Innovating Today, Preserving Tomorrow

2024 SUSTAINABILITY STATEMENT

valneva

3 Sustainability Statement

Translated excerpt from the Company's 2024 Universal Registration Document This excerpt is a free translation, into English, of Section 3 of the Company's 2024 Universal Registration Document. The Company's 2024 Universal Registration Document is available in its entirety in the French language at the following address: https://valneva.com/investors/financial-reports/. In case of discrepancy between the French and the English version, the French version shall prevail.

CSRD Disclaimer and Explanatory Note

Valneva's ability to achieve its objectives and plans in any specified time frame or at all, including with respect to ESG and sustainability matters, is subject to other conditions and considerations, both within and outside the Group's control, that may affect its ability to meet such objectives and plans, and/or put in place the initiatives required to meet them. These include but are not limited to the risk factors described in Section 1.5 "Risk factors" of the Company's 2024 Universal Registration Document (***URD***). In addition, historical, current, and forward-looking environmental and other ESG or sustainability-related statements may be based on standards for measuring progress that are still developing, internal controls and processes that continue to evolve, and assumptions that are subject to change in the future, including future laws and rule making.The Group plans to continue to evaluate its objectives and plans and its approach to them and may make adjustments deemed necessary in light of such considerations.

This Sustainability Statement has been prepared pursuant to the CSRD regime as implemented in French law. Forward-looking and other statements regarding environmental and other sustainability efforts and aspirations are not intended to communicate any material investment information under the laws of the United States or other applicable jurisdictions. This document uses certain terms, including such terms under the Science Based Targets Initiative (SBTi), EU Taxonomy Regulation, the United Nations Guiding Principles on Business and Human Rights, the Organization for Economic Co-operation and Development Guidelines for Multinational Enterprises, the International Bill of Human Rights, the International Labor Organization, the Assessing Low-Carbon Transition (ACT) Initiative, the EU Eco design for Sustainable Products Regulation , and the CSRD rules (including as implemented in French law), regimes, or requirements that may be referred to as "material" for those purposes, to reflect specific impacts, risks or opportunities or other matters identified as "material" to Valneva or its stakeholders according to such rules, regimes, or requirements, and in accordance therewith. However, the terms "material," "materially," and "materiality" in this document are distinct from, and should not be confused with, such terms as defined by or construed in accordance with securities or other laws, including the laws of the United States, or as used in the context of financial statements and reporting required by relevant laws and regulations. In particular, these terms are determined for purposes of the CSRD in accordance with a double materiality assessment, which applies a specific standard and regime pursuant to the CSRD that is separate and distinct from notions of materiality under securities laws, including the securities laws of the United States. The term "materiality" in this document is to be construed pursuant to the CSRD, the European Sustainability Reporting Standards (ESRS) contained in Commission Delegated Regulation (EU) 2023/2772 dated July 31, 2023, and other guidance published by the European Commission, the European Financial Reporting Advisory Group (EFRAG) and/or other European and member state bodies, regulators and/or standard setters.

3.1 Message from the Chief Executive Officer

Dear Valneva Stakeholders,

As we close another impactful year for our ESG agenda, I am pleased to present Valneva's 2024 Sustainability Report. This report reflects not only our accomplishments but also the path we are charting toward a more sustainable future. It demonstrates our commitment to integrating sustainability throughout our operations, while remaining true to our mission of developing, manufacturing, and commercializing prophylactic vaccines for infectious diseases addressing unmet medical needs.

We are proud to share this year's report, which is aligned with the ambitious standards of the European Corporate Sustainability Reporting Directive (CSRD), and reinforces how Valneva aligns its practices with the 10 Principles of the UN Global Compact, of which we are an active participant. These principles guide our actions and decision-making, ensuring that we operate ethically and responsibly across all dimensions of our business.

Over the past 12 months, we have advanced our Company's sustainability ambition. Among our key achievements, we successfully entered in a new partnership with Serum Institute of India, which paves the way for access in Asia to our chikungunya vaccine. This is particularly notable as India is currently enduring one of its worst chikungunya outbreaks. The agreement reinforces Valneva's commitment to support universal access by enabling local manufacturing and local access via technology transfers.

Furthermore, we successfully completed and published the assessment of our complete emissions inventory, marking a significant milestone in our journey to reduce our environmental impact. We also joined the Assessing Low-Carbon Transition (ACT) Initiative, which will help us establish a clear, detailed trajectory for meeting our decarbonization targets.

Additionally, we launched the EcoVadis program to assess and monitor the environmental, social, and governance (ESG) risks within our supply chain, ensuring that our partners share in our commitment to sustainability.

Finally, in 2024, we introduced a dedicated ESG training program for all employees and provided specialized training for our Executive Committee on different sustainability topics. We also successfully integrated ESG risks into our enterprise risk management system, conducting our first Double Materiality Assessment, which helped us better understand the broader impact of our business on both society and the environment.

Looking to the future, we defined our ESG strategy around three fundamental pillars for sustainability: Protecting Lives, Reaching People, and Preserving the Planet. Each pillar is based on key objectives that will continue to drive our sustainability developments. Some of our upcoming efforts include:

- by 2026, we will enable access to Valneva's single-shot chikungunya vaccine in Brazil and India by enabling local manufacturing and local access via technology transfers;
- by 2026, we will discontinue the use of animals for routine monitoring for contaminating pathogens in our animal facility and implement in-vitro testing with similar sensitivity of detection. In the same period, we also will define criteria related to animal welfare for the selection and monitoring of GxP and R&D suppliers involved in external in vivo testing;
- by 2026, we will assess 100% of key suppliers in EcoVadis and share our Business Partners Code of Conduct with 100% of our direct suppliers;
- by 2026, we will define a Sustainable Procurement Policy including environmentally-friendly criteria for selecting and contracting with suppliers;
- by 2026, we will include language about Valneva's approach to diversity and inclusion in all of our job postings;
- by 2030, we will reduce our Scope 1 and 2 [(1)] CO_2 emissions by 50%.

We are committed to improving in environmental, social, and governance topics. We know there is still much to be done, but with continued dedication, collaboration, and transparency, we are confident that we will make meaningful progress on this journey.

I would like to thank the many Valneva employees and all our stakeholders who have contributed to these ESG endeavors. Your collaboration, support, and commitment to our shared goals are vital to our success.

Together, we will continue to lead with purpose and innovation, ensuring a better, more sustainable future for all and helping deliver our vision to contribute to a world where no one dies or suffers from a vaccine preventable disease.

Sincerely,

Thomas Lingelbach CEO, Valneva SE

[(1)] *The definition of Scope 1 and Scope 2 is available at: GHG Protocol, "A corporate accounting and reporting standard", 2004.*

3.2 Glossary

CSRD: Corporate Sustainability Reporting Directive

DMA: Double Materiality Assessment

EOHS: Environmental, Occupational Health and Safety

ESRS: European Sustainability Reporting Standards

GHG: Greenhouse gas

GRI: Global Reporting Initiative

HCO: Healthcare organizations

HCP: Healthcare professionals

IRO: Impact, Risk and Opportunity

I/S: Industry-specific

LMIC: Low- and middle-income countries

LTIFR: Lost Time Injury Frequency Rate

R&D: Research & Development

SASB. Sustainability Accounting Standards Board

SoC: Substance(s) of concern

SoVHC: Substance(s) of very high concern

WHO: World Health Organization

3.3 ESRS 2 – About this Report

This Sustainability statement covers Valneva's essential sustainability topics, aligned with the strategic aspirations, which are the sustainability topics found to be material from both an impact and financial perspective, assessing all the affiliates in the Group. The statement also covers other important sustainability topics, deemed material based on the company and industry activities. The Sustainability statement includes information on relevant processes, policies, actions, performance metrics and targets in accordance with the requirements of the European Sustainability Reporting Standards (ESRS) for each sector-agnostic topic, as well as some industry specific key performance indicators (KPIs).

The section references and page numbers in this Sustainability Statement refer to the Sections of the Company's 2024 Universal Registration Document (URD), available in the French language at the following address: https://valneva.com/investors/financial-reports/

Disclosure Requirement	Page number in the 2024 URD
BP-1 – General basis for preparation of Sustainability Statements	198
BP-2 – Disclosures in relation to specific circumstances	198
GOV-1 – The role of the administrative, management and supervisory bodies	201
GOV-2 – Information provided to and sustainability matters addressed by the undertaking's administrative, management and supervisory bodies	203
GOV-3 – Integration of sustainability-related performance in incentive schemes	206
GOV-4 – Statement on due diligence	205
GOV-5 – Risk management and internal controls over sustainability reporting	205
SBM-1 – Strategy, business model and value chain	207
SBM-2 – Interests and views of stakeholders	211
SBM-3 – Material IROs and their interaction with strategy and business model	224
IRO-1 – Description of the processes to identify and assess material IROs	246
IRO-2 – Disclosure requirements in ESRS covered by the undertaking's Sustainability Statement	249
MDR-P – Policies adopted to manage material sustainability matters	160, 268, 274, 276, 296, 304, 309, 312, 318
MDR-A – Actions and resources in relation to material sustainability matters	160, 268, 274, 276, 296, 304, 309, 312, 318
MDR-M – Metrics in relation to material sustainability matters	160, 268, 274, 276, 296, 304, 309, 312, 318
MDR-T – Tracking effectiveness of policies and actions through targets	160, 268, 274, 276, 296, 304, 309, 312, 318
E1-1 – Transition plan for climate change mitigation	260
E1-2 – Policies related to climate change mitigation and adaptation	260
E1-3 – Actions and resources in relation to climate change policies	251
E1-4 – Targets related to climate change mitigation and adaptation	251
E1-5 – Energy consumption and mix	254
E1-6 – Gross Scopes 1, 2, 3 and Total GHG emissions	255

Disclosure Requirement	Page number in the 2024 URD
E2-1 – Policies related to pollution	255
E2-2 – Actions and resources related to pollution	259
E2-3 – Targets related to pollution	259
E2-4 – Pollution of air, water and soil	261
E2-5 – Substances of Concern and Substances of Very High Concern	261
E3-1 – Policies related to water and marine resources	264
E3-2 – Actions and resources related to water and marine resources	264
E3-3 – Targets related to water and marine resources	264
E3-4 – Water consumption	264
E4-2 – Policies related to biodiversity and ecosystems	265
E4-3 – Actions and resources related to biodiversity and ecosystems	266
E4-4 – Targets related to biodiversity and ecosystems	266
E5-1 – Policies related to resource use and circular economy	268
E5-2 – Actions and resources related to resource use and circular economy	268
E5-3 – Targets related to resource use and circular economy	268
E5-5 – Resource outflows	269
S1-1 – Policies related to own workforce	295
S1-2 – Processes for engaging with own workers and workers' representatives about impacts	296
S1-4 – Taking action on material impacts on own workforce, and approaches to mitigating material risks and pursuing material opportunities related to own workforce, and effectiveness of those actions	298
S1-5 – Targets related to managing material negative impacts, advancing positive impacts, and managing material risks and opportunities	296
S1-6 – Characteristics of the undertaking's employees	300
S1-8 – Collective bargaining coverage and social dialogue	302
S1-13 – Training and skills development metrics	302
S1-14 – Health and safety metrics	303
S3-1 – Policies related to affected communities	303
S3-4 – Taking action on material impacts on affected communities, and approaches to managing material risks and pursuing material opportunities related to affected communities, and effectiveness of those actions	304
S3-5 – Targets related to managing material negative impacts, advancing positive impacts, and managing material risks and opportunities	304
S4-1 – Policies related to consumers and end-users	305
S4-4 – Taking action on material impacts on consumers and end-users, and approaches to managing material risks and pursuing material opportunities related to consumers and end- users, and effectiveness of those actions	305
S4-5 – Targets related to managing material negative impacts, advancing positive impacts, and managing material risks and opportunities	305
G1-1– Corporate culture and business conduct policies and corporate culture	318
G1-2 (treated in ESRS 2, under SBM-3) – Management of relationships with suppliers	318
G1-5 – Political influence and lobbying activities	318

3.3.1 Basis for preparation of this Sustainability Statement

This section introduces the general basis for preparing this Sustainability Statement, covering aspects such as the scope of consolidation, value chain information, and the omission of sensitive information. Additionally, specific circumstances affecting the preparation of this Sustainability Statement are addressed, including time horizons, value chain estimation, sources of estimation uncertainty, changes in preparation or presentation, and reporting errors. This section also covers disclosures required by other legislation, incorporation by reference, and the use of phase-in provisions.

