

# **Welcome to your CDP Climate Change Questionnaire 2023**

# C0. Introduction

# C<sub>0.1</sub>

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

Lundbeck is a global pharmaceutical company highly committed to improving the quality of life of people living with brain diseases. For this purpose, Lundbeck is engaged in the research, development, manufacturing, marketing and sale of pharmaceuticals across the world. The company's products are targeted at the disease areas within psychiatry and neurology.

Focus on R&D is the most important pillar in Lundbeck's ambition to improve treatment for people living with brain diseases. We are specialists in our area and have a state-of-the-art research facility in Denmark.

We cooperate closely with strategic partners all over the world, ensuring the best possible foundation for innovation and the development of new treatment solutions.

Lundbeck employs approximately 5,400 people worldwide. We have employees in more than 50 countries, and our products are registered in more than 100 countries. We have production facilities in Denmark, France and Italy and our research centers are based in Denmark, Italy and USA. Lundbeck generated revenue of DKK 18.2 billion in 2022.

In early 2020, Lundbeck launched a new sustainability strategy. The sustainability strategy aims to ensure that our business activities are conducted in a way that supports seven Sustainable Development Goals (SDGs) and mitigates significant risks and adverse impacts.

Goal 3 Good Health and Well-being is closely linked to our corporate purpose and dedication to restore brain health, so every person can be their best. Goal 13 Climate Action will drive our efforts to prepare for a zero emissions future. And then we will use our influence and act to promote Goals 5, 8, 10, 12 and 16.



Climate strategy: In 2007 Lundbeck developed our first Climate strategy, making a firm commitment to minimizing CO2 emissions, and confirming our ambition to be among the leaders within the pharmaceutical industry. By the end of 2019 we decided to accelerate our actions and joined the global movement "Business Ambition for 1.5°C" of leading companies aligning their business actions with the most ambitious aim of the Paris Agreement. By doing so we committed to carbon neutrality no later than 2050. In 2020 we developed a Science based target that was approved according to the 1,5C scenario and by end of 2022 we submitted a Net-zero target for approval by SBTi. This target includes a reduction of carbon emissions from production and fleet drastically by 65% and reduce our carbon footprint outside our premises by 40% in the period 2019-2034. Production and fleet take up app. 20% of our entire footprint and our scope 3 target include 2/3 of our scope 3 emissions in the categories: Purchased goods and services, Upstream transportation and distribution and Business travel. To support our Net zero ambition in 2050 we developed a Transition plan in 2022, which was published in beginning of 2023 along with our Annual Sustainability report.

## C<sub>0.2</sub>

(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

### C<sub>0.3</sub>

(C0.3) Select the countries/areas in which you operate.

Denmark

France



Italy

Poland

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

# C<sub>0.8</sub>

(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	DK0010287234

# 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
Other C-Suite Officer	Climate change is concerned, at the highest strategic level of the company, there are two bodies in charge of its management. The Board of Directors is ultimately responsible for climate change issues at Lundbeck.  Below, the figure of the Executive Vice President of Product Development & Supply, represents the highest figure in charge of these matters and is member of the Executive management group. Our Executive Vice President of Product Development and Supply (C-suite officer) is appointed by the Chief Executive Officer (CEO) to assume corporate responsibility for climate issues and chair the Climate Change Steering Committee. The Steering committee for climate change has the highest level of responsibility for climate change and approve our climate targets, strategy, transition plan and oversee progress on targets before consolidation in the Executive management group.  The Executive Vice President of Product Development and Supply acts as a link between the execution of the Lundbeck Transition Plan and the presentation of the most strategic aspects in the medium and long term of the climate emergency to the board of directors.  In this way, Lundbeck ensures that the position in charge of climate change is both in the day-to-day execution of the company's climate strategy and also regularly presents the main strategic issues to be dealt with in this matter to the entire Board of Directors.  Examples on decisions that the Executive Vice President of Product Development & Supply (C-suite officer) has brought for approval and consolidation in EM and following the Board:  Our decision about joining the global movement "Business Ambition for 1.5°C" (Dec 2019)  Our 1,5C aligned Science Based Target (2020)  To include relevant climate tasks in key managers and employees performance targets. Performance targets are used for deciding monetary bonus (2021)  And in 2022:



	- Our Net zero target - Our transition plan towards zero emissions
President	The Director of the Corp. Health Safety and Environmental (HSE) department (President level in the organization) was elected as member of the Board in March 2022. The Director of HSE is also member of the Steering committee for climate change. The Steering committee for climate change has the highest level of responsibility for climate change and approve our climate targets and strategy before consolidation in the Executive management group. The Steering committee has the responsibility for overseeing progress against targets and initiatives within climate change and take necessary decisions to achieve the targets, like governance structure for climate initiatives, supplier engagement model and proposal for Low Carbon transition plan.  Examples of decisions that has been taken by Executive management and following presented for the Board are:  Our decision about joining the global movement "Business Ambition for 1.5°C" (Dec 2019)  Our 1,5C aligned Science Based Target (2020)  To include relevant climate tasks in key managers and employees performance targets. Performance targets are used for deciding monetary bonus (2021)  And in 2022:  Our Net zero target  Our transition plan towards zero emissions  Additionally the Director of Corp. HSE is the direct manager of the Project manager of the Cooperate climate strategy and project and via this responsible for the corporate climate strategy and all external climate reporting like the quarterly release that include status on our climate targets, Climate sections in our Sustainability report and questionnaires like CDP. As part of preparing the CDP response the Director of Corp. HSE participate in the evaluation of climate related risks and opportunities that are reported in CDP.

# C1.1b

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

Frequency with which	Governance mechanisms	Please explain
climate-related issues	into which climate-related	
are a scheduled agenda	issues are integrated	
item		



### Scheduled - some meetings

budgets

Overseeing major capital expenditures

Overseeing acquisitions, mergers, and divestitures 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 Reviewing and guiding the risk management process

Reviewing and guiding annual The CEO has the highest responsibility of the sustainability strategy and present major decisions to the board when relevant. In 2020 we launched our updated Sustainability Strategy including our Sustainable Development Goals and we have now integrated sustainability as a strategic imperative. This is for instance expressed in the acceleration of our Climate Strategy. In Dec 2019 we joined the "Business Ambition for 1.5°C" of leading companies aligning their business actions with the most ambitious aim of the Paris Agreement, in the beginning of 2021 we announced our new approved 1.5c aligned Science Based Target and by end of 2022 we submitted a Net zero target for approval by SBTi and consolidated our transition plan towards zero emissions. These are examples on major decisions that have been decided and consolidated by Executive management and following presented for the Board. Additionally, we include status on our climate targets in our quarterly financial release. These announcements are carefully reviewed at Board meetings.

> The Executive Vice President of Product Development & Supply (C-suite officer) is responsible for these input at the Board meetings. The CEO has appointed the Executive Vice President of Product Development & Supply (PDS) to have the highest responsibility on the climate strategy, climate performance and management and to chair the Climate steering committee. The Steering committee for climate change has the highest level of responsibility for climate change and approve our climate targets and strategy before consolidation in the Executive management group. The Steering committee has the responsibility for overseeing progress against targets and initiatives within climate change and take necessary decisions regarding e.g. developing and achieving targets, governance structure and employee incentives for implementing climate initiatives, budget for climate initiatives, supplier engagement model and proposal for Low Carbon transition plan.

This means the Executive Vice President of PDS has the overall responsibility of defining and evaluating corporate policies, strategies, guidelines and corporate activities and monitoring progress against targets within climate change and to report major decisions to the Board. The Steering Committee for climate change has 3 meetings during the year.



# 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
Row 1	Yes	The Board of Directors consist of 7 external members and 4 elected Lundbeck group representatives. Our Executive Vice President of Product Development & Supply (C-suite officer) is member of the Executive Management (EM) and attend Board meetings. The Executive Vice President of Product Development and Supply (PDS) has been appointed by the Executive Vice President to chair the Climate steering committee. The EVP for PDS has been chairing the Health Safety and Environment council and had the highest responsibility for environmental issues for several years. Additionally, he has the overall responsibility for production and supply where some of the largest CO2 emissions stems from. The Steering committee for climate change has the highest level of responsibility for climate change and approve our climate targets, strategy, transition plan and oversee progress on targets before consolidation in the Executive management group. The Steering committee take also decisions regarding incentives for employees and managers, implementation of climate initiatives, budget for climate initiatives and supplier engagement model.  Due to this positions the Executive Vice President for PDS is regularly being trained and updated within all company related aspects of climate action and has competences within e.g.:  - Climate strategy and targets  - Scope 1, 2 and 3 initiatives to achieve targets  - Requirements within Science based targets and transition planning  - Risk management and mitigation of risks  - Business strategy  Additionally the Executive Vice President for PDS is audited annually by a third party within his areas of responsibility as a part of the regular ISO 14001 audit.  In March 2022 the climate competences on the board was strengthened further because the Director of the Corp. Health Safety and Environmental (HSE) department (President level in the organization) was elected as member of the Board. The Director of HSE is also member of the Steering committee for climate change. Additionally the Director of



	daily basis in all decisions within the corporate climate strategy. The Director of Corp. HSE has competences within
	e.g.:
	- Climate strategy and targets
	- Scope 1, 2 and 3 initiatives to achieve targets
	- Requirements within Science based targets and transition planning
	- Risk identification
	- Climate reporting e.g. CDP

## C1.2

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

#### Position or committee

Other C-Suite Officer, please specify

The Executive Vice President of Product Development & Supply (C-suite officer), member of the Executive Management (EM), attend Board meetings and chair the climate steering committee

### Climate-related responsibilities of this position

Managing annual budgets for climate mitigation activities

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

Assessing climate-related risks and opportunities



#### Coverage of responsibilities

#### Reporting line

CEO reporting line

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

Quarterly

#### Please explain

Our CEO has appointed our C-Suite Officer, the Executive Vice President (EVP) of Global Product Development & Supply (PDS) to have the highest responsibility on climate related issues (Ambition, targets, performance and reporting of risks and opportunities). The EVP of PDS:

- Is member of the Executive management and responsible for presenting and achieve consolidation of significant decisions within climate change like joining the "Business Ambition for 1.5°C", submission of Science Based Targets, Power purchase agreements, Transition plan, Value chain engagement and progress against targets.
- Participate at Board meetings and is responsible for presenting significant decisions within climate change like joining the "Business Ambition for 1.5°C", Science Based Targets, transition plan and progress against targets as part of the Quarterly release.
- Is chairing the Climate steering committee which has the responsibility of developing targets, transition plan, strategy, initiatives and follow progress against targets.
- Has the overall responsibility for all production and facility management and the overall responsibility for Lundbeck's energy costs and Power purchase agreements.
- Is chairing the Steering committee for climate change that is responsibility for overseeing progress against targets and initiatives within the climate strategy and take necessary decisions to achieve the targets including prioritizing among needed initiatives.
- Reporting in the Corporate risk register
- Communicate corporate decisions to managers and employees at all sites.

#### Position or committee

Other committee, please specify Climate steering committee



#### Climate-related responsibilities of this position

Providing climate-related employee incentives Developing a climate transition plan

Implementing a climate transition plan

Integrating climate-related issues into the strategy

Conducting climate-related scenario analysis

Setting climate-related corporate targets

Monitoring progress against climate-related corporate targets

Managing public policy engagement that may impact the climate

#### Coverage of responsibilities

#### Reporting line

Other, please specify

The climate steering committee reports to Executive management group

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

Quarterly

### Please explain

The Steering committee for climate change has the highest level of responsibility for climate change. It is chaired by The Executive Vice President of Product Development & Supply (C-suite officer). Other members are our Senior Sustainability manager, Director of Corp Health, Safety and Environment, Senior Vice President of Pharmaceutical production and Supply chain, Senior Vice President of Corporate Procurement, Vice President of Facility and HSE and Vice President of Clinical Operations. The Steering committee has the responsibility for:

- Developing and achieving climate targets and strategy and monitoring of progress
- Alignment with overarching Sustainability strategy
- Overseeing progress against targets and initiatives within climate change and take necessary decisions regarding e.g., governance structure, employee incentives for implementing climate initiatives, budget for climate initiatives and supplier engagement initiatives.
- Developing Low Carbon transition plan
- Deciding on public engagement e.g. signing of Business ambition for 1,5C



- Reporting on progress to Executive management and presentation of new targets, strategies and transition plan for consolidation by Executive management

# 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	All employees and managers in Lundbeck are covered by a Performance Management System. Through this system individual goals, including climate related goals can be set. Especially managers and employees that are a part of development and achievement of our climate target and ambition can have individual climate or energy goals. Twice a year managers and employees participate in performance dialogues and once a year the performance is evaluated and scored, and good performance is recognized through the scoring system. The score is used as to decide the size of an annual bonus and general salary adjustments.

# 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**

Board/Executive board

#### Type of incentive

Monetary reward

Incentive(s)



Bonus - % of salary

#### Performance indicator(s)

Achievement of climate transition plan KPI

Progress towards a climate-related target

Reduction in absolute emissions

Increased share of low-carbon energy in total energy consumption

#### Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan

#### Further details of incentive(s)

Incentive: Prepare business case for PPA covering entire Europe excl. Denmark

Timeframe: Q1-Q4

Quantitative details and the performance indicator: 1.5% of salary Regional, sectoral and/or operational context: Operational, EU

# Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

The incentive contributes to achievement of:

- Annual and long term Scope 1 and 2 absolute targets
- Annual target on share of renewable energy and a similar KPI in our Sustainability linked loan
- A milestone in out transition plan in 2025 to be 100% supplied by renewable electricity in Europe

#### **Entitled to incentive**

Other C-Suite Officer

#### Type of incentive

Non-monetary reward



#### Incentive(s)

Other, please specify Individual objectives for the year

#### Performance indicator(s)

Achievement of climate transition plan KPI
Progress towards a climate-related target
Reduction in absolute emissions
Increased engagement with suppliers on climate-related issues

#### Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan

#### Further details of incentive(s)

Incentive:

- Deliver on scope 3
- Start solvent recovery if feasible

Timeframe: Q1, Q4

Quantitative details and the performance indicator: These are individual goal that are discussed at semiannual appraisal talks Regional, sectoral and/or operational context: Corporate, operational context

# Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

The incentives contribute to achievement of:

- Long term Scope 3 absolute targets
- A milestone in our transition plan in 2030 to recycle 85% of solvents used in chemical production

#### **Entitled to incentive**

Procurement manager



#### Type of incentive

Monetary reward

#### Incentive(s)

Bonus - % of salary

#### Performance indicator(s)

Implementation of an emissions reduction initiative Increased engagement with suppliers on climate-related issues Increased supplier compliance with a climate-related requirement

#### Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan

#### Further details of incentive(s)

Our Senior vice president of Corp. Procurement has following target as part of the bonus goals:

- Implement initiatives in 2022 plan. This plan included e.g. development of a supplier engagement model. Develop and execute a 2023 plan with impactful initiatives to significantly reduce CO2 emissions (Scope 1, 2 and 3) by end of 2022.
- Appoint resources to implement initiatives in the plan for 2023.
- Develop a 3 year plan (2023 2025) with impactful initiatives to significantly reduce CO2 emissions (Scope 1, 2 and 3) by end August 2022. The developed 2023-2025 plan includes e.g.: Emission amendments requesting suppliers to use renewable electricity and report emission data agreed and signed with top 300 vendors in 2025 (50 signed in 2023, 150 signed in 2024 and 300 signed in 2025), 4 key sourcing projects finalized 1) Global Travel emission data transparency 2) HQ car fleet policy 3) European Renewable Electricity Project (scope 2) 4) US Renewable Electricity Project (scope 2).

Additionally all Category managers have climate related targets in their bonus goals like:

- Develop and promote a climate conscious travel policy
- Investigate possibilities for preparing a Power Purchase Agreement for the European sites
- Engage with suppliers about climate action



# Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

Emissions from purchased goods and services (cat 1) constituted 68% of our scope 3 target boundary in 2022. Supplier engagement and emission reductions at our suppliers is therefore key to achieve our 40% emissions reduction target. Additionally we have following milestones in our Transition plan towards zero emissions: By end of 2025: Renewable electricity must be used by top 50 suppliers, By end of 2030: Renewable electricity must be used by top 300 suppliers, By end of 2040: Renewable electricity must be used by all suppliers.

Additionally, we have following milestones in our Transition plan that the targets in Corp. Procurement contributes to:

- Fleet: By 2023: 100% EV's in DK and 50% in EU and USA.
- Business travel: By 2025: 25% reduction of emissions from business travel, By 2040: 40 % emission reduction
- Use of renewable electricity: By end of 2025: 100% use of renewable electricity in EU, By end of 2030: 100% renewable electricity in USA, by end of 2040: 100% Renewable electricity worldwide at all sales affiliates.

It also support our annual target: Renewable electricity share 50% in 2022

#### **Entitled to incentive**

Facilities manager

## Type of incentive

Monetary reward

#### Incentive(s)

Bonus - % of salary

#### Performance indicator(s)

Achievement of climate transition plan KPI Progress towards a climate-related target Achievement of a climate-related target Reduction in absolute emissions

## Incentive plan(s) this incentive is linked to



Short-Term Incentive Plan

#### Further details of incentive(s)

Incentives description:

Climate: Develop and execute a 2023 plan with impactful initiatives to significantly reduce CO2 emissions (Scope 1, 2 and 3) by end of 2023.

- Reduce ventilation in building C6, Q4 2023
- Prepare business case for PPA in Europe
- Ensure operation on sustainable energy sources at site Valby

Low Carbon transition plan: Approved and launched and approved in EM and General Assemble in Q1 2023

Quantitative details and the performance indicator: 5% of salary

Regional, sectoral and/or operational context: Corporate, operational context

# Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

The incentive contributes to achievement of:

- Annual and long term Scope 1 and 2 absolute targets
- Annual target on share of renewable energy and a similar KPI in our Sustainability linked loan
- Development, approval and communication of the transition plan

#### **Entitled to incentive**

Other, please specify

Project manager of the Climate project

#### Type of incentive

Monetary reward

#### Incentive(s)

Bonus - % of salary



#### Performance indicator(s)

Board approval of climate transition plan

Progress towards a climate-related target

Achievement of a climate-related target

Company performance against a climate-related sustainability index (e.g., DJSI, CDP Climate Change score etc.)

#### Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan

#### Further details of incentive(s)

The project manager of the climate project had following included in the performance targets.

- 1. Prepared status to Executive Management, quarterly
- 2. Developed supplier engagement model
- 3. Initiated inclusion of requirements in relevant RFP's in Cooperation with Corp. Procurement
- 4. Initiated dialogue with 3 new supplier categories in cooperation with Corp. Procurement
- 5. Developed Net Zero SBTi target for approval by Climate steering committee, Executive management and to submit target to SBTi
- 6. Develop Low Carbon transition plan for approval by Climate steering committee, Executive management and the Board
- 7. Supported key stakeholders in the climate project defining new reduction initiatives for 2023-25

Quantitative details and the performance indicator: 50% of salary

Regional, sectoral and/or operational context: Corporate, operational context

# Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

All these targets are key to develop Lundbeck's climate short and long term targets, strategy and future planning towards zero emissions and to retain progress towards targets. From 2023 the initiatives will also feed into the milestones in the transition plan that was approved by end of 2022.

It also support the annual target about: Included in the global environmental benchmark, CDP A list in 2022



# 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	2	The local business plans for the individual business units uses typically 1 - 2 year for short-term planning and definition of annual goals. Since 2006 we have also had annual climate targets.
Medium- term	2	10	Lundbeck do not use the term "medium" in our financial planning, but only long-term financial business planning when looking 2 - 10 years ahead. Due to the long perspective for climate risks and the existence of climate scenarios, we are using both medium and long-term horizons in our climate strategy and identification of risks and opportunities. For the climate targets our medium horizon runs from 2 - 10 years which corresponds to our Science based target running for 15 years from 2019 - 2034 and our new Net zero near term target also running from 2019-2034.
Long- term	10	30	Our long-term horizon for our climate strategy and identification of risks and opportunities runs from 10 - 30 years. This is reflected in our long-term Net Zero target running from 2019 - 2050.

# C2.1b

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

All risks, including climate related risks, that are reported in the risk register is considered to have impact on the business. In order to decide how big a risk may be, Lundbeck consider both the financial and strategic impact and the probability of the risk. Risks on both company and asset level are assessed.



The financial and strategic impact range is divided in:

- Minor: Small losses less than 500 MDKK
- Moderate: Moderate damage on reputation, some financial loss between 500 MDKK and 2,500 MDKK
- Major: Major damage to reputation, major financial loss between 2,500 and 5,000 MDKK
- Catastrophic: Significant damage to reputation, huge financial loss, more than 5,000 MDKK

The probability range is divided in:

- Unlikely: No past history, but possible in some circumstances or occasionally
- Possible: Some past history, and considered possible in some circumstances
- Likely: Some past history, and considered quite likely in these circumstances
- Almost certain: The event will occur in most circumstances.

By combining the individual risks financial and strategic impact and the probability in a matrix with probability on the Y-axe and financial impact on the X-axe the final risk is determined as:

Low: Can be managed through routine procedures

Medium - Low: Can be managed by specific monitoring or risk treatment

Medium - High: Requires attention from Executive Management (EM)

High: Requires detailed research, EM planning and Board of Directors involvement.

All risks in the "High" category is by default considered as SUBSTANTIVE risks, but depending on the evaluation of the individual risk "Medium" scored risks can also be considered substantive.

Examples on climate related risks that are identified with the potential of causing business interruptions are the risk of a wildfire at one of our own sites in France and the risk of a flooding at a warehouse supplier. Both risks are assessed to have Moderate financial and strategic impact and but to be Unlikely due to the implemented mitigating actions. This result in a final risk at: Medium - Low risk.

# **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**

RISKS including climate related risks on both company and asset level, covering direct operations and upstream and downstream operations in our value chain, are identified and managed in a common risk management system. Our risk management principle is that risks, in addition to central monitoring and coordination, must be managed by decentralized business units as they have the most extensive knowledge of the risks and the best possibility of mitigating the exposure. The individual business units take a systematic approach to monitor, identify, quantify and respond to risks. Furthermore, we have defined reporting, decision-making and follow-up procedures. The decentralized risk assessment in the business units is done continuously and at least once a year reported into the corporate risk register providing a consolidated picture of our risk exposure on short-, medium- and long-term. The risk descriptions give details of the event; category, type, current status, status of response, likelihood and potential impact and the person responsible for managing the risk. An important input in our risk management system is our annually updated Business Impact Analysis (BIA) Report that consider physical climate related risks. The BIA report is the result of a process that integrates insurance inspections, risk management workshops, risk-mitigating actions, supply continuity planning and supply chain management in one uniform process, considering risks at both company (incl. suppliers and partners) and asset level. The primary focus of the report is to identify business interruption impact and mitigation of risks securing a resilient supply chain on both short, medium and long-term time horizon. Based on the identified risks our Business insurance premium is decided. The main results from the BIA report is presented for the Executive Management once a year and included in our risk register. The risk register is processed by the risk management organization and evaluated by our central Risk Office. The Risk Office assesses the overall risk exposure and discusses it with the Executive Management. Finally, a key risk overview is reviewed by our audit committee and shared with the Board of Directors.



The principal aim of the risk management system is to strike the balance between risk exposure and value creation. Materiality of the risks is determined by combining the individual risks probability and impact. RISKS are assessed both as gross risks and net risks. The assessment of gross risk assumes that no mitigating actions have been implemented, whereas net risk assessment consider implemented mitigating actions and their anticipated effect. Lundbeck strives to have as many risks mitigated as possible.

#### Identification and reporting of PHYSICAL RISKS:

Two of the most substantive risks in 2022, which were identified in our Business Impact Analysis that are evaluating risk on the short- and medium time horizon, is a wildfire at our pharmaceutical site in France (Cote D'azur region) that are likely to happen on short-term (0-2 years) and river flooding at our Warehouse provider in Tennessee, USA, that are likely to happen on medium term (3-10 year). To mitigate the risk from a wildfire at our French site a Fire gap analysis have been prepared by our insurance broker in 2021. The gap analysis identify the weaknesses on the site and suggest preventive actions. To mitigate the risks at our suppliers, our most critical suppliers prepare Factory Assessment Reports and undergo an extended evaluation including audits. Additionally, we establish dual sourcing when possible e.g. we have implemented dual-warehousing in Nevada to secure continued supply in the event of an incident at our Warehouse provider in Tennessee.

#### Identification and reporting of TRANSITIONAL RISKS:

Transitional risks like reputational or regulatory risks and opportunities at both company and asset level are mainly assessed by the Corporate Health, Safety and Environment (HSE) department and the Compliance & Sustainability department. E.g. are current and emerging legislation (Looking 1 - 3 years ahead) assessed quarterly and social/reputational trends (Looking 1 - 10 years ahead) are evaluated at least once a year. The Director of the HSE department reports quarterly to the HSE Council that decide if actions are needed. If considered significant the Chairman of the HSE Council reports to the Executive Management group and into the risk management system at least semi-annually. A substantive identified transitional risk is the possibility of increased energy prices and CO2 pricing e.g. in Denmark the government are currently working on introducing a new carbon tax. This development corresponds with the predictions in scenario IEA NZE where CO2 pricing is predicted to increase in all OECD countries. This risk is identified by the Corporate HSE department and reported in our risk register. To reduce the impact of increasing CO2 pricing we have worked dedicated with energy optimization at our sites and our possibilities for increasing our use of renewable electricity, e.g. we entered a Power Purchase Agreement in 2020 which have supplied our two Danish sites with renewable electricity from January 2022. Similar possibilities for our European sites and our sites in USA is currently being explored. Another substantive identified risk is the sustainability reporting directive (CSRD), that will impact both our environmental and climate related performance and disclosure significantly.



OPPORTUNITIES are identified and managed by the decentralized business units as they have the most extensive knowledge. Evaluation of opportunities is assessed continuously several times a year and decisions and prioritization are taken in the units e.g. most energy reducing activities are identified and implemented in the business units.

Strategic opportunities are reported up in the line organization following defined procedures for decision making and decided based on the priorities in our business strategy. In the recent years we have experienced that financial institutions are favoring companies with high ratings in ESG indexes by offering cheaper loans. To exploit this opportunity we have increased our participation in those ESG indexes, that banks and investors most often use. Apart from CDP we reported to following ESG indexes in 2022: MSCI, Sustainalytics, ISS ESG, Moody's, Ecovadis and FTSE Russell. During 2020 an opportunity for sustainability linked loans revealed and during 2021 we agreed with top management and the bank on 3 sustainability KPI's (two of them relating to climate performance). The loan was signed in 2022 and is running until 2025. We believe that our focus on increasing our climate ambitions e.g. by continue developing our climate targets and the development of a transition plan towards zero emissions will improve our possibilities for realizing such opportunities.

