio-based products (public procurement and mandates).

EuropaBio helps Novozymes position and increase the understanding of biotech as a key enabler for green transition in public domain, in state and EU agencies and at political level. This is a key priority for Novozymes.

Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication
In mainstream reports, incorporating the TCFD recommendations

Status
Complete

Attach the document
PDF_PDF_The_Novozymes_Report_2022.pdf

Page/Section reference
Please refer to the following pages and sections:
1. Pages 27-29: Targets, Performance, Our journey to net zero
2. Page 66: Taskforce on Climate-related Financial Disclosures
3. Page 138-141: Climate change and Energy Note
4. Pages 51-55: Risk management
5. Pages73-74: Consolidated Environmental Data

Content elements
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

C12.5

(C12.5) Indicate the collaborative frameworks, initiatives and/or commitments related to environmental issues for which you are a signatory/member.

	Environmental collaborative framework, initiative and/or commitment	Describe your organization's role within each framework, initiative and/or commitment
Row 1	The B Team UN Global Compact Other, please specify (ICC (Climate, sustainability and biodiversity) USCIB, World Economic Forum, CEO climate leaders Alliance, Business fights poverty (not relevant for climate))	ICC: Among its relevant activities ICC is the official focal point for business and industry engagement with the UN Framework Convention on Climate Change (UNFCCC), is also engaged with UNEP on Environmental issues including the development of a Legally Binding Instrument on Plastics Pollution Novozymes and is actively engaged on the outcomes of the CBD COP15 and the deployment of the Global Biodiversity Framework (GBF). Novozymes holds several roles and positions within Task Forces, Working Groups and Commissions within ICC, including Chairing its Global Environment and Energy Commission and its Biodiversity Subgroup on Digital Sequence Information (DSI) in relation to its Task Force on Access and Benefits Sharing (ABS). USCIB: The United States Council for International Business represents around one third of Fortune 500 companies and is the leading climate voice from North America in global climate, multilateral and environmental negotiations and processes and serves as the US affiliate to Business @ OECD, The International Organization of Employers and ICC. Among its roles within USCIB, Novozymes serves on its Board of Trustees at CEO level as its Sustainability Champion and as one of three Co-Chairs of its Environment Committee World Economic Forum: Novozymes is one of the Co-Chairs of WEF's CEO Climate Leaders Alliance and is also active within its work in relation to the EU "Green Deal". The B Team: Through its CEO level leadership role within the B-Team and by extension its role within the We Mean Business Coalition, Novozymes works to both champion climate action and encourage leaders and decision makers to lead. UN Global Compact: Novozymes is part of the world's largest voluntary sustainability initiative has been one of its "LEAD" private sector members for over 20 years. Among its activities within the Climate space, it part of its Caring for Climate Initiative, as well as its Climate Related "Think Labs", including on Just Transition.

C15. Biodiversity

C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity	Scope of board-level oversight
Row 1	Yes, executive management-level responsibility	Inspired by nature, Novozymes strives to find biological answers for better lives in a growing world. As a biology-based business, we interact with biodiversity over various stages of our research, development, innovation, operations and product use. Novozymes' Corporate Sustainability Committee (CSUC) is responsible for integration of sustainability into Novozymes' strategies and innovation. The CSUC, which includes members of the executive leadership team, take active participation in monitoring developments in the dynamically changing Biodiversity landscape. The CSUC monitors developments in the landscape that impact our ability to innovate and operate, in addition to the developments that can influence our supply chain, operations and our solutions. Novozymes endorses, acknowledges and respects the principles of the United Nations Convention on Biological Diversity. Internal procedures in our management system ensure that we live up to our commitments. As an example, we have established a Nagoya Protocol steering group which ensures compliance with the protocol and that internal guidelines are maintained. We also continuously monitor the global dialogue and development on biodiversity. We are actively seeking opportunities to align our ambition and actions with the post-2020 global biodiversity framework, its 2050 vision and mission and its associated 2030 targets.	<Not Applicable>

C15.2

(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	Yes, we have endorsed initiatives only	<Not Applicable>	CBD – Global Biodiversity Framework SDG Other, please specify (Business for Nature's, mandatory reporting on Biodiversity)

C15.3

(C15.3) Does your organization assess the impacts and dependencies of its value chain on biodiversity?