General basis for preparation of Sustainability Statement

Valneva's Sustainability Statement was prepared on a consolidated report basis for the 2024 exercise in accordance with the European Directive 2022/2464/EU transposed into French law by Ordinance no. 2023-1142 of December 6, 2023 and Decree no. 2023-1394 of December 30, 2023. The scope of consolidation is the same as for Valneva's financial statements.

Valneva's Sustainability Statement encompasses a comprehensive analysis of the value chain, including both upstream and downstream elements. Valneva has made diligent efforts to procure an extensive array of data pertinent to the impacts, risks, and opportunities (IROs) emanating from tier 1 suppliers (upstream). The information pertaining to the tier 1 suppliers' performance delineated within this Statement exclusively represents Valneva's primary suppliers of essential raw materials and service providers, which collectively constitute 80% of Valneva's procurement spend. Based on the scope of the analysis conducted and the results obtained, Valneva considers that there is no indication to suggest that any additional IRO derived from suppliers would emerge from the analysis of the remaining 20% of tier 1 suppliers (by procurement spend). Further details on this assessment can be found in Section 3.3.3.

Furthermore, through the double materiality assessment (DMA), Valneva has conducted a thorough evaluation of the environmental, social, and governance IROs throughout the stages of research and development (R&D), manufacturing, and commercialization, as well as during the utilization and terminal phases of their product lifecycle (downstream). This approach enhanced a holistic comprehension of the sustainability performance of Valneva's value chain, as described in Section 3.3.3, in accordance with the mandates of the Corporate Sustainability Reporting Directive (CSRD). Information regarding actions taken in connection with the French Military pursuant to Law no. 2023-703 of August 1, 2023, is not mentioned as it is considered not significant with regards to Valneva's activity.

As permitted by the CSRD, Valneva has chosen to withhold specific details pertaining to intellectual property, proprietary knowledge, or results of innovation due to the sensitive character of such information. This decision aims to safeguard Valneva's competitive edge and its principal innovations while upholding compliance with the transparency requirements. Valneva does not believe that the exclusion of this information compromises the integrity or exhaustiveness of its 2024 Sustainability Statement. Valneva is prepared to furnish additional information within the bounds of confidentiality. This Sustainability Statement lists the contents incorporated by reference in the dedicated table .

Disclosures in relation to specific circumstances

This Sustainability Statement has been developed within the context of the initial implementation of ESRS standards, which is marked by uncertainties in text interpretation, reliance on estimates, and a lack of established practices and frameworks, particularly regarding the DMA. Additionally, Valneva's ESG strategy is new and is currently being deployed across the sites, with further details available in Section 3.3.3, which refers to the relevant environmental, social, and governance sections. Furthermore, Valneva has opted to make use of transitional provisions, specifically exercising the option to exclude information required by ESRS E4, S1, S3, and S4 for entities with fewer than 750 employees, as outlined in Section 3.3.1. Additionally, as of the publication of this report, Valneva has not adopted a transition plan (see Section 3.4.1 for more information).

Disclosures related to metrics and data collection based on estimations

Preparation of ESG performance data requires to make estimations in some areas, which affect the reported data. Valneva forms its estimates based on historical experience, external data points, in-house specialists, and other information believed to be reasonable under each circumstance. Read more about uncertainties and estimates in the "Calculation methodology" description of each Metrics section.

To minimize risks of reporting errors in relation to ESG performance data, certain internal controls and validation processes are established.

Section	Section	Key estimates and judgements	Estimate	Level of uncertainty of estimates
SBM-1 Value Chain	3.3.3	ESG risks related to suppliers	Estimation	Low
E1-6: GHG Emissions	3.4.1	GHG emissions for Scopes 1 and 2	Estimation	Medium
E1-6: GHG Emissions	3.4.1	GHG emissions for Scope 3	Estimation	High
E3-4: Water consumption	3.4.3	Water consumption	Estimation	Low
E2-4: Pollution of air and water	3.4.2	Quantification of air and water pollutants	Estimation	Low
E2-5: Substances of Concern	3.4.2	Amounts of Substances of Concern used	Estimation	Medium
E5-5: Resource outflows	3.4.5	Waste estimates for commercial offices	Judgement	Low
E5-5: Resource outflows	3.4.5	Product end-of-life waste treatment method	Judgement	Low
S1-14: Health and safety	3.5.1	Working hours estimates used when preparing the lost time incident frequency	Estimation	Low

For metrics that include value chain data estimated using indirect sources, Valneva employs industry norms, third-party data, and estimation models. In the absence of direct data from tier 1 suppliers or associates, Valneva depends on benchmarks and scientifically validated methodologies to enhance the accuracy and comparability of the figures disclosed in the 2024 Sustainability Statement. Furthermore, quantitative information on air pollutants, water pollutants, Scope 3 emissions, and training hours related to certain areas have been estimated. The estimation process for each of those KPIs is described in each relevant Section below.

The accuracy of metrics deduced from indirect value chain data may vary depending on the availability and quality of third-party data and estimation models. Despite endeavors to bolster reliability via the application of established industry benchmarks and methodologies, these estimates are not as exact as directly sourced data. Nevertheless, Valneva believes that they furnish a reasonable basis for the appraisal of sustainability impacts throughout the value chain.

In an effort to improve the accuracy of metrics upon indirect value chain data, Valneva plans to enhance supplier engagement and amplify data transparency throughout its supply chain. Valneva is also working on internal processes to collect data directly from third-party distribution partners to obtain shipment weights which were previously estimated from primary data. This will be implemented alongside improved procurement guidelines with the aim of securing high-quality information from tier 1 suppliers along the value chain. This strategy encompasses intensified cooperation with tier 1 suppliers to obtain direct data, investment in advanced data collection and analysis instruments (EcoVadis and Valneva's ESG reporting tool), and the adoption of more exacting estimation techniques. Additional information on the due diligence process, EcoVadis and the next steps are available in Section 3.3.3.

Metrics are subject to a high level of measurement uncertainty, primarily due to the calculation methods used to estimate carbon emissions within the value chain and any indirect environmental impacts. The reliance on monetary data throughout calculations has led to the broad use of average cost-based emissions factors, which inherently carry more variability than activity-based or supplier-specific data. Monetary emissions factors may include embedded emissions from other sources (*e.g.*, upstream freight emissions included in equipment purchases) making them less precise than assessing each component individually. Further uncertainty arises from mixed data inputs – combining both activity- and cost-based data within a single emissions category (e.g., freight) – which can introduce discrepancies in emissions estimations. Assumptions, such as incineration as an end-of-life treatment where specific disposal data is unavailable, add to this uncertainty. Finally, extrapolations for missing data, such as adjustments for incomplete survey participation, further contribute to variability in emissions calculations.

Valneva believes that the predominant origins of measurement uncertainty within its sustainability metrics stem from the dependency on indirect data procured from tier 1 suppliers, the assumptions employed within estimation models, the fluctuation inherent in industry benchmarks, and the gaps present in externally sourced data. Valneva continues to enhance its methodological approaches in an attempt to mitigate these uncertainties.

Comparative figures are provided for metrics that have been disclosed in one or more prior periods, where their definition and scope were aligned with the ESRS requirements or required only minor adjustments. In accordance with the ESRS transitional provision, no comparative figures are disclosed for new metrics introduced in 2024. The endeavor to retroactively reconcile historical data with this new framework demands time and resources that currently exceed Valneva's operational capabilities. As a result, Valneva's primary focus is on the delivery of accurate information for the present reporting period. In instances where historical data could be adjusted, the Group provides information from the last two years.

Disclosures related to time horizons

Within the framework of Valneva's 2024 Sustainability Statement, the time horizons are aligned with the definition from the CSRD and are categorized as follows: "short term" is defined as a period up to 1 year, "medium term" encompasses a range of 1 to 5 years, and "long term" is considered to be any duration exceeding 5 years. These delineations provide a framework for Valneva's strategic planning processes and align with industry standards. These time horizons do not differ from the definitions of the European Sustainability Reporting Standards (ESRS).

Disclosures related to modification of processes

The application of the CSRD required some adjustments to Valneva's 2024 Sustainability Statement processes, leading to the implementation of significant modifications. Valneva has decided to follow the structure set out in Appendix F of ESRS 1, with the aim of enhancing the traceability of monitored information.

The major changes that can be observed as a result of this new process include:

- enhanced methods of data collection: Valneva has integrated more robust data collection tools to improve the accuracy and reliability of the metrics provided;
- standardized reporting framework: Valneva has used well-established frameworks, such as the Global Reporting Initiative (GRI) and the Sustainability Accounting Standards Board (SASB) as a reference in the identification of best practices within the sector, with the aim of improving comparability and transparency for the benefit of stakeholders;
- increased stakeholder engagement: Valneva has broadened its stakeholder engagement process to include feedback from a broader range of stakeholders, in order to reflect their interests, concerns, and expectations;
- DMA methodology: Valneva has developed its own DMA Methodology, which allowed the Group to identify actual and potential IROs;
- key performance indicators: Valneva has made adjustments to the definitions and details of KPIs, some of which may not have been previously considered.

These changes are intended to improve the clarity, consistency, and relevance of Valneva's Sustainability Statement, thereby reinforcing Valneva's commitment to transparency and accountability.

For more information regarding the assumptions, approximations, and judgements made in measurement, see Section 3.3.4.

Disclosures stemming from partial application of the Global Reporting Initiative (GRI)

This year's Sustainability Statement is prepared in accordance with the requirements of the CSRD and compares these requirements with those set out in the GRI.

The references indicated in this Section regarding the ESRS and the GRI standards follow the references of the file published by the European Financial Reporting Advisory Group (EFRAG) and are summarized in the following table:

Disclosure CSRD	Disclosure GRI
BP-1	GRI2: 2-2; GRI3: 3-1
BP-2	GRI2: 2-4
GOV1	GRI2: 2-9. GRI2: 2-12, GRI2: 2-13, GRI2: 2-17, GRI 405-1
GOV2	GRI2: 2-12, GRI2: 2-13, GRI2: 2-16, GRI2: 2-24
GOV3	GRI2: 2-19, GRI2: 2-20
GOV4	GRI2: 2-23
GOV5	GRI2: 2-14
SBM1	GRI2: 2-6. GRI2: 2-7, GRI2: 2-22, GRI3: 3-3
SBM2	GRI2: 2-12
SBM3	GRI3: 3-2, GRI3: 3-3, GRI 201-2, GRI 303-1, GRI 306-1, GRI 308-2, GRI 413-2, GRI 414-2
IRO1	GRI2: 2-14, GRI3: 3-1
IRO2	
MDR-P	GRI2: 2-23, GRI2: 2-24
MDR-A	GRI2: 2-28, GRI 202-2, GRI 203-1, GRI204-1, GRI 301-3, GRI 302-2, GRI 302-4, GRI302-5, GRI 303-3, GRI 303-4, GRI305-6, GRI306-3, GRI402-1, GRI -403-3, GRI 403-6, GRI 407-1, GRI410-1, GRI416-1, GRI417-1,
MDR-T	GRI 303-1

Disclosures regarding the use of phase-in provisions

Valneva's DMA conducted in 2024 identified up to 99 sustainability-related matters of which 54 were deemed material. This evaluation reflects the specific context of the sector and aims to pinpoint the relevant issues for Valneva's operational activities. Those 54 matters were translated into 76 final material IROs (see Section 3.3.3). Consequently, the following standards are considered material: E1, E2, E3, E4, E5, S1, S3, S4, and G1 (see the table below). However, Valneva exercises the option to exclude information mandated by ESRS E4, S1, S3 and S4 for entities with fewer than 750 employees, in line with Appendix C of ESRS 1. Following the CSRD requirements, more information on the IROs related to E4 are outlined in section IRO-1, information about all IROs and stakeholders can be found in Sections 3.3.3 and 3.3.4 respectively, and brief relevant disclosures about policies, actions, and targets for ESRS E4, ESRS S1, ESRS S3 and ESRS S4 are included in the specific Sections. In addition, Valneva exercises the phase-in options for specific data points, including those related to anticipated financial effects.