## 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	As a pharmaceutical company being in compliance is essential for our business and all environmental and climate related regulations are followed quarterly by the Corporate HSE department even though the risk might be small. E.g. regulations on energy and carbon taxes are always considered as it can influence our revenue. At the moment, our total energy costs constitute a very small part of our revenue (0.5%), so the risk is considered low even though climate scenarios like IEA NZE predict increasing carbon pricing. In DK where our headquarter and one chemical sites is located we are currently experiencing a new carbon tax increasing the tax from app 3 MDKK to app. 3.2 MDKK. A low risk compared to our revenue at 18.2 billion DKK.
		Another example is our implementation of the directive on energy efficiency (Directive 2012/27/EU) on all our European sites. The Energy Directive has negligible financial impact on our business.  Other environmental regulations like the requirements about best available technologies (BAT) have affected our operational costs in Denmark, because we had to implement a new exhaust air treatment system at our chemical site. This



		was an investment on app. 20 MDKK and has been discussed on the management boards in the line organization, included in the budget process and approved by our Executive Vice President of Product Development & Supply (C-Suite Officer, member of Executive Management group and attend Board meetings) and our CFO. The system was fully implemented during 2022.  Other regulations and requirements related to pharmaceutical products can impact our climate footprint. E.g. regulation for humidity and temperature during production and transportation are likely to increase the energy consumption to maintain the required conditions. These regulations are followed regularly in the local business units and the business risk evaluated and if relevant included in the budget process and the business planning.  Latest the regulation on Sustainability reporting (CSRD) has come into force. This regulation is expected to strengthen: Our risk management process on all sustainability matters including climate risks, Our reporting on climate and management focus on climate performance and the awareness and performance within climate action in general at all companies in scope for the regulation. An initial assessment of resources and costs for implementing this regulation showed: 6-12 FTE and 4.5 - 6 MDKK (Systems and consultancies).
Emerging regulation	Relevant, always included	All emerging regulation concerning environmental and climate related issues is followed quarterly by the Corporate HSE department. At least once a year, in connection with the update of the Corporate HSE strategy, risks and opportunities related to emerging regulation are considered in the HSE Council. This is followed by plans for preparing and implementing new requirements in the organization. Energy and carbon pricing, energy efficiency and reporting requirements are examples on typical climate related areas that are risk assessed.  Other regulations and requirements related to pharmaceutical products can also influence our climate footprint. E.g. regulation for humidity and temperature during production and transportation are likely to increase the energy consumption to maintain the required conditions. These regulations are also followed continuously in the relevant local business units and the business risk evaluated. A recent example is the new tightened requirements to fixed temperature during transportation. The effect of this regulation was an increase in transportation cost on app. 50% because we will have to favor trucks with cooling systems on several product transports hence increasing energy consumption for transportation. Another emerging regulation that will affect our business is the extended producer responsibility on packaging waste introduced via The European Commission, 2020 Circular Economy Action Plan. This legislation will encourage to redesign our packaging materials to favor recycled and recyclable materials to support a more circular economy. The regulation is



		still to be determined in more detail, both the scope and the national implementation before the impact on our operational costs can be estimated.
Technology	Not relevant, included	Lundbeck do not develop new climate related technologies. Therefore, our interest in technology lies in the opportunities for optimizing the energy consumption related to our production or other possibilities for optimization of production efficiency at our sites. This could be technologies that enables us to recycle more solvents or use less solvents in a process or technology that make it possible to convert from fossil fuels to electricity. All technologies that can contribute to reduced CO2 emissions, reduction of our energy or raw material consumption present an opportunity for the company to reduce our risk related to limited supply of biofuels, increasing prices on energy/CO2 and raw materials. Additionally, it presents an opportunity to make progress against our climate targets. The development in technologies that we are using are therefore followed regularly and opportunities included in the future business planning. E.g. we are using a part of our solvent waste as fuel in our new exhaust air treatment system (RTO), that was installed during 2020 at our chemical site in Denmark. By using solvent waste we avoid using gasoil as fuel. In 2022 we continued investigating our possibilities for installing a new equipment for increased solvent recycling.  Apart from these initiative we always prioritize to choose more energy efficient equipment, when we are renewing old equipment like pumps.
Legal	Not relevant, included	Our legal department monitors relevant litigation claims, but we do not believe this is a material risk for Lundbeck and to date, no such claims have been raised.  One of our business principles is to be responsible. It is therefore a high priority to be in compliance with all legislation and act responsibly.  To strengthen our work with compliance we always cooperate with the European Foundation of Pharmaceutical Industries Association (EFPIA), to identify risks related to emerging regulations in order to influence the regulation and to contribute to the preparation of Position papers for the pharmaceutical industry. An example on a Position paper for EFPIA members, where we actively have contributed, is the Position paper on Climate where EFPIA encourage members to develop Science based targets in line with the Paris Agreement. In 2022 we participated in updating this position paper.  In November 2019, the Danish Prime Minister, Mette Frederiksen unveiled 13 climate partnerships covering the main sectors across Danish industry, including sectors such as Maritime, Transportation, Energy, Agriculture, Packaging, Production and Life science & Biotech. Lundbeck participated in the Life science & Biotech partnership where we prepared recommendations for the government to aid the government in reaching the ambition of reducing CO2-emissions by 70% in 2030 and in 2021 the partnership prepared sector roadmaps with business objectives and recommendations to the



		government.  Since 2006 we have worked actively to reduce our environmental impacts and are today committed to support the Paris Agreement and have joined the "Business Ambition for 1.5°C" of leading companies aligning their business actions with the most ambitious aim of the Paris Agreement. By end of 2022 we submitted our new Net zero target for approval by SBTi. These commitments clearly express our support to the Sustainable Development Goal 13, Climate Action. Therefore we do not believe climate-related litigation claims are a risk to Lundbeck.
Market	Relevant, sometimes included	During the next 10 years we do not expect shifts in demand for our products due to climate change. We only make medicines for disease areas within psychiatry and neurology, and we do not assume that these disease areas are impacted by climate changes. But we do see a trend towards national organizations that source medicine for hospitals e.g. Amgros in Denmark and NHS in UK, include climate considerations in their sourcing strategy. E.g. has NHS developed a supplier framework including increasing requirements for reporting and target ambitions in the years 2022 - 2045. As these initiatives are very new, the impact on our business is unknown, but we believe that our constant focus on developing our climate strategy and targets will make it possible to comply with these new frameworks and therefore not impact our business. But we are following this development closely and will include it in our risk register if it becomes significant. We do not expect changes in our supply needs. Our products are mainly based on chemicals and chemical synthesis and a very small part is based on proteins. Neither of these raw materials are dependent on biological raw materials, that could be affected by climate changes. Therefore, market risks related to climate change are not included in Lundbeck's overall risk register yet.  During 2022 we did see a significant change in the market for energy prices resulting in a 50% increase in our total energy cost compared to 2021. This was due to increasing electricity and gas prices and limited supply of biooil increasing the cost of biooil as well. The limited supply of biooil also increased our scope 1 emissions, because we had to use gasoil in short periods of time. As energy costs only constitute app. 0,5% of our revenue, this increase constituted a very low risk. Our PPA agreement with a fixed electricity price, covering our two Danish sites, reduced the impact of the rising electricity costs significantly and helped us keeping progress in achieving our climate targets despite the inc
Reputation	Relevant, always included	Our reputation concerning all sustainability issues are of great importance for the organization. We are experiencing that good ESG rating have a positive financial impact on financing/funding for Lundbeck on two overall categories (1) Regular bank loans and (2) Corporate bonds. This means that if we do not have good climate performance, we cannot obtain these favorable loans. In addition, bad climate performance can influence and reduce our ability to attract the right employees.



The new European sustainability reporting standards (CSRD) may impact our reputation depending on the degree of our compliance. In 2022 we prepared a gap assessment ourselves and in 2023 we will prioritize and plan how to comply with this legislation so we are ready for reporting in beginning of 2025 in accordance with the directive.

We have also considered if there could be a reputational risk related to customers and stakeholder's belief and thinking of Lundbeck's Climate change performance. We have not yet found any significant risks related to this, but due to the increased focus on climate changes we cannot exclude this risk in the future.

To meet risks and exploit opportunities related to our reputation we are continuously developing our climate strategy and increasing our ambitions. In 2019 we joined the "Business Ambition for 1.5°C" of leading companies aligning their business actions with the most ambitious aim of the Paris Agreement and by end of 2022 we submitted a Net zero target for approval by SBTi and we finalized a Transition plan to wards zero emissions. We have also included a TCFD reference index as part of our Sustainability reporting.

Reputational risks related to climate issues are always included in our climate related risk assessment. The risks are typically identified by the Compliance & Sustainability department and the Corporate HSE department and reported and evaluated with relevant managers in the line organization. Key managers are our Senior Sustainability manager, Our Director of the Health, Safety and environmental department and our Senior Vice President for Pharmaceutical production and Supply chain. Our Executive Vice President of Product Development & Supply (C-Suite Officer, member of Executive Management group) has the corporate responsibility for climate issues including climate risks and are informed about identified risks as part of our risk management process.

# Acute physical

# Relevant, always included

Acute physical risks like flooding due to extreme weather events and wildfire due to increasing temperature both resulting in loss of production capacity are relevant for both our own sites and certain groups of our suppliers and are always included in our risk assessment and our risk register. Every year a Business Impact Analysis report is prepared. The focus of this report is business interruption impact and mitigation of risks securing a resilient supply chain. As a result of this annual assessment we continuously strengthen our mitigating actions like having dual sourcing and increase of back up production possibilities. An example on a risk is flooding at our warehouse service provider in Tennessee, USA situated in a high-risk area for river flooding. This risk is considered to have substantial impact on our business and is ranked medium in our risk system. To minimize this risk Lundbeck have implemented dual warehousing in Nevada to secure continued



		Another example is the risk for wildfire at our pharmaceutical site in France (Cote D'azur region). A fire gap analysis prepared by a third party in 2021 showed that a wildfire is likely to happen and that existing sprinklers and fire alarms will not be able to limit the damage of a massive roof fire and well trained personnel will not be able to do anything significant to inhibit the fire until the local fire brigade arrives at the site. Additionally, it is evaluated that the fire brigade will have insufficient time to setup the right measures to carry out their firefighting of the roof/building complex until it is to late. The recommendations in this gap analysis will create basis for decisions about further fire protection initiatives at the site during the upcoming years.  The risk is reported in our Business impact analysis report whish is presented for the Executive Management once a year and included in our risk register. The risk register is processed by the risk management organization and evaluated by our central Risk Office. The Risk Office assesses the overall risk exposure and discusses it with the Executive Management.
Chronic physical	Relevant, always included	Our products are mainly based on chemicals and chemical synthesis and only a very small part is based on proteins. Neither of these raw materials are dependent on biological raw materials, and therefore not directly affected by chronic physical risks like drought and rising temperatures. Even though we cannot exclude that companies situated in countries with severe drought and rising temperatures can be affected. Additionally, increasing temperatures in one country can affect the stability of the weather at many geographic locations. To estimate chronic physical risks at both our own and supplier sites, we use the Aqueduct atlas and the WWF risk tool. Some of our suppliers situated in India and China are in risk of e.g. drought and rising temperatures, but many of our suppliers and partners and our own sites are not located in areas with chronic risks. Nevertheless both our own sites and suppliers can be affected by severe weather events caused by e.g. chronic risks like increased temperature that can create wildfires and flooding.  The business risk related to chronic physical risks would be similar to the risks related to acute physical risks with damaged products and/or missing or delayed deliveries from suppliers, partners with substantial business risk and increased direct costs. At our own sites product can be damaged but more likely our buildings could be damaged resulting in increased costs due to business interruptions and property loss.

# **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

Emerging regulation
Carbon pricing mechanisms

#### **Primary potential financial impact**

Increased direct costs

### **Company-specific description**

Lundbeck is influenced by changing in energy prices, carbon taxes and other climate related regulations.

Lundbeck is not covered by the EU ETS, but we are influenced by other regulations that can affect the price on GHG emissions and we expect that new European and international agreements like the Paris Agreement will result in new regulation like renewed cap and trade schemes leading to increases in carbon taxes. Also climate scenarios predict that CO2 pricing/taxes will be used more and in more countries. In IEA NZE it is predicted that CO2 prices can increase by a factor 5 in most OECD countries.

In Denmark where our headquarter site and one of our chemical sites are located the government have just decided on a new CO2 tax. This will change the existing taxation system from an energy tax to a CO2 tax thus promoting the use of renewable energy. The tax will gradually be implemented during the next 5 years and expected cost is 3.2 MDKK/year if our energy sources stay as they were in 2022.

Our site in France is covered by two carbon tax system based on the "polluter pays" principle. In total we are paying 349,538 DKK in this system.



Another example on an energy and climate related regulation is the implementation of the directive on energy efficiency (Directive 2012/27/EU) that require companies to optimize their energy consumption. All Lundbeck's European sites need to comply with this directive. Both at our Danish sites and at our Italian site the directive has resulted in slightly increased operational costs to internal resources, consultancy costs and implementation of meters on steam at our Danish sites.

In 2022 we experienced an unforeseen increase in electricity and gas prices and due to limited supply of biooil, prices on biooil also increased significantly. In total our energy costs increased by 50% in 2022 compared to 2021.

The above regulations pushes the environmental focus and ambitions towards more sustainable solutions, but will also increase the operational costs on the short run. On the long run new solutions like converting from gas to electricity that can be covered by PPA agreements with fixed electricity price reducing the operational cost for carbon taxes will be evaluated. In 2022 a business case for converting gas to electricity was developed for our headquarter site, unfortunately showing both several technical challenges and a long payback time. In 2023 a business case for our Danish Chemical site will be developed.

#### Time horizon

Short-term

#### Likelihood

Very likely

#### Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

6,400,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)



#### **Explanation of financial impact figure**

Today our total energy costs incl. carbon tax only constitutes about 0.5% of our revenue (app. 89 MDKK compared to our revenue in 2022 at 18.2 billion DKK). In Denmark a part of the energy cost is a carbon tax currently on app. 1 MDKK a year. The new suggested carbon tax will increase this cost to app. 3.2 MDKK. At our French site we are paying app. 0.35 MDKK in their carbon tax system.

By looking at the expected new carbon tax in Denmark we could predict that we would have a similar carbon tax in the other countries we are operating. This would result in a carbon tax at 6.2 MDKK (750 DKK/ton CO2 emitted from operation of sites in scope 1 based on scope 1 emissions in 2022). This would constitute less than 0.1% of our revenue and be considered a low risk. Considering the IEA NZE predictions on carbon pricing the price could increase to app. 1000 DKK/ton CO2 emitted in 2040. That would constitute 8.3 MDKK and still constitute less than 0.1% of our revenue.

Costs related to other legislations like the directive on energy efficiency are considered to be low. Because we have had focus on energy optimizations for many years and due to this, prioritized to use man hours, consultancies, install meters etc., the annual costs for implementing and complying with the directive is estimated to 0.2 MDKK/year for internal resources.

The total financial impact figure is estimated based on the Danish CO2 tax: The increase in carbon tax/prices: 6.2 MDKK DKK + cost for complying with the energy directive: 200,000 DKK. In total = 6.4 MDKK

#### Cost of response to risk

7,600,000

#### Description of response and explanation of cost calculation

Risks for increasing carbon taxes caused by changing in legislation or the political agenda are identified systematically. Lundbeck's sites have procedures to identify changes in HSE legislation, incl. legislation related to climate issues. When changes is identified the best implementation path is decided.

The most important method to keep the financial risks from increased energy prices and GHG taxes low, is our Climate strategy and scope 1 and 2 targets. We have both long-term and annual targets. Costs associated with our CO2 strategy is app. 1.2 MDKK (1.5 FTE) and our energy saving projects costed 5.7 MDKK in 2022.

Another important element in reaching our Climate targets is our focus on increasing our use of renewable energy, which we believe will make us more resilient towards carbon taxation. By the end of 2020 we signed a Power Purchase Agreement (PPA) on renewable electricity that started supplying our two Danish sites with electricity from January 2022 and run for 7 years (covering electricity consumption 100%). Our PPA agreement include a fixed electricity price which was app. 6 times lower than the unexpected high average electricity price in 2022. In 2023 we



expect to sign a PPA covering our European sites from 2025 at the latest. The development of the Danish agreement required internal resources for meetings with developers, evaluation of RFP's and management meetings estimated to 0.5 MDKK. A similar amount of resources can be estimated for the future PPA in Europe.

Early tracking of legislation has been beneficial in our implementation of the EU energy efficiency directive. The directive gives companies the possibility of integrating energy reviews in existing environmental management systems instead of paying external consultants for this work. We used this possibility and save app. 2 MDKK every 4 years. Instead, we only have an internal cost for energy reviews (Energy mapping and audit) on 0.2 MDKK/year.

Costs related to identifying new legislation are considered necessary for having an efficient business and not as an extra cost for tracking climate related legislation. Therefore, it is not included in the "Cost of response to risk".

The total cost of response to risk is therefore: Energy reducing activities/projects: 5.7 MDKK, Internal resources for CO2 strategy (1.5 FTE): 1.2 MDKK, Internal resources for Energy reviews: 0.2 MDKK and Internal resources for PPA in EU: 0.5 MDKK. In total 7.6 MDKK.

#### Comment

#### Identifier

Risk 2

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

Direct operations

#### Risk type & Primary climate-related risk driver

Acute physical Wildfire

#### **Primary potential financial impact**

Increased indirect (operating) costs

#### **Company-specific description**



2 of Lundbeck's production sites are located in low-risk areas (Denmark), 1 in medium risk area (Italy) and 1 in high risk area (France). The site in France is packaging app. 2/3 of our internal produced products. It is located in the Provence-Alpes-Côte d'Azur region of France where the general temperature during summer month's is known to be high in the area, and forest areas can thus be extremely dry. Also, forest/wildfires are known to occur frequently in the south of France. Statistics tells us that there have been 2,500 fires reported each year in the period 1994 to 2016 and the number of wildfires in the region is expected to rise due to current challenge with climate changes. The Provence-Alpes-Côte d'Azur region was hit by wildfire as late as August 2021, but it did not reach our site.

The combination of "elevated" forest close to the site (less than 12 meters on the north and east site of the site) situated above roof level, the roof construction consist of a bitumen felt with polystyrene underneath and that the site is one big common construction a roof fire is likely to involve the entire building complex with complete destruction of the site as a consequence. Thus affecting 100% of stock at the time of the fire. A fire gap analysis prepared by a third party in 2021 shows that existing sprinklers and fire alarms will not be able to limit the damage of a massive roof fire and well-trained personnel will not be able to do anything significant to inhibit the fire until the local fire brigade arrives at the site. Additionally, it is evaluated that the fire brigade will have insufficient time to setup the right measures to carry out their firefighting of the roof/building complex until it is too late. The recommendations in the gap analysis to mitigate the consequences from a wildfire will create basis for decisions about further fire protection initiatives at the site.

The risk is reported in our Business impact analysis report which is presented for the Executive Management once a year and included in our risk register. The risk register is processed by the risk management organization and evaluated by our central Risk Office. The Risk Office assesses the overall risk exposure and discusses it with the Executive Management. The overall risk from a wildfire is evaluated to have medium-low impact.

#### Time horizon

Short-term

#### Likelihood

Unlikely

#### Magnitude of impact

Medium-low

#### Are you able to provide a potential financial impact figure?

Yes, a single figure estimate



#### Potential financial impact figure (currency)

1,546,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

#### **Explanation of financial impact figure**

Every year we prepare a Business Impact Analysis (BIA) report where the biggest supply chain risks are described incl. climate related risks. This report is based on thorough analysis and insurance inspections at our sites and in 2021 we also had our insurance broker to complete a Fire Gap Analysis for our French site due to the likelihood of a wildfire to happen. In this report the present estimated maximum loss and normal loss expectancy is calculated both to be 1,546 MDKK split between app. 711 MDKK for business interruptions in the period until all production is transferred and reestablished at partly our DK site and partly at an external contract manufacturing organization) and app. 776 MDKK for property loss and 59 MDKK for inventory loss.

#### Cost of response to risk

12.400.000

#### Description of response and explanation of cost calculation

The corrective action in case a wildfire happens is to transfer our production partly to Lundbeck's headquarter site where we have similar manufacturing facilities and partly to external contract manufacturing organizations that we already cooperate with.

Our preventive actions constitute of a thorough risk identification process where we have insurance inspections and annual risk assessment workshops covering all production areas, warehouses, contract manufacturers (CMO) and suppliers. The result from these inspections and assessments are gathered in our annual Business Impact Analysis (BIA) that present business interruption impact and mitigating of risks securing a resilient supply chain. The report also includes estimated property and inventory losses. The result from this analysis determines the size of our property and business interruption insurances that are set to 8.4 MDKK for 2022/23.

The additional Fire Gap analysis for our French site prepared in 2021 by our insurance broker are pointing at a devastating wildfire to be the highest climate related risk with largest impact. The gap analysis point at two main weaknesses on the site: Lack of heavy fire separation and a



thick layer of polystyrene isolation on the entire roof area.

During the last 3 years we have been implementing mitigating actions like:

2019-20: Every 2 years a 50 meters clearing at the east side of the site is performed to increase factory distance to trees and bushes.

2021 (Q2): Trees have been cut in the east side of the site to limit wildfire hazards.

Total cost: 0.372 MDKK

Planned mitigating actions the next 2-3 years including:

- Sprinklers with waterfall to protect the north side of the warehouse estimated to cost app. 1 MDKK.
- Roof material replacement by mineral wool. Also mandatory for an onsite solar panel project initiated in 2022 and included in the business plan to a cost at app. 7.5 MDKK

Cost of response to risk can therefore be summed of the cost for:

Share of property and Business interruption insurance costs 3-4 MDKK annually (3.5 MDKK is used for calculating total cost for response to risk). The price for the insurance is decided based on the total risk picture described in our BIA report.

Already performed and future Fire protection initiatives at our French site: 8.9 MDKK

In total this is app: 12.4

#### Comment

During the next two years similar gap analysis will be prepared for our two chemical sites in DK and Italy.

#### Identifier

Risk 3

Where in the value chain does the risk driver occur?

Upstream

Risk type & Primary climate-related risk driver

Acute physical



Flood (coastal, fluvial, pluvial, groundwater)

#### **Primary potential financial impact**

Increased direct costs

#### **Company-specific description**

Acute physical risks like exposure to tsunamis and flooding can affect Lundbeck's partners and suppliers. Lundbeck have suppliers and partners all over the world and some of them are situated at locations that are considered to have a high or medium risk for acute physical risks like tsunami and flooding and/or chronic physical risks like drought and temperature rise. This can lead to damaged products or missing or delayed deliveries. For the most critical suppliers and partners we do have second sources in place securing the financial impact in case of a break down at a low level. But we do have a service provider located in Tennessee, USA close to a river, where our insurance company have considered this location to have severe risk for river flooding. This service provider is running a warehouse for our medicine and in case the supplier experiences a serious flooding, large part of our medicine can be damaged, and our stock inventory seriously decreased. This situation has been assessed in our Business Impact Analysis process and considered to have moderate financial impact, but unlikely to happen because we have established a dual warehouse solution resulting in an overall medium-low impact.

#### Time horizon

Medium-term

#### Likelihood

Unlikely

## Magnitude of impact

Medium-low

#### Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

#### Potential financial impact figure (currency)

209,000,000

Potential financial impact figure – minimum (currency)



#### Potential financial impact figure – maximum (currency)

#### **Explanation of financial impact figure**

The financial figure is calculated based on our most critical climate related risk at our service provider running a warehouse in Tennessee. The financial impact is constituted by the financial impact from:

Inventory loss: 16 MDKK

Business interruption due to loss of stock and time for moving to another warehouse (2 weeks): 193 MDKK

In all: 209 MDKK

#### Cost of response to risk

4,500,000

#### Description of response and explanation of cost calculation

To reduce risks from supply chain interruptions Lundbeck has a risk management process in place. The risk management process includes insurance inspections carried out by the insurance companies together with Lundbeck. As a part of this process our insurance company prepare a climate related risk assessment of our own sites and most critical suppliers ranking the risk for e.g. tsunamis, flooding, storms etc. The process also includes that all our partners prepare factory risk assessments that describes factory risks, including climate risks and how they are mitigated. Annually risk assessment workshops covering all production areas, warehouses, contract manufacturers, suppliers and supporting functions are performed. The primary focus of this process is to get an overview of business interruption impact and mitigation of risks securing a resilient supply chain e.g. by establishing dual sourcing and increasing our production flexibility. The most critical risks are gathered in a Business Impact Analysis (BIA) report. This report is also used to define the necessary coverage of our Property and Business Interruption insurance.

The most substantial mitigating action to reduce business interruption caused by flooding at our warehouse service provider in Tennessee, USA, is that we have implemented dual-warehousing in Nevada, USA to secure continued supply. In the event of a flooding incident at the warehouse in Tennessee all products will be moved to the warehouse in Nevada lasting app. 2 weeks. To further reduce the period of time for resupplying lost inventory, Lundbeck will engage with manufacturers to expedite the resupply.



It is difficult to separate activities that mitigates supply chain interruptions solely caused by physical climate risks. Most activities are performed due to a mix of different risks all causing loss of inventory or business interruption. To indicate a size of cost of response we can use the cost for:

The Business Impact Analysis (BIA) process app: 1 MDKK

Share of Property and Business Interruption insurance: 3-4 MDKK (3.5 MDKK will be used in the total calculation)

In all: 4.5 MDKK.

#### Comment

# **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?

Direct operations

## **Opportunity type**

Energy source



#### Primary climate-related opportunity driver

Use of lower-emission sources of energy

# Primary potential financial impact

Reduced indirect (operating) costs

#### Company-specific description

Lundbeck is exposed to fossil fuel price increases and climate scenarios predict that countries using carbon pricing schemes will increase. Our two Danish sites and our French site is exposed to carbon taxes. The current situation with fluctuating energy prices creates a good opportunity for Lundbeck to enter long-term PPA agreements with renewable electricity to a low fixed energy price.

Entering PPA's is also a strong and important contribution to Lundbeck's climate targets and to our commitment to "Business Ambition for 1.5°C" of leading companies committing us to have Net Zero emissions by latest 2050. We have several milestones for gradually converting to 100% renewable electricity in our transition plan.

In 2020 we signed a PPA with a solar panel park covering the entire electricity consumption of our two Danish sites from January 2022. Rapid adoption of a long-term PPA with renewable energy is a good opportunity to become more resilient to increased energy prices and carbon taxes/pricing schemes. E.g. in 2022 where we experienced unexpected high energy prices our Danish PPA agreement including a fixed electricity price was app. 6 times lower than the average electricity price at 1,596 DKK/MWh.

In 2022/23 we are exploring our possibilities for entering PPA's covering our sites in Europe. Parallel our Italian site is installing on-site solar panels that will produce 500 MWh/year corresponding to 168 tons of reduced CO2 emissions. The business case for the solar panels is positive as we have locked the price for 15 years at a low level: 796 DKK/MWh compared to the average price in 2022 at 1,596 DKK/MWh. Possibilities for on-site solar panels at our French site have also been investigated during 2022, but will require huge changes in the roof construction and therefore have a long pay back time.

Our continuous effort for reducing our energy consumption is also an important contribution to reduce the risk from increasing energy cost and carbon taxes/pricing. Since 2006 we have reduced our energy consumption by 30% reducing our annual energy cost by app. 25 MDKK. Finally we are exploring our possibilities for converting gas driven boilers to electrical driven equipment. In 2022 a business case for converting gas to electricity was developed for our headquarter site, unfortunately showing both several technical challenges and a long payback time. In 2023 a business case for our Danish Chemical site will be developed.

#### Time horizon

Short-term



#### Likelihood

Virtually certain

#### **Magnitude of impact**

Low

#### Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

## Potential financial impact figure (currency)

19,650,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

#### **Explanation of financial impact figure**

By signing the PPA in Denmark with a fixed low energy cost we reduced our energy cost by app. 30 MKK/year compared to the extremely high average price in from 2022. Looking at 2023 energy prices the saving is more likely to be app. 13 MDKK/year in the coming years.

By installing on-site solar panels at our Italian site we expect to save app. 450,000 DKK/year

Additionally converting from gas boiler to electric boilers receiving electricity via Power Purchase Agreement (PPA) will make us more resilient towards increasing energy prices and carbon taxes/pricing schemes. In IEA NZE it is predicted that CO2 prices can increase by a factor 5 in most OECD countries. By looking at the governmental suggested new carbon tax in Denmark it is a very high estimate. Instead, we could predict that we would have a similar carbon tax as in Denmark in the other countries we are operating (4 countries in Europe and 3 sites in USA). This would result in a carbon tax at 6.2 MDKK (750 DKK/ton CO2 emitted from operation of sites in scope 1 based on scope 1 emissions in 2022)

In total:

Reduced energy cost due to the PPA: 13 MDKK/year (based on 2023 prices)

Reduced energy cost due to on-site solar panels in Italy: 450,000 DKK/year



Avoided CO2 tax/pricing: 6.2 MDKK

In all: 19,650,000 DKK

## Cost to realize opportunity

7,400,000

#### Strategy to realize opportunity and explanation of cost calculation

Our strategy to reduce our exposure to increasing CO2 taxes is to reduce our energy consumption and decrease the amount of fossil fuel used at our sites. By reducing our energy consumption and increasing the amount of renewable energy, we reduce the financial impact from increasing CO2 taxes. Our management method to realize this opportunity is our continuous development of our Climate strategy where we raised our ambitions in 2019 by joining the "Business Ambition for 1.5°C" of leading companies and committed to have Net Zero emissions by latest 2050. Additionally, we submitted a new Net zero target for approval by SBTi and developed a transition plan towards zero emissions by the end of 2022. Since 2006 we have used our absolute climate targets as an important driver for our continued focus on energy reductions and so far, we have achieved a 30% reduction of our energy consumption. As it becomes more difficult to continue reducing of our energy consumption, we have increased our focus on transitioning our use of fossil fuels to renewables. A specific example of how Lundbeck is taking care of the opportunity to become more energy efficient and less vulnerable to carbon regulation is our decision about entering Power Purchase Agreements (PPA). Our current PPA agreement is supplying our two Danish sites by January 2022 and 7 years forward. Due to the fixed price in our PPA, we have avoided 13 MDKK in energy costs (compared to average energy price) in 2022. In 2022 we started exploring possibilities for a PPA covering our EU sites and expect to sign an agreement during 2023. Additionally, our Italian site has installed on-site solar panels in 2022 covering 7% of the electricity consumption.

Our transition plan includes milestones for changing to renewable energy and will be a driver for developing roadmaps for converting gas and oil driven boilers to electrical boilers, that can be supplied by PPA's. Apart from reducing our carbon tax, this will also reduce the risk for limited supply of biooil, which we experienced in the second half of 2022, increasing our Scope 1 emissions from our chemical site in DK.