Impacts on biodiversity

Indicate whether your organization undertakes this type of assessment
No, but we plan to within the next two years

Value chain stage(s) covered
<Not Applicable>

Portfolio activity
<Not Applicable>

Tools and methods to assess impacts and/or dependencies on biodiversity
<Not Applicable>

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)
<Not Applicable>

Dependencies on biodiversity

Indicate whether your organization undertakes this type of assessment
No, but we plan to within the next two years

Value chain stage(s) covered
<Not Applicable>

Portfolio activity
<Not Applicable>

Tools and methods to assess impacts and/or dependencies on biodiversity
<Not Applicable>

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)
<Not Applicable>

C15.4

(C15.4) Does your organization have activities located in or near to biodiversity- sensitive areas in the reporting year?
Not assessed

C15.5

(C15.5) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity- related commitments
Row 1	No, we are not taking any actions to progress our biodiversity-related commitments, but we plan to within the next two years	<Not Applicable>

C15.6

(C15.6) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	No, we do not use indicators, but plan to within the next two years	Please select

C15.7

(C15.7) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
In mainstream financial reports	Biodiversity strategy	Biodiversity is a material issue for Novozymes and is an essential part of the annual report disclosures. Refer Notes section (Section 7.6) Page 147 of The Novozymes Report 2022. PDF_PDF_The_Novozymes_Report_2022.pdf

C16. Signoff

C-FI

(C-FI) 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.

C16.1

(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	COO & Executive Vice President of Operations, Supply and Quality Management	Chief Operating Officer (COO)

SC. Supply chain module

SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	17553000000

SC1.1

(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

Requesting member
KAO Corporation

Scope of emissions
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
0.12

Uncertainty (±%)
10

Major sources of emissions
Combustion of fuel in Novozymes operations

Verified
No

Allocation method
Allocation based on the volume of products purchased

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

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
CO2 from internally generated energy (scope 1) is calculated based on the amount of fuel consumed, using local emission factors

Requesting member
KAO Corporation

Scope of emissions
Scope 2

Scope 2 accounting method
Market-based

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
0.29

Uncertainty (±%)
10

Major sources of emissions
Purchased electricity / heat

Verified
No

Allocation method
Allocation based on the volume of products purchased

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

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
CO2 from externally generated energy (scope 2) is reported in accordance with both the market-based and the location-based methods, as defined by the Greenhouse Gas (GHG) Protocol. The marked-based method assumes zero CO2 emissions from the sourced renewable energy and uses CO2 factors from the International Energy Agency (IEA) for non-renewable energy. The location-based method uses third party validated CO2 factors or CO2 factors from IEA.

Requesting member
KAO Corporation

Scope of emissions
Scope 3

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
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 5: Waste generated in operations
Category 6: Business travel

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
1.86

Uncertainty (±%)
10

Major sources of emissions
For Novozymes, our Scope 3 boundary is composed of Category 1 (Purchased goods and services), 3 (Fuel- and energy related activities (not included in scope 1 or 2), Category 4 (Upstream transportation and distribution), Category 5 (Waste generated in operations) and Category 6 (business travel).

Verified
No

Allocation method
Allocation based on the volume of products purchased

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

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Please refer to C6.5 for details on the accounting methodologies of the respective categories.

Requesting member

Diageo Plc

Scope of emissions
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
0.07

Uncertainty (±%)
10

Major sources of emissions
Combustion of fuel in Novozymes operations

Verified
No

Allocation method
Allocation based on the volume of products purchased

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

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
CO2 from internally generated energy (scope 1) is calculated based on the amount of fuel consumed, using local emission factors

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Requesting member
Diageo Plc

Scope of emissions
Scope 2

Scope 2 accounting method
Market-based

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
0.16

Uncertainty (±%)
10

Major sources of emissions
Purchased electricity / heat

Verified
No

Allocation method
Allocation based on the volume of products purchased

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

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
CO2 from externally generated energy (scope 2) is reported in accordance with both the market-based and the location-based methods, as defined by the Greenhouse Gas (GHG) Protocol. The marked-based method assumes zero CO2 emissions from the sourced renewable energy and uses CO2 factors from the International Energy Agency (IEA) for non-renewable energy. The location-based method uses third party validated CO2 factors or CO2 factors from IEA.