Incorporation by reference

The table below provides an overview of where information can be found relating to ESRS disclosures that have been either partially or totally incorporated by reference and stated outside of this Sustainability Statement as part of other sections of this URD.

DISCLOSURE REQUIREMENTS INCORPORATED BY REFERENCE

Disclosure requirement	Data point(s)	URD Section	Sustainability Statement Section
Number of executive and non-executive members of the Board of Directors	GOV-1. 21 (a)	2.1.1	3.3.2
Diversity of the Board of Directors	GOV-1. 21 (d)	2.1.1	3.3.2
Information on risk management and controls	GOV-5.34; GOV-5.36	1.5.5	3.3.2
Business model and value chain	SBM-1.40 (a)	1.3.1 and 1.3.2	3.3.3
Characteristics of the Undertaking's Employees	S1-6	Note 7 to the consolidated financial statements for the fiscal year 2024, in Section 4.1.5	3.5.1
Total revenue by significant ESRS sectors	SBM-1.40 (b) and (c)	1.4.3 (a)	3.3.3
Revenue derived from fossil fuel activities	SBM-1.40 (d) i.	1.4.3 (a)	3.3.3

As 100% of Valneva's revenue belongs to the healthcare and medical sector – including the third-party products sold – the total revenue by significant ESRS sectors is €169.6 million.

3.3.2 Governance at Valneva

This section outlines the governance processes, controls, and procedures for monitoring and managing sustainability matters. Key topics include the roles and responsibilities of administrative, management, and supervisory bodies, their composition and diversity, and how they are informed about and address sustainability issues. Additionally, it covers the integration of sustainability-related performance in incentive schemes, the due diligence process, and the main features of risk management and internal controls over sustainability reporting.

The role of the administrative, management, and supervisory bodies

Pursuant to Valneva's Articles of Association in effect as of the date of this report, its administrative, management, and supervisory bodies consist of the Board of Directors and the general management, which includes the CEO and the Associate Managing Officers. The Executive Committee, comprised of nine executive officers, is responsible for the day-to-day management of Valneva with an enterprise and cross-functional focus. Within the strategic guidelines set by the Board of Directors, the Executive Committee sets the strategic objectives while delegating and tracking performance against such objectives.

Composition of Valneva's Board of Directors and general management

The Board of Directors consists of seven members, six of whom serve as non-executive directors. All directors are appointed by Valneva's shareholders and must not exceed the age of 80 at the time of appointment.

BOARD OF DIRECTORS

7 Members

71% independent Members

57% female Members

EXECUTIVE COMMITTEE

9 Members

44% female Members

Anne-Marie Graffin

Ms. Graffin is the **Chair of Valneva's Board of Directors** and a member and former Chair (until December 17, 2024) of the Nomination, Governance, and Compensation Committee. She also serves as the Vice-Chair of Nanobiotix's Supervisory Board, a member of the Sartorius Stedim Biotech Board of Directors, and a member of the Vetoquinol SA Board of Directors.

Thomas Lingelbach

Mr. Lingelbach is the CEO and a non-independent **member of the Board of Directors** and the Chair of the ESG Committee. With over 30 years of experience in vaccines, he has held roles ranging from product development to commercialization and has contributed to the development and licensure of more than ten vaccines. He holds an engineering degree in bioprocess engineering and has received education in business administration.

James Sulat

Mr. Sulat is the **Vice-Chair of the Board of Directors**, a member and former Chair (until September 25, 2024) of the Audit, Compliance, and Risk Committee, and a member of the Nomination, Governance, and Compensation Committee. Mr. Sulat has financial and accounting expertise illustrated by his position as Financial Director in previous experiences. He has more than 15 years of experience in audit committees or Board of Directors in several pharmaceutical companies.

BOARD OF DIRECTORS

James Edward Connolly

Mr. Connolly is a **member of the Board of Directors**, a member of the Audit, Compliance, and Risk Committee, and a member and Chair (since December 17, 2024) of the Nomination, Governance, and Compensation Committee. He has more than three decades of experience in the life sciences industry and is the former Executive Vice President and General Manager of Wyeth Vaccines and President of Wyeth Canada.

Maïlys Ferrère

Ms. Ferrère is a non-independent **member of the Board of Director**, representing Bpifrance since 2023. She's also a member of the ESG Committee.

Dr. Kathrin U. Jansen, Ph.D

Dr. Jansen is a **member of the Board of Directors**, the Chair of the Science and Technology Committee, and a member of the ESG Committee. She is the former Senior Vice President and Head of Vaccine Research and Development at Pfizer Inc. and member of Pfizer's Worldwide Research, Development, and Medical leadership team.

Danièle Guyot-Caparros

Ms. Guyot-Caparros is a **member of the Board of Directors** and a member and Chair (since September 25, 2024) of the Audit, Compliance, and Risk Committee. She is an experienced non-executive director with a focus on Biotech/Medtech and is also a member of the Board of DBV Technologies.

EXECUTIVE COMMITTEE'S MEMBERS

Thomas Lingelbach CEO and Member of the BOD	**Kendra Wergin** General Counsel	**Peter Bühler** Chief Financial Officer	**Dipal Patel** Chief Commercial Officer	**Franck Grimaud** Chief Business Officer
Petra Pesendorfer Chief People Officer	**Dr. Juan Carlos Jaramillo, MD** Chief Medical Officer	**Dr. Hanneke Schuitemaker, PhD** Chief Scientific Officer	**Vincent Dequenne** Chief Operation Officer	

The Executive Committee is composed of the following nine members, boasting a rich array of nationalities, including representatives from Colombia, Australia, the US, and various European Union countries, underscoring the Group's international perspective.

- **Thomas Lingelbach**, **CEO (*Directeur Général*) & Member of the Board of Directors (Germany)**.
- **Peter Bühler, Associate Managing Officer *(Directeur Général Délégué)* – Chief Financial Officer (Switzerland):** Mr. Bühler has over 20 years of experience in strategic and financial leadership in the life sciences and technology sectors. He previously served as the CFO of the Nasdaq-listed Swiss diagnostics company Quotient, Group CFO of Zaluvida AG, and Group CFO of Stallergenes Greer Plc. He has also held senior roles at Eli Lilly, Merck Serono, and Logitech. Mr. Bühler is a Swiss Certified Accountant and holds an MBA.
- **Vincent Dequenne, Chief Operating Officer (Belgium):** Mr. Dequenne has over 20 years of experience in operations leadership roles at Eli Lilly, GSK Vaccines, and Pierre Fabre. He has expertise in vaccines and drug manufacturing. Mr. Dequenne holds an MSc in Mechanical Engineering.
- **Franck Grimaud, Associate Managing Officer *(Directeur Général Délégué)* – Chief Business Officer (France):** Mr. Grimaud has extensive experience in corporate and business development, as well as strategic management, with more than 20 years in the biotech industry. He also holds an MBA.
- **Dr. Juan Carlos Jaramillo, MD, Associate Managing Officer *(Directeur Général Délégué)* – Chief Medical Officer (Colombia and U.S):** Dr. Jaramillo has over 20 years of experience in the pharmaceutical industry, with expertise in medical affairs, clinical development, as well as market access and pricing. He has previously held senior management roles at Daiichi Sankyo, Grünenthal, and GSK.
- **Dipal Patel, Associate Managing Officer *(Directeur Général Délégué)* – Chief Commercial Officer (Australia):** Ms. Patel has over 20 years of experience at GSK, specializing in commercial strategy, execution, market access, and lifecycle management. She has also served as the Global Commercial Head for Shingrix. Ms. Patel holds an MBA.
- **Petra Pesendorfer, Chief People Officer (Austria):** Ms. Pesendorfer has over 15 years of experience in HR with international responsibilities, most recently at ams OSRAM and previously at Rentokil Initial and Soravia Group. She has expertise in employer attractiveness, cultural change, and restructurings. Ms. Pesendorfer holds an International MBA.
- **Dr. Hanneke Schuitemaker, Ph.D., Chief Scientific Officer (Netherlands):** Dr. Schuitemaker has over 20 years of experience in vaccine discovery and development. She served for nearly 14 years as the Global Head of Viral Vaccine Discovery and Translational Medicine at Johnson & Johnson (J&J), overseeing vaccine programs for COVID-19, HIV, RSV, Ebola, and other viral diseases. Previously, she worked at Sanquin and the University Medical Center Amsterdam, conducting research into HIV pathogenesis. Dr. Schuitemaker has authored over 350 scientific publications.
- **Kendra Wergin, General Counsel & Corporate Secretary (U.S.):** Ms. Wergin is a US-qualified lawyer with expertise in corporate and international law. She has practiced corporate law in the London and Paris offices of an international law firm, as well as in the in-house legal team of a Fortune 500 company in California. Ms. Wergin holds law degrees from both France and the U.S. and is admitted to practice in several U.S. jurisdictions.

  Prior to Ms. Wergin's appointment, Mr. Frédéric Jacotot (France) served as General Counsel & Corporate Secretary and member of Valneva SE's Executive Committee (until 31 July 2024). He had extensive experience in corporate governance and international business law.

Valneva's governance structure currently does not include direct representation of employees or other workers on the Board of Directors. Valneva's leadership positions are filled based on roles and responsibilities related to the management and strategic direction of the Group, without designated seats for employee representatives.

Regarding members' expertise on sustainability and the training courses followed, more information is available further down in this Section. Information on the resources and expertise related to IROs through committees and internal experts is also provided in Section 3.3.2..

Responsibilities for Managing IROs

Valneva's administrative, management, and supervisory bodies are regularly informed about material IROs and monitor the implementation and effectiveness of due diligence processes and ESG-related policies, actions, metrics, and targets. Responsibilities related to sustainability and management of material IROs are allocated among Valneva's administrative, management, and supervisory bodies as follows:

- **Board of Directors:** The Board is responsible for strategic oversight of the Company, including oversight of the Executive Committee. Two of the Board's committees have specific responsibilities related to ESG topics, as described further below and in the Internal Rules of the Board of Directors, available on Valneva's website. The Board is tasked with overseeing alignment of the Group's operations with stakeholder interests and plays a central role in validating the Group's material IROs and ESG strategic goals and objectives. The Board also monitors the financial performance of the Group;