The cost for realizing these opportunities is constituted by:

Internal resources for developing the Climate strategy (1.5 FTE): 1.2 MDKK

Cost associated with energy saving projects: 5.7 MDKK.

Internal resources (600 hours (app. 1/3 FTE) for meetings with developers, evaluation of RFP's and management meetings) for the PPA:

500,000 DKK

In all: 7.4 MDKK

#### Comment



#### Identifier

Opp2

#### Where in the value chain does the opportunity occur?

Direct operations

# **Opportunity type**

Resilience

#### Primary climate-related opportunity driver

Other, please specify

Good Environmental, social and corporate governance (ESG) rating have a positive financial impact on financing and funding

## **Primary potential financial impact**

Increased access to capital

#### Company-specific description

There is an opportunity and potential for good Environmental, Social and Corporate Governance (ESG) performance to have a positive financial impact on financing/funding for Lundbeck on two overall categories (1) Regular bank loans and (2) Corporate bonds. For the bank loans it is an agreement with the banks, that if Lundbeck were to improve on certain agreed KPIs e.g. carbon emission performance the price would drop 2.5 bps (0.025%). Consequently, if no improvement were made Lundbeck would either pay the same, or have to pay extra.

For the bond market investors have a lot of focus on ESG in general, but the pricing impact is estimated to be 1-5 bps since Lundbeck is not in an industry where there is a net positive climate impact or a severely negative impact (e.g. like extraction or energy intensive production industries).

In 2022 we extended our revolving credit facility and added 3 sustainability KPI's. Two of them are climate related KPI:

KPI 1: Absolute scope 1 and 2 CO2 emissions per year, running from 2021 - 2025 with a total emission reduction at 15% (3%/year)

KPI 2: Share of total electricity from renewable sources per year, running from 2021 - 2025 increasing from 47% to 85% (Respectively in the years 2022 to 2025: 50%, 55%, 60%, 85%). Only renewable electricity according to RE100 Technical criteria can be procured.



Going forward Lundbeck will continuously follow upcoming opportunities for sustainability linked bonds and loans through dialogue with our banks.

#### Time horizon

Short-term

#### Likelihood

Very likely

## **Magnitude of impact**

Medium-low

### Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

## Potential financial impact figure (currency)

2,800,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

#### **Explanation of financial impact figure**

There is potential for good ESG performance to have a positive financial impact on financing/funding for Lundbeck on two overall categories (1) Regular bank loans and (2) Corporate bonds.

Loans: Current Revolving Credit Facility of EUR 1.5 bn. Saving potential: 0.025%\*1,500,000,000 = 375,000 EUR/year equal to app. 2,800,000 DKK/year

Bonds: Benchmark size – saving potential: 0.02%\*500,000,000 = 100,000 EUR/year equal to app. 745,500 DKK/year In total: 4,100,200 DKK.

\* This assumes full drawing on the RCF, which is not the case for Lundbeck currently. However, this has been mitigated by using the lower end



of the range provided to us by the banks.

The financial impact calculated above is based on our current loan portfolio and an assumption of a potentially future bond issuance of a benchmark size (i.e. 500 MEUR). The numbers used have been discussed with our banking partners to get insights from experts in the field. However, given that Lundbeck current loans are not green loans, and the impact on the pricing of a potential bond are virtually impossible to predict these should be considered as estimates of a high certainty. Both the corporate loan and bond market have seen an increased focus on ESG; bond market more than loan market. Some bond investors have green funds and certain ESG requirements for what they can invest in. Any investor that can be unlocked could have a positive price impact, which also goes for showing investors that Lundbeck is a company with strong ESG. In this sense being focused on a higher cost if performing badly on ESG compared to the benefit of being a good performer. As Lundbeck currently have focused on the Loans and not the bonds a potential financial impact is therefore: 2,800,000 DKK (Current Revolving Credit Facility of EUR 1.5 bn. Saving potential: 0.025%\*1,500,000,000 = 375,000 EUR/year equal to app. 2,800,000 DKK/year).

## Cost to realize opportunity

2,200,000

#### Strategy to realize opportunity and explanation of cost calculation

Generally, shareholders and customers are positively inclined for ESG and climate related initiatives which could add to Lundbeck's image. Our strategy to be able to exploit the positive financial impact on financing/funding is to increase focus on the targets set out in the agreements and to maintain our high climate ambitions. It impacts business units like: Treasury, Legal, Ethics Compliance, Corporate Sustainability and Health, Safety & Environment. At the moment our Compliance & Sustainability and Health, Safety & Environment departments are increasing the focus about selecting benchmarks that are the most significant and most used by banks and investors and improving our disclosure of the requested information. In addition to CDP Climate we have selected the following indices, which include climate, for targeted responses in 2022: Sustainalytics, MSCI, ISS ESG, and FTE Russell. We also consider our rating from Moody's Analytics, but this rating was not updated in 2022. Our climate governance, management, disclosure and targets reporting contribute to strong ESG ratings for Lundbeck. Examples on our high ambitions on climate actions is our decision about signing the "Business Ambition for 1.5°C" of leading companies aligning their business actions with the most ambitious aim of the Paris Agreement (Dec 2019), our submission of a net zero SBTi target (2022) and development of our transition plan (2022).

To exploit the opportunity for changing an existing loan to the offered sustainability linked loan that will run from 2022 to 2025, we had to develop and achieve 3 sustainability KPI's. During 2021 agreed on the 3 KPI's incl. timeline with the bank and finalized all paper documentation and signed the loan in July 2022. The climate related KPI's are:

KPI 1: Absolute scope 1 and 2 CO2 emissions per year, running from 2021 - 2025 with a total emission reduction at 15% (3%/year)



KPI 2: Share of total electricity from renewable sources per year, running from 2021 - 2025 increasing from 47% to 85% (Respectively in the years 2022 to 2025: 50%, 55%, 60%, 85%). Only renewable electricity according to RE100 Technical criteria can be procured.

The current costs for this strategy are all costs for internal resources for:

- Responding to benchmarks: Internal resources (1.25 FTE): 1 MDKK
- Development of the climate ambition and targets (1.5 FTE): 1.2 MDKK
- Development of KPI's for Sustainability linked loans is considered insignificant.

In all: 2.2 MDKK.

#### Comment

#### Identifier

Opp3

## Where in the value chain does the opportunity occur?

Direct operations

# **Opportunity type**

Resource efficiency

## Primary climate-related opportunity driver

Use of recycling

## **Primary potential financial impact**

Reduced direct costs

# **Company-specific description**

Lundbeck's medicine is based on chemical synthesis hence large amounts of chemicals are used to produce the active pharmaceutical ingredients. Several of the most used solvents are both expensive and emits large amounts of CO2 when being produced. In Lundbeck's



carbon footprint chemicals and raw materials for the chemical production of active pharmaceutical ingredients take up 39% of all the emissions related to product-related purchased goods. The ability to recycle chemicals and use them repeatedly in the production synthesis is therefore beneficial from a financial point of view as it reduces cost for raw materials, but it also reduces our scope 3 emissions and contributes to achieving our scope 3 target. In our transition plan we have included two milestones related to the share of solvents that are being recycled. In 2022 Lundbeck managed to recycle 65% of the used volatile organic chemicals in our chemical production and we are continuously looking for new possibilities for recycling of chemicals. In 2021 a new method for palladium recycling and toluene recovery was implemented creating a possibility for reducing CO2 emissions by app. 422 tons/year and saving 9 MDKK/year. The method was developed further in 2022. A new solution for recovering Ethanol, Isopropanol and Acetone with a potential of reducing CO2 emissions by 1,155 tons was also being exploited in 2022.

#### Time horizon

Short-term

#### Likelihood

Virtually certain

#### Magnitude of impact

Low

## Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

8,500,000

Potential financial impact figure – maximum (currency)

10,500,000

**Explanation of financial impact figure** 



80% recovery of toluene: 1 - 2 MDKK in cost savings for virgin toluene (Recovery of app. 214,000 L toluene)

90% recovery of palladium: 8 -9 MDKK in cost savings for virgin palladium (Recovery of app. 17 kg palladium)

Extra cost for recovery and transportation: 0.5 MDKK

Total range: (9 - 11 MDKK) - 0.5 MDKK

## Cost to realize opportunity

40,500,000

#### Strategy to realize opportunity and explanation of cost calculation

Lundbeck's production sites are continuously looking for new possibilities to increase recycling of chemicals. The strategy is to find ways to recycle the chemicals that are used in large amounts or chemicals that are expensive to purchase. One of the chemicals that have been in focus the recent years is palladium (Pd). It is a costly raw material and have a significant CO2 emission as it is extracted from mines in Russia and South Africa and following transported worldwide (Average at 11.29 tons CO2 is emitted per kg of Pd). The worldwide demand of palladium is increasing, which has led to an increasing price level over the past years.

In 2021 a new innovative methodology was implemented. Via a cooperative process between Lundbeck and the Pd supplier, Pd is now recycled leading to less CO2 emissions, less raw material consumption, less waste, reduced cost and reduced risk from metal price fluctuations due to lower consumption. A site benefit from the process is increased internal recycling of toluene reducing CO2 emissions by 255 tons (1,49 kg CO2/liter toluene). The process consist of several steps: 1. The Pd supplier deliver virgin Pd to Lundbeck. 2. Lundbeck use the Pd in the relevant synthesis. 3. Lundbeck deliver the used Pd solution back to the Pd supplier that recover the Pd to a certain quality. 4. Pd is delivered to Lundbeck again for use in the synthesis. The target is to recover 90% of Pd.

The setup is implemented at our Danish site without any cost except from extra cost for recovery and transportation: 0.5 MDKK.

A new solution for recovering Ethanol, Isopropanol and Acetone is also being exploited. One solution that was investigated was to have an external company to do the job. The result turned out to be negative. Instead we have investigated the possibility to establish the capacity inhouse in a dedicated recovery plant. During 2022 a business case was prepared and during first half of 2023 the business case will be evaluated and a management decision will be taken.

The potential amount of solvents that can be recovered with a recovery percent at conservative 80%, are:

Ethanol: 430,000 L Isopropanol: 160,000 L



Acetone: 160,000 L

The recovery will give a cost saving in buying the solvents at 5.7 MDKK and a CO2 reduction at 1,155 tons CO2.

Purchase and installation of recovery equipment is estimated to 40 MDKK. Adding the extra cost for recovery and transportation of Pd at 0.5

MDKK. The cost for realizing the opportunity is 40.5 MDKK.

#### Comment

# 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 do not have a feedback mechanism in place, but we plan to introduce one within the next two years

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

Our Transition plan towards Zero emissions was including main levers and how we are working with the different categories of emissions was published along with our Sustainability report 2022 in Feb 2023 and made available at www.lundbeck.com at the same time. Additionally it was presented at the General assemble in March 2023. We also have a background document for internal use, where we have addressed additional aspects related to the transition plan.



- Transition plan Colors A4\_09-02 Final.pdf
- $\bigcirc$  Low carbon transition plan\_Background\_Final Feb 2023.pptx

# 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	
Row 1	Yes, qualitative and quantitative	

# 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
Transition scenarios IEA NZE 2050	Company-wide		Parameters: In our scenario analysis we have used a top-down approach and identified the potential impact on: Carbon pricing, fuel availability, policy regulation, technology, reputation, production and supply chain disruptions, physical damage to assets and changes in demand for our products. Important inputs to our scenario analysis are: - The TCFD and CDP Guidance documents, the public scenarios and National and EU climate targets - Our Business Impact Analysis (BIA) Report that consider physical climate related risks at our sites and in our value chain Our assessment of transitional risks like regulatory risks at both company and asset level is mainly assessed by the Corporate Health, Safety and Environment (HSE) department and the Compliance & Sustainability department. Evaluation of public climate scenarios is included in this assessment. All material risks are reported into our company wide risk management process that are processed by the risk management organization, reviewed by Executive Management, and finally presented for the



		board of directors.  Assumptions:  The NZE Scenario shows an achievable pathway to achieve Net Zero CO2 emissions by 2050. The scenario also meets key energy-related SDGs and is consistent with limiting the global temperature rise to 1.5°C (with a 50% probability).  In IEA NZE 2050 following assumptions has been considered material for Lundbeck:  1. Increased use of carbon pricing: We are already experiencing an increase in carbon tax in Denmark and the NZE scenario foresee further increases by 50% in 2030 and a factor 5 in most OECD countries by 2040.  2. Limitations within fossil fuels. NZE predict an 80% decrease in use of fossil fuels in 2050 and no new sales of fossil fuel boilers already by 2025.  3. Rapid deployment of renewable energy. In 2030 is predicted four times the scale as in 2020.  4. The NZE also predict 60% increased sales of electric vehicles (EVs) in 2030 followed by an increased need for charging stations.  Analytical choices:  The time horizon for our scenario analysis is 1 – 10 years corresponding to our SBT target running to 2034 and Lundbeck's financial planning horizon of 0-2 years and 3-10 years (short- and long term). This corresponds to the NZE Scenario that uses year 2030 in many of the predictions.
Physical climate scenarios RCP 8.5	Company-wide	Parameters: In our scenario analysis we have used a top-down approach and identified the potential impact on: Carbon pricing, fuel availability, policy regulation, technology, reputation, production and supply chain disruptions, physical damage to assets and changes in demand for our products. Important inputs to our scenario analysis are: -The TCFD and CDP Guidance documents, the public scenarios and National and EU climate targetsFor the physical scenarios, we have mainly used the forward-looking scenarios from WRI's Aqueduct atlas and the regional fact sheets from IPCC's sixth assessment reportOur Business Impact Analysis (BIA) Report that consider physical climate related risks at our sites and value chainOur assessment of transitional risks like regulatory risks at both company and asset level mainly



assessed by the Corporate Health, Safety and Environment (HSE) department and the Compliance &
Sustainability department. Evaluation of public climate scenarios is included in this assessment.
All material risks are reported into our company wide risk management process that are processed by
the risk management organization, reviewed by Executive Management, and finally presented for the
board of directors.
Assumptions:
The RCP 8.5 predict an average of app. 4C temperature rise and include both transitional and
physical changes. RCP 8.5 is chosen as a second scenario as it is suggested by CDP and TCFD and
is considered the Business as usual scenario.
In RCP 8.5 we have focused on the physical scenarios as transitional risks already are covered by
IEA NZE. The physical scenarios in RCP 8.5 across the world varies but in general it predicts
increased temperature, drought, rising sea levels, changes in precipitation, increased frequency of
severe weather events and river flooding.
Following assumptions has been considered material for Lundbeck:
1. Increased temperature (4 degree increase) in southern part of Europe where our French site is
located increasing the risk for wildfires.
2. App. 20% increased precipitation and increased frequency for river flooding in Eastern North
America where our warehouse service provider is located.
Analytical choices:
The time horizon for our scenario analysis is 1 – 10 years corresponding to our SBT target running to
2034 and Lundbeck's financial planning horizon of 0-2 years and 3-10 years (short- and long term).
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# 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** 



We have chosen the IEA NZE 2050 and the RCP 8.5 in our scenario analysis because they are representing pathways to achieving the ambitious net zero CO2 emissions by 2050 and limiting the global temperature rise to 1.5°C (IEA NZE) and a probably more realistic future with warming of app. 2.7°C (RCP 4.5). It is recommended by TCFD to include a 1.5°C aligned pathway and a more realistic pathway. By using the IEA NZE we are also looking at a scenario that corresponds to our own 1.5°C aligned climate targets.

In our scenario analysis we evaluate several parameters: Carbon pricing, fuel availability, policy regulation, technology, reputation, production and supply chain disruptions, physical damage to assets and changes in demand for our products.

Scenario analysis is used for evaluating future business risks and opportunities and to highlight likely financial and non-financial impacts in the future. Additionally, it guides the needed levers and level of ambition in our overall climate strategy.

#### Focal questions:

- 1. What predicted future developments need to be evaluated?
- 2. What initiatives are needed to develop the business in accordance with the climate scenarios and relevant timing?
- 3. What developments have the greatest ability to support decision-making and shape future performance?

The focal questions are considered company-wide in a time horizon of 1 – 10 years covering the time horizon for our SBT target running to 2034 and Lundbeck's financial planning horizon of 0-10 years (short- and long-term).

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

The analysis of the NZE scenario show that we must continue developing our Climate strategy, go 100% renewable energy and increase EV's in our fleet. The NZE predict:

- 1. Increased carbon pricing up to 5 times higher than today across the world: In DK a new carbon tax will be implemented within 5 years increasing energy related tax with a factor 5. If copying this to the rest of our sites it would constitute less than 0.1% of our revenue. An insignificant extra cost, but it does impact our climate strategy. E.g. was our transition plan decided in 2022 including several milestones towards having 100% renewable energy in scope 1 worldwide in 2035.
- 2. 80% decrease in use of fossil fuels in 2050 and no new sales of fossil fuel boilers by 2025. At 3 of our sites, we use fossil fuels in our boilers and at 1 site we use biooil. Supply of biooil has become limited and in 2022 we had to switch to fossil fuels in shorter periods. This result of the scenario analysis has initiated preparation of business cases for converting to electric boilers in 2022/2023 at our DK sites.
- 3. Rapid deployment of renewable energy. In 2030 four times the scale as in 2020. By Jan 2022 our PPA supplied our two Danish sites with renewable electricity covering 66% of our electricity consumption. In 2023 we expect to sign a PPA covering our sites in Europe increasing this share to app. 85% and by 2040 we will use 100% renewable electricity worldwide.
- 4. 60% increased sales of electric vehicles (EVs) in 2030. Lundbeck lease app. 2,800 cars and our Car policies have been impacted. In 2021 EV's were introduced in our Car policy for HQ. At our sales office in USA, that has the majority of the fleet, a roadmap for converting to EV's:



50% in 2030 and 100% in 2035 has been developed. Experiences with converting to EV's in DK and USA will create bases for developing a timeline for our fleet worldwide.

The analysis of the RCP 8.5 scenario concludes that we should continue to evaluate physical risks at our sites and in our value chain. The RCP 8.5 predict:

- 5. 3-4 degree increased temperature in the south of Europe increasing the risk for wildfires at our French site. In 2021 a fire gap analysis was prepared and will create basis for decisions about further fire protection. The financial impact from a wildfire is estimated to 1,55 MDKK and future cost for increased fire protection is app. 8.9 MDKK.
- 6. 20% increased precipitation and increased frequency for river flooding in Eastern North America where our warehouse provider is located close to a river. This location is considered to have severe risk for river flooding. If this supplier experiences a flooding our stock inventory will seriously decrease and have a financial impact at 209 MDKK. To mitigate this risk a dual warehouse solution in Nevada was established in 2021/22.

The scenario analysis emphasizes the importance of considering the results in our risk management process and when deciding milestones in our transition plan.

# 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	Yes	Our financial planning runs up to 10 years and using this time horizon we only see that, the top concerns
services		for our patients are effectiveness of the treatment and the cost of the medicine.
		Lundbeck's products are mainly based on chemicals and chemical synthesis and only a very small part
		is based on proteins. Neither of these raw materials are dependent on biological raw materials, that
		could be affected by climate changes. Additionally, our products are pharmaceutical products that must
		follow strict medical regulation and neither our products or the packaging materials are allowed by this
		regulation to change due to climate risks or opportunities. We expect that some future products will be
		developed based on biologics that potentially are impacted by climate changes, but development of
		pharmaceutical products up to market launch takes 10 -15 years and risks related to new products are



		continuously being evaluated via our risk management system.  Another area that indirectly influences our business and climate strategy is EU's, Health organizations (our customers) and financial institutions increasing focus on climate change. Examples are NHS in UK that from 2023 will require suppliers of medicine to publish carbon reduction plans for contracts larger than £5M. Similar requirements are being developed in other countries Health organizations making good climate performance a prerequisite for selling products. The growing number of climate requirements from our customers has advanced our work with developing product footprint which will be initiated in 2023. Also the financial sector has started to offer sustainability linked loans to promote good climate performance. A substantial business decision in 2021 was to exploit this opportunity and consult our banking partners and agree on a sustainability loan where we can save up to 2.8 MDKK in interests if 3 defined KPI's are achieved (2 of them climate related). In June 2022 the loan was signed. Another substantial business decision in 2022 impacted by the increasing focus on climate change was the approval of our transition plan ultimo 2022.
Supply chain and/or value chain	Yes	Many of our suppliers and partners are situated in Europe and USA at locations where extreme weather events rarely have a character that affect product reliability, but we do have suppliers and partners located in Japan, India and China at locations that are considered to have a high or medium risk for acute physical risks like flooding, tsunami and/or chronic physical risks like drought and temperature rise. Every year a Business Impact Analysis is prepared based on results from e.g. factory risk assessments made by our key partners. The primary focus of this process is to get an overview of the risk of business interruption, the size of the potential impact, mitigating actions and finally decide the size of our business insurance. Based on this process a continuity plan is being decided. The most critical risk with financial impact identified in 2022 was our warehouse service provider located in Tennessee, USA close to a river. A location that today is considered to have a high risk for flooding. To mitigate business interruption caused by a potential flooding the most substantial mitigating action at our warehouse service provider in Tennessee, USA, is that we have implemented dual-warehousing in Nevada, USA to secure continued supply. In the event of a flooding incident at the warehouse in Tennessee, it will take 1 - 2 weeks to get the warehouse in Nevada up running with the same capacity. To further reduce the period of time for resupplying lost inventory, Lundbeck will engage with manufacturers to expedite the re-supply. Time horizon: 2020 - 2030.



Investment in R&D	Yes	The way our investment in Research and Development are affected is through requirements to our Contract Research Organizations (CRO's) to comply with our code of conduct and by our audits: Both activities have the purpose to ensure proper conditions at their sites. The most substantial business decision influencing our cooperation with CRO's is our decision about developing a Net zero Science Based Target. This target includes absolute reductions in our scope 3 where CRO services are constituting a significant part and therefore selected to be enrolled in our scope 3 reduction activities. In 2021 we engaged with our largest CRO's and received information about emissions related to the service they provide to us, their climate targets and initiatives for emission reduction. The result from the survey showed that CRO emissions typically is distributed with 60% in scope 2 and 40% related to business travel. Based on this we decided in 2022 to start requesting our largest suppliers to use renewable electricity as a part of our contractual requirements and deliver emission data. Our CRO's will be enrolled in this initiative during the next 3 years where we expect to have 300 contractual agreements signed. Milestones for this initiative is included in our transition plan.  Our investments in R&D can also be affected by our ability to obtain favorable financing/funding and by investors trust in our capabilities. Today we experience that good ESG rating have a positive financial impact on financing/funding for Lundbeck on two overall categories (1) Regular bank loans and (2) Corporate bonds. This situation has impacted our decision about developing a sustainability linked loan in corporation with our banks, giving us the possibility of saving up to 2.8 MKK in interests in defined KPI's are achieved. The loan was signed in June 2022.
Operations	Yes	Lundbeck's operations can be affected by both transitional changes like reputation, increasing reporting requirements and carbon taxes and by physical changes like increasing temperatures, increasing risks for wildfires and increasing risk for flooding. Both transitional and physical risks are evaluated in our risk management system and mitigating and preventive actions implemented. The most substantial business decision in 2022 related to transitional changes was our submission of a Net zero target to SBTi and to develop and decide our Transition plan towards zero emissions. To achieve our climate targets and reduce the impact of transitional risks we have included milestones for e.g. using 100% renewable electricity and energy worldwide in our Transition plan. Another substantial decision in 2022 was to explore for entering a PPA covering our European sites and reducing the impact from increasing carbon



pricing. We expect to sign this PPA during 2023.
Physical risks are continuously being evaluated via our annually updated Business Interruption Analysis process and mitigating actions are continuously being improved. In 2021 a fire gap analysis was prepared by a third party at our French site to evaluate the risk from a wildfire. The site is located in an area where wildfires are increasingly likely to happen. The Gap analysis showed that existing sprinklers and fire alarms will not be able to limit the damage of a massive roof fire. The recommendations in the gap analysis to mitigate the consequences from a wildfire will create basis for decisions about further fire protection initiatives at the site in the coming 1 - 3 years.

# 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 expenditures Access to capital	In 2022 our net zero SBTi target and transition plan was approved by the Climate steering committee and consolidated in the Executive management group. As a part of this approval process estimates on the related budgets for the largest initiatives had been presented for the climate steering committee. Going forward the transition plan will drive decisions on investments and costs related to achieving our climate targets. Every year as part of the budget planning initiatives for emission reductions incl. budgets for each initiative that are included in our transition plan will be presented and approved by the Climate steering committee and the approved initiatives will be included in the further budget process. This enables management to arbitrate between different options and to choose the most virtuous and efficient ones in order to achieve our organization's strategic goals. Prior to the development of the transition plan the decision process and budget planning was similar but mainly driven by our climate targets running until 2034.  Besides the review of the milestones in our Transition Plan, climate related risks and opportunities is evaluated every year and integrated in the overall risk management process. Approved at the highest executive level of the company, examples on material priorities of these reviews in terms of its impact on financial planning are:  • In relation to the indirect costs of the impacts of climate change, the two most relevant issues were those of i) increasing



efforts to decarbonize our supply chain (57 % of our total scope 1, 2 and 3 emissions and 2) negotiate a new PPA that incorporates a 100% renewable mix and a more efficient cost structure.

• In relation to investments in new assets, the Transition Plan determined as the most material issue the increase in the needs for capital expenditure in the recycling of solvents used in our chemical production plants.

Below is details from the financial management that has been carried out: Indirect costs:

In our transition plan we have several milestones that we expect will impact our indirect costs:

- Our supplier engagement initiative that was implemented in 2022 where we request our suppliers to use renewable electricity and submit emission data to us. This initiative is estimated to potentially increase Opex in the range of 2 5 MDKK/year when we roll out to top 500 suppliers by spend. This extra cost is insignificant comparing with value of the contracts of the suppliers in scope. So far, we haven't experienced suppliers requesting extra cost for complying with this request.
- We have also milestones related to use of sustainable fuel at our logistic suppliers which we expect to increase cost by app. 25%. First milestone on this is in 2025 where we will have 50% of air logistics on sustainable fuel. In 2022 the Climate steering committee decided to postpone this initiative due to the high cost compared to some of the other initiatives e.g. the Supplier engagement initiative. The initiative will be evaluated again in 2023 by the Climate Steering committee as part of the budget planning process. Another milestone in 2025 in relation to logistic is to move our longest routes from air to sea. This will reduce opex cost but require extensive planning of production and acceptance from the receiving customers which isn't in place yet.
- Our PPA agreement covering electricity consumption at our Danish sites from January 2022 with a fixed price for 7 years. Establishment of the agreement had a cost of app. 0.5 MDKK (Internal resources and external consultancy), but already in 2022, the PPA turned out to be very beneficial for Lundbeck due to the huge increase in energy costs. The agreement reduced our energy costs by app. 30 MKK/year compared to the extremely high average price in from 2022. Looking at 2023 energy prices the saving is more likely to be app. 13 MDKK/year in the coming years. In 2022 we also had solar panels installed at our Italian site which we expect to reduce energy costs with additional app. 0.5 MDKK/year from 2023 also due to a fixed price agreement. In our transition plan we have milestones for gradually achieving 100% renewable energy at all our sites. The next milestone is a 100% coverage at all our EU sites by 2025. Investigation of possibilities for establishing a PPA covering EU was initiated in 2022 and a business case will be presented for the



Chairman of the climate steering committee in 2023.

Capital expenditures:

Milestones in our transition plan also impacts our capital expenditures. An example is our milestone about recycling 85% of the solvents used in our chemical production by 2030. In 2022 we recycled 65%. In order to be able to reach 85% recycling we will have to install new equipment. In 2021/22 we have investigated several possibilities and prepared a business case for installing a new recycling equipment. The Business case will be finalized and presented for approval by the Chairman for the Climate steering committee in 2023. Expected cost is app. 40 MDKK.

Other examples not directly linked to our transition plan but related to climate change adaptation are: Increasing risk for wildfires at our site in France causing need for securing the site additional sprinklers and replacement of existing roof material with mineral wool. These improvements have been included in our business plan and are expected to be implemented during the next 2 – 3 years increasing capitals expenditures in this period with app. 8.9 MDKK.

To reduce risk from business interruptions we are continuously improving our production flexibility. We have 4 independent production and packaging facilities that can take over for each other and reduce the impact of production breakdown. During 2020 we increased the production capacity at our French site, making it possible to reduce the impact by 25% in case of a break down at our headquarter site. This required an investment at app. 15 MDKK. Access to capital:

The increasing awareness on the consequences from climate changes have increased the financial sectors focus on the importance of companies' awareness about climate related risks and opportunities and their resilience towards climate related risks. This has created financial opportunities for companies that have good ESG performance by offering sustainability linked corporate bonds and loans. In 2022 Lundbeck decided to sign a sustainability linked loan including a potential saving on 2.8 MDKK in interests if defined sustainability KPI's are met and an estimated downside if only some of the KPI's are met at 1 MDKK. Two of the KPI's relates to our climate performance: KPI1: Scope 1 and 2 reductions and KPI2: Share of renewable electricity. The loan will be running from 2022 – 2025. These KPI's are strongly linked to milestones in our transition plan and our scope 1 and 2 target.