Requesting member
Diageo Plc

Scope of emissions
Scope 3

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
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 5: Waste generated in operations
Category 6: Business travel

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
1.04

Uncertainty (±%)
10

Major sources of emissions
For Novozymes, our Scope 3 boundary is composed of Category 1 (Purchased goods and services), 3 (Fuel- and energy related activities (not included in scope 1 or 2), Category 4 (Upstream transportation and distribution), Category 5 (Waste generated in operations) and Category 6 (business travel).

Verified
No

Allocation method
Allocation based on the volume of products purchased

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

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Please refer to C6.5 for details on the accounting methodologies of the respective categories.

Requesting member
Unilever plc

Scope of emissions
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
2.2

Uncertainty (±%)
10

Major sources of emissions
Combustion of fuel in Novozymes operations

Verified
No

Allocation method
Allocation based on the volume of products purchased

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

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
CO2 from internally generated energy (scope 1) is calculated based on the amount of fuel consumed, using local emission factors

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Requesting member
Unilever plc

Scope of emissions
Scope 2

Scope 2 accounting method
Market-based

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
5.5

Uncertainty (±%)
10

Major sources of emissions
Purchased electricity / heat

Verified
No

Allocation method
Allocation based on the volume of products purchased

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

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
CO2 from externally generated energy (scope 2) is reported in accordance with both the market-based and the location-based methods, as defined by the Greenhouse Gas (GHG) Protocol. The marked-based method assumes zero CO2 emissions from the sourced renewable energy and uses CO2 factors from the International Energy Agency (IEA) for non-renewable energy. The location-based method uses third party validated CO2 factors or CO2 factors from IEA.

Requesting member
Unilever plc

Scope of emissions
Scope 3

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
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 5: Waste generated in operations
Category 6: Business travel

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
35.13

Uncertainty (±%)
10

Major sources of emissions
For Novozymes, our Scope 3 boundary is composed of Category 1 (Purchased goods and services), 3 (Fuel- and energy related activities (not included in scope 1 or 2), Category 4 (Upstream transportation and distribution), Category 5 (Waste generated in operations) and Category 6 (business travel).

Verified
No

Allocation method
Allocation based on the volume of products purchased

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

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Please refer to C6.5 for details on the accounting methodologies of the respective categories.

Requesting member
International Flavors & Fragrances Inc.

Scope of emissions
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Allocation level

Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
0.004

Uncertainty (±%)
10

Major sources of emissions
Combustion of fuel in Novozymes operations

Verified
No

Allocation method
Allocation based on the volume of products purchased

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

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
CO2 from internally generated energy (scope 1) is calculated based on the amount of fuel consumed, using local emission factors

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Requesting member
International Flavors & Fragrances Inc.

Scope of emissions
Scope 2

Scope 2 accounting method
Market-based

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
0.01

Uncertainty (±%)
10

Major sources of emissions
Purchased electricity / heat

Verified
No

Allocation method
Allocation based on the volume of products purchased

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

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
CO2 from externally generated energy (scope 2) is reported in accordance with both the market-based and the location-based methods, as defined by the Greenhouse Gas (GHG) Protocol. The marked-based method assumes zero CO2 emissions from the sourced renewable energy and uses CO2 factors from the International Energy Agency (IEA) for non-renewable energy. The location-based method uses third party validated CO2 factors or CO2 factors from IEA.

Requesting member
International Flavors & Fragrances Inc.

Scope of emissions
Scope 3

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
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 5: Waste generated in operations
Category 6: Business travel

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
0.07

Uncertainty (±%)
10

Major sources of emissions
For Novozymes, our Scope 3 boundary is composed of Category 1 (Purchased goods and services), 3 (Fuel- and energy related activities (not included in scope 1 or 2), Category 4 (Upstream transportation and distribution), Category 5 (Waste generated in operations) and Category 6 (business travel).