- **ESG Committee of the Board of Directors:** Chaired by the CEO and meeting as often as the company's interests require and at least twice a year., this Committee reviews and assesses progress on Valneva's ESG strategy and provides strategic guidance on sustainability matters. The ESG Committee reviews Valneva's sustainability disclosure. The ESG Committee facilitates the integration of material sustainability matters into strategic decisions, including any potential acquisitions, making ESG a key component of decision-making and aligning corporate actions with long-term environmental, social, and governance goals. The ESG Committee is also responsible for informing the Board of emerging trends, verifying compliance with legal and regulatory sustainability requirements, and making associated recommendations. The ESG Committee is responsible for overseeing the Group's environmental strategies, including initiatives for transitioning to a lower-carbon economy and promoting resource use within a circular economy. Broadly, the sustainability topics and related IROs under the ESG Board Committee´s oversight are described under ESRS E1, ESRS E2, ESRS E3, ESRS E4, ESRS E 5. Workforce management and diversity, equity, and inclusion, are also managed by the ESG Committee, jointly with the Nomination, Governance and Compensation Committee. These Committees ensure that Valneva's social policies are aligned with the Group's commitment to global health and the well-being of its employees – topics that are incorporated in ESRS S1 ESRS S3;
- **Science and Technology Committee**: this Committee reviews, evaluates, and advises the Board on the progress of Valneva's R&D programs and the Group's medium- to long-term R&D portfolio strategy. The Committee's guidance on R&D initiatives indirectly contributes to the development of safe and effective vaccines, thereby impacting the overall safety and security of the products for consumers and end users. The Committee discuss and inform the Board of emerging trends in science and technology relevant to the company's mission and activities, and make recommendations. The IROs managed by the Science and Technology Committee are disclosed referring to ESRS S4;
- **Audit, Compliance and Risk Committee of the Board of Directors** (also called "the Audit Committee"), charged with verifying the accuracy and accountability of ESG reporting, the Audit Committee plays a critical role in overseeing non-financial information (including risks) and promoting compliance with reporting standards, including through internal controls. The Audit Committee meets as often as the company's interests require and at least twice a year. The Audit Committee is also responsible for overseeing sustainability audits and recommending appointment of sustainability auditors. Those topics and related IROs are discussed under the guidance of ESRS G1;
- **Joint Committee Meetings:** To promote alignment and coordination on ESG issues, the ESG Committee and the Audit Committee began holding monthly meetings in October 2024, facilitating cross-committee collaboration and unified oversight;
- **Executive Committee:** The Executive Committee is responsible for the day-to-day management of Valneva with an enterprise and cross-functional focus. Within the strategic guidelines set by the Board of Directors, the Executive Committee sets the strategic objectives while delegating and tracking performance against such objectives. In the context of sustainability, the Executive Committee is responsible for the day-to-day management of IROs, including developing and monitoring risk management strategies, including strategies adopted by the Board. Certain operational decisions are further delegated to the ESG Operating Committee, described below. The Executive Committee provides Quarterly Business Reports to the Board to keep them apprised of Valneva's activities. This structure facilitates the efficient upwards flow of information regarding the management of IROs, allowing for informed decision-making and strategic oversight by the Board. Given that the members of the Executive Committee hold concurrent responsibilities for specific functions within Valneva, they are informed of the management of IROs through reports from their respective teams as well as through the ESG Operating Committee;
- **ESG Steering Committee:** This committee was created in October 2024 and includes Valneva's CEO, CFO, General Counsel, and ESG Director. This committee provides focused oversight and facilitation of Valneva's ESG activities, including management of IROs;
- **ESG Operating Committee:** The ESGOpCo comprises subject matter experts from various organizational functions. This Committee is responsible for executing the sustainability strategy by following-up on the functions' performance against the targets set and driving actions within their respective areas. Per its charter, the Committee convenes on a monthly basis, which promotes consistent monitoring and implementation of ESG initiatives across the Group;
- **Global ESG Function:** Established at the end of 2023, this corporate function is dedicated to organizing and advancing Valneva's ESG initiatives and shaping the Group's ESG strategy. Reporting to the CEO, this function aims to maximize the impact of Valneva's solutions and reinforce its sustainability leadership.

Valneva has policies concerning risk management, sustainability topics, and ethical guidelines that reinforce this governance framework. These policies set out specific procedures for identifying, assessing, and managing risks related to sustainability. The policies serve as practical tools for implementing the strategic directions established by the Board of Directors and the ESG Steering Committee, providing a cohesive approach to managing IROs.

Setting and Monitoring of Targets for Material IROs

The Group's ESG Director coordinates cross-functional work streams which are responsible for identifying and defining targets related to material IROs. The Executive Committee approves these targets, which are then incorporated into the Group's ESG strategy, which is developed by the ESG Director and approved by the Executive Committee.

The ESG Committee of the Board reviews and approves the finalized ESG strategy, including the targets, and confirms alignment with Valneva's overarching goals.

The ESGOpsCo monitors implementation of the Group's ESG strategy and progress towards the targets.

Skills and expertise related to sustainability

Valneva's administrative, management, and supervisory bodies determine the availability of appropriate skills and expertise to oversee sustainability matters through evaluating the collective qualifications and experiences of their members. This evaluation considers the diverse nationalities and professional backgrounds of the Board of Directors, the general management, and the other Executive Committee members, which suggests a range of competencies relevant to the Group's global operations and sustainability challenges (see Section 3.3.3).

The Board participated in two comprehensive training sessions in 2024, focusing on sustainable investment, the CSRD, and other regulatory frameworks, as well as in-depth discussions on specific ESG aspects such as climate change. As a result of this training, Board members are familiar with the latest sustainability practices and requirements.

In 2024, the Executive Committee engaged in several training sessions, including a company-wide ESG training, as well as specialized sessions for the Executive Committee on various sustainability aspects like climate change, biodiversity, human rights, sustainable procurement, carbon footprint calculation, carbon pricing, and the Sustainable Development Goals (SDGs). Additionally, as part of the development of the Group's decarbonization strategy, Executive Committee members received training on the Assessing low-Carbon Transition (ACT) Methodology, which is instrumental in guiding the Group's climate-related initiatives. ACT is a joint voluntary initiative of ADEME (*l'Agence de l'environnement et de la maîtrise de l'énergie*) and CDP (formerly known as the Carbon Disclosure Project) under the UNFCCC Action Agenda (MPGCA) and supported by the French government, which works to accompany businesses in their sustainability efforts. As part of this initiative, Valneva has received financial support from ADEME in the implementation of ACT methodologies.

The trainings mentioned above relate mostly to Valneva's environmental IROs, complementing the existing expertise of Board and Executive Committee members related to Valneva's environmental, own workforce, consumers, business conduct, and industry-specific IROs.

Business conduct, internal controls, and risk management

Business conduct

The use of the term "business conduct" in this Section encompasses the following governance and ethics topics: corporate culture and business conduct policies, lobbying, and animal welfare.

Valneva is committed to conducting business ethically and responsibly and in compliance with applicable laws, rules, and regulations. The governance of business conduct begins at the highest level of the Group. The Board of Directors adopts Valneva's Code of Conduct and Ethics, which reflects the Group's dedication to upright business conduct, and approves strict policies related to corruption and bribery prevention. On a day-to-day basis, the Group's Corporate Compliance Officer and the Group's General Counsel supervise the business conduct governance, overseeing application of relevant policies at the subsidiary level and working closely with Local Compliance Officers. The Compliance Committee meets on a quarterly basis and plays a critical role in overseeing the Group's reporting on business conduct matters. Valneva also has a policy governing lobbying activities.

The Corporate Compliance Officer reports to the Group's General Counsel and provides regular reports to the Board's Audit, Compliance and Risk Committee, which is also a primary actor in internal controls. The Corporate Compliance Officer is an experienced ethics & compliance professional with in-depth knowledge of the health care industry and extensive experience in matters related to legal affairs, ethics, and data protection.

Internal controls

Valneva has established an internal controls framework that is integrated across various internal functions to provide oversight of IROs. This framework is applicable to Valneva SE and all its consolidated subsidiaries and was adapted following the transition in December 2023 to a single-tiered governance system led by a Board of Directors. The Chief Executive Officer and the Chief Financial Officer play a central role in defining and monitoring the Group's internal controls objectives, including the implementation of internal controls procedures for sustainability matters, as described below:

- **Internal Controls Objectives:** Valneva's internal controls procedures aim to ensure compliance with laws and regulations, adherence to Executive Committee instructions, proper functioning of internal processes, and reliability of financial information;
- **General Organization:** The Executive Committee, the Board of Directors, and the Audit, Compliance and Risk Committee are primary actors in internal controls, supported by the Finance, Legal, Internal Audit, and Quality Assurance Departments. Valneva reports the results of risk assessments and the efficacy of internal controls to its governance bodies by providing regular updates to the Audit, Compliance and Risk Committee. Valneva has a full scope framework of internal controls over (in particular but not limited to) financial reporting, in accordance with the highest international standards;
- **Internal Controls function:** This team, which is part of the Finance department, is involved in the definition of controls for non-financial information and played a key role during the implementation of the Group's ESG software. Furthermore, the Director of Finance Excellence, leading the Internal Controls team, participates in the ESG Operating Committee when required. The Director of Finance Excellence reports to the CFO weekly, to the Executive Committee monthly, and to all Audit, Compliance and Risk Committee meetings (except those focused on quarterly result publications) on all matters regarding Internal Controls, including CSRD-related topics. This oversight mitigates the risk of inadequate control measures, and enhances the overall reliability of the 2024 Sustainability Statement.

Valneva's internal controls system is characterized by a clearly defined governance structure and delineation of roles, coupled with a culture of risk awareness and compliance. The integration of controls and procedures across internal functions facilitates effective management and reporting of sustainability-related IROs.

Risk management

Valneva's risk analysis includes meetings organized twice a year between functional heads and the Head of Risk Management to assess risks related to the Group's activities in the course of the bi-annual risk management review process. The risks identified during the DMA have now been integrated within Valneva's ERM systems and process.

Without relying on a formal risk assessment, Valneva has identified several key risks in ensuring a complete and comprehensive sustainability report, namely the risk of inaccurate data, incomplete data, misalignment with internal objectives, insufficient oversight, and inadequate internal controls. In addition to the internal controls approach described above, Valneva has taken the following actions in an effort to mitigate these risks:

- Defined Work streams: Valneva has defined four cross-functional work streams throughout the Group to identify, assess, and define targets and projects related to the IROs identified. Each team is responsible for the alignment of these targets with internal objectives and KPIs. This structure facilitates careful review and validation of data. Moreover, each work stream is tasked with comprehensive data collection and reporting to reduce the likelihood of omission of critical information. Finally, each work stream is connected to an Executive Committee member who oversees the targets' definition process and validates information reported, facilitating alignment of the reported data with internal objectives and KPIs. This alignment is essential for preserving consistency and relevance in the Sustainability Statement;
- ESG Software Implementation: Valneva has implemented an ESG software that collects the majority of its sustainability-related data. The software is equipped with automatic internal controls at each stage of data collection and processing, supporting the data's accuracy and completeness. Furthermore, all KPIs reported through the software must be validated via a 4-eyes principle, reducing the risk of errors. People designated to report the information in the software are the ones closest to the original data. This software is designed to mitigate ESG reporting risks and to be accessible throughout the organization and to tier 1 suppliers, allowing for the direct reporting of emissions data, which is particularly useful for the efficient tracking of Scope 3 emissions.

Integration of sustainability-related performance in incentive schemes

Valneva has incorporated sustainability into its bonus scheme for all employees, including members of the Executive Committee.

The bonuses of all Valneva employees, including members of the Executive Committee, are calculated in part based on achievement of company objectives that are set by the Board of Directors. In 2024, one of these company objectives was to become an ESG-focused enterprise. This sustainability objective required the definition, validation, and approval of Valneva's first ESG Strategy and the implementation of the necessary data collection and analysis processes and software to enable compliance with ESG reporting requirements, including the CSRD. The Executive Committee and the ESG Committee of the Board closely monitored progress towards this objective, which accounted for 5% of the company objectives. For members of the Executive Committee other than the CEO, overall achievement of the company objectives accounts for 70% of the bonus calculation. For the CEO, achievement of the company objectives accounts for 90% of the bonus calculation. The remainder of the bonus for members of the Executive Committee is determined by achievement of individual objectives set by the Board of Directors. Beginning in 2025, these individual objectives may include targets related to sustainability for those Executive Committee members playing a pivotal role in sustainability activities. The Board of Directors conducts a mid-year review of objectives to assess progress and the potential need for changes to the objectives.

Due diligence statement

Valneva exercises due diligence in its supply chain by partnering with EcoVadis to assess risks and enhance transparency in environmental, labor, human rights, and governance practices like ethics and sustainable procurement (more information in Section 3.3.3). Valneva is focused on increasing the level of transparency on its suppliers ESG performance through that partnership.

The following table lists the main steps of due diligence and explains how these steps are reflected in the 2024 Sustainability Statement.

Core elements of due diligence	Paragraphs in the Sustainability Statement
Embedding due diligence in governance, strategy, and business model	Valneva is currently defining its Sustainable Procurement Strategy. Information derived from the current due diligence process, mostly resulting from the EcoVadis assessment, will serve as the basis for the decision-making process. More information on the target relating to Sustainable Procurement in Section 3.3.3 and 3.4.1.
Engaging with affected stakeholders in all key steps of the due diligence	Valneva aims to include 100% of its key suppliers within the EcoVadis evaluation by 2026. Those suppliers will be reviewed in sustainability terms (risk and performance), and the result of that evaluation will serve as the basis for the definition of action plans and internal decision-making. More information on impacts and risks in Section 3.3.3.
Identifying and assessing adverse impacts	EcoVadis allows Valneva to identify both adverse impacts and risks. More information on impacts and risks in Section 3.3.3.
Taking actions to address those adverse impacts	Valneva is working on comprehensive action plans and is implementing a monitoring procedure.
Tracking the effectiveness of these efforts and communicating	Valneva conducts regular evaluations of supplier performance and has included the pertinent results within the Sustainability Statement. More information on the 2024 Ecovadis evaluation in Section 3.3.3.