# 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	Yes, we identify alignment with both our climate transition plan	At both the company and activity level
1	and a sustainable finance taxonomy	

# C3.5a

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

## **Financial Metric**

OPEX

## Type of alignment being reported for this financial metric

Alignment with a sustainable finance taxonomy

## Taxonomy under which information is being reported

EU Taxonomy for Sustainable Activities

## Objective under which alignment is being reported

Climate change mitigation

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

0

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



0

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

We have reviewed our CAPEX and OPEX activities for 2022 aiming to identify eligible activities and determine the eligible amount for those items according to the Taxonomy requirements. We identified that OPEX is not centrally accounted, but rather recorded locally across the business. Further, CAPEX is tagged by general activity, and to assess compliance with eligible activities as required by the EU Taxonomy requirements, we assessed the list of projects that Lundbeck invested in 2022 to map eligible activities in accordance with the normative. Based on this approach, we found three eligible activities: Construction of new buildings; Renovation of existing buildings; and Transport by motorbikes, passenger cars, and light commercial vehicles. We reviewed the activities currently published and found that the activity "Transport by motorbikes, passenger cars, and light commercial vehicles" is important to us from a sustainability perspective, as company cars are part of our GHG scope 1 emission target. We found that 6.5% of OPEX to be eligible.

For all three activities, our review found that none of Lundbeck's CAPEX or OPEX live up to the substantial contribution criteria and are therefore not taxonomy aligned. When looking at the substantial contribution criteria for the activities, it was clear that the activities performed were noncompliant, which therefore meant it was unnecessary to move on to examine the Do No Significant Harm and Minimum Safeguard criteria, as we would not be claiming alignment. For our reporting period, we also do not have a focus on improving our alignment in our approved CAPEX plan, as there is a small percentage which is eligible according to the currently published activities. Similarly, as we are a pharmaceutical company, the majority of our OPEX is centered on R&D, which is currently not an eligible activity and therefore contributes to our low eligibility. In conclusion, Lundbeck has no taxonomy-aligned turnover, CAPEX, or OPEX related to climate change and climate mitigation to report in 2022.

**Financial Metric** 

OPEX

Type of alignment being reported for this financial metric



Alignment with our climate transition plan

#### Taxonomy under which information is being reported

# Objective under which alignment is being reported

Amount of selected financial metric that is aligned in the reporting year (unit currency as selected in C0.4) 178,000,000

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

4

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

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

C

## Describe the methodology used to identify spending/revenue that is aligned

We have reviewed our CAPEX and OPEX activities for 2022 aiming to identify eligible activities and determine the eligible amount for those items according to the Taxonomy requirements. We identified that OPEX is not centrally accounted, but rather recorded locally across the business. Further, CAPEX is tagged by general activity, and to assess compliance with eligible activities as required by the EU Taxonomy requirements, we assessed the list of projects that Lundbeck invested in 2022 to map eligible activities in accordance with the normative. Based on this approach, we found three eligible activities: Construction of new buildings; Renovation of existing buildings; and Transport by motorbikes, passenger cars, and light commercial vehicles. We reviewed the activities currently published and found that the activity "Transport by motorbikes, passenger cars, and light commercial vehicles" is important to us from a sustainability perspective, as company cars are part of our GHG scope 1 emission target. We found that 6.5% of OPEX to be eligible. For all three activities, our review found that none of Lundbeck's CAPEX or OPEX live up to the substantial contribution criteria and are therefore not taxonomy aligned. When looking at the substantial contribution criteria for the activities, it was clear that the activities performed were noncompliant, which therefore meant it was unnecessary to move on to examine the Do No Significant Harm and Minimum Safeguard criteria, as we would not



be claiming alignment. For our reporting period, we also do not have a focus on improving our alignment in our approved CAPEX plan, as there is a small percentage which is eligible according to the currently published activities. Similarly, as we are a pharmaceutical company, the majority of our OPEX is centered on R&D, which is currently not an eligible activity and therefore contributes to our low eligibility. In conclusion, Lundbeck has no taxonomy-aligned turnover, CAPEX, or OPEX related to climate change and climate mitigation to report in 2022. In our transition plan we have a milestone that 100% of cars in DK and 50% of company cars in US and EU should be EV's. Based on a business case developed in US that holds the majority of company cars the extra cost for using EV's instead of fossil based cars is estimated to 6 MDKK.

## C3.5b

(C3.5b) Quantify the percentage share of your spending/revenue that was associated with eligible and aligned activities under the sustainable finance taxonomy in the reporting year.

## **Economic activity**

Construction of new buildings

## Taxonomy under which information is being reported

EU Taxonomy for Sustainable Activities

#### **Taxonomy Alignment**

Taxonomy-eligible but not aligned

## Financial metric(s)

CAPEX

Taxonomy-aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned turnover from this activity as % of total turnover in the reporting year



Taxonomy-aligned turnover from this activity that substantially contributed to climate change mitigation as a % of total turnover in the reporting year

Taxonomy-aligned turnover from this activity that substantially contributed to climate change adaptation as a % of total turnover in the reporting year

Taxonomy-eligible but not aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned CAPEX from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned CAPEX from this activity as % of total CAPEX in the reporting year

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change mitigation as a % of total CAPEX in the reporting year

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change adaptation as a % of total CAPEX in the reporting year

Taxonomy-eligible but not aligned CAPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

27,000,000



Taxonomy-eligible but not aligned CAPEX associated with this activity as % of total CAPEX in the reporting year

Taxonomy-aligned OPEX from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned OPEX from this activity as % of total OPEX in the reporting year

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change mitigation as a % of total OPEX in the reporting year

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change adaptation as a % of total OPEX in the reporting year

Taxonomy-eligible but not aligned OPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned OPEX associated with this activity as % total OPEX in the reporting year

Type(s) of substantial contribution

# Calculation methodology and supporting information

We have reviewed our CAPEX and OPEX activities for 2022 to identify eligible activities and determine the eligible amount for those items according to the Taxonomy requirements. We identified that OPEX is not centrally accounted, but rather recorded locally across the business. Further, CAPEX is tagged by general activity, and to assess compliance with eligible activities as required by the EU Taxonomy requirements, we assessed the list of projects that Lundbeck invested in 2022 to map eligible activities in accordance with the normative. Based on this, we found three eligible activities: Construction of new buildings; Renovation of existing buildings; and Transport by motorbikes, passenger cars, and



light commercial vehicles. We reviewed the activities currently published and found that the activity "Transport by motorbikes, passenger cars, and light commercial vehicles" is important to us from a sustainability perspective, as company cars are part of our GHG scope 1 emission target. For all three activities, our review found that none of Lundbeck's CAPEX or OPEX live up to the substantial contribution criteria and are therefore not taxonomy aligned. Looking at the substantial contribution criteria for the activities, it was clear that the activities performed were noncompliant, and therefore unnecessary to move on to examine the Do No Significant Harm and Minimum Safeguard criteria, as we would not be claiming alignment. For our reporting period, we also do not have a focus on improving our alignment in our approved CAPEX plan, as there is a small percentage which is eligible according to the currently published activities. As we are a pharmaceutical company, the majority of our OPEX is centered on R&D, which is not an eligible activity and therefore contributes to our low eligibility. In conclusion, Lundbeck has no taxonomy-aligned turnover, CAPEX, or OPEX related to climate change and climate mitigation to report in 2022.

The total CAPEX denominator is 824. CAPEX are costs incurred by the Group to acquire, upgrade, and maintain tangible or intangible assets. CAPEX is used to undertake new projects or other investments made by the Group on fixed or intangible assets as well as lease transactions. All records are recognized, subsequently measured, and disclosed in our financial statements according to IFRS requirements. The numerator was the CAPEX associated with all activity related to construction of new buildings taken from our consolidated accounts.

#### Technical screening criteria met

No

## Details of technical screening criteria analysis

We did not meet following criteria:

Constructions of new buildings for which:

- 1. The Primary Energy Demand (PED)(290), defining the energy performance of the building resulting from the construction, is at least 10 % lower than the threshold set for the nearly zero-energy building (NZEB) requirements in national measures implementing Directive 2010/31/EU of the European Parliament and of the Council(291). The energy performance is certified using an as built Energy Performance Certificate (EPC).
- 2. For buildings larger than 5000 m2 (292), upon completion, the building resulting from the construction undergoes testing for air-tightness and thermal integrity(293), and any deviation in the levels of performance set at the design stage or defects in the building envelope are disclosed to investors and clients. As an alternative; where robust and traceable quality control processes are in place during the construction process this is acceptable as an alternative to thermal integrity testing.



3. For buildings larger than 5000 m2 (294), the life-cycle Global Warming Potential (GWP)(295) of the building resulting from the construction has been calculated for each stage in the life cycle and is disclosed to investors and clients on demand.

#### Do no significant harm requirements met

No

#### Details of do no significant harm analysis

Due to that we didn't meet the technical screening criteria, we did not move forward with the DNSH analysis.

#### Minimum safeguards compliance requirements met

No

## Details of minimum safeguards compliance analysis

Due to that we didn't comply with the technical screening criteria, we did not move forward with the minimum safeguard analysis.

## **Economic activity**

Transport by motorbikes, passenger cars and light commercial vehicles

## Taxonomy under which information is being reported

EU Taxonomy for Sustainable Activities

# **Taxonomy Alignment**

Taxonomy-eligible but not aligned

## Financial metric(s)

OPEX

Taxonomy-aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned turnover from this activity as % of total turnover in the reporting year



Taxonomy-aligned turnover from this activity that substantially contributed to climate change mitigation as a % of total turnover in the reporting year

Taxonomy-aligned turnover from this activity that substantially contributed to climate change adaptation as a % of total turnover in the reporting year

Taxonomy-eligible but not aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned CAPEX from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned CAPEX from this activity as % of total CAPEX in the reporting year

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change mitigation as a % of total CAPEX in the reporting year

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change adaptation as a % of total CAPEX in the reporting year

Taxonomy-eligible but not aligned CAPEX associated with this activity in the reporting year (unit currency as selected in C0.4)



Taxonomy-eligible but not aligned CAPEX associated with this activity as % of total CAPEX in the reporting year

Taxonomy-aligned OPEX from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned OPEX from this activity as % of total OPEX in the reporting year

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change mitigation as a % of total OPEX in the reporting year

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change adaptation as a % of total OPEX in the reporting year

Taxonomy-eligible but not aligned OPEX associated with this activity in the reporting year (unit currency as selected in C0.4) 178,000,000

Taxonomy-eligible but not aligned OPEX associated with this activity as % total OPEX in the reporting year

Type(s) of substantial contribution

#### Calculation methodology and supporting information

We have reviewed our CAPEX and OPEX activities for 2022 to identify eligible activities and determine the eligible amount for those items according to the Taxonomy requirements. We identified that OPEX is not centrally accounted, but rather recorded locally across the business. Further, CAPEX is tagged by general activity, and to assess compliance with eligible activities as required by the EU Taxonomy requirements,



we assessed the list of projects that Lundbeck invested in 2022 to map eligible activities in accordance with the normative. Based on this, we found three eligible activities: Construction of new buildings; Renovation of existing buildings; and Transport by motorbikes, passenger cars, and light commercial vehicles. We reviewed the activities published and found that the activity

"Transport by motorbikes, passenger cars, and light commercial vehicles" is important to us from a sustainability perspective, as company cars are part of our GHG scope 1 emission target. For all three activities, our review found that none of Lundbeck's CAPEX or OPEX live up to the substantial contribution criteria and are therefore not taxonomy aligned. When looking at the substantial contribution criteria for the activities, it was clear that the activities performed were noncompliant, which meant it was unnecessary to move on to examine the Do No Significant Harm and Minimum Safeguard criteria, as we would not be claiming alignment. For our reporting period, we also do not have a focus on improving our alignment in our approved CAPEX plan, as there is a small percentage which is eligible according to the published activities. Similarly, as we are a pharmaceutical company, the majority of our OPEX is centered on R&D, which is not an eligible activity and therefore contributes to our low eligibility. In conclusion, Lundbeck has no taxonomy-aligned turnover, CAPEX, or OPEX related to climate change and climate mitigation to report in 2022.

The total for the OPEX denominator is 4370 MDKK and activity as % total OPEX is 0.4%. Operating expenses are expenditures that the Group incurs through its ordinary business operations and where they do not meet the IFRS requirements to be recognized as an asset. OPEX generally includes expenditures with sales and distribution costs, administrative expenses and research and development. The numerator is the OPEX associated with Transport by motorbikes, passenger cars and light commercial vehicles taken from our consolidated accounts.

# **Technical screening criteria met**

No

## Details of technical screening criteria analysis

We did not meet following technical criteria:

for vehicles of category M1 and N1, both falling under the scope of Regulation (EC) No 715/2007:

until 31 December 2025, specific emissions of CO2, as defined in Article 3(1), point (h), of Regulation (EU) 2019/631, are lower than 50gCO2/km (low- and zero-emission light-duty vehicles);

from 1 January 2026, specific emissions of CO2, as defined in Article 3(1), point (h), of Regulation (EU) 2019/631, are zero. for vehicles of category L, the tailpipe CO2 emissions equal to 0g CO2e/km calculated in accordance with the emission test laid down in Regulation (EU) 168/2013.

## Do no significant harm requirements met

No



## Details of do no significant harm analysis

Due to that we didn't meet the technical screening criteria, we did not move forward with the DNSH analysis.

# Minimum safeguards compliance requirements met

No

# Details of minimum safeguards compliance analysis

Due to that we didn't meet the technical screening criteria, we did not move forward with the minimum safeguard analysis.

## **Economic activity**

Renovation of existing buildings

#### Taxonomy under which information is being reported

EU Taxonomy for Sustainable Activities

## **Taxonomy Alignment**

Taxonomy-eligible but not aligned

## Financial metric(s)

CAPEX

Taxonomy-aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned turnover from this activity that substantially contributed to climate change mitigation as a % of total turnover in the reporting year



Taxonomy-aligned turnover from this activity that substantially contributed to climate change adaptation as a % of total turnover in the reporting year

Taxonomy-eligible but not aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned CAPEX from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned CAPEX from this activity as % of total CAPEX in the reporting year

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change mitigation as a % of total CAPEX in the reporting year

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change adaptation as a % of total CAPEX in the reporting year

Taxonomy-eligible but not aligned CAPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

39,000,000

Taxonomy-eligible but not aligned CAPEX associated with this activity as % of total CAPEX in the reporting year

Taxonomy-aligned OPEX from this activity in the reporting year (unit currency as selected in C0.4)



Taxonomy-aligned OPEX from this activity as % of total OPEX in the reporting year

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change mitigation as a % of total OPEX in the reporting year

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change adaptation as a % of total OPEX in the reporting year

Taxonomy-eligible but not aligned OPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned OPEX associated with this activity as % total OPEX in the reporting year

Type(s) of substantial contribution

#### Calculation methodology and supporting information

We have reviewed our CAPEX and OPEX activities for 2022 aiming to identify eligible activities and determine the eligible amount for those items according to the Taxonomy requirements. We identified that OPEX is not centrally accounted, but rather recorded locally across the business. Further, CAPEX is tagged by general activity, and to assess compliance with eligible activities as required by the EU Taxonomy requirements, we assessed the list of projects that Lundbeck invested in 2022 to map eligible activities in accordance with the normative. Based on this approach, we found three eligible activities: Construction of new buildings; Renovation of existing buildings; and Transport by motorbikes, passenger cars, and light commercial vehicles. For all three activities, our review found that none of Lundbeck's CAPEX or OPEX live up to the substantial contribution criteria and are therefore not taxonomy aligned. When looking at the substantial contribution criteria for the activities, it was clear that the activities performed were noncompliant, which therefore meant it was unnecessary to move on to examine the Do No Significant Harm and Minimum Safeguard criteria, as we would not be claiming alignment. For our reporting period, we also do not have a



focus on improving our alignment in our approved CAPEX plan, as there is a small percentage which is eligible according to the currently published activities. Similarly, as we are a pharmaceutical company, the majority of our OPEX is centered on R&D, which is currently not an eligible activity and therefore contributes to our low eligibility. In conclusion, Lundbeck has no taxonomy-aligned turnover, CAPEX, or OPEX related to climate change and climate mitigation to report in 2022.

The total CAPEX denominator is 824 MDKK. CAPEX are costs incurred by the Group to acquire, upgrade, and maintain tangible or intangible assets. CAPEX is often used to undertake new projects or other investments made by the Group on fixed or intangible assets as well as lease transactions. All those records are recognized, subsequently measured, and disclosed in our financial statements according to IFRS requirements. The numerator was the CAPEX associated with all activity related to construction of new buildings taken from our consolidated accounts.

#### **Technical screening criteria met**

No

#### Details of technical screening criteria analysis

We did not meet following technical criteria:

The building renovation complies with the applicable requirements for major renovations. Note 307: As set in the applicable national and regional building regulations for 'major renovation' implementing Directive 2010/31/EU. The energy performance of the building or the renovated part that is upgraded meets cost-optimal minimum energy performance requirements in accordance with the respective directive.

Alternatively, it leads to a reduction of primary energy demand (PED) of at least 30 %. Note 308: The initial primary energy demand and the estimated improvement is based on a detailed building survey, an energy audit conducted by an accredited independent expert or any other transparent and proportionate method, and validated through an Energy Performance Certificate. The 30 % improvement results from an actual reduction in primary energy demand (where the reductions in net primary energy demand through renewable energy sources are not taken into account), and can be achieved through a succession of measures within a maximum of three years.

#### Do no significant harm requirements met

No

## Details of do no significant harm analysis

Due to that we didn't meet the technical screening criteria, we did not move forward with the DNSH analysis.



# Minimum safeguards compliance requirements met

No

#### Details of minimum safeguards compliance analysis

Due to that we didn't meet the technical screening criteria, we did not move forward with the minimum safeguard analysis.

# C3.5c

# (C3.5c) Provide any additional contextual and/or verification/assurance information relevant to your organization's taxonomy alignment.

We did not have a signed external assurance on our taxonomy alignment, but we did get our external auditors to review the numbers we presented in our Financial report.

# **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

2019

# **Target coverage**

Company-wide

# Scope(s)

Scope 1

Scope 2

# Scope 2 accounting method

Market-based

Scope 3 category(ies)

#### Base year

2019

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

29,025

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

9,405

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



Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

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)

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

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

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

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)



Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)

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

Total base year emissions covered by target in all selected Scopes (metric tons CO2e) 38,430

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

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

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)

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)



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)

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)

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)

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)

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)

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)

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)



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)

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)

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)

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)

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)

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)

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)



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

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

**Target year** 

2034

Targeted reduction from base year (%)

63

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated] 14,219.1

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

22,918

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

4,255

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

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

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)

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



- Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)
- Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)
- Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)
- Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)
- Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
- Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)
- Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)
- Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)
- Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)
- Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)



Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)

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

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e) 27,173

#### Does this target cover any land-related emissions?

Yes, it covers land-related and non-land related emissions (e.g. SBT approved before the release of FLAG target-setting guidance)

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

46.4955866986

#### Target status in reporting year

Underway

#### Please explain target coverage and identify any exclusions

The target cover all our scope 1 and 2 emissions including emissions from our 4 production sites and 4 administrative/research sites and emission from our fleet. At our Chemical site in Denmark we use biooil, constituting 0.01% of our scope 1 emissions. No exclusions.

# Plan for achieving target, and progress made to the end of the reporting year

A big contribution for achieving the target was our PPA agreement that has been supplying our two Danish sites by beginning of January. Additionally our Italian site had onsite solar panels installed in 2022 covering 7% of the electricity consumption. In 2023 we expect to sign a PPA agreement covering the rest of our European consumption. These initiatives will reduce our scope 1 and 2 emissions by app. 40% compared to 2019. By 2030 we will have our US sites to use renewable electricity and gradually we will implement solutions for using renewable energy in



scope 1. We do already use biooil as fuel in one of our chemical sites and solutions like converting to electric boilers are currently being investigated. This will lead to a app 52% reduction compared to 2019.

Additionally, we will convert our fleet to EV's. 100% in Denmark and 50% in rest of EU and USA by 2030 leading to app. 65% reduction in scope 1 and 2 compared to 2019.

#### List the emissions reduction initiatives which contributed most to achieving this target

# 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 3

# Scope 2 accounting method

# Scope 3 category(ies)

Category 1: Purchased goods and services



Category 4: Upstream transportation and distribution

Category 6: Business travel

Base year

2019

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

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

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e) 81,353

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

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)

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e) 10,544

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

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e) 13,531

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)



Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)

Base year total Scope 3 emissions covered by target (metric tons CO2e) 105,428

90



Total base year emissions covered by target in all selected Scopes (metric tons CO2e) 105,428

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

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

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)

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)

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)

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)

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)

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)

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)

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)

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)

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)

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)

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)

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)



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)

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)

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

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

# **Target year**

2034

Targeted reduction from base year (%)

19

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated] 85,396.68

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

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



Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e) 87,261

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

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)

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

8,207

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

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

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)



Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e) 102,620

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e) 102,620

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]

14.0180477372

#### Target status in reporting year

Underway

#### Please explain target coverage and identify any exclusions

The target covers:

- 89% of scope 3 category 1 Purchased goods and services. We have excluded emissions related to e.g authorities (medical, patient, environmental etc) and patent organizations as these organizations are crucial for driving our business.
- 90% of category 4 Upstream transportation and distribution. The excluded emissions are those related to Supplier to Lundbeck transport
- 100% of category 6 Business travel

#### Plan for achieving target, and progress made to the end of the reporting year

The target will be achieved by requesting our suppliers to use renewable electricity for the products or service they provide to us. We have a milestone in our transition plan on including top 50 suppliers by emission in 2025 leading to app. 20% reduction compared to baseline 2019. Additionally, we will move air logistics to sea and start requesting our suppliers to use sustainable fuel. And for business travel we will promote to keep the low level of travelling post Covid19 in the years to come.

This means that we will overperform on our target in a few years, but as we have submitted a Net zero target (with higher ambition level) for approval by SBTi in Dec 2022, it is necessary to overperform on this target.

# List the emissions reduction initiatives which contributed most to achieving this target

#### Target reference number

Abs 3

# Is this a science-based target?

No, but we are reporting another target that is science-based



# **Target ambition**

Year target was set

2021

**Target coverage** 

Company-wide

Scope(s)

Scope 1

Scope 2

Scope 2 accounting method

Market-based

Scope 3 category(ies)

Base year

2021

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

25,505

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

7,492

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

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)



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)

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

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

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

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)



Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)

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

Total base year emissions covered by target in all selected Scopes (metric tons CO2e) 32,997

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

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

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)

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)



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)

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)

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)

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)

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)

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)

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)

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)



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)

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)

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)

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)

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)

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)

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



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 (%)

3

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated] 32,007.09

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

22,918

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

4.255

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

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

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)

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

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



- Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)
- Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)
- Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)
- Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
- Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)
- Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)
- Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)
- Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)
- Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)
- Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)



Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)

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

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

27,173

#### 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]

588.3363134022

#### Target status in reporting year

Achieved

# Please explain target coverage and identify any exclusions

The target cover all our scope 1 and 2 emissions including emissions from our 4 production sites and 4 administrative/research sites and emission from our fleet. At our Chemical site in Denmark we use biooil, constituting 0.01% of our scope 1 emissions. No exclusions.

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

# List the emissions reduction initiatives which contributed most to achieving this target

The biggest contribution for achieving the target was our PPA agreement that has been supplying our two Danish sites by beginning of January 2022. Additionally our Italian site had onsite solar panels installed in 2022 covering 7% of the electricity consumption.



# Target reference number

Abs 4

# Is this a science-based target?

Yes, we consider this a science-based target, and the target is currently being reviewed 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)

# Base year

2019

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

29,025



Base year Scope 2 emissions covered by target (metric tons CO2e) 9,405

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

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

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)

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

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

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

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)



Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)

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

Total base year emissions covered by target in all selected Scopes (metric tons CO2e) 38,430

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

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



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)

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)

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)

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)

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)

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)

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)

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)



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)

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)

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)

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)

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)

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)

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)

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)



Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)

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

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

#### **Target year**

2034

Targeted reduction from base year (%)

65

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated] 13,450.5

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

22,918

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

4,255

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

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)



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)

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

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

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

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)



Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)

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

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e) 27,173

#### 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]

45.0649532617

#### Target status in reporting year

New



#### Please explain target coverage and identify any exclusions

The target cover all our scope 1 and 2 emissions including emissions from our 4 production sites and 4 administrative/research sites and emission from our fleet. At our Chemical site in Denmark we use biooil, constituting 0.01% of our scope 1 emissions. No exclusions.

#### Plan for achieving target, and progress made to the end of the reporting year

A big contribution for achieving the target was our PPA agreement that has been supplying our two Danish sites by beginning of January. Additionally our Italian site had onsite solar panels installed in 2022 covering 7% of the electricity consumption. In 2023 we expect to sign a PPA agreement covering the rest of our European consumption. These initiatives will reduce our scope 1 and 2 emissions by app. 40% compared to 2019. By 2030 we will have our US sites to use renewable electricity and gradually we will implement solutions for using renewable energy in scope 1. We do already use biooil as fuel in one of our chemical sites and solutions like converting to electric boilers are currently being investigated. This will lead to a app 52% reduction compared to 2019.

Additionally, we will convert our fleet to EV's. 100% in Denmark and 50% in rest of EU and USA by 2030 leading to app. 65% reduction in scope 1 and 2 compared to 2019.

List the emissions reduction initiatives which contributed most to achieving this target

#### Target reference number

Abs 5

#### Is this a science-based target?

Yes, we consider this a science-based target, and the target is currently being reviewed by the Science Based Targets initiative

#### **Target ambition**

1.5°C aligned

#### Year target was set

2022

# **Target coverage**



Company-wide

#### Scope(s)

Scope 3

#### Scope 2 accounting method

#### Scope 3 category(ies)

Category 1: Purchased goods and services

Category 4: Upstream transportation and distribution

Category 6: Business travel

#### Base year

2019

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

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

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e) 81,353

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

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)

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



10,544

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

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

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)



Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)

Base year total Scope 3 emissions covered by target (metric tons CO2e) 105,428

Total base year emissions covered by target in all selected Scopes (metric tons CO2e) 105,428

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

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

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)

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)

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)



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)

90

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)

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)

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)

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)

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)

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)



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)

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)

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)

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)

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)

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

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

Target year

2034



Targeted reduction from base year (%)

40

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated] 63,256.8

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

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

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e) 87,261

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

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)

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

8,207

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

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e) 7,153

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)



- Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)
- Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
- Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)
- Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)
- Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)
- Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)
- Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)
- Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)
- Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)
- Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)



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

102,620

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

102,620

#### 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]

6.6585726752

#### Target status in reporting year

New

## Please explain target coverage and identify any exclusions

The target covers:

- 89% of scope 3 category 1 Purchased goods and services. We have excluded emissions related to e.g authorities (medical, patient, environmental etc) and patent organizations as these organizations are crucial for driving our business.
- 90% of category 4 Upstream transportation and distribution. The excluded emissions are those related to Supplier to Lundbeck transport
- 100% of category 6 Business travel

#### Plan for achieving target, and progress made to the end of the reporting year

The target will be achieved by requesting our suppliers to use renewable electricity for the products or service they provide to us. We have a milestone in our transition plan on including top 50 suppliers by emission in 2025 leading to app. 20% reduction compared to baseline 2019. By 2030 we will have top 300 included in this initiative increasing reductions to app. 37%.

Additionally, we will move air logistics to sea and request 50% of our suppliers to use sustainable fuel on air transport by 2025 leading to a total emission reduction at app. 40%. Thus achieving our target.

For business travel we will promote to keep the low level of travelling post Covid19 in the years to come. In 2022 emissions from business travel was 47% lower than in baseline year 2019.

In 2022 we developed a transition plan including a number of other milestones leading us to Net zero emission by 2050.