Verified
No

Allocation method
Allocation based on the volume of products purchased

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

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Please refer to C6.5 for details on the accounting methodologies of the respective categories.

Requesting member
Ajinomoto Co., Inc.

Scope of emissions
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
0.04

Uncertainty (±%)
10

Major sources of emissions
Combustion of fuel in Novozymes operations

Verified
Please select

Allocation method
Please select

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

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
CO2 from internally generated energy (scope 1) is calculated based on the amount of fuel consumed, using local emission factors

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Requesting member
Ajinomoto Co., Inc.

Scope of emissions
Scope 2

Scope 2 accounting method
Market-based

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
0.11

Uncertainty (±%)
10

Major sources of emissions
Purchased electricity / heat

Verified
No

Allocation method
Allocation based on the volume of products purchased

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

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
CO2 from externally generated energy (scope 2) is reported in accordance with both the market-based and the location-based methods, as defined by the Greenhouse Gas (GHG) Protocol. The marked-based method assumes zero CO2 emissions from the sourced renewable energy and uses CO2 factors from the International Energy Agency (IEA) for non-renewable energy. The location-based method uses third party validated CO2 factors or CO2 factors from IEA.

Requesting member
Ajinomoto Co., Inc.

Scope of emissions
Scope 3

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
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 5: Waste generated in operations
Category 6: Business travel

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
0.71

Uncertainty (±%)
10

Major sources of emissions
For Novozymes, our Scope 3 boundary is composed of Category 1 (Purchased goods and services), 3 (Fuel- and energy related activities (not included in scope 1 or 2), Category 4 (Upstream transportation and distribution), Category 5 (Waste generated in operations) and Category 6 (business travel).

Verified
No

Allocation method
Allocation based on the volume of products purchased

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

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Please refer to C6.5 for details on the accounting methodologies of the respective categories.

Requesting member
Bayer AG

Scope of emissions
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
0.15

Uncertainty (±%)
10

Major sources of emissions
Combustion of fuel in Novozymes operations

Verified
No

Allocation method
Allocation based on the volume of products purchased

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

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
CO2 from internally generated energy (scope 1) is calculated based on the amount of fuel consumed, using local emission factors

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Requesting member
Bayer AG

Scope of emissions
Scope 2

Scope 2 accounting method
Market-based

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
0.37

Uncertainty (±%)
10

Major sources of emissions
Purchased electricity / heat

Verified
No

Allocation method
Allocation based on the volume of products purchased

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

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
CO2 from externally generated energy (scope 2) is reported in accordance with both the market-based and the location-based methods, as defined by the Greenhouse Gas (GHG) Protocol. The marked-based method assumes zero CO2 emissions from the sourced renewable energy and uses CO2 factors from the International Energy Agency (IEA) for non-renewable energy. The location-based method uses third party validated CO2 factors or CO2 factors from IEA.

Requesting member
Bayer AG

Scope of emissions
Scope 3

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
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 5: Waste generated in operations
Category 6: Business travel

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
2.35

Uncertainty (±%)
10

Major sources of emissions
For Novozymes, our Scope 3 boundary is composed of Category 1 (Purchased goods and services), 3 (Fuel- and energy related activities (not included in scope 1 or 2),

Category 4 (Upstream transportation and distribution), Category 5 (Waste generated in operations) and Category 6 (business travel).

Verified
No

Allocation method
Allocation based on the volume of products purchased

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

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Please refer to C6.5 for details on the accounting methodologies of the respective categories.

Requesting member
Ecolab Inc.

Scope of emissions
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
0.18

Uncertainty (±%)
10

Major sources of emissions
Combustion of fuel in Novozymes operations

Verified
No

Allocation method
Allocation based on the volume of products purchased

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

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
CO2 from internally generated energy (scope 1) is calculated based on the amount of fuel consumed, using local emission factors

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Requesting member
Ecolab Inc.