3.3.3 Valneva's strategy and business model

This section outlines how the Group's strategy, business model, and value chain relate to sustainability matters. Key topics include the elements of the strategy that impact sustainability, how stakeholder interests and views are integrated into the strategy and business model, and the assessment of material IROs. This section also addresses the financial effects of these IROs, as well as the Group's strategy and business model.

Strategy and business model

Valneva's business model in relation to sustainability matters

Valneva develops, manufactures, and commercializes prophylactic vaccines for infectious diseases addressing unmet medical needs, advancing first-, only-, or best-in-class vaccine candidates.

The Group's activities are fully integrated, and encompass research, development, manufacturing, and commercialization of vaccines for a range of diseases such as Lyme disease, Japanese encephalitis, cholera, and chikungunya. The Group's manufacturing sites are located in Scotland and Sweden; the R&D sites are located in Austria and France. Additional sites, focused on marketing and sales, are located in North America as well as in France.

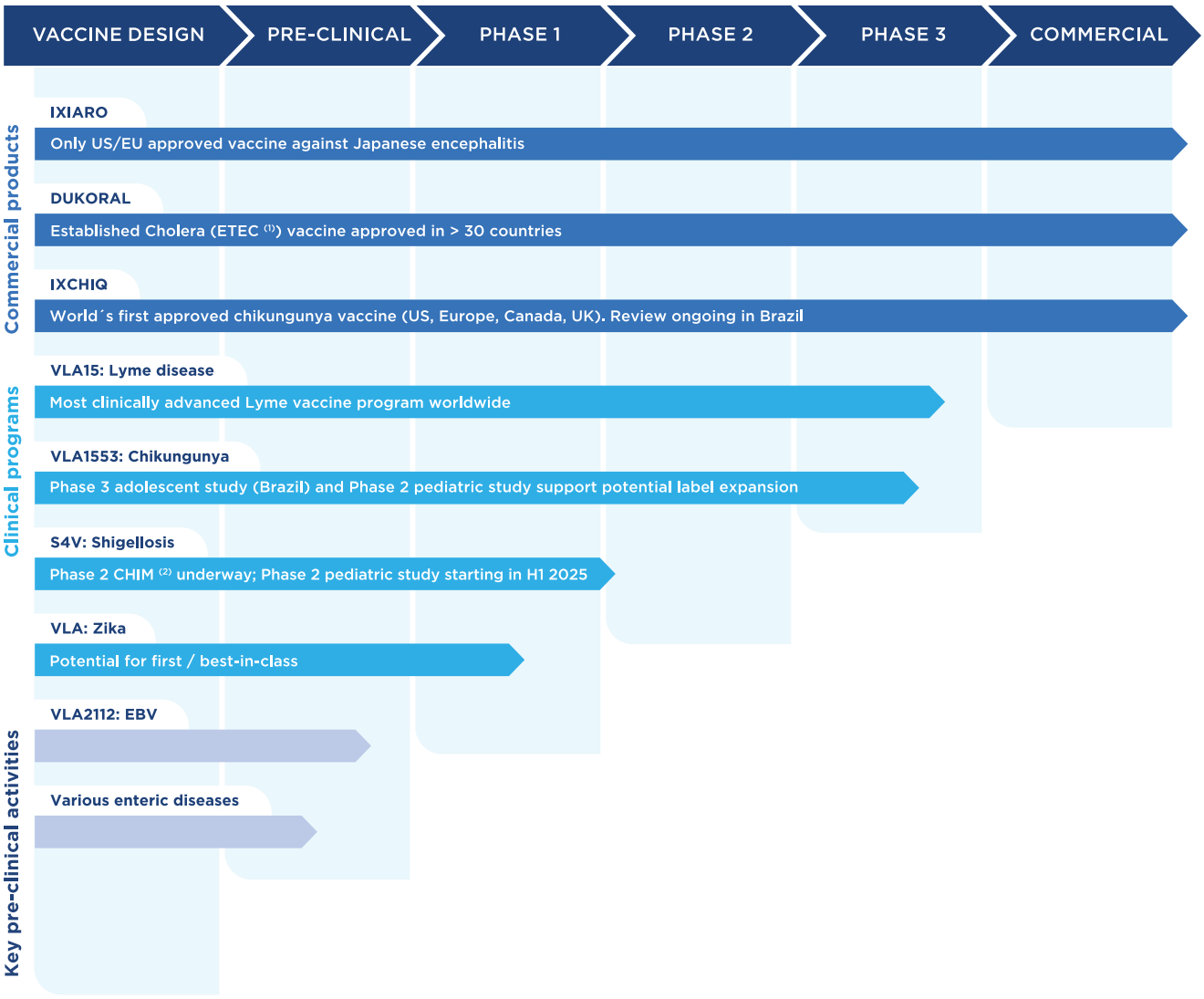
Valneva distributes its products in several markets around the world, with a particular focus on:

- Europe, with significant activities in markets such as France, where the Group is headquartered;
- North America, where IXIARO (Japanese encephalitis) and IXCHIQ (chikungunya) are marketed in the U.S and DUKORAL (cholera), IXIARO, and IXCHIQ are marketed in Canada;
- Other international markets (Asia, Oceania) where IXIARO (also marketed as JESPECT) and DUKORAL are commercialized;

Valneva targets two primary customer categories:

- Customers receiving the vaccine; and
- Healthcare providers, including hospitals, clinics, and vaccination centers.

Valneva's vaccine pipeline, as of December 31, 2024, is detailed in the graphic below:



(1) ETEC indication in some markets only.
(2) Controlled human infection model.

Valneva's 2024 total revenue was €169.6 million. Product sales accounted for €163.3 million (impact revenue, defined as as the revenue derived from activities or products that have a measurable positive or negative environmental or social impact, which represents about 96% of the total) of which €33.2 million were sales of third-party products for which Valneva acts as a distributor. Other revenue from contracts with customers was €5.6 million. No revenue was derived from fossil fuel activities. For additional information, refer to the financial statements included in Section 1.4.3 (a) of this URD.

Valneva primarily operates within the pharmaceutical and biotechnology sectors, with activities that are eligible with the European Union's Taxonomy for sustainable activities, particularly under the objective of "Pollution Prevention and Control" (PPC) – Manufacture of Medicinal Products and Manufacture of Active Pharmaceutical Ingredients (more information on Taxonomy disclosures in Section 3.4.6) The Group's revenue streams are assessed for Taxonomy eligibility, with a focus on the sales of medicinal products, which include the Group's vaccines IXIARO, DUKORAL, and IXCHIQ.

On December 31, 2024, the Group had 713 employees working in different countries broken down as follows.

	Employees *(FTE)*
Austria	288
Canada	9
France	69.5
Sweden	126.5
United Kingdom	172.5
United States	29
TOTAL	**713**

VALNEVA INDUSTRY

Ensuring the resilience and security of supply chains

Addressing public health challenges derived from emerging diseases as pandemics or antimicrobial resistance

Strict regulatory oversight to ensure vaccines' safety and efficacy

Highly specialized manufacturing processes with strong quality controls

Highly-skilled employees

Address vaccine hesitancy

Access to emerging markets is critical for growth

WHAT WE DO

3 Commercial vaccines

€169.6M Total revenue in 2024

3 Unique vaccine development programs

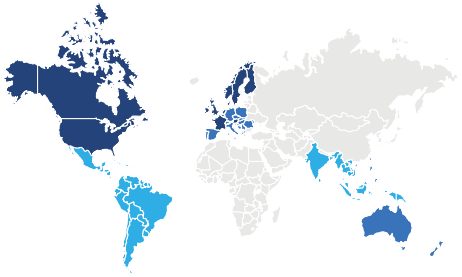
INTEGRATED differentiated clinical and pre-clinical assets robust commercial portfolio

FOCUSED on prevention of infectious diseases with significant unmet medical needs

>700 Employees in six countries

Valneva's commercial footprint

Valneva has a commercial infrastructure in most key markets; with a footprint extended through distribution partners integrated sales, marketing, market access and medical/government affairs capabilities are focused on increasing awareness and unlocking brand potential.



■ Valneva ■ Distributor ■ Producer & Distributor

VALNEVA STRATEGIC DRIVERS

DRIVE COMMERCIAL GROWTH:
Expand global reach

CAPTURE R&D UPSIDE:
Continue to focus on vaccines that can make a difference

MAXIMIZE INTEGRATED BIOTECH MODEL:
Build continual value from R&D and commercial execution

HOW WE DO IT

Reaching Further, Where Most Needed.

Protecting lives

- Universal and affordable access
- R&D for unmet medical need
- Vaccines safety

Preserve the planet

- Transition to a lower-carbon business model
- Improving our environmental performance
- Vaccines stewardship

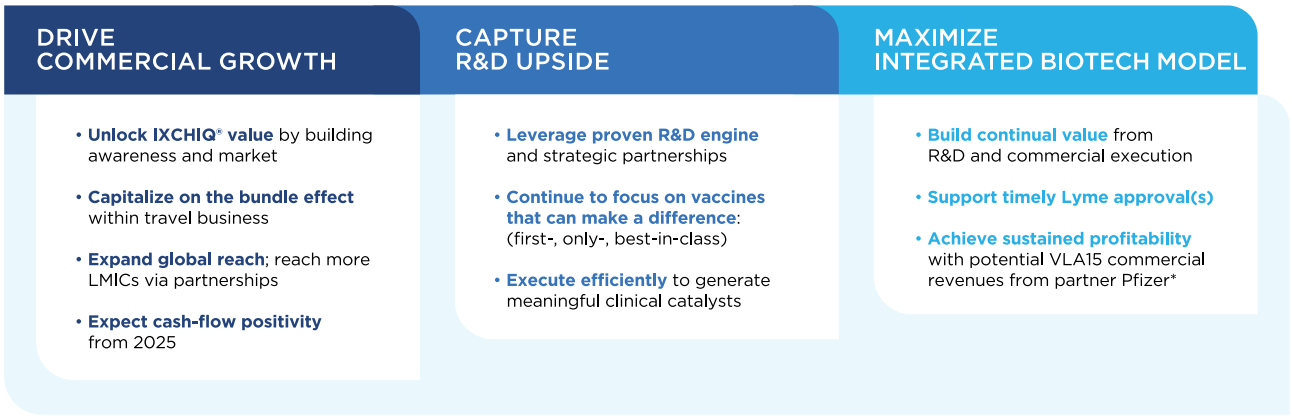
Reaching people

- Employee engagement
- Talent Management
- Committed to Ethics

Valneva's vision and key strategic drivers

Valneva's vision is to contribute to a world in which no one dies or suffers from a vaccine-preventable disease. It is this vision that drives the Group to develop vaccines aimed at protecting people from infectious diseases for which no other vaccines or effective treatments currently exist, hence supporting an important public health goal. This vision is articulated through three strategic drivers detailed in the graphic below.

VALNEVA STRATEGY TO BECOME A GLOBALLY RECOGNIZED VACCINE COMPANY:
CONTRIBUTE TO A WORLD WHERE NO ONE DIES OR SUFFERS FROM A VACCINE PREVENTABLE DISEASE



* *Subject to successful development, licensure and launch of Lyme disease vaccine candidate partnered with Pfizer*

Valneva's ESG Strategy – Reaching Further Where Most Needed

ESG has been part of Valneva since the Group joined the United Nations Global Compact a decade ago. Valneva's newly defined ESG strategy "Reaching Further Where Most Needed" aims to amplify and expand the company's positive impact on global health.