## List the emissions reduction initiatives which contributed most to achieving this target

#### Target reference number

Abs 6

#### Is this a science-based target?

Yes, we consider this a science-based target, and the target is currently being reviewed by the Science Based Targets initiative

## **Target ambition**

Other, please specify

Net Zero aligned long-term target

#### Year target was set

2022

## **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 2: Capital goods



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

Category 7: Employee commuting

Category 8: Upstream leased assets

Category 9: Downstream transportation and distribution

Category 10: Processing of sold products

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

#### Base year

2019

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

29,025

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

9,405

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

90,952

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

16,205

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)

7,612

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

11,767



- Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)
- Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)
- Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e) 3,836
- Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)
- Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)
- Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e) 6,859
- Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)
- Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)
- Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)
- Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)
- Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)



Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)

Base year total Scope 3 emissions covered by target (metric tons CO2e) 153,273

Total base year emissions covered by target in all selected Scopes (metric tons CO2e) 191,703

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

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

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)

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)

100

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)

100

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)

100

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)

100

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)

100

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)



Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)

100

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)

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)

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)

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)

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

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

**Target year** 

2050



Targeted reduction from base year (%)

90

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated] 19,170.3

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

22,918

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

4,255

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e) 95,154

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

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)

6.564

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

9,132

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

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e) 7,153

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)



3,781

- Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)
- Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

1,012

- Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)
  4,411
- Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)
- Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)

877

- Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)
- Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)
- Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)
- Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)
- Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)



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

139,846

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

167,019

#### 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]

14.3068531357

#### Target status in reporting year

New

#### Please explain target coverage and identify any exclusions

The target consist is a part of our Net Zero target. Our Net Zero target consist of a near term target and a long-term target where Abs 6 is the long term target and Abs 4 and Abs 5 are the Near term targets.

There are NO exclusions in the target boundary.

The long term target wording: H. Lundbeck A/S commits to reduce absolute scope 1, 2 and 3 GHG emissions 90% by 2050 from a 2019 base year. Coverage 100% of scope 1, 2 and 3 emissions, no exclusions. We expect to neutralize the last 10% by Carbon removals.

The target is submitted for approval by SBTi.

#### Plan for achieving target, and progress made to the end of the reporting year

In 2022 we developed a transition plan with several milestones that will lead us to achieving our targets. Examples on significant milestones are:

- Use of 100% renewable electricity: In DK and EU by 2025, In USA by 2030, Worldwide in 2040
- 100% use of renewable energy in scope 1: All productions sites by 2035, Worldwide by 2045
- Use of sustainable fuel at logistic suppliers: 50% on air by 2025, 100% on air by 2030, 50% on sea by 2035, 100% in sea by 2040, 100% on all transport modes by 2045
- Suppliers use renewable electricity for products/ services provided to Lundbeck: Top 50 by 205, Top 300 by 2030, All by 2040



- Conversion of fleet to EV's: 100% in DK and 50% in EU and USA by 2030, 100% in EU and USA and 30% in rest of world by 2035
- Emissions from Business travel reduced by 25% by 2025, 40% by 2040
- Circular solutions: Recycle 85% of solvents used in chemical production by 2030, reduce emissions from packaging materials by 60% by 2035 We will revise our transition plan every 5 years to adjust for unforeseen challenges and include new opportunities for emission reductions.

By end of 2022 we had achieved: 21% reduction of scope 1 emissions, 55% reduction of scope 2 emissions and 3% reduction of scope 3 emissions.

List the emissions reduction initiatives which contributed most to achieving this target

# C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?

Net-zero target(s)

## 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

Abs4

Abs5

Abs6



#### Target year for achieving net zero

2050

#### Is this a science-based target?

Yes, we consider this a science-based target, and the target is currently being reviewed by the Science Based Targets initiative

#### Please explain target coverage and identify any exclusions

Our Net Zero target consist of a near term target and a long-term target.

The near term target include a 65% emission reduction in scope 1 and 2 and a 40% reduction in 2/3 of scope 3. The long term target Abs 6 include a 90% reduction of all scope 1, 2 and 3 emissions.

Target boundary Abs 4 and Abs5:

- All our scope 1 and 2 emissions including emissions from our 4 production sites and 4 administrative/research sites and emission from our fleet. At our Chemical site in Denmark we use biooil, constituting 0.01% of our scope 1 emissions. No exclusions.
- 89% of scope 3 category 1 Purchased goods and services. We have excluded emissions related to e.g authorities (medical, patient, environmental etc) and patent organizations as these organizations are crucial for driving our business.
- 90% of category 4 Upstream transportation and distribution. The excluded emissions are those related to Supplier to Lundbeck transport
- 100% of category 6 Business travel

Target boundary Abs 6: 100% of all scope 1, 2 and 3 emissions.

The long term target wording: H. Lundbeck A/S commits to reduce absolute scope 1, 2 and 3 GHG emissions 90% by 2050 from a 2019 base year. Coverage 100% of scope 1, 2 and 3 emissions, no exclusions. We expect to neutralize the last 10% by Carbon removals.

#### 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 we developed a transition plan with several milestones that will lead us to achieving our targets. Examples on significant milestones are:

- Use of 100% renewable electricity: In DK and EU by 2025, In USA by 2030, Worldwide in 2040
- 100% use of renewable energy in scope 1: All productions sites by 2035, Worldwide by 2045
- Use of sustainable fuel at logistic suppliers: 50% on air by 2025, 100% on air by 2030, 50% on sea by 2035, 100% in sea by 2040, 100% on all transport modes by 2045
- Suppliers use renewable electricity for products/ services provided to Lundbeck: Top 50 by 205, Top 300 by 2030, All by 2040



- Conversion of fleet to EV's: 100% in DK and 50% in EU and USA by 2030, 100% in EU and USA and 30% in rest of world by 2035
- Emissions from Business travel reduced by 25% by 2025, 40% by 2040
- Circular solutions: Recycle 85% of solvents used in chemical production by 2030, reduce emissions from packaging materials by 60% by 2035 We will revise our transition plan every 5 years to adjust for unforeseen challenges and include new opportunities for emission reductions.

#### Planned actions to mitigate emissions beyond your value chain (optional)

Our strategy is to work with emission reductions as much as possible and only start investigating possibilities for carbon removals by 2040-2045. At this time we will also consider mitigation of emission beyond value chain. We will only invest in acknowledged and certified carbon removals.

# 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	9	
To be implemented*	5	272
Implementation commenced*	2	4
Implemented*	8	3,811
Not to be implemented	0	



# C4.3b

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

## **Initiative category & Initiative type**

Low-carbon energy consumption Solar PV

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

3,615

## 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)

13,000,000

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

0

# Payback period

<1 year

#### **Estimated lifetime of the initiative**

6-10 years

#### Comment



Our PPA agreement is running for 7 years. We have a fixed electricity price in the contract resulting in fluctuating annual savings depending on the development in the electricity price. In 2022 we did save app. 30 MDKK in electricity cost due to the PPA, but 2022 had unusual high energy prices. Looking at the average electricity cost in the first 4 month of 2023 the saving is more likely to be 13 MDKK/year.

#### **Initiative category & Initiative type**

Energy efficiency in production processes Machine/equipment replacement

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

89

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

Scope 1

# Voluntary/Mandatory

Voluntary

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

112,500

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

2,250,000

#### Payback period

21-25 years

#### Estimated lifetime of the initiative

21-30 years

#### Comment

By changing our Boilers to more efficient boilers we could reduce energy consumption significantly.



## **Initiative category & Initiative type**

Energy efficiency in production processes Process optimization

## Estimated annual CO2e savings (metric tonnes CO2e)

11

## 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)

96,000

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

200,000

## Payback period

1-3 years

#### Estimated lifetime of the initiative

21-30 years

#### Comment

By by-passing Chilled water Primary via a secondary network, electricity consumption has been reduced.

# Initiative category & Initiative type



Energy efficiency in production processes Process optimization

## Estimated annual CO2e savings (metric tonnes CO2e)

1

## 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)

6,000

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

0

# Payback period

<1 year

#### Estimated lifetime of the initiative

3-5 years

#### Comment

Summer and winter T° setpoint adjustment for offices.

## Initiative category & Initiative type

Energy efficiency in production processes Machine/equipment replacement



## Estimated annual CO2e savings (metric tonnes CO2e)

2

## 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)

21,000

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

220,000

## Payback period

4-10 years

#### Estimated lifetime of the initiative

21-30 years

#### Comment

Change of fan motors to save electricity.

## Initiative category & Initiative type

Energy efficiency in production processes Process optimization

## Estimated annual CO2e savings (metric tonnes CO2e)

11



## 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)

120,000

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

200,000

## Payback period

1-3 years

#### Estimated lifetime of the initiative

21-30 years

#### Comment

Recycling air + Ceiling height reduction in weighing area to save electricity.

#### **Initiative category & Initiative type**

Energy efficiency in production processes Machine/equipment replacement

## Estimated annual CO2e savings (metric tonnes CO2e)

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)

45,000

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

600,000

## Payback period

11-15 years

#### Estimated lifetime of the initiative

11-15 years

#### Comment

Change of chillers to save electricity.

# **Initiative category & Initiative type**

Energy efficiency in production processes Compressed air

## Estimated annual CO2e savings (metric tonnes CO2e)

6

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

Scope 1

## **Voluntary/Mandatory**

Voluntary



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

11,925

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

2,250,000

## Payback period

16-20 years

#### Estimated lifetime of the initiative

16-20 years

#### Comment

Installation of compressed air Producer with water heating recovery to reduce consumption of methane gas.

# C4.3c

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

Method	Comment
Other  Our GHG reduction targets and climate ambitions are a strong driver for our emission reduction activities	The most important drivers for investments in emission reduction activities is our GHG reduction targets. In Dec 2019 we signed the Business Ambition for 1.5°C pledge and hereby committed to have Net Zero emissions by latest 2050. In Feb 2021 we announced our new Science Based Target which was approved by Science Based Targets initiative and in Dec 2022 we submitted a Net zero target for approval by SBTi. In 2022 we also developed our transition plan including milestones for achieving 100% renewable energy worldwide in scope 1 and 2. Several emission reduction initiatives in scope 3 is also included in the transition plan.  An example is that both our Climate targets and our commitment to the "Business Ambition for 1.5°C" pledge, have been strong drivers for our decision about entering Power Purchase Agreements (PPA) beginning in Denmark (Jan 2022) and next steps are to have PPA's for our European sites by 2025 and in USA by 2030.



Financial optimization calculations	Before implementing new initiatives, a business case showing the investment, expected annual savings and payback time is always prepared. Additionally, we have started to calculate the cost/ton CO2 reduced for our Scope 3 initiatives. These calculations create the foundation for the management to prioritize between the different emission reduction initiatives. For instance in 2022 it was decided to favor our supplier engagement initiative in front of an initiative about using sustainable fuel at our logistic suppliers.  Other examples that has been driven due to our climate targets but also based on the business cases prepared is the signing of our Power Purchase Agreement (PPA. The PPA runs for 7 years and was when decided expected to reduce the annual electricity cost for our two Danish sites by at least 1 MDKK/year. It has turned out to be an even more favorable agreement due to the contractual fixed price on electricity and the unexpected increases in electricity prices in 2022. Another example is the onsite solar panels that was installed in 2022 at our Italian site. Again, due to a fixed price agreement we expect to reduce the annual electricity cost with app. 450,000 DKK/year from 2023 and forward.  In 2020 a new innovative methodology for palladium was developed. Via a cooperative process between Lundbeck and a palladium supplier it became possible to recycle palladium leading to less CO2 emissions, less raw material consumption, less waste, improved waste sorting, reduced cost and reduced risk from metal price fluctuations due to lower consumption. The solution has been implemented in 2021 and
	improved in 2022 at our two chemical sites in Denmark and Italy. When fully implemented we will save app. 9.6 MDKK/year due to decreased raw material consumption and an improved agreement with a new supplier.
Partnering with governments on technology development	At our chemical site in Lumsås, Denmark we have a partnership with the Danish Technical University about optimizing production equipment for continuous production. This will result in more efficient equipment using less raw materials and less energy.
Internal incentives/recognition programs	Lundbeck uses monetary reward to managers and employees having specific responsibility for energy savings and other emission reduction initiatives covered by our climate target e.g., our supplier engagement initiative. The reward consists of an annual bonus for meeting short term targets. The short-term target is created by breaking down the corporate long-term targets on GHG emissions to the relevant business functions.  Activities related to development of our climate target and strategy are covered by the annual bonus system. For instance, does all members of the executive management team have a shared target about a new PPA



	agreement for our European sites which contributes to achievement of our short- and long-term scope 1 and 2 absolute targets.
Compliance with regulatory requirements/standards	Regulatory requirements can also drive initiatives that reduce emissions. An example is the implementation of the Directive on energy efficiency that has catalyzed improvements in our energy screening and mapping. This improves our possibilities for identifying further potentials for energy savings in the future. Once a year our Danish sites are audited by an external auditor challenging our efforts on energy reducing activities and every 4 years an energy consultant prepares a screening at our Italian site and suggest initiatives to optimize the energy consumption.  Another regulation that we expect to impact our emission reduction initiatives is the European sustainability reporting standards (CSRD) which we expect will push many companies' climate targets to be more ambitious and it require companies to publish emission data in their financial reporting. We expect this to ease the implementation of our supplier engagement initiative where we request suppliers to use renewable electricity and deliver emissions data.
Internal price on carbon	We have developed a business case model for engineering projects where we among other things score the CO2 reductions in a project. Currently CO2 reductions are rated higher than pay back times, increasing the chance for energy projects to be preferred over other projects. This is considered as an indirect carbon price. It is not an exact price on carbon, but a scoring criterion that is put on carbon emissions favoring projects with high emission reductions.  In Denmark it is also possible to sell our energy reductions to an energy supplier. The actual price/kWh saved energy is fixed in a contract between the energy supplier and the company. The level for the recent years has been at 300DKK/MWh corresponding to 4,500 DKK/Tons CO2. This means that when new projects are identified, typically in the Engineering department, energy savings and carbon reductions are calculated. The benefit from selling the energy reductions is included in the final calculations for the project. The pricing system means that projects with large energy reduction potentials are favored. We consider it an internal price on carbon because this structure increases the possibility for energy activities to be favored over other activities. We did not sell any energy savings in 2022, but in 2020 the energy reduction from an energy efficiency project reducing emissions by 30 tons CO2/year was sold to an energy supplier. The requirements for selling energy savings have recently been changed, so you can apply for all projects with payback time down to two years, thus giving more access to selling energy reductions. We expect to sell



energy savings from a project in 2023.

In France it is possible to receive national grants for energy saving projects. An example on this is an investment at app. 9 MDKK in 2021 for two energy projects reducing emissions with 421 tons CO2/year were covered entirely by national grants. Such grants makes it possible to change to energy efficient equipment at a faster pace.

# 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

Product or service

## Taxonomy used to classify product(s) or service(s) as low-carbon

No taxonomy used to classify product(s) or service(s) as low carbon

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

Other

Other, please specify

Active pharmaceutical ingredient

#### **Description of product(s) or service(s)**

During 2022, a number of results have demonstrated that circularity can deliver on both resource recycling and reducing climate emissions. Identifying the main contributors to climate emissions in the development of a chemical process for an Active Pharmaceutical Ingredient (API) is



of critical importance. Here the process steps, materials and discharges can still be changed. Our Italian site has developed a model for assessing the climate emissions, while developing chemical production processes for new compounds. Many early-stage developments never reach full production scale. Therefore, the assessment method needs to be readily useful and applied every time to have effect. With the new method, our developers can calculate and compare the carbon footprint of different chemical processes. This allows them to identify the major contributors and to model the chemical process that gives the lowest footprint.

In 2022 a comprehensive analysis was done on an API synthesis. By applying the new tool to two early phase projects and to a late phase one, respectively approx. 1.4 Tons of CO2-e/kg for the first early phase API, 0.2 tons of CO2-e/kg for the second early phase API and 0.34 Tons of CO2-e/kg for the late phase API could be saved compared to the previous syntheses. We therefore consider this a Low Carbon Product. The late phase API produced with this new synthesis will be sold on the market from 2024. Due to this the revenue share is zero in 2022 and 2023.

#### 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

12 principle of the Green Chemistry, Process Mass Intensity (PMI) and the Green Aspiration Level (GAL) and GWP factors.

#### Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Cradle-to-gate

#### **Functional unit used**

Tons/kg API

#### Reference product/service or baseline scenario used

Business as usual referring to an API synthesis developed previously by an external Contract Development & Manufacturing Organisation.

## Life cycle stage(s) covered for the reference product/service or baseline scenario

Cradle-to-gate

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

0.34



#### Explain your calculation of avoided emissions, including any assumptions

Carbon Footprint has become a standard way to evaluate any human activities and numerous values can be found in literature, but for a chemical process, it is difficult to be exactly calculated, because of complex interactions between contributing processes. Lundbeck have developed a simple Excel tool to calculate the greenhouse gas equivalence for a chemical process: By using a hypothesis of burning all the wastes, carbon atoms of each reagent/solvent are converted to CO2-e, while nitrogen atoms are converted to N2O equivalent that is hence converted to CO2-e multiplying by the Global Warming Potential (GWP) factor of N2O and finally added together; the contribution of other atoms are considered negligible due to the low Global Warming Potential of their corresponding gases.

This tool allows comparing the Carbon Footprint of different chemical processes and identifying the major contributors of each process. Thus clarifying what activities that could give the largest CO2 reductions.

The key results were:

- Overall Process Mass Intensity for the first early phase API decreased from 771 kg/kg of API of the original process developed by an external CDMO to 253 kg/kg, equal to -67%, from 273 kg/kg to 235 for the second early phase API equal to -14% and from 84 kg/kg to 58 kg/kg for the late phase API equal to -31%
- Total solvent wastes for the late phase and larger scale API decreased by 54%, corresponding to 9.2 Tons for the 180 Kg batch size produced
- Total aqueous wastes decreased by 20%, corresponding to 14.4 Tons for the 180 kg batch size produced
- GAL (Green Aspiration Level) remained "below average" but improved by 31%
- Applying the internal tool, approx. 0.34 tons of CO2-e/kg of API could be saved (corresponding to a decrease of 57%) or 61 MT for the 180 kg batch size produced.

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

0

# **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?

No

# 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?
Row 1	No

# C5.2

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

## Scope 1

## Base year start

January 1, 2019

## Base year end

December 31, 2019

# Base year emissions (metric tons CO2e)

29,025



#### Comment

Fuel consumption for combustion and company car fleet.

## Scope 2 (location-based)

## Base year start

January 1, 2019

## Base year end

December 31, 2019

## **Base year emissions (metric tons CO2e)**

17,745

#### Comment

Location-based CO2 emission from the use of district heating and electricity.

# Scope 2 (market-based)

# Base year start

January 1, 2019

## Base year end

December 31, 2019

# Base year emissions (metric tons CO2e)

9,405

#### Comment



Market-based CO2 emission from the use of district heating and electricity is used in reporting our targets.

#### Scope 3 category 1: Purchased goods and services

#### Base year start

January 1, 2019

#### Base year end

December 31, 2019

#### Base year emissions (metric tons CO2e)

90,952

#### Comment

1a: Purchased goods and services (product) = 20,246 tons CO2e

1b: Purchased goods and services (non-product) = 70,706tons CO2e

Total: 90,952 tons CO2

Lundbeck differentiate between the purchase of product-related goods that are used in production of medicine and non-product related goods (1b) (indirect procurement).

The category 1a includes all upstream emissions from the production of product related raw materials purchased or acquired by Lundbeck. As Lundbeck is a manufacturer and purchases significant volumes of raw materials and packaging materials each year, this was identified as a high priority category at an early stage.

The emissions accounted for in Category 1 include those related to the sourcing of materials used within the pharmaceutical products as well as the manufacture. Other specific upstream emissions are separately captured in the respective Scope 3 categories.

A volume-based approach split by relevant categories of purchased goods are used to calculate emissions.

For finished goods purchased as part of the CMO relationships, a proxy finished goods emission factor was applied to these. This proxy finished



goods emission factor is based on the tons of goods produced by each of Lundbeck's chemical & pharmaceutical sites and the associated emissions relating to these.

Category 1b includes emissions from all non-product-related purchases, not otherwise included in the other categories of upstream scope 3 emissions.

This is a wide category of goods and services, and can include professional services, laboratory consumables and advertising. The total spend is split by relevant categories of purchased services. Due to lack of supplier data a spend-based approach to calculate emissions is used.

#### Scope 3 category 2: Capital goods

#### Base year start

January 1, 2019

#### Base year end

December 31, 2019

## Base year emissions (metric tons CO2e)

16,205

#### Comment

Category 2 includes all upstream emissions associated with the production of capital goods that have been purchased within the reporting period. Capital goods are those that are treated as fixed assets or as property, plant and equipment, and are typically amortized over the life of the asset.

Goods expensed in the accounting year (i.e. operating expenditure or "Opex") are included in Category 1.

The spend-based approach to calculate emissions is used.

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

# Base year start

January 1, 2019

## Base year end



December 31, 2019

#### Base year emissions (metric tons CO2e)

7,612

#### Comment

Category 3 includes the upstream emissions relating to the production of fuels and electricity consumed by Lundbeck, not already accounted for in scope 1&2. For all fuel-related consumption, there are associated emissions to extract gas/coal/oil etc., transport and process it before it is combusted (known as well to tank, WTT). There are also transmission and distribution (T&D) losses in supplying electricity – these emissions are accounted for in this category.

The volume/primary data-based approach to calculate emissions is used.

#### Scope 3 category 4: Upstream transportation and distribution

#### Base year start

January 1, 2019

#### Base year end

December 31, 2019

#### Base year emissions (metric tons CO2e)

11,767

#### Comment

Category 4 includes emissions from all purchased (non-owned) transport and distribution services. This includes inbound logistics (from Tier 1 suppliers), transport between Lundbeck sites and outbound logistics (i.e. fulfilment of sold products, if Lundbeck has paid for/purchased the service), when paid for by Lundbeck. This includes the carbon impact of warehousing (where paid for/purchased from a third party).

This is in contrast to "Category 9 - Downstream transport & distribution" – which consists of the transport and storage of sold products when not paid for by Lundbeck.

Lundbeck have key third party logistics suppliers we work with predominantly. These suppliers provide emissions data for their activities to Lundbeck which can be used in the model (the suppliers are managed by the External Supply Chain team). Where this is not available, spend



data has been used – this approach was used for locally procured logistics services.

The volume/primary data-based approach to calculate emissions is used.

## Scope 3 category 5: Waste generated in operations

#### Base year start

January 1, 2019

#### Base year end

December 31, 2019

## Base year emissions (metric tons CO2e)

281

#### Comment

Category 5 includes all emissions from the third-party disposal and treatment of waste generated by Lundbeck's owned or controlled operations. Lundbeck have provided waste totals by tonnage for chemical and non-chemical waste as well as the waste treatment for all sites operated by Lundbeck.

The volume/primary data-based approach to calculate emissions is used.

## Scope 3 category 6: Business travel

## Base year start

January 1, 2019

## Base year end

December 31, 2019

#### Base year emissions (metric tons CO2e)

13,531

#### Comment



Category 6 includes emissions from the transportation of employees for business-related activities in vehicles owned or operated by third parties. This includes emissions that are caused due to employees travelling by air, road, rail and boat. It also includes emissions associated with hotel stays. Uplifts were applied to account for any missing data in order to cover 100% of our Business Travel activities. The volume/primary data-based approach to calculate emissions is used.

## Scope 3 category 7: Employee commuting

#### Base year start

January 1, 2019

#### Base year end

December 31, 2019

#### Base year emissions (metric tons CO2e)

3,836

#### Comment

Category 7 refers to all emissions arising from the transportation of employees between their homes and their worksites. Typically, this may include emissions from: automobile, bus, rail, air and other modes of transportation. Travel for business purposes is captured in Category 6, Business Travel.

An estimation based on employees and countries travel approach is used to calculate emissions.

## Scope 3 category 8: Upstream leased assets

## Base year start

January 1, 2019

#### Base year end

December 31, 2019

## Base year emissions (metric tons CO2e)

942



#### Comment

Category 8 includes emissions associated with the operation of property or assets that are leased by Lundbeck from a third-party proprietor, and are not included in the Scope 1 and 2 inventories. This will cover renting our global sales offices if primary energy data is not available. The spend-based approach to calculate emissions is used.

## Scope 3 category 9: Downstream transportation and distribution

#### Base year start

January 1, 2019

#### Base year end

December 31, 2019

#### Base year emissions (metric tons CO2e)

721

#### Comment

Downstream transportation and distribution covers the transport of sold finished goods to customers, only if paid for by a third party.

All inbound and outbound logistics paid for by Lundbeck are captured in Category 4. Therefore, this category captures the additional movement of Lundbeck sold products, after being sold to a third party. In Lundbeck's case, sales are made to hospitals and wholesalers. Hospitals are end customers and so no onward transport or storage accounted for under category 9 is applicable for these customers. The sales to wholesalers do include elements of downstream transportation and distribution and have been calculated as part of this category.

Given the limited information on downstream storage undertaken by customers estimations around number of days in storage have been made along with kilograms of product per pallet and the number of stacked pallets. These numbers are based on tons of goods sold by product type obtained from Lundbeck sales data.

The spend-based approach to calculate emissions is used.

#### Scope 3 category 10: Processing of sold products

#### Base year start

January 1, 2019



#### Base year end

December 31, 2019

#### Base year emissions (metric tons CO2e)

6,859

#### Comment

Category 10 includes customer's emissions relating to the processing of intermediate products sold by the reporting company, for example the conversion of raw materials into finalized pharmaceutical products.

In the context of Lundbeck intermediate chemicals/APIs (Active Pharmaceutical Ingredients) are sold to third parties for further processing and therefore this category is included in the scope 3 inventory.

A proxy emission has been developed based on the tons of intermediate products transferred internally (from chemical to production facilities) within Lundbeck and the associated scope 1&2 emissions for the production facility sites. The proxy factor has then been applied against tons of intermediate chemicals sold externally to determine emissions for this category.

#### Scope 3 category 11: Use of sold products

#### Base year start

January 1, 2019

#### Base year end

December 31, 2019

## Base year emissions (metric tons CO2e)

C

#### Comment

Category 11 refers to emissions from the use of goods and services sold by Lundbeck to end users. The GHG protocol draws a distinction between direct and indirect use phase. Direct use phase relates to emissions from direct use of a product, e.g. electricity consumption from a lamp. Indirect use phase relates to energy associated with using a product, but not directly consumed by the product, e.g. the energy used to wash clothing. A company should report all direct use phase emissions, and may optionally report indirect use phase.



Exclusion Statement: The vast majority of Lundbeck products use no energy on consumption and any that do (e.g. IV-dosed products) were deemed to be de-minimis. Therefore this category has been excluded from the Scope 3 inventory.

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

#### Base year start

January 1, 2019

#### Base year end

December 31, 2019

#### Base year emissions (metric tons CO2e)

567

#### Comment

Category 12 refers to emissions from the waste disposal and treatment of the products sold by Lundbeck at their end of life (EoL).

This would include disposal of packaging, rather than the medication itself, as generally emissions associated to this category are deemed to be minimal given the assumption that all medication will be taken by the end customer.

Averages for the end of life treatment of packaging for different countries and regions has been obtained through external research. Based on these and tons of sold goods per region data, emissions have been derived by the application of BEIS emission factors.

## Scope 3 category 13: Downstream leased assets

## Base year start

January 1, 2019

#### Base year end

December 31, 2019

## Base year emissions (metric tons CO2e)

0



#### Comment

Category 13 includes emissions associated with the operation of property or assets that are leased by Lundbeck to a third-party proprietor, and are not included in the Scope 1 and 2 inventories. In Lundbeck context there is some space leased out however this is extremely small and therefore deemed de-minimis.

Exclusion Statement: Category 13 has been excluded from Lundbeck Scope 3 inventory as there are no downstream leased assets.

## Scope 3 category 14: Franchises

#### Base year start

January 1, 2019

#### Base year end

December 31, 2019

#### Base year emissions (metric tons CO2e)

С

#### Comment

Category 14 includes emissions from the operation of franchises not included in scope 1 or 2. This category is applicable to franchisors, who should account for the scope 1 and 2 emissions of franchisees.

The GHG protocol defines a franchise as a business operating under a license to sell or distribute another company's goods or services within a certain location. This category is applicable to franchisors (i.e. companies that grant licenses to other entities to sell or distribute its goods or services in return for payments, such as royalties for the use of trademarks and other services).

Exclusion Statement: Category 14 has been excluded from the Scope 3 Inventory as there are no franchise relationships.

#### Scope 3 category 15: Investments

#### Base year start

January 1, 2019



#### Base year end

December 31, 2019

## Base year emissions (metric tons CO2e)

0

#### Comment

Category 15 contains all emissions associated with Lundbeck investments not already included in scope 1 and 2. These investments are most often either:

- Minority shareholdings in companies not accounted for using the accounting boundary chosen for Scope 1 and 2.
- General portfolio investments utilizing cash reserves.

Exclusion Statement: Category 15 has been excluded from the Scope 3 Inventory as there are no further investment relationships.

#### Scope 3: Other (upstream)

### Base year start

January 1, 2019

## Base year end

December 31, 2019

#### Base year emissions (metric tons CO2e)

0

#### Comment

No other upstream activities i Scope 3 not already captured in the scope 3 footprint.

#### Scope 3: Other (downstream)

#### Base year start

January 1, 2019



#### Base year end

December 31, 2019

## Base year emissions (metric tons CO2e)

0

#### Comment

No other upstream activities i Scope 3 not already captured in the scope 3 footprint.