Scope of emissions
Scope 2

Scope 2 accounting method
Market-based

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
0.46

Uncertainty (±%)
10

Major sources of emissions
Purchased electricity / heat

Verified
No

Allocation method
Allocation based on the volume of products purchased

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

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
CO2 from externally generated energy (scope 2) is reported in accordance with both the market-based and the location-based methods, as defined by the Greenhouse Gas (GHG) Protocol. The marked-based method assumes zero CO2 emissions from the sourced renewable energy and uses CO2 factors from the International Energy Agency (IEA) for non-renewable energy. The location-based method uses third party validated CO2 factors or CO2 factors from IEA.

Requesting member
Ecolab Inc.

Scope of emissions
Scope 3

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
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 5: Waste generated in operations
Category 6: Business travel

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
2.93

Uncertainty (±%)
10

Major sources of emissions
For Novozymes, our Scope 3 boundary is composed of Category 1 (Purchased goods and services), 3 (Fuel- and energy related activities (not included in scope 1 or 2), Category 4 (Upstream transportation and distribution), Category 5 (Waste generated in operations) and Category 6 (business travel).

Verified
No

Allocation method
Allocation based on the volume of products purchased

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

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Please refer to C6.5 for details on the accounting methodologies of the respective categories.

Requesting member
Raizen S.A.

Scope of emissions
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
0.26

Uncertainty (±%)
10

Major sources of emissions
Combustion of fuel in Novozymes operations

Verified
No

Allocation method
Allocation based on the volume of products purchased

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

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
CO2 from internally generated energy (scope 1) is calculated based on the amount of fuel consumed, using local emission factors

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Requesting member
Raizen S.A.

Scope of emissions
Scope 2

Scope 2 accounting method
Market-based

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
0.65

Uncertainty (±%)
10

Major sources of emissions
Purchased electricity / heat

Verified
No

Allocation method
Allocation based on the volume of products purchased

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

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
CO2 from externally generated energy (scope 2) is reported in accordance with both the market-based and the location-based methods, as defined by the Greenhouse Gas (GHG) Protocol. The marked-based method assumes zero CO2 emissions from the sourced renewable energy and uses CO2 factors from the International Energy Agency (IEA) for non-renewable energy. The location-based method uses third party validated CO2 factors or CO2 factors from IEA.

Requesting member
Raizen S.A.

Scope of emissions
Scope 3

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
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 5: Waste generated in operations
Category 6: Business travel

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
4.15

Uncertainty (±%)
10

Major sources of emissions
For Novozymes, our Scope 3 boundary is composed of Category 1 (Purchased goods and services), 3 (Fuel- and energy related activities (not included in scope 1 or 2), Category 4 (Upstream transportation and distribution), Category 5 (Waste generated in operations) and Category 6 (business travel).

Verified
No

Allocation method
Allocation based on the volume of products purchased

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

Unit for market value or quantity of goods/services supplied

Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Please refer to C6.5 for details on the accounting methodologies of the respective categories.

SC1.2

(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

SC1.3

(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Allocation challenges	Please explain what would help you overcome these challenges
Diversity of product lines makes accurately accounting for each product/product line cost ineffective	Due to multiple products in our portfolio, calculating and reporting cradle to gate emissions for each one of them is currently time consuming and, therefore, challenging. We would like to streamline and automate the calculation process in future.

SC1.4

(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?
Yes

SC1.4a

(SC1.4a) Describe how you plan to develop your capabilities.

Novozymes has been using LCAs to assess environmental impact of producing and using enzymes since 2004 and has a dedicated team of LCA experts. We continuously keep our LCA tools and data updated and are in alignment with the latest developments in LCA. We updated our entire LCA platform to EcoInvent 3.5 and SimaPro 9 in 2019. We have also implemented new utility supply scenarios for our production sites around the globe and have collected new LCA data from our suppliers to keep our LCA database up-to date. However, due to multiple products in our portfolio, calculating and reporting cradle to gate emissions for each one of them is currently time consuming and, therefore, challenging. We would like to streamline and automate the calculation process in future.

SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?

SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?
Please select

Submit your response

In which language are you submitting your response?
English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

Please confirm below
I have read and accept the applicable Terms