Valneva has defined the "Protecting Lives" pillar of its ESG strategy to align with the Group's vision and strategic drivers. Valneva is committed to the inclusion of people at risk of vulnerability as candidates in vaccine programs. Vulnerable populations—such as children, the elderly, and individuals in high-risk environments—often face greater exposure to infectious diseases and may experience more severe health impacts. A notable example of this commitment is the development of Valneva's IXCHIQ vaccine. In addition, while the Group's commercial activities currently focus on travelers and neglected diseases, Valneva believes that access to vaccines should be universal, striving to improve access for underserved customers in partnership with key stakeholders across different countries. Valneva has also expanded its pipeline of vaccine candidates that could provide protection against antimicrobial resistance, a growing global health threat, while also prioritizing future pandemic preparedness. The company recognizes the potential opportunities that vaccines offer in combating the effects of climate change on public health.

Valneva addresses environmental impact management in the "Preserving the Planet" pillar of its ESG strategy. The company emphasizes the importance of maintaining a low carbon footprint, minimizing the company's environmental impact, and promoting animal welfare.

Valneva relies on a workforce that is engaged, diverse, and committed to ethical practices, equipped with the right skills. This focus on human capital is encapsulated in the "Reaching People" pillar of its ESG strategy.

Those three pillars of Valneva's ESG strategy are detailed in the graphic below together with the Sustainable Development Goals those contribute to.

VALNEVA'S ESG STRATEGY AND CONTRIBUTION TO THE SUSTAINABLE DEVELOPMENT GOALS

Reaching Further, Where Most Needed

PROTECTING LIVES

- R&D for unmet medical need
- Universal and affordable access
- Vaccine safety

PRESERVING THE PLANET

- Transition to a lower carbon business model
- Improving our environmental performance
- Vaccines stewardship

REACHING PEOPLE

- Employee engagement
- Talent management
- Committed to Ethics

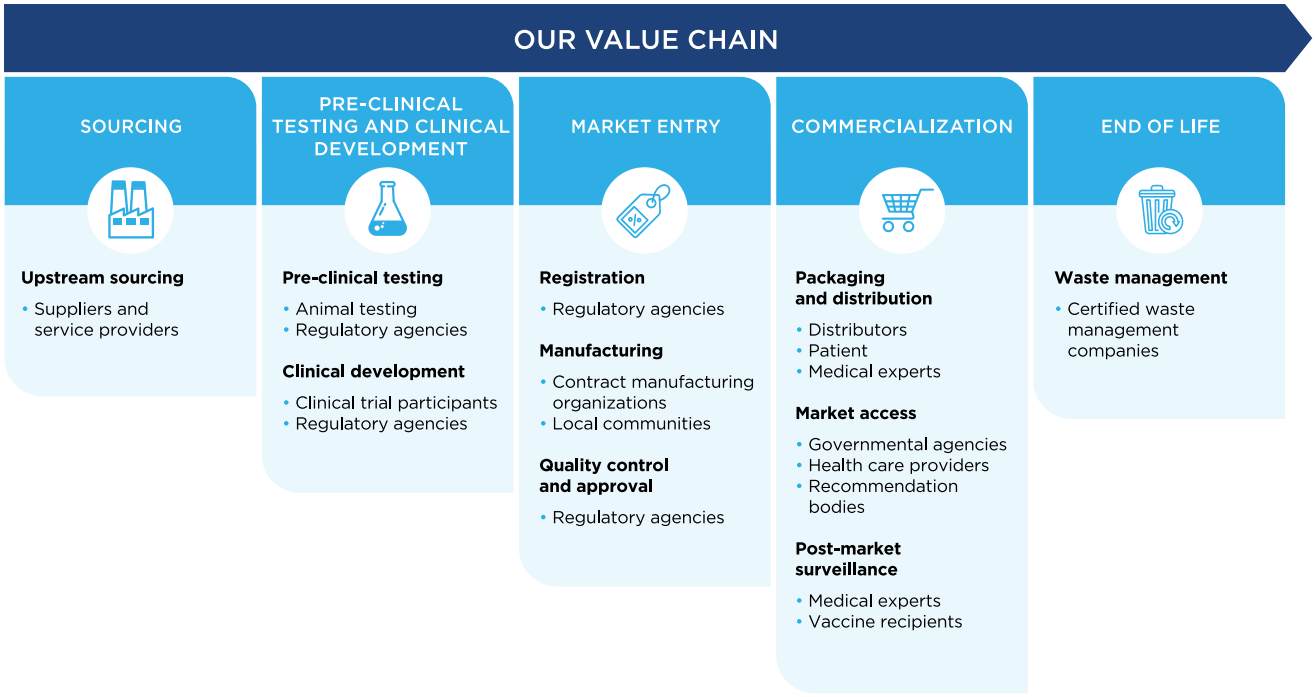
Valneva's value chain

The table below illustrates the value chain elements associated with each of the three pillars of Valneva's ESG strategy and the material topics addressed.

ESG Commitments	Value Chain & Stakeholders concerned	Material topics, each encompassing several IROs listed in Section 3.3.3
Protecting lives	Valneva operations: customers, medical community, CMOs, communities	• R&D investments • Antimicrobial resistance • Vaccine equity and universal access • Future pandemic preparedness • Communities affected by Valneva operations
Preserving the Planet	Valneva operations: the environment, governmental organizations	• Transition to a lower-carbon economy • Air and water pollution • Biosourced materials • Resource use and circular economy • Animal welfare
Reaching People	Valneva operations: workers councils, workers	• Engagement with own workforce or representatives • Employee level of engagement/satisfaction • Recruitment, training and promotion • Gender pay-gap • Corporate culture and business conduct policies

Valneva's Sustainability Statement includes an assessment of both upstream and downstream aspects of the value chain. This provides a comprehensive understanding of the value chain's sustainability performance. While Valneva has made reasonable efforts to access as much information as possible related to IROs derived from tier 1 suppliers (upstream), all information related to suppliers' performance within this Statement refers only to the 96 major raw materials tier 1 suppliers and service providers (more information below) due to challenges in obtaining direct information from all suppliers within the limited timeframe of this year's reporting process. tier 1 suppliers are generally providers of goods and services that work directly with Valneva, without intermediaries.

The chart below shows the main stakeholders impacted by the Group's operations or involved in the different steps of the value chain:



Valneva's operations depend on the procurement of raw materials and services essential for vaccine development and production. These inputs include biological materials and services provided by Contract Manufacturing Organizations (CMOs) and Contract Research Organizations (CROs), which are integral to the Group's supply chain. Valneva recognizes the importance of these tier 1 suppliers and actively engages with them to enhance transparency and performance in environmental, labor, and governance aspects.

Partnering for success – supply chain transparency

To understand these inputs and manage associated risks, Valneva has partnered with EcoVadis to conduct a comprehensive risk assessment of its tier 1 suppliers. This allowed the Company to analyze 96 suppliers in 2024, representing over 80% of the Group's purchasing expenditure. From those 96 suppliers, 87 are based within European countries, 9 in North America, and 1 in South America.

Valneva's key providers of raw materials and services have been included in the analysis, ensuring that no material activity with the potential to generate specific IROs has been overlooked. Based on the scope of the analysis conducted and the results obtained, Valneva considers that there is no indication to suggest that any additional impacts from tier 1 suppliers would emerge from the analysis of the remaining suppliers. However, Valneva will continue its due diligence efforts on its most critical, "key suppliers" in 2026, ensuring they are all included in EcoVadis. Valneva also committed to share its Business Partners Code of Conduct with 100% of tier 1 suppliers.

The 2024 assessment encompassed a wide array of areas, including R&D services, pharmaceutical products, human health, and scientific activities. It also covered architectural and engineering activities, alongside technical testing and analysis. The scope extended to the wholesale of other household goods and the provision of essential services such as electricity, gas, steam and air conditioning, as well as water and waste management supply. Furthermore, the assessment included the activities of employment placement agencies, along with head office activities and management consultancy services.

EcoVadis' proprietary methodology initially assesses the companies according to the countries they are based in and their industry. That initial screening determines the weight associated with each of the factors (qualitative and quantitative) associated with environmental, labor, ethics, and procurement risks. The assessment is based not only on the policies and structures put in place by the suppliers, but also on the actions taken and the results already achieved. Significant public information shared by the media is also taken into account, ensuring that additional ESG-related risk factors are integrated in the assessment.

Each supplier is analyzed according to different risk factors (see table below), and the final overall risk classification is calculated based on the combination of both sustainability-related risks and other risk factors.

RISKS ANALYZED FOR SUPPLIERS AND BUSINESS PARTNERS

SUSTAINABILITY RISKS	
Sustainability: Environment risk	**Sustainability: Labor & Human rights risk**
Environment country risk	Health and social country risk
Environment industry risk	Human rights country risk
Water	Labor and human rights industry risk
Biodiversity	Employee health and safety
Local and accidental pollution	Working conditions
Materials, chemicals and waste	Social dialogue
Product use	Career management and training
Product end-of-life	Child labor, forced labor and human trafficking
Customer health and safety	Diversity, discrimination and harassment
Environmental services and advocacy	External stakeholder human rights
Sustainability: Ethics risk	**Sustainability: Sustainable procurement risk**
Ethics country risk	Sustainable procurement industry risk
Ethics industry risk	Supplier environmental practices
Corruption	Supplier social practices
Anticompetitive practices	
Responsible information management	

OTHER RISK FACTORS	
Procurement risk	**Industry risk**
Scan risk	**Modern slavery risk**
Country risk	

After the level of risk has been calculated, Valneva requests active participation of tier 1 suppliers in a questionnaire including environmental, labor and human rights, ethics, and sustainable procurement topics, to complement their risk profile. In 2024 Valneva distributed this questionnaire to medium-high (with a score between 25 and 44 out of 100) and high-risk tier 1 suppliers.

Finally, upon completion of that questionnaire, the supplier receives a scorecard which determines its overall risk level. Based on that final complete profile, Valneva will collaborate with tier 1 suppliers which are still classified as high-risk on an improvement plan to enhance their ESG performance. Valneva is committed to further analyzing the remaining tier 1 suppliers that were not included in the assessment, during 2026.

Of the 96 suppliers analyzed, only one was classified as "High Risk." This rating indicates that the supplier received an EcoVadis score between 13 and 24 out of 100 after completing all required questions. Valneva is currently conducting further analysis of this supplier's situation through targeted questionnaires. The high-risk rating is primarily due to the lack of publicly available information (indicating insufficient transparency on sustainability-related issues) and a high level of risk associated with the supplier's country of operation. As a result, Valneva has decided to request the supplier's participation in a more comprehensive questionnaire, which delves deeply into various sustainability areas and enables Valneva to request supporting documentation, certificates, and other relevant materials. Valneva expects the supplier to submit that information during 2025. Upon receipt of the complete information, the supplier's final rating may improve depending on the findings. For any areas that remain classified as at risk, Valneva will collaborate directly with the supplier to establish improvement plans and monitor their implementation within specific timeframes.

As part of the Reaching People pillar of Valneva's ESG Strategy, the Company has defined the following targets related to its supply chain:

ESG STRATEGY – REACHING PEOPLE PILLAR

COMMITTED TO ETHICS
• Excellence in Human Rights
• Embed ESG across the business and Valneva's supply chain
• Business Conduct and culture

TARGETS AND ACTIONS
(1) By 2026, assess 100% of key suppliers in EcoVadis and share the Business Partners Code of Conduct with 100% of tier 1 suppliers.
(2) By 2026, define a Sustainable Procurement Policy including environmentally-friendly criteria for selecting and contracting with suppliers.
(3) By 2026, update Valneva's Code of Conduct & Ethics to reinforce conduct required by other Group policies and provide training on the updated Code to all employees.

Good Manufacturing Practice and supply chain

Furthermore, GMP (Good Manufacturing Practice) certification plays a significant role in ensuring that pharmaceutical companies maintain high-quality standards. Valneva carefully selects, audits, and validates (qualifies) tier 1 suppliers to ensure the quality and purity of raw materials before they enter the manufacturing process. These supplier qualification processes are also critical to reduce ESG risks in the supply chain, as it provides assurance that tier 1 suppliers meet stringent quality, safety, ethical, and sustainability standards *e.g.* related to waste management, energy efficiency, worker safety, and ethical sourcing.