## C5.3

#### (C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

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)

22,918

#### Comment

Lundbeck have no big structural change in our boundary used to calculate our emission in 2023 compared to 2022.

2022: 22,917 tons CO2e



2021: 25,505 tons CO2e

Constitute a 11% decrease, primarily due to reductions in emissions from company car fleet outweighing the increase of emissions from oil driven power and heat.

## 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

CO2 emission from the use of district heating and electricity.

Lundbeck have used the Scope 2 accounting method (GHG Protocol Scope 2 Guidance, January 2015).

Both the location based and the market based approach is used in our annual public reporting of CO2 emissions.

# **C6.3**

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

#### Reporting year

## Scope 2, location-based

15,525

# Scope 2, market-based (if applicable)

4,255



#### Comment

CO2 emission from the use of district heating and electricity.

Lundbeck have used the Scope 2 accounting method (GHG Protocol Scope 2 Guidance, January 2015).

Both the location based and the market based approach is used in our annual public reporting of CO2 emissions.

Location based:

2022: 15,525 tons CO2e 2021: 15,808 tons CO2e Constitute a 2% decrease.

Market Based:

2022: 4,255 tons CO2e 2021: 7,492 tons CO2e

Constitute a 76% decrease due to conversion towards renewable electricity and general decarbonization.

# **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?

No

## 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)** 



95,154

#### **Emissions calculation methodology**

Supplier-specific method
Spend-based method
Average product method

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

6

#### Please explain

This category includes all upstream emissions from the production of raw materials purchased or acquired by Lundbeck.

We have differentiated between the purchase of product-related goods that are sold to customers (1a), and non-product related goods (1b) (indirect procurement).

1a – Purchased Goods and Services, Product Related: Emissions related to the sourcing of materials used within the pharmaceutical products as well as the manufacture and transportation within the supply chain.

1b – Purchased Goods and Services, Non-Product Related: Emissions from all non-product-related purchases like CRO services, laboratory consumables and advertising.

1a: Purchased goods and services (product) = 17,775 tons CO2e

1b: Purchased goods and services (non-product) = 77,378 tons CO2e

Total: 95,154 tons CO2e

The category cover 57% of total footprint and 68% of scope 3

Emission 2022: 95,154 tons CO2e Emission 2021: 102,297 tons CO2e

Corresponds to a 7,5% decrease, primarily due to correction for the increased inflation and correction in use of supplier specific emission data.

Calculation is based on spend data and volume data/proxy. These data are obtained in our purchasing system. Supplier specific emissions have been obtained by 6% of suppliers.



1a:

Are calculated based on quantity data obtained from Lundbeck which details materials purchased with their associated weight (in either tons or liters).

Materials are reviewed and a pragmatic approach is undertaken to match each item to an emission factor, most of which is derived from the Ecoinvent 3.0 database. For items where the weight is deemed to be of a low value, an average emission factor has been applied. The pragmatic approach has aimed to cover at least 85% of each Lundbeck material group prior to applying an average emission factor. For finished goods purchased as part of the CMO relationships, a proxy is used.

1b:

Lundbeck's spend data is broken down by supplier. Focus have been put to ensure the spend data did not include items that have been accounted for using the quantity data (1a). Each spend category/supplier spend line item was allocated a relevant EEIO emission factor.

#### Capital goods

#### **Evaluation status**

Relevant, calculated

#### **Emissions in reporting year (metric tons CO2e)**

10,054

## **Emissions calculation methodology**

Spend-based method

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

0

## Please explain

All of Lundbeck's spend data was inserted in our footprint model. Capital expenditure was identified within Lundbeck's spend data. Each spend category was allocated a relevant EEIO factor. If the category fits between two EEIO categories, then the model allows a weighted EEIO factor to be allocated to the category. All the spend categories were then multiplied by the relevant EEIO factors to calculate emissions.



The category cover 6% of total value chain and 7% of scope 3

Emission 2022: 10,054 tons CO2e Emission 2021: 15,732 tons CO2e

Corresponds to a 36% decrease, primarily due to annual purchase fluctuations determined by different needs for new equipment.

Capital goods includes all upstream emissions associated with the production of capital goods that have been purchased within the reporting period. Capital goods are those that are treated as fixed assets or as property, plant and equipment, and are typically amortized over the life of the asset. Goods expensed in the accounting year (i.e. operating expenditure or "Opex") is not included in this inventory - but in Category 1. Calculation is based on spend data only. These data are obtained in our purchasing system. No specific emission factors provided by the suppliers was used.

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

#### **Evaluation status**

Relevant, calculated

#### **Emissions in reporting year (metric tons CO2e)**

6,564

## **Emissions calculation methodology**

Supplier-specific method

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

100

#### Please explain

Emissions were calculated by multiplying fuel and electricity quantities by relevant upstream emission factors. For fuel consumption for company vehicles, not all Lundbeck locations had available data. Therefore calculations were performed by The Carbon Trust to pro-rate these quantities.

All calculations for upstream fuel and electricity emissions are shown in the model.



Key assumptions: BEIS - UK conversion factors from DEFRA database - cover the Danish and global factors.

Data Sources: Consumption data (MWh) from scope 1 and scope 2 are directly used.

The category cover 4% of total value chain and 5% of scope 3

Emission 2022: 6,564 tons CO2e Emission 2021: 7,116 tons CO2e

Corresponds to a 8% decrease, primarily due to decrease in scope 1 and 2 consumption data.

This category includes the upstream emissions relating to the production of fuels and electricity consumed by Lundbeck, not already accounted for in scope 1 and 2. For all fuel-related consumption, as accounted for in Scope 1 and 2, there are associated emissions to extract gas/coal/oil etc., transport and process it before it is combusted (known as well to tank, WTT). There are also transmission and distribution (T&D) losses in supplying electricity – these emissions are accounted for in this category.

Lundbeck input electricity and fuel consumption data on an annual basis. These data is obtained directly from the suppliers by invoice or online meter readings. The modelling approach uses known consumption data (from the scope 1 and 2 calculations) multiplied by appropriate WTT and T&D emission factors.

## **Upstream transportation and distribution**

#### **Evaluation status**

Relevant, calculated

#### **Emissions in reporting year (metric tons CO2e)**

9.132

## **Emissions calculation methodology**

Supplier-specific method Spend-based method

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

45



#### Please explain

#### Inbound logistics:

Due to the volume and variety of purchased goods an average approach was taken to calculate these emissions from transport of goods from Tier 1 suppliers to Lundbeck. For the majority of purchased goods the Ecoinvent 3.0 database was used as the source for emission factors (EF). Ecoinvent provides EF's both with and without transport, and this difference is used to estimate the inbound logistics. For purchased materials/goods where this was not possible, average emission factors (based on the known Ecoinvent data) were used.

#### Purchased logistics:

Lundbeck have key third party logistics suppliers. They provide emissions data on a quarterly basis. Emission data provided by main distributors has been used directly in the model. For some third party logistics providers, emissions data was not available for the well-to-wheel (WtW) phase of activity - hence calculated assumed WtW emissions is based on the data provided by Lundbeck's other third party logistics providers. For one supplier (due to the lack of primary CO2 data) the tons of goods transported has been multiplied by the assumed average distance travelled. This has been multiplied by a BEIS 2019 emission factor to determine total emissions.

Where spend data was used (locally procured logistics), transport spend items were identified and EEIO factors applied against these. Ecoinvent 3.0 emission factors are used for the inbound logistics calculations. For purchased logistics, BEIS (DEFRA) conversion are used (if primary data from the supplier are not available) to provide the full Well to Wheel (WtW) emissions.

The category cover 5% of total value chain and 7% of scope 3

Emission 2022: 9,132 tons CO2e Emission 2021: 9,888 tons CO2e

Corresponds to a 8% decrease, primarily due to less transportation by air, which is moved to sea and more good moved by low emissions solutions.

4,070 tons CO2e was reported directly by our major outbound third party logistics providers on air, sea and road. This corresponds to 36%. The rest of the emissions are calculated by using spend data and applying appropriate emission factors.

#### Waste generated in operations

#### **Evaluation status**

Relevant, calculated



#### **Emissions in reporting year (metric tons CO2e)**

256

#### **Emissions calculation methodology**

Supplier-specific method Waste-type-specific method

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

100

#### Please explain

The total tonnage of waste has been provided, along the end of life treatment. Factors are applied to the different waste streams. This takes in to account the end of life treatment of the waste, as well as the waste category. The volume of waste is multiplied by the appropriate BEIS emission factor, based on disposal method and waste type (recycling, incineration, landfill, biological treatment).

Key assumptions: BEIS - UK conversion factors from DEFRA database - cover the Danish and global factors.

Data Sources: Annual HSE data in the HSE database providing an Excel – detailing tons of chemicals gone to waste across Lundbeck sites and the treatment method.

The category cover 0.1% of total value chain and 0.1% of scope 3

Emission 2022: 256 tons CO2e Emission 2021: 275 tons CO2e

Corresponds to a 7.4% decrease, primarily due to 3% less waste generated overall as produced goods has decreased with 1.7% compared to 2021

However the recycling rate for general waste has declined by 9%, sending more waste for incinerations.

This category is emissions from the third-party disposal and treatment of waste generated by Lundbeck's owned or controlled operations. Our suppliers have provided waste totals by tonnage for chemical and non-chemical waste as well as the waste treatment method for all sites operated by Lundbeck.

#### **Business travel**



#### **Evaluation status**

Relevant, calculated

#### **Emissions in reporting year (metric tons CO2e)**

7.153

#### **Emissions calculation methodology**

Supplier-specific method Average data method Fuel-based method

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

81

#### Please explain

Business Travel includes emissions from the transportation of employees for business-related activities in vehicles owned or operated by third parties. This includes emissions that are caused due to employees travelling by air, road, rail and boat and includes also emissions associated with hotel stays.

Air travel emissions is provided by Lundbeck's travel agent CWT (covering DK, SE, NO, PL and CH) and the US travel agent. An uplift was applied to account for any missing flight data. Emissions are directly calculated for the modes of transport (distance data) and for hotels (number of nights). Hotels are rated as 4 star. Uplifts were applied to account for any missing data.

Other modes of transport (taxi and rail) that did not have distance data were estimated based on the assumption of travel undertaken by Lundbeck employees. The relevant BEIS emission factors were then applied to these.

The category cover 4% of total value chain and 5% of scope 3

Emission 2022: 7,153 tons CO2e Emission 2021: 2,587 tons CO2e

Corresponds to a 177% increase, primarily due to the lift of COVID-19 restrictions resulting in more travel activity.

Primary data cover 81% of all travels. Primary CO2 data are provided directly by the travel agents once a year in a report. They also report



number of hotel nights. Employees reimbursed for driving own vehicles is also based on primary data. Uplifts were applied to account for any missing data.

#### **Employee commuting**

#### **Evaluation status**

Relevant, calculated

## **Emissions in reporting year (metric tons CO2e)**

3.781

#### **Emissions calculation methodology**

Average data method

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

0

#### Please explain

Category 7 refers to all emissions arising from the transportation of employees between their homes and their worksites.

Employee number data multiplied by the average commuting emissions per person. Commuting types cover: Automobile travel, bus travel, rail travel, air travel, subway, bicycling and walking.

Average emission factors for commuting by country classification have been calculated by The Carbon Trust. These are multiplied by the total number of employees within each country. Travel for business purposes should be captured in Category 6, Business Travel.

Key assumptions: Data based on UK Office of National Statistics and US statistics data as well as further assumptions.

Average commuting data for different countries has been taken from the following and used within the model:

http://www.nationmaster.com/country-info/stats/Transport/Commute/Distance.

Data Sources: The employee numbers are provided by Lundbeck's human resources department.

BEIS emissions factors are used to calculate emissions for each method of travel.



The category cover 2% of total value chain and 3% of scope 3

Emission 2022: 3,781 tons CO2e Emission 2021: 4,039 tons CO2e

Corresponds to a 7% decrease, primarily due to 159 less employees compared to 2021.

#### **Upstream leased assets**

#### **Evaluation status**

Relevant, calculated

#### **Emissions in reporting year (metric tons CO2e)**

1.453

#### **Emissions calculation methodology**

Spend-based method

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

0

# Please explain

Category 8 includes emissions associated with operation of property where we do not have operational control or assets that are leased by Lundbeck from a third-party proprietor, and are not included in the Scope 1 and 2 inventories.

The approach undertaken has been to use Lundbeck's spend data and to apply average environmental extended input-output (EEIO) emission factors to the items relating to upstream leased assets. Only spend data is used and converted to emission data by use of EEIO emissions factors.

The complete list of spend data is used in the footprint model. Each spend category was allocated a relevant EEIO factor. If the category fits between two EEIO categories, then the model allows a weighted EEIO factor to be allocated to the category. All the spend categories were then multiplied by the relevant EEIO factors to calculate emissions.



The category cover 1% of total value chain and 1% of scope 3

Emission 2022: 1,453 tons CO2e Emission 2021: 1,391 tons CO2e

Corresponds to a 4% increase, primarily due to the increased spend on office spaces.

#### **Downstream transportation and distribution**

#### **Evaluation status**

Relevant, calculated

#### **Emissions in reporting year (metric tons CO2e)**

1.012

## **Emissions calculation methodology**

Average data method

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

0

#### Please explain

Downstream transportation and distribution covers the transport of sold finished goods to customers, only if paid for by a third party. All inbound and outbound logistics paid for by Lundbeck are not captured in this category. Therefore, this category captures the additional movement of Lundbeck sold products, after being sold to a third party. In Lundbeck's case, sales are made to hospitals and wholesalers. Hospitals are end customers and so no onward transport or storage accounted for under category "Downstream transportation and distribution" is applicable for these customers. The sales to wholesalers do include elements of downstream transportation and distribution and have been calculated as part of this category.

Transportation: Tons of goods sold per country has been combined with country data detailing whether airfreight is used and whether delivery to an agent occurs. Estimations around average distance travelled per country and the mode of transport used have been applied.

For each country, appropriate well-to-tank (WTT) and tank-to-wheel (TTW) kgCO2e/tonne.km emission factors have been applied for each country to derive total emissions.



Warehouse storage: Tons of goods sold by product type have been obtained from the Lundbeck sales data by filtering for finished goods, trading good, Sold & EPR System. Estimations around number of days in storage have been made along with kilograms of product per pallet and the number of stacked pallets. Kilograms of product per square meter of warehouse space has been determined from the data and estimations and emissions factors applied to calculate total emissions.

Key Assumptions: Lundbeck has little data on downstream transport and warehousing not paid for by Lundbeck, so broad assumptions have been used. Estimations for onwards distances & travel modes were applied for the various countries Lundbeck sell to. Estimations for warehouse storage were applied including kilograms of goods per pallet, the stacking of pallets and the number of days goods are stored in the warehouse.

No primary data obtained by suppliers or value chain partners.

The category cover 0.6% of total value chain and 0.7% of scope 3

Emission 2022: 1,012 tons CO2e Emission 2021: 876 tons CO2e

Corresponds to an 15.5% increase, primarily due to annual fluctuations, new product launches and distribution split to large area countries

#### **Processing of sold products**

#### **Evaluation status**

Relevant, calculated

#### **Emissions in reporting year (metric tons CO2e)**

4.411

## **Emissions calculation methodology**

Average product method

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

0



#### Please explain

This category includes customer's emissions relating to the intermediate chemicals/APIs (Active Pharmaceutical Ingredients) sold by Lundbeck to third parties for further processing. For example the conversion of APIs into finalized pharmaceutical products.

A proxy emission has been developed based on the tons of intermediate chemicals transferred internally (from chemical production facilities to pharmaceutical production facilities) within Lundbeck and the associated scope 1 and 2 emissions for the production facility sites. The proxy factor has then been applied against tons of intermediate chemicals sold externally to determine emissions for this category.

The category cover 2.5% of total value chain and 3% of scope 3

Emission 2022: 4,411 tons CO2e Emission 2021: 4.199 tons CO2e

Corresponds to a 5% increase, primarily due to annual fluctuations in production mix and sales patterns.

#### Use of sold products

#### **Evaluation status**

Not relevant, explanation provided

## Please explain

This category refers to emissions from the use of goods and services sold by Lundbeck to end users. The GHG protocol draws a distinction between direct and indirect use phase. Direct use phase relates to emissions from direct use of a product, e.g. electricity consumption from a lamp. Indirect use phase relates to energy associated with using a product, but not directly consumed by the product, e.g. the energy used to wash clothing. A company should report all direct use phase emissions, and may optionally report indirect use phase.

Exclusion Statement: The vast majority of Lundbeck products use no energy when stored, used or consumed. A few e.g. IV-dosed products and products that needs to bee kept in fridge have a minimal footprint. CO2 emission from the category is calculated to bee less than 0.2% of total Scope 3 CO2 emissions, the category is deemed not relevant (based on assumption of 5% energy use in 55 fridges using EU standard electricity consumption).

Therefore this category has been excluded from the Scope 3 inventory.



#### End of life treatment of sold products

#### **Evaluation status**

Relevant, calculated

#### **Emissions in reporting year (metric tons CO2e)**

877

#### **Emissions calculation methodology**

Average data method

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

0

#### Please explain

This category refers to emissions from the waste disposal and treatment of the products sold by Lundbeck at their end of life. This would include disposal of packaging, rather than the medication itself, as generally emissions associated to this category are deemed to be minimal given the assumption that all medication will be taken by the end customer.

Averages for the end of life treatment of packaging for different countries and regions has been obtained through external research. Based on these and tons of sold goods per region data, emissions have been derived by the application of BEIS emission factors.

In Denmark, Italy & France, it is assumed that all blister packs are generally incinerated. For other countries where Lundbeck sell products to, external research has been undertaken to understand the treatment of waste.

No primary date obtained by suppliers or value chain partners.

The category cover 0.5% of total value chain and 0.6% of scope 3

Emission 2022: 877 tons CO2e Emission 2020: 776 tons CO2e

Corresponds to a 13% increase, primarily due to fluctuations in packaging types and end-of-life treatment options in countries of sold goods.



#### **Downstream leased assets**

#### **Evaluation status**

Not relevant, explanation provided

#### Please explain

This category includes emissions associated with the operation of property or assets that are leased by Lundbeck to a third-party proprietor, and are not included in the Scope 1 and 2 inventories.

Exclusion Statement: Category 13 has been excluded from Lundbeck Scope 3 inventory as Lundbeck have no down stream leased assets.

#### **Franchises**

#### **Evaluation status**

Not relevant, explanation provided

#### Please explain

Category 14 includes emissions from the operation of franchises not included in scope 1 or 2. This category is applicable to franchisors, who should account for the scope 1 and 2 emissions of franchisees.

The GHG protocol defines a franchise as a business operating under a license to sell or distribute another company's goods or services within a certain location. This category is applicable to franchisors (i.e. companies that grant licenses to other entities to sell or distribute its goods or services in return for payments, such as royalties for the use of trademarks and other services).

Exclusion Statement: Category 14 has been excluded from the Scope 3 Inventory as Lundbeck have no franchise relationships.

#### Investments

#### **Evaluation status**

Not relevant, explanation provided

#### Please explain



Category 15 contains all emissions associated with Lundbeck investments not already included in scope 1 and 2. These investments are most often either:

- Minority shareholdings in companies not accounted for using the accounting boundary chosen for Scope 1 and 2.
- · General portfolio investments utilizing cash reserves.

Exclusion Statement: Category 15 has been excluded from the Scope 3 Inventory as Lundbeck have no further investment relationships.

#### Other (upstream)

#### **Evaluation status**

Not relevant, explanation provided

#### Please explain

Lundbeck do not have any significant activities regarding other upstream activities.

All relevant score 3 categories are evaluated and already covered in the CO2 inventory/footprint model.

#### Other (downstream)

#### **Evaluation status**

Not relevant, explanation provided

#### Please explain

Lundbeck do not have any significant activities regarding other downstream activities.

All relevant score 3 categories are evaluated and already covered in the CO2 inventory/footprint model.

## **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	186	CO2e emission from use of biooil (by-product from the production of sunflower- and rapeseed oil) at our chemical site in Lumsås, Denmark.
		Source/method: Apendix II in Commission Regulation (EU) No 601/2012 of 21 June 2012 on the monitoring and reporting of greenhouse gas emissions.

# 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**

0.000001489

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

27,137

**Metric denominator** 

unit total revenue

**Metric denominator: Unit total** 

18,246,000,000

Scope 2 figure used

Market-based



## % change from previous year

26

## **Direction of change**

Decreased

#### Reason(s) for change

Change in renewable energy consumption

## Please explain

Constitute a 76% decrease due to conversion towards renewable electricity and general decarbonization

- 1: 17.5% decrease in gross market based scope 1 and 2 primarily due to convertion to renewable electricity and general decarbonization
- 2: 12% increase in revenue compared to 2021 . Had the revenue been the same in 2021 the decrease would be 17.5%.

Intensity figure in 2021 was:

32,997 tons CO2e gross global combined Scope 1 and 2 emissions

Revenue: 16,299,000,000 million DKK

Intensity figure = 0.000002024

# 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	22,911	IPCC Fifth Assessment Report (AR5 – 100 year)
HFCs	7	IPCC Fifth Assessment Report (AR5 – 100 year)

P¹Emission factors from DEFRA 2020 & Danish governmental energy & environmental agencies. Utility emissions pr. MWh assumed to be equal independ of geographic location.

# **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)	
Denmark	5,288
$\mathcal{Q}_1$	
Italy	2,141
$\mathcal{D}_2$	
France	1,196
<b>Q</b> ₃	
United States of America	244

<sup>2</sup>HFCs (Refrigerants) used: R-134a: GWP 1300 kg CO2/kg R-407C: GWP 1600 kg CO2/kg



Q <sub>4</sub>			
Poland	0		
<b>⊋</b> 5			
Other, please specify	14,048		
Global - total CO2 emission from company cars			
<b>№</b> 6			
⊊¹Gasoil, biooil, emergency diesel, citygas, LPG, HFCs			
<sup>2</sup> Methane			
<sup>2</sup> Methane			
<sup>2</sup> Methane for La Jolla and Seattle sites			
$\wp$ 5No scope 1 emissions in Poland as the affiliate use only electricity and district heating - both reported in scope 2.			
©6Company cars is not calculated by country or region but on a global scale. We assumptions on the remaining part.	have primary data from 57% of our fleet and uplift to cover 100% by		

Car fleet: Emissions are based on direct reports from leasing companies, and quarterly surveys sent out to affiliates.

The total emission is extrapolated to cover 100%. Calculations are made on consumption data directly from our leasing companies and affiliates on a quarterly on the amount of fuel used from our leasing partner and a CO2 emission calculation is made. We strive to reduce emissions by using more fuel efficient cars, using newer car models, EVs, hybrid cars or reducing the number of leased cars. Goal of 100% EV fleet in EU & US, 30% for other countries in 2035 as part of transition plan.

# **C7.3**

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

By facility

By activity



# 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
Site Valby, Denmark	2,262	55.658035	12.516765
Site Lumsås, Denmark	3,026	55.94317	11.512057
Site Padova, Italy	2,141	45.410201	11.926138
Site Elaiapharm, France	1,196	43.628082	7.051954
Affiliate - La Jolla, USA	90	32.902291	-117.236373
Affiliate - Seattle, USA	154	47.763859	-122.181455
Affiliate - Deerfield, USA	0	42.165547	-87.879638
Affiliate - Krakow, Poland	0	50.087748	19.976176
Company cars - Global	14,048	0	0

# C7.3c

# (C7.3c) Break down your total gross global Scope 1 emissions by business activity.

Activity Scope 1 emissions (metric tons CO2e)	
Biooil	186
Methane	3,582
Gasoil	1,557
F -gas (LPG)	687
Town gas	2,258



HFC (R134a & R407C)	7
Emergency diesel for generators	7
Company cars - Global	14,048
Solvents	585

# **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)
Denmark	10,817	455
<b>Q</b> 1		
Italy	2,005	1,840
$\mathcal{Q}_2$		
France	346	346
<b>Q</b> <sub>3</sub>		
United States of America	1,690	1,138
<b>Q</b> 4		
Poland	666	474
<b>Q</b> 5		

□¹Electricity supplied to Danish sites is provided by solar panels under PPA agreement. 85% of the fuel used for generating district heating originates from biofuels (hay, biomass, organic waste, wood pellets). Self generated: Steam is made by use of town gas. Cooling by use of electricity.

⊋²Purchaced electricity only. Self generated: Steam and heat is made by use of methane. Cooling by use of electricity. 19,81% renewable electricity in the grid.



$\wp$ Purchaced electricity only. Self generated: Steam and heat is made by use of methane. Cooling
by use of electricity. 7.1% renewable electricity in the grid.
□      □

Cooling by use of electricity. 20% renewable electricity in the grid.

Seattle: Purchaced electricity only. Self generated heat is made by use of methane.

Cooling by use of electricity. 20% renewable electricity in the grid.

Deerfield: Purchaced electricity only. Self generated heat and cooling is made by use of electricity. 20% renewable electricity in the grid.

 $\Omega$ <sup>5</sup>Purchased and consumed electricity and heat (district heating). Self generated cooling by use of electricity.

16.9% renewable electricity and 10.4% renewable district heating in the grid respectively.

## **C7.6**

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

By facility

By activity

# 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)
Site Valby, Denmark	7,915	455
Electricity supplied to Danish sites is provided by solar panels under PPA agreement. 85% of the fuel used		



for generating district heating originates from biofuels (hay, biomass, organic waste, wood pellets). Self		
generated: Steam is made by use of town gas. Cooling by use of electricity.		
Site Lumsås, Denmark	2,902	0
Electricity supplied to Danish sites is provided by solar panels under PPA agreement.		
Site Padova, Italy	2,005	1,840
Purchased electricity only. 19.81% of the electricity originates from renewable energy sources. Self		
generated: Steam and heat is made by use of methane. Cooling by use of electricity.		
Site Elaiapharm, France	346	346
Durch and electricity only 7.10/ of the electricity originates from renewable energy sources. Colf generated		
Purchaced electricity only. 7.1% of the electricity originates from renewable energy sources. Self generated: Steam and heat is made by use of methane. Cooling by use of electricity.		
	005	454
Affiliate - La Jolla, USA	335	151
Purchaced electricity only. Self generated heat is made by use of methane.		
Cooling by use of electricity. 20% renewable electricity in the grid.		
Affiliate - Seattle, USA	424	476
Purchaced electricity only. Self generated heat is made by use of methane.		
Cooling by use of electricity. 20% renewable electricity in the grid.		
Affiliate - Deerfield, USA	931	511
Purchaced electricity only. Self generated heat and cooling is made by use of electricity.		
20% renewable electricity in the grid.		
Affiliate - Krakow, Poland	666	474



Purchased and consumed electricity and heat (district heating). Self generated cooling by use of electricity.	
16,9% renewable electricity and 10,4% renewable district heating in the grid respectively.	

# C7.6c

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

Activity	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Purchased electricity	14,708	3,610
Purchased district heating	816	644

# **C7.7**

(C7.7) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

Not relevant as we do not have any subsidiaries

## **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.

issions	change in	Emissions value (percentage)	Please explain calculation
	emissions		



	(metric tons CO2e)			
Change in renewable energy consumption	165	Decreased	0.6	The change in emissions in renewable energy is due to difficulties with supply of biooil at an acceptable pricepoint throughout 2022.  Biooil: A by-product from the production of sunflower- and rapeseed oil and used for heat/steam at Site Lumsås, Denmark.  5,911 MWh biooil was used in 2022 compared to 12,205 MWh in 2021. As a result 5,084 MWH more gasoil was used equating to 1,364 tons CO2  The reduced use of biooil resulted in a decreased emission of 165 tons CO2, corresponding to a 47% decrease. Emissions from biooil in 2021 were 351 tons and 186 tons in 2022.  Formula: ((-165/27,173) *100)) = -0.6%
Other emissions reduction activities	3,811	Decreased	14	The change in emissions due to other reduction activities is attributed to proactive emission reduction initiatives at our production sites. In 2022 Lundbeck implemented several energy conserving initiatives. These initiatives were based on a 5.7 MDKK investment.  Energy efficiency in buildings: We implemented lowering of ceiling height, recycling of air, change of boiler size and office temperature setpoint adjustments.  Production processes: Implementation of new fan motors ,chiller and compressed air producer with water heating recovery.  Total emission reduction is 196 tons corresponding to 0.7%



				Additionally the PPA agreement covering the electricity usage of both DK sites was accounted for in 2022. Reductions are estimated as a 3,615 tons CO2 decrease.  The net decrease is 3,811 tons CO2, corresponding to a 14% decrease  Formula: ((3,811/27,173)*100) = 14 %
Divestment	0	No change	0	NA
Acquisitions	0	No change	0	NA
Mergers	0	No change	0	NA
Change in output	2,055	Decreased	7.6	The change in emissions due to change in output is attributed to 1.7% less finished goods production in 2022 compared to 2021.  Chemical production had different energy requirements due to RTO being fully implemented, HVAC QC operating more hours, shutdown of fermentation lab and shutdown of production units and change in production mix.  Energy consumed decreased by 4,159 MWh (3.8%) from 2022 to 2021 corresponding to a 2,055 tons CO2 emission decrease. This is equal to a 7.6% emission decrease in total scope 1&2 emissions excluding company cars.  Formula:  ((-2,055/27,173)*100) = 7.6%
Change in methodology	786	Increased	2.9	The change in emissions due to change in methodology is primarily attributed to change in emission factors (the increasing part of sustainable energy in the



				grid: electricity and district heating)  The total change of Scope 1&2 emissions comparing 2022 and 2021 was a decrease of 5,824 tons of CO2 from 32,997 tons in 2021 to 27,173 tons in
				2022. Using 2021 emission factors for 2022 a decrease of 2,829 tons is calculated. This counts the CO2 savings of the PPA-agreement at 3,615 tons CO2. When subtracted an increase of 786 tons is calculated.
				Formula: ((786/27,173)*100) = 2.9%
Change in boundary	585	Increased	2.2	The RTO-burner at site Lumsås introduced recycled solvents as a fuel source into the boundary in 2022. Solvents is used a substitute fuel to F-Gas (LPG)  A total of 2,403 MWh solvents was used in 2022 corresponding to 585 tons CO2.  Formula: ((585/27173)*100) = 2.2%
Change in physical operating conditions	0	No change	0	NA
Unidentified	449	Decreased	1.65	The total decrease in CO2 emission from 2021 to 2022 was 17.7%  16.05% is accounted for in the above. A 1.65% decrease is unidentified (17.7%-16.05%) corresponding to 449 tons of CO2.  Formula: ((-449/27,173)*100) = 1.65%



				This is partly due to fluctuations in our annual production mix and other elements not accounted for in the above. However we find it difficult to pinpoint the actual reason for this unidentified emission
Other	2,770	Decreased	10	1) Emissions from company cars based on fuel usage and kilometers driven decreased by 3,833 tons (21%) from 17,881 tons in 2021 to 14,048 tons in 2022. This corresponds to a 14% decrease in gross scope 1&2 emissions.  2) Due to the unavailability of biooil on 2022, 5,084 MWH more gasoil was used in 2022 compared to 2021 equating to 1,364 tons CO2 This corresponds to a 5% increase in gross scope 1&2 emissions.  3) Due to the introduction of recycled solvents into the Scope1 boundary 1,662 MWh less F-Gas(LPG) was used, corresponding to 301 tons CO2. This corresponds to a 1% decrease in gross scope 1&2 emissions.  The 3 together result in a net decrease of 2,770, equal to 10% (14%-5%+1% =10%)  Formula: ((-3,833+1,364-301)/27,173) *100) = 10%



# 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 0% but less than or equal to 5%

# **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	No
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)	5,911	40,456	46,368
Consumption of purchased or acquired electricity		29,024	14,889	43,913
Consumption of purchased or acquired heat		11,553	2,169	13,722
Consumption of self-generated non-fuel renewable energy		0		0
Total energy consumption		46,488	57,514	104,002

# 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

5,911

### MWh fuel consumed for self-generation of electricity

0

# MWh fuel consumed for self-generation of heat

2,365

#### MWh fuel consumed for self-generation of steam

3,547

#### Comment

Biooil (by-product from the production of sunflower- and rapeseed oil). Used for production of heat and steam in Site Lumsås, Denmark. 60% for generation of steam and 40% for generation of heat.

#### Other biomass

# **Heating value**

Unable to confirm heating value

# Total fuel MWh consumed by the organization

0

# MWh fuel consumed for self-generation of electricity

O

# MWh fuel consumed for self-generation of heat



0

# MWh fuel consumed for self-generation of steam

0

#### Comment

N/A

# Other renewable fuels (e.g. renewable hydrogen)

# **Heating value**

Unable to confirm heating value

# 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

#### Comment

N/A

#### Coal

# **Heating value**

Unable to confirm heating value



# 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

#### Comment

N/A

Oil

# **Heating value**

LHV

Total fuel MWh consumed by the organization

5,862

MWh fuel consumed for self-generation of electricity

26

MWh fuel consumed for self-generation of heat

2,334

MWh fuel consumed for self-generation of steam

3,502

Comment



Diesel: Used for emergency generators producing electricity at site Valby.

Gasoil: Used as backup fuel for biooil at Lumsås, Denmark. 60% for generation of steam and 40% for generation of heat.

#### Gas

#### **Heating value**

LHV

#### Total fuel MWh consumed by the organization

32,191

## MWh fuel consumed for self-generation of electricity

0

# MWh fuel consumed for self-generation of heat

11,915

# MWh fuel consumed for self-generation of steam

20,276

#### Comment

LPG: Used for production of heat and fueling our RTO burner at site Lumsås.

Methane/Natural gas: 50% for heat and 50% for steam.

Used at our production sites in Valbonne, France and Padova, Italy as well as our affiliates in Seattle, USA and La Jolla, USA.

Citygas in Valby used 100% for generation of steam.

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

#### **Heating value**

LHV

# Total fuel MWh consumed by the organization

2,403



# MWh fuel consumed for self-generation of electricity

0

# MWh fuel consumed for self-generation of heat

2,403

# MWh fuel consumed for self-generation of steam

0

#### Comment

Mix of solvents recycled from production used for fueling of RTO burner at site Lumsås

#### **Total fuel**

# **Heating value**

LHV

# Total fuel MWh consumed by the organization

46,368

# MWh fuel consumed for self-generation of electricity

26

# MWh fuel consumed for self-generation of heat

19,017

# MWh fuel consumed for self-generation of steam

27,325

#### Comment

See above fuel types for details.

12.7% of the combusted fuels originate from renewable sources in 2022.



# 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	26	26	0	0
Heat	19,017	19,017	2,365	2,365
Steam	27,325	27,325	3,547	3,547
Cooling	21,956	21,956	12,575	12,575

# C8.2e

(C8.2e) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero or near-zero emission factor in the market-based Scope 2 figure reported in C6.3.

# Country/area of low-carbon energy consumption

Denmark

# Sourcing method

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

# **Energy carrier**

Electricity

#### Low-carbon technology type

Solar



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

25,151

#### **Tracking instrument used**

Contract

### Country/area of origin (generation) of the low-carbon energy or energy attribute

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)

2022

#### Comment

PPA contract agreement between Lundbeck and Better Energy was established in Q1 of 2021 ensuring construction of a 34MW solar park covering 100% of Lundbeck's electricity consumption effective from 2022.

# Country/area of low-carbon energy consumption

Denmark

### Sourcing method

None (no active purchases of low-carbon electricity, heat, steam or cooling)

# **Energy carrier**

### Low-carbon technology type



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

**Tracking instrument used** 

Country/area of origin (generation) of the low-carbon energy or energy attribute

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

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

#### Comment

District heating: Purchased and consumed low-carbon heat in Denmark originates from grid mix in district heating. 85% of the district heating in 2022 originates from renewable energy sources (hay, biomass, organic waste, wood pellets).

# **C8.2g**

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

# Country/area

Denmark

**Consumption of purchased electricity (MWh)** 

25,151

Consumption of self-generated electricity (MWh)

26



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

13,394

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

12,575

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

51,146

# Country/area

Italy

**Consumption of purchased electricity (MWh)** 

6,791

Consumption of self-generated electricity (MWh)

0

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

0

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

3,395

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

10,186



# Country/area

France

**Consumption of purchased electricity (MWh)** 

7,667

Consumption of self-generated electricity (MWh)

0

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

0

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

3,833

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

11,500

# Country/area

Poland

**Consumption of purchased electricity (MWh)** 

357

Consumption of self-generated electricity (MWh)

0

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

328



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

179

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

864

# Country/area

United States of America

**Consumption of purchased electricity (MWh)** 

3,947

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

0

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

0

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

1,974

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

5,921



# C9. Additional metrics

# C9.1

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

#### **Description**

Waste

#### **Metric value**

5,293

#### **Metric numerator**

Tonnes of solvents recovered.

# Metric denominator (intensity metric only)

NA

# % change from previous year

4.6

# **Direction of change**

Decreased

# Please explain

Over the years, Lundbeck have refined the skills and technical capabilities of our chemical production to increase recycling of organic solvents and reduce hazardous waste. We set targets each year to improve and in 2022, we are proud to report that we achieved the corporate target of internal recycling on 63% of the solvents used in chemical production. In 2022 we manage to recycle 65% - hence exceeding our target.



In 2022 Lundbeck recovered 5,293 tons solvents. The actual amount in tons recovered in 2022 is 256 tons less than in 2021, due to less use of solvents (12%) in the production in 2022. Through this recycling we indirectly saved 10,9004 tons CO2 emissions from manufacturing of new solvents for production, transportation and waste management. All major solvents used in chemical production is recycled. Both solvents recovered on-site (internal recycling) and by external companies (external recycling). Our target for 2023 is to recycle 64% of the organic compounds used in chemical production (in Denmark and Italy).

# **Description**

Energy usage

#### Metric value

186

#### **Metric numerator**

Tons CO2 from liters of biooil used.

#### Metric denominator (intensity metric only)

NA

## % change from previous year

47

# **Direction of change**

Decreased

#### Please explain

Biooil: Reduced CO2 emission by using biooil (by-product from the production of sunflower- and rapeseed oils). Biooil is used for heat/steam in Site Lumsås, Denmark.

However, 51,6% less biooil was used in 2022 compared to 2021. The decrease was due to problems in sourcing biooil du to limited supply at



the vendor. Hence more gasoil was needed (7 times more gasoil used in 2022 compared to 2021). Biooil is our preferred type of fuel, as certified biooil have a 9 times lower emission factor than gasoil.

# 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

Limited assurance



#### Attach the statement

- Usustainability\_Report\_2022.pdf.coredownload.pdf
- $\ensuremath{\mathbb{Q}}$  Lundbeck 2022 CDP verification template PwC completed.pdf

### Page/ section reference

- 1: Verification from PwC. See page 1-2. Attachment "Lundbeck 2022 CDP verification template PwC completed".
- 2: Sustainability Report. See page 48-49 in Lundbeck Sustainability Report 2022. Attachment "Sustainability\_Report\_2022.pdf.coredownload".

#### 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



#### Limited assurance

#### Attach the statement

- Usustainability\_Report\_2022.pdf.coredownload.pdf
- U Lundbeck 2022 CDP verification template PwC completed.pdf

#### Page/ section reference

- 1: Verification from PwC. See page 1-2. Attachment "Lundbeck 2022 CDP verification template PwC completed".
- 2: Sustainability Report. See page 48-49 in Lundbeck Sustainability Report 2022. Attachment "Sustainability\_Report\_2022.pdf.coredownload".

#### 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: Upstream transportation and distribution

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

Usustainability\_Report\_2022.pdf.coredownload.pdf

U Lundbeck 2022 - CDP verification template PwC completed.pdf

#### Page/section reference

- 1: Verification from PwC. See page 1-2. Attachment "Lundbeck 2022 CDP verification template PwC completed".
- 2: Sustainability Report. See page 48-49 in Lundbeck Sustainability Report 2022. Attachment "Sustainability\_Report\_2022.pdf.coredownload".

Note: 102,620 tons CO2 of 111,439 tons CO2 is verified by PwC and reported in our Sustainability Reporting. This number is aligned with our target boundary. This corresponds to 92,1% of the full emission in these three categories.

#### Relevant standard

ISAE3000

# Proportion of reported emissions verified (%)

92

# 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
C6. Emissions data	Year on year change in emissions (Scope 1 and 2)	ISAE3000	2021: 32997 tons CO2e. 2022: 27173 tons CO2e. Change: 17,6% decrease in 2022 compared to 2021. The corporate 3% annual reduction target is well achieved in 2022.  Reason for change: Scope 1 down by 10,1% and Scope 2 down by 43,2% due to a decrease in emissions from our global company car fleet and sourcing of renewable electricity (zero emission) in Denmark. On January 1st 2022, the newly built solar park was connected to the Danish grid, supplying 100% renewable electricity to Lundbeck. The electricity is provided by Better Energy through a power purchasing agreement covering all consumed electricity at Lundbeck's 2 Danish sites.  PwC has included Scope 1, Scope 2 and Scope 3 (Purchased goods and services, Up-stream transportation and distribution, business travel), in our verification statement, but not specifically covered the year on year movements in CO2 emission as these were not included within the assurance scope of the statement.  However, this was verified in the annual data assuring process and validated by PwC prior to launch of our Sustainability Report 2022.  The change is reported in our annual Sustainability Report. See page 48-49 in Lundbeck Sustainability Report 2022. Attachment "Sustainability_Report_2022.pdf.coredownload".



			Verification from PwC. See page 1-2. Attachment: "Lundbeck 2022 - CDP verification template PwC completed".
C8. Energy	Energy consumption	ISAE3000	2021: 108162 MWh. 2022: 104004MWh. Change: 3,8% decrease compared to 2021.  Reason for decrease is primarily due to energy reduction initiatives at site Padova and site Valby (optimization of heating system, reducing the office temperature, rectified defects on steam pipe, production shut down, improved running of steam boilers and optimized management of cooling towers on weekends).  PwC have included the year on year movements in energy in our verification statement, as these were not technically included within the assurance scope for the statement.  However, annual data from 2021 and 2022 are verified in the annual data assuring process and validated by PwC prior to launch of our Suatainability Report 2022.  The change is reported in our annual Sustainability Report. See page 48-49 in Lundbeck Sustainability Report 2022. Attachment "Sustainability_Report_2022.pdf.coredownload".

¹Sustainability\_Report\_2022.pdf.coredownload.pdf

# 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)?

 $<sup>\</sup>textcircled{1}$  2Lundbeck 2022 - CDP verification template PwC completed.pdf



Yes

# C11.1a

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

Denmark carbon tax

France carbon tax

# C11.1c

# (C11.1c) Complete the following table for each of the tax systems you are regulated by.

#### **Denmark carbon tax**

#### Period start date

January 1, 2022

#### Period end date

December 31, 2022

# % of total Scope 1 emissions covered by tax

12

# Total cost of tax paid

3,013,697

#### Comment

In Denmark we have a tax on our consumption of city gas at 3,013,697 DKK We also have a tax on consumption of electricity at: 15,014,352 DKK

#### France carbon tax



#### Period start date

January 1, 2022

#### Period end date

December 31, 2022

#### % of total Scope 1 emissions covered by tax

4

#### Total cost of tax paid

278,802

#### Comment

Our site in France is covered by two carbon tax system based on the "polluter pays" principle. One tax for gas and another for electricity.

# C11.1d

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

Lundbeck wants to be a responsible company and comply with existing and future legislation. As a part of our corporate Health Safety and Environment (HSE) system, that are certified according to the international ISO 14001 standard, we have implemented a firm monitoring and compliance strategy to assure compliance with new and upcoming legislation. The strategy is described in the manual for the system and implemented locally in the HSE departments at our sites in Denmark, Italy and France. The strategy requires that all sites have a set procedure to monitor national legislation on a quarterly basis. In addition, the Corporate HSE department is also required to monitor EU legislation. Lundbeck's energy consumption is too small to be covered by EU's ETS scheme, but we are covered by national legislations on carbon taxes.

CASE STUDY: Carbon tax is currently a part of the legislation in Denmark and France. The Danish carbon tax is included in our energy invoices and payed automatically together with these invoices. In Denmark where our headquarter site and one of our chemical sites are located the government have just suggested a new taxation system for decision. This suggestion will increase the CO2 tax for our Danish sites with app. 3.2 MDKK/year thus promoting the use of renewable energy. Hence, we are looking into a future with increasing cost for use of fossil-based fuels.



In France we are covered by two carbon tax system based on the "polluter pays" principle. The tax is levied directly on the purchase of energy (gas, petrol, electricity, etc.). Basically, all energy buyers pay this tax. The name for gas tax is "TICGN or "Taxe Intérieure sur Consommation de Gaz Naturel" and for electricity: Contribution au Service Public d'Electricité.

Several scenarios like IEA NZE 2050 predict that carbon taxes will increase and will be introduced in more countries. Our strategy to minimize the impact from increasing carbon price schemes is included in our climate strategy and transition plan and our 1.5C and Net zero aligned climate targets. We have several milestones in our transition plan for moving towards renewable electricity and renewable fuels gradually beginning in DK and expanding to our sites worldwide. 12 years ago, we replaced a large boiler using fuel oil with a new boiler using bio oil at our chemical site in DK. This reduced our CO2 emissions by app. 2000 ton/year. We are currently experiencing limited supply of biooil and have for shorter periods during 2022 been forced to go back to fossil fuels. Due to this we have developed a business case for our headquarter site for converting our existing fossil fuel boiler to an electrical boiler. Unfortunately, technology is lacking maturity for such conversion and payback time is very long. Instead, we have initiated investigation of possibilities for electrical boilers at our other production sites. This work will continue in 2023. Conversion to electrical boilers will eliminate our use of fossil fuels and enable us to use renewable electricity, thus avoid carbon taxes in DK.

Additionally, we are moving away from fossil based electricity to electricity based on renewables e.g. we signed a Power Purchase Agreement that started supplying our two Danish sites with electricity from a new solar park by January 2022 and 7 years ahead. This has reduced our scope 2 emissions by 3,615 tons. In 2022 we have investigated possibilities for another PPA covering the rest of our European sites incl. sales offices. We expect to sign an agreement during 2023. Additionally, we have installed on-site solar panels at our Italian site in 2022. We believe this transition make us resilient towards new and increasing carbon pricing schemes.

# 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

Other, please specify
Implicit energy reduction price

#### How the price is determined

Other, please specify

In Denmark it is possible to sell our energy reductions to an energy supplier. The actual price/kWh saved energy is fixed in a contract between the energy supplier and the company

#### Objective(s) for implementing this internal carbon price

Drive energy efficiency

# 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

As the actual price/kWh saved energy is fixed in a contract between the energy supplier and the company it is re-negotiated every year, but it has stayed on the same level for several years. The level for the recent years has been at 300 DKK/MWh saved corresponding to 4,500



DKK/ton CO2. The requirements for selling energy reductions has recently changed to projects with pay back times down to two years where as previously the lowest accepted payback time was 5 years. This increases the possibility for using this pricing mechanism.

Actual price(s) used – minimum (currency as specified in C0.4 per metric ton CO2e)
4,500

Actual price(s) used – maximum (currency as specified in C0.4 per metric ton CO2e) 4,500

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

# Explain how this internal carbon price has contributed to the implementation of your organization's climate commitments and/or climate transition plan

In Denmark it is possible to sell our energy reductions to an energy supplier. The actual price/kWh saved energy is fixed in a contract between the energy supplier and the company.

This means that when new projects are identified energy savings and carbon reductions are calculated and sold to the energy supplier. The benefit from selling the energy reductions is included in the final calculations for the project thus establishing a pricing system that favor projects with large energy reductions. We did not sell any energy savings in 2022, but in 2020 the energy savings from a project reducing emissions by 30 tons CO2/year was sold. We do expect to sell energy reductions from a specific energy efficiency project in 2023.

In France it is possible to receive national grants for energy saving projects, making it possible to implement energy projects earlier than otherwise. At our French site, it is the Engineering department that identify and implement energy projects. In 2022 an energy projects reducing CO2 emissions by 127 tons were partly financed by national grants (App. 0.6 MDKK) thus making it possible to implement the projects at an earlier time.



# C12. Engagement

# C12.1

# (C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers

Yes, other partners in the value chain

# C12.1a

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

#### Type of engagement

Information collection (understanding supplier behavior)

# **Details of engagement**

Collect targets information at least annually from suppliers

% of suppliers by number

2

% total procurement spend (direct and indirect)

90

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

45

Rationale for the coverage of your engagement



Lundbeck's supplier engagement strategy on climate was approved by the Climate steering committee and launched in beginning of 2022. It pursues to cooperate with our suppliers about emission reductions. A first step was to use an extensive survey as the tool that allows us to obtain the information that feeds this strategy. The survey was send to 260 of our largest suppliers (Cat. 1: Purchased goods and services) where we asked about their climate strategy, use of renewable electricity and consumption of electricity. This survey was performed to create information about our suppliers maturity within climate action before developing contractual requirements to all our suppliers. Our main aim was to investigate the possibility of requesting suppliers to use renewable electricity for the service/products they supply to us as we can see on the emissions data that we have received from cat. 1 suppliers, that the suppliers scope 2 emissions constitute between 40-60% of the emissions we include in our carbon footprint.

#### Impact of engagement, including measures of success

126 suppliers out of 260 responded to the survey. 79% of the 126 suppliers responded they have a climate strategy and 60% were either already using renewable electricity or were planning to. Also 60% were able to deliver electricity consumption data. Measure of success was defined as a sufficient amount of responding suppliers to create a foundation for deciding on our engagement strategy. As we almost reached a response rate at 50% we decided it was sufficient to create the foundation for Lundbeck to decide an engagement strategy where we implement contractual commitments requesting our suppliers to use renewable electricity for the service/product they deliver to us and to deliver emission data. A pilot was performed end of 2022 sending the contractual commitment for signature at 5 suppliers where 3 of them signed the commitment and 1 supplier signed already in 2021.

If a supplier refuses to sign the contractual commitment, we have developed a procedure (Decision tree) for how we retain and engage with the supplier or exclude cooperation with the supplier. The procedure include considerations about emission share and criticality of supplier. In most cases we will continue the purchase and make an agreement about re-evaluating the possibility for signing after a year.

Implementation of the contractual commitments for using renewable electricity is included in our transition plan where top 50 suppliers must use renewable electricity by 2025, 300 by 2030 and 100% by 2040. To be sure we reach our milestones we have set an internal goal about 50 suppliers must have signed by the end of 2023 and 300 by the end of 2025. By end of 2022, 4 suppliers had signed the agreement.

#### Comment

#### Type of engagement

Information collection (understanding supplier behavior)



#### **Details of engagement**

Collect GHG emissions data at least annually from suppliers

#### % of suppliers by number

1

### % total procurement spend (direct and indirect)

10

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

13

### Rationale for the coverage of your engagement

To improve the accuracy of our emission data we request our suppliers to deliver emission data. Suppliers in cat. 4 Upstream transportation and distribution and in Cat. 6 Business travel are requested to deliver data quarterly and suppliers in cat. 1 Purchased goods & Services are requested to deliver data once a year. In 2022 100% of suppliers in cat. 4 Upstream transportation and distribution and in Cat. 6 Business travel were requested and 1% of suppliers in cat. 1 Purchased goods & services.

#### Impact of engagement, including measures of success

All suppliers in cat. 4 Upstream transportation and distribution are delivering data on a quarterly basis, 81% of suppliers in Cat. 6 Business travel are delivering data and all the requested suppliers in Cat 1 Purchased goods & services delivered data.

The majority of emissions in Cat 1 Purchased goods & services (88% of emissions within the near-term target boundary) is calculated based on spend data and emission factors and as the Business grow emissions will follow if we continue to calculate emissions like that. It is therefore crucial, that we receive emission data from more suppliers. Our internal target for 2023 is that max 75% of emissions within the near-term target boundary in cat. 1 should be calculated based on spend.

#### Comment



Engagement & incentivization (changing supplier behavior)

#### **Details of engagement**

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

#### % of suppliers by number

0.01

#### % total procurement spend (direct and indirect)

0.39

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

-

#### Rationale for the coverage of your engagement

As a part of our engagement strategy, we have decided to help and train those of our suppliers that request help for climate action. The rationale for this decision is that we need our suppliers to reduce their emissions in order for us to achieve our scope 3 target and our Net zero ambition in 2050. One of our strategic suppliers has done so and we have performed three days of training (1 in 2021 and 2 in 2022) within: Calculating emissions, setting Science based targets and possibilities for receiving renewable electricity.

#### Impact of engagement, including measures of success

Measures of success for this initiative is: The supplier can: 1. deliver CO2 emission data on an annual basis. 2. sign a contractual agreement for using renewable electricity.

So far the training is considered a success because: 1. The supplier are now delivering a full data set for emissions annually. 2. The supplier is considering committing to set a Science based target and have initiated investigations for entering a PPA agreement with renewable electricity. Entering a PPA agreement will enable the supplier to sign a contractual agreement on using renewable electricity for the products they deliver to us.

#### Comment



# C12.1d

#### (C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

Lundbeck cooperate with several partners within the pharmaceutical industry. The partnerships are both within development of new medicine and within the production set-up of already approved medicine. When it comes to climate action our strategy for these cooperations are the same as for our suppliers. It means that we collect information about their CO2 emissions and their strategy and targets. They are also included in our initiative where we request our suppliers to use renewable electricity in a contractual agreement. The largest partners by emission are considered highest priority and are also the ones where we initiative cooperation within climate action first. Our approach is to start the dialogue with an introduction meeting, where we present our targets and wishes for the cooperation and they do the same. Based on this dialogue it is decided when our partner is ready for signing a contractual agreement on renewable electricity and if they need training for being able to deliver CO2 emission data to us. So far our biggest partner by emission has been trained in calculating emissions and are planning to use renewable electricity from 2025.

# 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**

Purchasing renewable energy

#### Description of this climate related requirement

Based on received emission data from cat. 1 (Purchased goods & services) suppliers we see that the scope 2 emissions constitute between 40-60% of the emissions we include in our carbon footprint. Having our suppliers to use renewable electricity is therefore an efficient lever to



reduce emissions and it is an easy action to do for suppliers as it is possible to purchase certificates for renewable electricity in most of the countries our suppliers are located. Many of our suppliers are located in Europe and USA where the possibility for entering PPA agreements is increasing if the suppliers prefer to do so. Apart from using renewable electricity, the supplier has to deliver emission data annually. Implementation of the contractual commitments for using renewable electricity is included in our transition plan: Top 50 suppliers must use renewable electricity by 2025, 300 by 2030 and 100% by 2040. To be sure we reach our milestones we have an internal goal on 50 suppliers to have signed by the end of 2023 and 300 by the end of 2025. For the calculations below 300 suppliers will be used as the target group meaning that 100% of suppliers by spend have to comply in the group of top 300 suppliers. Comparing with the entire cat. 1 suppliers the 300 suppliers constitute 64% of total spend. By end of 2022, 4 suppliers had signed an agreement (0.3% by spend).

Going forward we are evaluating if we should include requirements for having Science based targets in our engagement strategy.

% 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

Mechanisms for monitoring compliance with this climate-related requirement

First-party verification

Response to supplier non-compliance with this climate-related requirement

Retain and engage

Procedure for supplier engagement\_Climate.pptx

# 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

# 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)

Position document on Climate change Screen dump from our homepage Transition plan towards zero emissions

Transition\_plan\_2023\_Final.pdf

Climate\_Change\_Position\_2023.pdf

Climate commitment at www.lundbeck.com.docx

# 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

It is described in Lundbeck's HSE management system how internal and external communication is coordinated in the company. Lundbeck's HSE management system is certified according to ISO 14001 and ISO 45001 and in compliance with Art. 8 in DIRECTIVE 2012/27/EU. All communication with policy makers, authorities, trade associations and participation in other networks is coordinated and agreed between the Executive Vice President (EVP) of Product Development & Supply (C-Suite Officer and chairing the Climate steering committee), the Corporate HSE department (incl. the project manager of the climate strategy), Corporate Compliance & Sustainability and the Corporate Communication department. When needed our CEO is involved, typically when we decide to sign new ambitions or statements. Only the Corporate Communication department can prepare press releases, corporate news at our homepage or other social media announcements, but the content is always confirmed with Corporate Compliance & Sustainability, the Corporate HSE department and our Executive Vice President of Product Development & Supply.

Preparation of input to upcoming legislation, participation in trade unions and networks or climate seminars is performed by managers and employees from the Corporate HSE department. Lundbeck's Corporate HSE department is responsible for developing and managing Lundbeck's Climate strategy and for the follow up on all Lundbeck's climate initiatives and targets. This means that it is the same managers and



employees that are responsible for the climate strategy, that participate prepare input to new legislation, trade unions and network activities. This ensures consistent communication about our climate strategy.

When Lundbeck participate in interviews with external journalists concerning climate issues it is usually performed by our EVP of Product Development & Supply or our Compliance & Sustainability officer and clarified with the Corporate HSE department and the Corporate Communication department. Occasionally other managers referring to the EVP of Product Development & Supply participate in interviews but again it is approved by our EVP of Product Development & Supply and coordinated with the Corporate HSE department.

The internal communication concerning climate issues is coordinated and performed by the Corporate Communication department I cooperation with Corporate Compliance & Sustainability and the Corporate HSE department.

## 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

The Danish government has decided on a new agreement on Carbon tax. The agreement introduces a new CO2 tax at a rate of DKK 750 per tons of CO2 emitted in 2030 for companies outside the EU's quota trading system and DKK 375 per tons of CO2 emitted in 2030 for companies within Mineralogical processes etc. receives a charge of DKK 125 per tons of emitted CO2 in 2030.