Outputs and outcomes in terms of current and expected benefits for customers, investors, vaccines and other stakeholders

Valneva's vaccines play a critical role in global health, with benefits extending to customers, investors, society, and other stakeholders. The Group's products enhance public health by by using vaccines for preventable diseases.

- **Protection for vulnerable populations:** Vaccination helps establish herd immunity, where a large enough portion of the population is immunized to stop the transmission of a disease, This protects individuals who cannot be vaccinated, such as newborns, the elderly, or those with compromised immune systems
- **Potential to eliminate or hinder disease impact:** Valneva has a specialist commercial capability for the distribution of its travelers' vaccines in key travel vaccine markets. Traveler vaccinations are essential for preventing the spread of diseases by protecting individuals from infections and reducing the risk of transmitting illnesses to new regions, thereby strengthening global health security.
- **Prevention of long-term health issues:** Many diseases preventable by vaccines can lead to death or serious long-term health complications, including disability and chronic conditions.
- **Control of global pandemics, endemic settings and diseases' outbreaks:** Vaccination programs help control and prevent pandemics by limiting the spread of diseases across borders.
- **Antimicrobial resistance:** certain vaccines reduce the incidence of bacterial infections, lowering the need for antibiotics.

Interest and views of stakeholders

Valneva's engagement with upstream, operational and downstream stakeholders is key to its approach to sustainability, providing assurance that actors in its value chain (from tier 1 suppliers to customers, and society at large) are aligned with its social and environmental responsibility objectives. Valneva's key stakeholders encompass a diverse group of entities and individuals involved at various stages of the Group's operations, from upstream sourcing to end-of-life product management.

Upstream stakeholders

Upstream is understood as tier 1 suppliers and service providers.

In this phase, the Group focuses on confirming that suppliers and partners meet the ethical, environmental, and quality standards essential to vaccine production. Those requirements are reflected in Valneva's Code of Conduct for Business Partners, which was communicated to targeted partners in December 2024. As of December 31, 2024, 13% of the targeted tier 1 suppliers had acknowledged the Code. Valneva will continue to follow up with its suppliers to increase adoption of the Code.

Furthermore, the Group analyzes partners' performance with regards to sustainability via the EcoVadis platform (more information in Section 3.3.3). As stated in its Code of Conduct for Business Partners, Valneva reserves the right to audit business partners.

Valneva conducts screenings of third parties involved in any agreement that are considered to be material to its business, including: tier 1 suppliers of materials used in its products, distributors of its products, contract manufacturing organizations, parties involved in conducting clinical trials, and parties who interact with healthcare professionals or government officials. These screenings are primarily designed to support Valneva's compliance with anti-corruption and anti-bribery laws and regulations (more information on business conduct policies and actions in Section 3.6.1). However, they may also provide the Group with information about the party's labor practices to the extent that there is publicly available information, for example in case of prior media coverage of the party on that topic.

Operational stakeholders

Operational stakeholders are stakeholders involved in all steps, from pre-clinical development of vaccines, to registration, manufacturing and approval:

- **Clinical trial participants** engage in regular interactions during trials. Usually, Valneva works with CROs who interact regularly with participants via different communication channels. Valneva is committed to providing trial participants with all required information, which includes the appropriate informed consents (IC), Institutional Review Board (IRB) information, local and national Ethics committees' consents, and information about the risks of participation in the trial. There is active and effective monitoring of the health and safety of trial participants during and after the trial.
- **Regulatory agencies:** Interaction between Valneva and regulatory agencies is essential for ensuring that vaccines meet safety, efficacy, and quality standards. These interactions occur at various stages, from initial development through post-market surveillance, and involve multiple channels to meet compliance requirements. Some examples include use of submission portals, pre-submission meetings, routine inspections, post-approval reporting, and public disclosures.
- **Contract Manufacturing Organizations:** the communication and interaction channels between Valneva and its CMOs are crucial for ensuring smooth collaboration, regulatory compliance, and product quality. Those are made of structured meetings, shared platforms, quality systems, on-site inspections, and routine communication channels.
- **Employees:** Valneva utilizes a comprehensive mix of communication channels with employees, from formal meetings and training sessions to digital platforms and mobile apps, to ensure continuous engagement, compliance, and alignment with organizational goals. These include one-on-one meetings with supervisors, All-Hands meetings, departmental and cross-functional meetings, and company-wide communications via email and the intranet. The Group also provides an anonymous reporting and whistleblower hotline. Valneva also engages with Local Works Councils and with an International Works Council – nominated groups of staff providing two-way communication with management – to raise any issues or concerns and ensure the well-being of the employees.

Downstream stakeholders

Downstream is understood as customers, health authorities, end-users, communities, and distributors.

Here, Valneva focuses on responsible vaccine distribution, accessibility, transparency and communication with end-users and continuous safety monitoring:

- **Distributors:** Communication channels between Valneva and its commercial distributors rely on a mix of digital platforms, regular meetings, training sessions, tracking systems, and dedicated support teams to support the safe, efficient, and compliant distribution of vaccines.
- **Customers:** Valneva's vaccines primarily serve individuals in the private market. As a result, Valneva does not typically communicate directly with individual customers due to regulatory, privacy, and logistical constraints. Instead, Valneva engages with customers indirectly through healthcare providers, pharmacies, educational campaigns, and partnerships to ensure that customers have access to vaccines, accurate information about them, and support if they experience side effects (specific pharmacovigilance channels for customers to raise concerns on side effects).
- **Medical Experts and Healthcare providers:** Valneva equips healthcare providers, via regular meetings, with up-to-date information and resources to communicate effectively with customers. This includes product brochures, posters, and digital resources that help providers educate customers on vaccine benefits, potential side effects, and schedules.
- **Governmental organizations:** Valneva often collaborates with government organizations through industry associations, which act as a collective voice representing interests of their members. These associations help facilitate communication on regulatory matters, public health initiatives, research, and policy.
- **Waste management providers:** To support compliance with environmental regulations and uphold the highest standards of safety and sustainability in waste disposal practice, Valneva commits to contracting exclusively with certified waste management providers. Those providers are having in-person meetings at the different sites with the environmental specialists and facility managers.
- **Local communities:** Valneva interacts via regular meetings with local community councils, corporate citizenship activities, and similar organizations (for example, Valneva has been a supporter of Encephalitis International since 2016).

Stakeholder engagement

The purpose of stakeholder engagement at Valneva is to foster two-way and continuous communication with all stakeholders, to align the Group's strategic objectives with their interests and expectations (see the table in Section 3.3.3). This allows the Group to identify and address key concerns, prevent or remediate impacts, improve decision-making, promote transparency in operations, and drive the Group's sustainable and responsible performance. In addition, engagement allows Valneva to adapt its policies to mitigate risks and seize opportunities in its dynamic environment, promoting a positive impact in social, environmental, and economic areas.

The results of stakeholder engagement at Valneva are directly integrated into the Group's decision-making and strategies to allow stakeholder concerns, suggestions, and expectations to be addressed. Feedback received in meetings, audits, and consultations is evaluated and translated into adjustments to internal policies, such as improved working conditions, sustainability strategies, and regulatory compliance.

Valneva has made strategic amendments to its business model and strategy, reflecting a commitment to addressing the interests and views of its stakeholders and enhancing sustainability practices. These steps are expected to modify Valneva's relationship with stakeholders, as they demonstrate the Group's proactive approach to sustainability and its responsiveness to stakeholder feedback. The table in the following section displays some strategic actions linked to specific stakeholders. In addition, the Group has implemented a range of initiatives, including:

- For own workforce:
  - **People and Organization Policy:** in 2024, Valneva drafted its People and Organization Policy which aligns Valneva's commitment to how it operates and engages with its own workforce. This policy acts as the bridge connecting the management of Valneva's people with the broader purpose of contributing to a healthier planet, stronger communities, and ethical business practices, and defines the controls and measures related to the employee-related IROs. The policy will be available on Valneva's website for external stakeholders and on the Group's intranet for employees,
  - **HR Programs and Targets definition:** during 2024 and derived from the identified employee-related IROs, the Group defined specific corporate and local initiatives to foster a supportive and inclusive workplace culture,
  - **Valneva's Corporate Environmental, Occupational Safety and Health Policy ("EOHS Policy") Revision:** in 2024, Valneva updated its existing Environmental, Health and Safety Policy to reflect industry best practices, IROs, and regulatory requirements. The policy is available on Valneva's website for external stakeholders and on the Group's intranet for employees,
  - **Accident Reporting:** in 2024, Valneva implemented a new platform for efficient and transparent accident reporting and investigation, allowing additional corporate oversight as well as best practice sharing between sites to promote early detection of potential unsafe situations,
  - **Human Rights Policy:** in 2024, Valneva drafted this new policy to confirm Valneva's commitment to human rights set forth in the Universal Declaration of Human Rights, the International Covenant on Economic, Social and Cultural Rights, and the International Labour Organization's Declaration on the Fundamental Principles and Rights at Work. The policy is available on Valneva's website for external stakeholders and on the Group's intranet for employees,
  - **Human Rights Due Diligence:** during 2024 Valneva performed a due diligence on human rights with the aim of assessing and mitigating any potential human rights-related risks. Some of the controls and measures described within the Group's Human Rights Policy were implemented as a result of that due diligence process. The process followed is described on the Company's Human Rights Position Statement, available on Valneva's website.

- For business partners (including CMOs, CROs, raw material tier 1 suppliers, and service providers):
  - **Code of Conduct for Business Partners:** published in June 2024, this code sets forth Valneva's expectation that its business partners uphold the highest standards of ethics and comply with all applicable laws and regulations. The Code is available on Valneva's website for external stakeholders and on the Group's intranet for employees and requested to be signed and acknowledged by key tier 1 suppliers and business partners,
  - **Agreement with EcoVadis**: as part of the ongoing definition of the Group's sustainable procurement strategy, Valneva entered into an agreement with EcoVadis, with the aim of actively engaging with business partners on sustainability-related matters and, at the same time, enabling risk management,
  - **Sustainability contractual obligations:** specific environmental sustainability requirements have been embedded into key contracts with organizations having the greatest impact on Valneva's environmental performance. This step towards a sustainable procurement strategy allows the Group to better align tier 1 suppliers with its sustainability goals, mitigate risks, and support long-term resilience and positive impact,
  - **Clinical Trials Policy:** the purpose of this policy is to establish the principles for conducting Clinical Trials sponsored by Valneva, supporting the highest standards of ethics, participant safety, and scientific rigor. Valneva expects to apply these principles also at contributing external parties.The policy drafting will be finalized in 2025;
- For silent stakeholders (mainly the environment):
  - **Scope 3 Emissions Calculation:** a comprehensive assessment of emissions across all 15 Scope 3 categories as outlined by the GHG Protocol has been performed during 2024 with regards to Valneva's Scope 3 emissions in 2024 (more information in Section 3.4.1). This enabled the Group to identify and understand the primary sources and impacts of these emissions more effectively,
  - **Animal Welfare Policy**: Valneva drafted this policy in 2024 with the aim of documenting Valneva's commitments to animal welfare. The policy is available on Valneva's website for external stakeholders and on the Group's intranet for employees,
  - **Decarbonization strategy:** during 2024, Valneva worked in several steps to begin to define its decarbonization strategy. This process involved a large number of functions in the organization, as well as the Executive Committee. This project has allowed the Group to start identifying its physical and transition risks, as well as climate-related opportunities. Furthermore, it will allow the Group to define a process to integrate climate criteria into the business decision-making process. The aim is for this strategy to be completed in 2025,
  - **Environmental programs and targets:** During 2024, and derived from the identified environmental-related IROs, the Group defined specific initiatives to foster environmentally-responsible decisions and promote the mitigation of negative environmental impacts;
- Investors and shareholders:
  - Valneva has proactively participated in renowned sustainability ratings and indices like S&P Global (through the Corporate Sustainability Assessment) or ISS. during 2024.