Lundbeck is not a part of the EU's quota trading system, thus the tax for Lundbeck will be 750DKK/Ton CO2 emitted.

### 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

In November 2019, the Danish Prime Minister, Mette Frederiksen unveiled 13 climate partnerships covering the main sectors across Danish industry, including sectors such as Maritime, Transportation, Energy, Agriculture, Packaging, Production and Life science & Biotech. The goal was to aid the government in reaching the ambition of reducing CO2-emissions by 70% in 2030 by preparing recommendations for conditions that are needed to realize the climate ambition. The baseline year is 1990, which is the baseline utilized by the U.N. and the Paris Agreement. In 2021/2022 the industry sectors prepared sector roadmaps with business objectives and recommendations to the government, which was submitted to the government primo 2022.

In 2022 the Government asked the Climate partnership to give input to a green tax reform. The involved ministers have asked the climate partnerships for proposals for solutions that can bring Danish business through the green transition to reach 70 percent. Lundbeck's Executive Vice President of Product Development & Supply (C-Suite Officer and member of EM) is member of the climate partnership for the Life science and Biotech sector. The participation include:

- Give input to shared responses from the climate partnership to the Government about new legislation like the new carbon tax.
- Filling out questionnaire about performance and ambitions
- Seminar with workshops identifying the level of ambition for the Life Science and Biotech sector and suggestions to the Government to support businesses reducing the CO2 emissions e.g. identifying existing regulation that prevent or delays the green transition.
- Commenting on recommendations and sector roadmaps to the Government.

## Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation Selected sections from the letter to the Government:

An agreement on a green tax reform is urgent. There is a great and urgent need across Danish business to get clarity on which future companies should invest in. This requires stable framework conditions for business and political consensus.

Recommendation 1: the climate partnership for Life Science and Biotech specifically proposes that the government seek a broad political settlement on a green tax reform before the Parliament closes this summer.

2. It is crucial that a green tax reform supports electrification and conversion away from gas, both for heating and process purposes. It is obvious these days that Danish and European gas dependence is extremely problematic and that the continued use of gas creates uncertainty in the European energy supply.



Recommendation 2: There must therefore be a clear incentive for conversion from gas to electricity, which requires a high price signal in the form of a CO2 tax – this should be at the high end of the models presented by the expert group. A total tax signal incl. energy taxes of DKK 1000/tCO2 will be sufficient.

It is mainly the size of the recommended tax price that differ from the Governments suggestion.

# 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 regulation is contributing but is not significant for achieving our targets and aligning with our transition plan because energy cost and taxes currently only is constituting app. 0.5% of our revenue. Today we pay app. 3 MDKK in tax for our gas consumption and with the new carbon tax this will increase by app. 3.2 MDKK. But we expect that when the new carbon tax are completely introduced the current electricity tax constituting app. 15 MDKK will be removed, because we use 100% renewable electricity at our Danish sites. We do have milestones in our transition plan for gradually using 100% renewable electricity and energy and when both milestones have been reached we will be able to avoid the carbon tax in Denmark.

## 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 Federation of Pharmaceutical Industries and Associations

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

Lundbecks position on climate change and several milestones in our transition plan is consistent with the White paper of EFPIA. In EFPIA's White Paper the EFPIA companies commit to:

- -Establish and further develop climate policies based on materiality impact for the individual companies, whilst addressing their entire value chains. As Lundbeck is addressing all scope 1, 2 and 3 emissions in our targets, this is consistent with our strategy.
- Set Science based targets. Lundbeck have had Science based targets since 2016
- Contribute to reduced energy consumption and increased energy efficiency. Energy optimization and efficiency have been corner stones in Lundbeck climate work for many years
- Increase the share of renewable energy at their own sites and along the global value chain. In Lundbecks transition plan we have milestones for using renewable energy at both our own sites and at our suppliers
- Annually and publicly disclose progress towards CO2 targets using recognized methodologies and verified by third parties. Lundbeck is reporting both to CDP and in our Sustainability report about progress and our Sustainability report is being verified by third party The Pharmaceutical Industry undertakes initiatives to promote climate action by supporting:
- The principles in UN Global Compact regarding climate
- United Nations' Sustainability Development Goal 13, aiming for urgent action to be taken to combat climate change and its impacts
- The Paris Climate Accord approved at COP21 by supporting the long-term goal to hold the increase in global average temperatures well below 2°C and to pursue efforts to limit the increase to 1.5°C compared to pre-industrial level
- The European Union's ambition to be climate neutral by 2050

Lundbeck have signed the Business ambition for 1.5C thus supporting the above initiatives.

Lundbeck have been actively engaged in the update of EFPIA's white paper on climate change by participating in meetings where level of ambition and content were discussed, and actual wording has been discussed and commented. The updated White paper has not yet been published, as it still is undergoing some final reviews.

In our Sustainability report we are publicly communicating about our engagement and cooperation with EFPIA and their initiatives.

#### 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

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

## C12.4

(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

Usustainability\_Report\_2022.pdf.coredownload.pdf

### Page/Section reference

5, 7, 8, 17-20, 32, 34-37

#### **Content elements**

Governance Strategy



Risks & opportunities Emissions figures Emission targets

#### Comment

The Sustainability report constitutes Lundbeck's compliance with the statutory disclosure on corporate social responsibility, in accordance with the Danish Financial Statements Act pursuant to the EU Directive on non-financial reporting.

#### **Publication**

In mainstream reports

#### Status

Complete

#### Attach the document

Annual report.pdf

## Page/Section reference

34

#### **Content elements**

Emission targets

#### Comment

Our Annual financial report.



#### **Publication**

In voluntary communications

#### **Status**

Complete

#### Attach the document

Unclimate communication 2022\_CDP.docx

## Page/Section reference

ΑII

#### **Content elements**

Other, please specify

Communication about our inclusion in CDP A list showing our commitment to climate action and transparency.

#### Comment

#### **Publication**

In voluntary communications

#### **Status**

Complete

#### Attach the document

U Climate commitment at www.lundbeck.com.docx



## Page/Section reference

ΑII

#### **Content elements**

Strategy

**Emission targets** 

Other metrics

#### Comment

Our climate commitment at our homepage.

#### **Publication**

In voluntary communications

#### **Status**

Complete

#### Attach the document

Uclimate\_Change\_Position\_2023.pdf

## Page/Section reference

Αll

#### **Content elements**

Strategy

Risks & opportunities

**Emission targets** 

#### Comment



Our Position document on climate change.

## 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	Business Ambition for 1.5C UN Global Compact	Business ambition for 1.5C is guiding our level of ambition eg. the development of our Net zero target that was submitted for approval by SBTi in Dec 2022.
		Lundbeck is a participant in The United Nations Global Compact which we became a signatory to in September 2009. We support the Global Compact by committing us to the initiative and its principles. In addition we disclose our progress using the new digital CoP platform in 2023.

## 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	Description of oversight and objectives relating to biodiversity
executive management-level	
responsibility for biodiversity-	
related issues	



Row	Yes, executive management-level
1	responsibility

Lundbeck do not operate in areas of high biodiversity value. Nor do we source natural resources. Biodiversity is however part of Lundbeck Sustainability Strategy, SGD12: "Responsible consumption and production". A strategy is underway in 2023 as we align our work and reporting requirements with the new sustainability reporting directive (CSRD) by addressing E4 - "Biodiversity and Ecosystems".

Our Executive Vice President of Product Development & Supply (C-suite officer) is appointed by the Chief Executive Officer (CEO) to have the corporate responsibility on environmental issues (incl. biodiversity) and to chair The Health, Safety and Environmental (HSE) Council. The HSE Council is responsible for our Environmental Strategy and approve our public Position document on Biodiversity.

#### Initiatives 2022:

#### Denmark:

- Overflow basins transformed to 560 m2 flowering wild meadow with a mix of 30 species of flowers. This will ensure variation in flowering and house different insects.
- 35 nest boxes for garden birds, placed on different trees at site Valby
- Man-high insect hotels, to house and shelter different types of insects.
- Beehive honey bees housed at site Valby. These are cared for by a local Lundbeck Employee.
- New solar panel park (75,000 solar panels and grazing sheep).

#### Italy:

- Planting indigenous/domestic plants and trees in green area for new office building.
- Reforestation project (Bosco800)

In corporation with the University of Padua, Lundbeck have contributed with the replanting of 2.000 trees in the Asiago plateau destroyed by storm in 2018.

#### France:

• Reforestation. Planting local southern trees, scrubs and herbs that require little watering by the restaurant terrace area. Robust species like lavender, olive trees, laurels, hackberries, camphor trees that thrive in dry summer.



	Australia: • Restore native forests to prevent impact of severe wildfires.
	Initiatives 2023: Denmark: 20 nesting boxes for swift and 2 for kestrel. Planned: A pond, 3 green roofs, a large framing field at Site Lumsås left unused and growing wild.
	Other biodiversity related actions:  • Lundbeck conduct Environmental Risk Assessment (ERA) for all new products prior to market authorization.  • Member of EFPIA framework on Pharmaceuticals in the Environment (PiE) and follow trends on the matter.  • Conduct supplier HSE audits in China and India where waste water, air emission, waste, soil pollution are part of the assessment on impacts on biodiversity.

## 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
1	Yes, we have made public commitments and publicly endorsed initiatives related to biodiversity	Other, please specify  Environmental Risk Assessment of the active pharmaceutical ingredients to assess the effect on biodiversity to various aquatic organisms. The knowledge gained is applied to our design and manufacturing process.	Other, please specify SDG 12 "Responsible consumption and Production""

## 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

Yes

### Value chain stage(s) covered

Direct operations Upstream

#### Tools and methods to assess impacts and/or dependencies on biodiversity

ENCORE tool
SBTN materiality tool
Other, please specify
WWF RISK FILTER SUITE

#### Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)

Impacts are assessed on both site level (own operations) and at region/country level of selected/important suppliers. If matter is evaluated material specific action will be taken. We do not yet have a specific strategy or targets. This will be ready in 2024. We do not expect much impact on biodiversity by our operations or suppliers.

The tools used are chosen due to being public available from recognized and relevant providers/organizations effectively supporting the requirements of the new Corporate Sustainability Reporting Directive. The tools are used to assess our impact, risk and opportunities relevant for Biodiversity. The assessment did not show any material topics in regards to Biodiversity, but did indicate areas for more focus. E.g. ecosystem pressure on marine environments due to API from our end users in the waste water. The results will be used for preparing a strategy, supporting actions plans and a transition plan going forward.

#### Dependencies on biodiversity

#### Indicate whether your organization undertakes this type of assessment

Yes

Value chain stage(s) covered



Direct operations Upstream

#### Tools and methods to assess impacts and/or dependencies on biodiversity

ENCORE tool
SBTN materiality tool

#### Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)

Dependencies are assessed on both site level (own operations) and region/country level of selected/important suppliers. If matter is evaluated material specific action will be taken. We do not yet have a specific strategy or targets. This will be ready in 2024. We do not expect many dependencies on biodiversity by our operations or suppliers.

The tools used are chosen due to being public available from recognized and relevant providers/organizations effectively supporting the requirements of the new Corporate Sustainability Reporting Directive. The tools are used to assess our impact, risk and opportunities relevant for Biodiversity. The assessment did not show any material topics in regards to Biodiversity, but did indicate areas for more focus. E.g. ecosystem pressure on marine environments due to API from our end users in the waste water. The results will be used for preparing a strategy, supporting actions plans and a transition plan going forward.

## C15.4

## (C15.4) Does your organization have activities located in or near to biodiversity- sensitive areas in the reporting year?

## 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	Yes, we are taking actions to progress our biodiversity-related commitments	Land/water management
1		Species management



ſ		Education & awareness
- 1		

## 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	Yes, we use indicators	State and benefit indicators

## 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 voluntary sustainability report or other voluntary communications	Impacts on biodiversity	Lundbeck is voluntary member of Vild med Vilje (Wildfully Wild) - a Danish NGO supporting more biodiversity. A story on 560 m2 green lawn transformed to wild meadow with Danish wild flowers supporting more biodiversity in the city was posted in 2022

U 1Vild med Vilje - 2022.docx

## 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	Chief Executive Officer for H. Lundbeck A/S.	Chief Executive Officer (CEO)

## SC. Supply chain module

## SC0.0

#### (SC0.0) If you would like to do so, please provide a separate introduction to this module.

Lundbeck is a global pharmaceutical company highly committed to improving the quality of life of people living with brain diseases. For this purpose, Lundbeck is engaged in the research, development, manufacturing, marketing and sale of pharmaceuticals across the world. The company's products are targeted at the disease areas within psychiatry and neurology.

Focus on R&D is the most important pillar in Lundbeck's ambition to improve treatment for people living with brain diseases. We are specialists in our area and have a state-of-the-art research facility in Denmark.

We cooperate closely with strategic partners all over the world, ensuring the best possible foundation for innovation and the development of new treatment solutions.

Lundbeck employs approximately 5,450 people worldwide. We have employees in more than 50 countries, and our products are registered in more than 100 countries. We have production facilities in Denmark, France and Italy and our research centers are based in Denmark. Lundbeck generated revenue of DKK 18,246 million in 2022.

Our sustainability actions are integrated into Lundbeck's strategy that has significant impact on 6 of the 17 SDG (Sustainable Development Goal). In addition, we are seeking partnerships with others to enable change and maximize impact across our sustainability efforts.

SDG 3 "Good Health and Well-being" is closely linked to our corporate purpose and dedication to restore brain health, so every person can be their best. SDG "13 Climate Action" will drive our efforts to prepare for a zero emissions future. We will use our influence and act to promote SDG 5, 8, 12 and 16.

The sustainability strategy aims to ensure that our business activities are conducted in a way that supports the UN Global Compact Principles and the SDGs and mitigate significant risks and adverse impacts.



Climate strategy: In 2007 Lundbeck developed our first Climate strategy, making a firm commitment to minimizing CO2 emissions, and confirming our ambition to be among the leaders within the pharmaceutical industry.

Our current CO<sub>2</sub> targets for the period 2019 – 2034 are to:

- Reduce carbon emissions from production and fleet drastically by 65%
- Work with our suppliers and customers to reduce our carbon footprint outside our premises by 40%

Additionally we have an overarching ambition of achieving net zero emissions no later than 2050.

In 2022, we developed a transition plan that shows us the emission reduction action plan and milestones. Any residual GHG emissions that cannot be eliminated by reducing emissions must be neutralized by carbon removals.

## SC0.1

#### (SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	18,246,000,000

## 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

Johnson & Johnson

Scope of emissions



#### Scope 1

### Scope 2 accounting method

## Scope 3 category(ies)

#### **Allocation level**

Company wide

#### Allocation level detail

#### **Emissions in metric tonnes of CO2e**

54

### Uncertainty (±%)

5

## **Major sources of emissions**

Natural gas, methane, waste solvent fuel and biooil for heating, steam and cooling purposes at our two chemical sites.

Gasoil, and Citygas primarily for steam production at our two Danish sites.

Company car fleet.

#### Verified

Yes

#### **Allocation method**

Allocation based on the number of units purchased

#### Market value or quantity of goods/services supplied to the requesting member

89,881



## Unit for market value or quantity of goods/services supplied

Other, please specify Unit of boxes

# Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Production of pharmaceuticals requires several process steps. Depending on the production capacity at our chemical sites some of the process steps can be made at one of the site and some process steps at the other site. The GHG emission is calculated by multiplying the number of produced units with the intensity figure per production unit/kg CO2. Our intensity figure is a combined scope 1, 2, 3 figure based on our total scope 1, 2, 3 emission from all our production sites. For this reporting only scope 1 data is used. The change in CO2 emission and production volumes will reflect on the intensity figure. The figure is based on sales of production to Johnson & Johnson as part of Lundbeck total production.

#### Requesting member

Johnson & Johnson

#### Scope of emissions

Scope 2

## Scope 2 accounting method

Market-based

Scope 3 category(ies)

#### Allocation level

Company wide

Allocation level detail



#### **Emissions in metric tonnes of CO2e**

10

#### **Uncertainty (±%)**

5

#### **Major sources of emissions**

Electricity for light and equipment and district heating for heating.

#### Verified

Yes

#### Allocation method

Allocation based on the number of units purchased

#### Market value or quantity of goods/services supplied to the requesting member

89,881

#### Unit for market value or quantity of goods/services supplied

Other, please specify
Unit of boxes

## Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Production of pharmaceuticals requires several process steps. Depending on the production capacity at our chemical sites some of the process steps can be made at one of the site and some process steps at the other site. The GHG emission is calculated by multiplying the number of produced units with the intensity figure per production unit/kg CO2. Our intensity figure is a combined scope 1, 2, 3 figure based on our total scope 1, 2, 3 emission from all our production sites. For this reporting only scope 2 data is used. The change in CO2 emission and production volumes will reflect on the intensity figure. The figure is based on sales of production to Johnson & Johnson as part of Lundbeck total production.



## **Requesting member**

Johnson & Johnson

#### Scope of emissions

Scope 3

### Scope 2 accounting method

### Scope 3 category(ies)

Category 1: Purchased goods and services

Category 4: Upstream transportation and distribution

Category 5: Waste generated in operations

#### Allocation level

Company wide

#### Allocation level detail

#### **Emissions in metric tonnes of CO2e**

62

## Uncertainty (±%)

5

#### **Major sources of emissions**

The scope 3 emission is from 3 scope 3 categories. Category 1a: Purchased goods and services (product), Category 4: Upstream transportation and distribution, Category 5: Waste generated in operations. Scope 3 is calculated in our footprint model for all relevant scope 3 categories using both direct data and spend data as well as general emission factors.

#### Verified

Yes



#### Allocation method

Allocation based on the volume of products purchased

## Market value or quantity of goods/services supplied to the requesting member 89,881

#### Unit for market value or quantity of goods/services supplied

Other, please specify
Unit of boxes

# Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Production of pharmaceuticals requires several process steps. Depending on the production capacity at our chemical sites some of the process steps can be made at one of the site and some process steps at the other site. The GHG emission is calculated by multiplying the number of produced units with the intensity figure per production unit/kg CO2. Our intensity figure is a combined scope 1, 2, 3 figure based on our total scope 1, 2, 3 emission from all our production sites. For this reporting only relevant scope 3 data is used. The change in CO2 emission and production volumes will reflect on the intensity figure. The figure is based on sales of production to Johnson & Johnson as part of Lundbeck total production.

## Requesting member

**CVS Health** 

#### Scope of emissions

Scope 3

#### Scope 2 accounting method

#### Scope 3 category(ies)

Category 1: Purchased goods and services



Category 4: Upstream transportation and distribution

Category 5: Waste generated in operations

#### **Allocation level**

Company wide

#### Allocation level detail

#### **Emissions in metric tonnes of CO2e**

11

### Uncertainty (±%)

5

#### **Major sources of emissions**

The scope 3 emission is from 3 scope 3 categories. Category 1a: Purchased goods and services (product), Category 4: Upstream transportation and distribution, Category 5: Waste generated in operations. Scope 3 is calculated in our footprint model for all relevant scope 3 categories using both direct data and spend data as well as general emission factors.

#### Verified

Yes

#### **Allocation method**

Allocation based on the number of units purchased

## Market value or quantity of goods/services supplied to the requesting member

23,232

### Unit for market value or quantity of goods/services supplied

Other, please specify Unit of boxes



# Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

The products for CVS Health are solely produced at Lundbecks suppliers in scope 3. At the moment we have not been able to get precise data from our suppliers about the CO2 emission from these products. Instead we have informed about the total scope 1, 2 and 3 emission if the products had been produced at our own sites, because we expect that the CO2 is comparable at our suppliers. If the products had been produced at Lundbecks own sites the scope 1 emission had been: 10 ton, Scope 2: 2 ton and Scope 3: 11 ton. Total of 22 ton. Especially scope 3 is subject to great uncertainty e.g. we do not expect that our suppliers have the same amount of research and development dedicated to their production as we have.

## SC1.2

## (SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

Lundbeck sustainability Report 2022

Link: Sustainability\_Report\_2022.pdf.coredownload.pdf (lundbeck.com) See page 32.

In our CDP investor response 2022 all data are public available. At section 6 "Emission Data" you find intensity data and scope 1, 2, 3 data.

## **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	Different products, weight and packaging sizes emit different amounts of GHG emissions. This makes it very complicated to make an exact calculation of the emission from the different product units. Installation of energy meters on relevant production equipment could be one step on the way to make more precise calculation. We use a CO2 inventory input-output database (By CarbonTrust), to calculate the emission based on economic spend data and primary supplier data when available.
Other, please specify  Lack of data	When products are produced solely by scope 3 suppliers and we do not have detailed data from our suppliers.  Allocation becomes very uncertain.



Some of the scope 3 emissions are based on proxy data, general emission factors and spend data making the uncertainty of the numbers reported higher. We do however engage directly with our largest/strategic suppliers.

## 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.

Lundbeck have a complete Scope 1, 2 and 3 inventory combined in a database.

We have initiated a dialogue with our suppliers, about climate changes and product specific emissions in the future in order to achieve our emission targets. This will make our scope 3 data (emission factors) more precise and it will increase our possibilities for allocating CO2 emissions for products produced solely in our scope 3.

#### Target of Engagement with suppliers:

Our supplier engagement strategy is based around the 3 Scope 3 categories of our SBTi-approved science-based target, representing 76% of scope 3 emissions. Our SBT target include a 19% reduction of the 3 categories in our target scope. The first step in our supplier engagement have in 2021 been to receive emission data (scope 1, 2 and 3) from our largest and strategic suppliers and information about climate targets and use of renewables. We have engaged with all suppliers for the distribution of our products, all the suppliers within our Contract Manufacturing Organizations (included in Purchased goods and services) and the largest within Purchased goods and services and Business travel.

## SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.



#### Requesting member

Johnson & Johnson

#### **Group type of project**

Relationship sustainability assessment

#### Type of project

Assessing products or services life cycle footprint to identify efficiencies

#### **Emissions targeted**

Actions that would reduce both our own and our customers' emissions

#### Estimated timeframe for carbon reductions to be realized

1-3 years

#### **Estimated lifetime CO2e savings**

762

#### **Estimated payback**

Cost/saving neutral

## **Details of proposal**

Establishment of a single database or similar solution where companies can exchange experiences on different climate issues like: Specific energy reducing initiatives, good ways to estimate LCA, good ways to reduce scope 3 emissions, tools to forecast GHG emissions, tools to allocate CO2 emissions to customers, tools to motivate suppliers to establish climate targets etc. Also specific emission factors based on LCA is needed for a better understanding og the data.

An estimate that 60% of the total CO2 emission (127 tons CO2) can be saved - corresponds to 762 tons CO2 (in 10 years).

#### Requesting member



CVS Health

#### **Group type of project**

Relationship sustainability assessment

#### Type of project

Assessing products or services life cycle footprint to identify efficiencies

#### **Emissions targeted**

Actions that would reduce both our own and our customers' emissions

#### Estimated timeframe for carbon reductions to be realized

1-3 years

#### **Estimated lifetime CO2e savings**

#### **Estimated payback**

Cost/saving neutral

#### **Details of proposal**

Both the time frame and the CO2 savings are very difficult to define since it depends on how the cooperation with the supply chain develop.

Establishment of a single database or similar solution where companies can exchange experiences on different climate issues like: Specific energy reducing initiatives, good ways to estimate LCA, good ways to reduce scope 3 emissions, tools to forecast GHG emissions, tools to allocate CO2 emissions to customers, tools to motivate suppliers to establish climate targets etc. Also specific emission factors based on LCA is needed for a better understanding og the data.

An estimate that 60% of the total CO2 emission (22 tons CO2) can be saved - corresponds to 132 tons CO2 (in 10 years).



## SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?

No

## SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?

Yes, I will provide data

## SC4.1a

(SC4.1a) Give the overall percentage of total emissions, for all Scopes, that are covered by these products.

0.28

## SC4.2a

(SC4.2a) Complete the following table for the goods/services for which you want to provide data.

### Name of good/ service

Cipramil

### Description of good/ service

Anti depressive medicine for Johnson & Johnson

## Type of product

Final



## **SKU (Stock Keeping Unit)**

1

### Total emissions in kg CO2e per unit

1.44

#### ±% change from previous figure supplied

-46.4

#### Date of previous figure supplied

May 19, 2022

#### **Explanation of change**

Total emissions in kg CO2e per unit supplied to J & J in 2022 was 1.44 kg CO2e/unit. In 2021 it was 2.63 kg CO2e/unit. This is an 46,4% reduction compared to 2021.

Due to our new CO2 inventory model, the emission differ. Calculations are based on primary data and sales data/spend. We also have less scope 2 as we from 2022 have 100% green electricity (solar panels) in our 2 Danish sites. Upstream transportation and distribution + Purchased goods and services are down as well - both due to less spend/inflation.

Lundbeck had a total of 20% reduction in corporate CO2 emission compared to 2021, as scope 1, scope 2 and scope 3 decreased by 7%, 43% and 16% respectively.

## Methods used to estimate lifecycle emissions

GHG Protocol Product Accounting & Reporting Standard

## Name of good/ service

Northera, Sabril, Xenazine

## Description of good/ service

Pharmaceuticals/medicine for CVS



#### Type of product

Final

#### SKU (Stock Keeping Unit)

1

## Total emissions in kg CO2e per unit

0.47

#### ±% change from previous figure supplied

-80.2

### Date of previous figure supplied

May 19, 2022

#### **Explanation of change**

Total emissions in kg CO2e per unit supplied to CVS in 2022 was 0.47 kg CO2e/unit. In 2021 it was 2.37 kg CO2e/unit. This is an 80.2% reduction compared to 2022.

Due to our new CO2 inventory model, the emission differ. Calculations are based on primary data and sales data/spend. We also have less scope 2 as we from 2022 have 100% green electricity (solar panels) in our 2 Danish sites. Upstream transportation and distribution Purchased goods and services are down as well - both due to less spend/inflation.

Lundbeck had a total of 20% reduction in corporate CO2 emission compared to 2021 as scope 1, scope 2 and scope 3 decreased by 7%, 43% and 16% respectively.

#### Methods used to estimate lifecycle emissions

GHG Protocol Product Accounting & Reporting Standard

## **SC4.2b**

(SC4.2b) Complete the following table with data for lifecycle stages of your goods and/or services.



## Name of good/ service

Cipramil for Johnson&Johnson

#### Please select the scope

Scope 1, 2 & 3

### Please select the lifecycle stage

Cradle to gate

#### Emissions at the lifecycle stage in kg CO2e per unit

1.44

### Is this stage under your ownership or control?

Yes

### Type of data used

Primary and secondary

#### **Data quality**

In order to inform about "cradle to gate" we need all scope 1, 2 and 3. All relevant scope 3 emissions are included and based on volume data or primary data from our suppliers if available.

Scope 1 and 2 is under our control but our scope 3 emissions are not in full control. Details about ownership and emissions can be read in our CDP response.

## If you are verifying/assuring this product emission data, please tell us how

We are not verifying these data.

### Name of good/ service

Pharmaceuticals for CVS

### Please select the scope



Scope 3

### Please select the lifecycle stage

Processing

### Emissions at the lifecycle stage in kg CO2e per unit

0.47

### Is this stage under your ownership or control?

No

## Type of data used

Primary and secondary

## **Data quality**

Produced by CMO. API supplied by Lundbeck. All relevant scope 3 emissions are included and based on volume data or primary data from our suppliers if available.

### If you are verifying/assuring this product emission data, please tell us how

We are not verifying these data.

## SC4.2c

#### (SC4.2c) Please detail emissions reduction initiatives completed or planned for this product.

Name of good/ service	Initiative ID	Description of initiative	Completed or planned	Emission reductions in kg CO2e per unit
All our products	Initiative 1	Reduction of 0.34 kg CO2e/unit in 2022.	Completed	0.34
		We cannot specify which of our energy reducing initiatives that are specifically related to one type of product because most of our initiatives are related to our facilities and therefore impact		



all our products. A complete list of our energy reducing activities can be seen in section C.4.3b Of energy reducing examples can be mentioned optimization, adjustment to energy on demand and renewal of old machines/equipment like pumps, ventilation, cooling etc. We also have less scope 2 emission as we from 2022 have 100% green electricity (solar panels) in our 2 Danish sites. Upstream transportation and distribution + Purchased goods and services are down as well - both due to less spend/inflation.	
Lundbeck had 21,3% (14717tons) decrease in scope 1, 2, 3 (category 1a, 4 and 5) CO2 emission in 2022 compared to 2021 as scope 1, scope 2 and scope 3 (category 1a, 4 and 5) decreased by 7%, 43%, category 1a by 30% and category 4 decreased by 29% respectively.	

## **SC4.2d**

(SC4.2d) Have any of the initiatives described in SC4.2c been driven by requesting CDP Supply Chain members?

## **Submit your response**

In which language are you submitting your response?

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		Public



## Please confirm below