The views and interests of affected stakeholders with regards to sustainability-related impacts have been shared with Valneva's administrative, management, and supervisory bodies through quarterly meetings with the ESG Committee of the Board, regular meetings with the Audit Committee of the Board, and monthly meetings with the Executive Committee.

The ESG Director participates in Executive Committee meetings on an ad hoc basis, as required, to present any issues raised or matters escalated for the Executive Committee's review and discussion.

Sustainability Statement 3
ESRS 2 – About this Report

Material impacts, risks, and opportunities and their interaction with the strategy and business model

This table summarizes the IROs identified and related to all ESRS material topics. The policies, actions, and targets, as well as ongoing progress, related to these IROs are presented in the table below.

ESRS E1 – CLIMATE CHANGE

Material challenges identified	IRO description	Type of IRO	IRO impact on Valneva and its stakeholders	Location in value chain and or business model	Section number
Supply chain and subcontractor carbon emissions	Financial costs due to the emergence of carbon pricing policies and operational risks to Valneva's product pipeline due the challenges raised by the carbon reduction plans established	Risk (financial and operational)	1. Potential costs associated with increasing the price of services when requesting sustainable solutions. 2. The Group's growth strategy, which includes expanding the Group's product pipeline and the geographic scope for distribution of its vaccines, will increase the complexity of the Group's value chain and the steps to be taken to reduce associated carbon emissions.	Valneva, Suppliers, Distributors	3.4.1
	Climate disruptions along the supply chain	Risk (operational)	Tier 1 suppliers across different geographical locations face unique climate conditions which may cause disruptions along the supply chain. Risk should be considered in mid-term to long-term scale as climate events may be sudden or progressive. Valneva's current supply chain contains lots of steps in different countries, which multiplies the risk of route interruption or sites unavailability in case of climatic events.	Suppliers, Distributors	3.4.1
	Operational and reputational improvements resulting from working with providers offering sustainable solutions	Opportunity	Attention to the Group's Scope 3 emissions and efforts to reduce these emissions could lead to operational and reputational improvements. For example, if the Group prioritizes working with providers with better environmental records and implements a sustainable procurement strategy, it may identify providers whose products or services could lead to efficiencies and better operational performance.	Valneva, Suppliers, Distributors	3.4.1
	Distribution and supply chain redesign for cost and efficiency optimization	Opportunity	Redesigning distribution and supply chain networks and working with partners characterized by lower ESG risks, can enhance cost efficiency by optimizing logistics, transportation routes, and inventory management to minimize operational costs and improve delivery speed and reliability.	Valneva, Suppliers, Distributors	3.4.1
	Impact on the environment due to carbon emissions produced by the manufacturing and distribution of Valneva's products	Negative Impact	The Group's value chain, which includes suppliers of materials used for the manufacturing of the Group's products and distributors of the Group's finished products, produces carbon emissions.	Valneva, Suppliers, Distributors	3.4.1
Climate regulatory context	Risks due to the increase of regulatory requirements related to climate change	Risk (operational and financial)	Enhanced emissions-reporting obligations would require compiling lengthy climate disclosures and could lead to mandatory carbon pricing via a carbon tax or cap-and-trade system. Valneva may be forced to ramp up investments in energy efficient technologies beyond its current capabilities to meet regulatory and cost pressures. The additional stress on financial and human resources could substantially increase the Group's operational costs.	Valneva, Employees, Regulators, Governments	3.4.1
	Increased pressure from financial institutions	Risk (financial)	Banks involved in the Net Zero Banking Alliance (NZBA) pledge to only invest in Net-Zero aligned companies. There could be fewer potential sources of financing for Valneva if it is unable to match the climate-related expectations of financial institutions.	Valneva, Investors	3.4.1
	Increased pressure from investors	Risk (financial)	According to Morgan Stanley's 2024 report [1], sustainable funds already outperform traditional funds. For example, the biggest French PE firms (such as Eurazeo, Quilvest, Siparex, Infravia) are introducing support programs for their investees to decarbonize their activities, such as carbon footprint calculation, strategy, and Science-Based Targets initiative engagement.	Valneva, Investors	3.4.1
	Increasing demands from government bodies	Risk (financial)	This risk is already developing as in Europe, tenders are increasingly including ESG criteria. For example, the UK's National Health Service requires such engagement from its suppliers. This may reach Valneva on the markets where the Group has competition.	Valneva, Customers, Governments	3.4.1
	Rising cost of transportation	Risk (financial)	Increasing cost of petrol has an impact on transportation costs. Other mechanisms, for example Europe's SEQE (emission exchange) scheme, can have a direct impact on transportation costs (sea & air transportation).	Valneva, Suppliers, Distributors	3.4.1
	Reduction of international travel	Risk (financial)	Given Valneva's current reliance on international travel for business operations, higher costs associated with international travel driven by the low-carbon transition could potentially increase Valneva's operating cost.	Valneva	3.4.1
	Investment in energy-related solutions facilitated by current climate regulatory context	Opportunity	The current climate regulatory context gives Valneva the opportunity to access sustainable-related grants to implement energy-related solutions which might support Valneva in its emissions reduction goal.	Valneva, Governments	3.4.1

[1] *The referenced document is: Sustainable funds modestly outperform as flows slowed in the first half of 2024, Morgan Stanley, https://www.morganstanley.com/ideas/sustainable-funds-performance-first-half-2024*

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Sustainability Statement 3
ESRS 2 – About this Report

ESRS E1 – CLIMATE CHANGE

Material challenges identified	IRO description	Type of IRO	IRO impact on Valneva and its stakeholders	Location in value chain and or business model	Section number
Own carbon emissions management	Impact on the environment due to carbon emissions resulting from manufacturing and R&D activities	Negative Impact	The Group's activities, particularly its manufacturing and R&D activities, produce carbon emissions.	Valneva	3.4.1
Reliance on non-renewable energy	Risks associated with Valneva's dependence on fossil fuels	Risk (operational and financial)	Valneva is at risk of relying on fossil fuels for its operations, which not only increases its carbon footprint but also exposes the Group to financial risks associated with rising energy costs. Additionally, regulatory risks may arise as certain fossil fuel sources could be restricted or banned in the future.	Valneva	3.4.1
	Unstable prices for energy (fossil fuels & electricity)	Risk (financial)	The current market prices for energy (electricity, gas, oil) fluctuate and may result in increased costs for Valneva.	Valneva	3.4.1
Renewable energies generation and consumption	Investment in renewable energies leading to energy price stabilization and costs reduction	Opportunity	Investing in renewable energies whenever economically and operationally feasible might lead to energy price stabilization (becoming independent from external supply) and reduction of costs. This would also support Valneva in its path to decarbonizing its business operations in the long-term.	Valneva	3.4.1
	Energy independence from on-site renewables	Opportunity	Unstable energy prices—spanning electricity, gas, and oil—are increasingly common. As Europe transitions toward a higher share of renewable energy sources, the availability of fossil fuels may be reduced, resulting in rising costs for its consumers. Extreme weather events could disrupt infrastructure, production, and distribution, further exacerbating energy price volatility. Energy independence could mitigate potential business disruptions and rising operational costs.	Valneva	3.4.1
	Positive impact on the environment and local economy with the use of renewable energy	Positive impact	The consumption of energy with renewable origin may reduce the Group's CO_2 footprint (market-based approach) and promotes the development of local renewable energy grids.	Valneva, Suppliers	3.4.1

ESRS E2 – POLLUTION

Material challenges identified	IRO description	Type of IRO	IRO impact on Valneva and its stakeholders	Location in value chain and or business model	Section number
Products that are, contain, or are manufactured with SoC or SoVHC	Non-compliance with the regulations related to the use of certain substances, leading to reputational and financial costs	Risk (operational, financial and reputational)	There is a risk that the Group may not comply with regulations related to the use of these substances; non-compliance could result in suspension of the Group's operations, fines, criminal prosecutions, and/or harm to the Group's employees.	Valneva, Employees, Regulators	3.4.2
	Impact on the environment and on workers' and consumers' safety due to the use of SoC or SoVHC	Negative Impact	The use of SoC or SoVHC is highly regulated. The Group has in the past had to invest in additional safeguards in order to comply with applicable regulations and cannot exclude the possibility that in the future it may be required to make further such investments. People working with SoC or SoVHC may be exposed to high-risk working environments. The improper handling of SoC or SoVHC may lead to chemical waste disposal and released into water systems. Using SoVHC leads to hazardous waste generation.	Valneva, Employees, Regulators	3.4.2
Air pollution legal thresholds and prevention and control of emissions to air	Impact on the environment and public health due to the discharge of pollutants	Negative Impact	The discharge of pollutants to the air from Valneva's operations and across its value chain may affect air quality.	Valneva, Suppliers	3.4.2
Water pollution legal thresholds and prevention and control of emissions to water	Impact on the environment and aquatic ecosystems in case of improper treatment on wastewater	Negative Impact	Wastewater derived from Valneva's R&D and manufacturing activities need wastewater treatment; improper treatment may cause water pollution.	Valneva	3.4.2

ESRS E3 – WATER AND MARINE RESOURCES

Material challenges identified	IRO description	Type of IRO	IRO impact on Valneva and its stakeholders	Location in value chain and or business model	Section number
Use and sourcing of water or marine resources in own operations	Risk to production timelines in case of water shortages	Risk (operational)	In case of water shortages, maintaining the necessary supply of purified water for manufacturing and R&D processes could become difficult, impacting production timelines.	Valneva	3.4.3
	Impact on water availability for communities due to Valneva's and its suppliers water consumption	Negative Impact	The Group uses water in its manufacturing and R&D processes. This consumption may affect water availability at local level. Some of the Group's tier 1 suppliers consume water in their operations which may affect water availability at local level.	Valneva	3.4.3

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Sustainability Statement 3
ESRS 2 – About this Report

ESRS E4 –BIODIVERSITY AND ECOSYSTEMS

Material challenges identified	IRO description	Type of IRO	IRO impact on Valneva and its stakeholders	Location in value chain and or business model	Section number
Dependency on biosourced ingredients	Impact of climate change on quality, availability, and price of biosourced molecules (plant- & animal-based)	Risk (operational and financial)	Some molecules used during the manufacturing process are biosourced. Therefore, they are subjected to biodiversity pressure, climate change, and price variations linked to variable harvesting or change in animal population.	Valneva, Suppliers	3.4.4
	Operations require the blood of horseshoe crabs, a species which is listed as Vulnerable on the IUCN Red List, for various quality assurance tests	Negative Impact	Horseshoe crab blood products are used for pharmaceutical development and manufacturing for endotoxin testing, ensuring drug product safety. The species of horseshoe crab affected is Limulus polyphemus (East Coast of the US and the Indo-Pacific). Their blood is used to produce Limulus Amebocyte Lysate (LAL) and Tachypleus Amebocyte Lysate (TAL) respectively, both being extracted without harming the crabs, who are typically collected, a measured amount of blood extracted and released back into the wild.	Valneva, Suppliers	3.4.4

ESRS E5 – RESOURCE USE AND CIRCULAR ECONOMY

Material challenges identified	IRO description	Type of IRO	IRO impact on Valneva and its stakeholders	Location in value chain and or business model	Section number
Vaccine packaging environmental footprint	Increase in regulatory approvals and financial costs due to tightening regulations	Risk (financial and regulatory)	The Group faces financial and regulatory risks associated with tightening regulations that may require the Group to invest in replacing primary and/or secondary packaging components with more sustainable materials, as this would lead to new regulatory approval for those new materials.	Valneva, Suppliers, Regulators, Governments	3.4.5
	Reduction of financial costs with the products' eco-conception and the reduction of packaging	Opportunity	By eco-designing and/or reducing vaccines' packaging, Valneva could reduce the consumption of raw materials and reduce waste generation and the associated costs to waste management.	Valneva, Suppliers	3.4.5
	New product eco-design guidelines and regulations	Opportunity	Ecodesign guidelines can include trying to prioritize design of oral vaccines instead of syringe-injected vaccines, reducing packaging size, weight or modifying material, etc. See the 2024 European laws/objectives on reduction & reuse for packaging.	Valneva, Suppliers, Regulators, Governments	3.4.5
	Manufacturing processes redesign for cost and efficiency optimization	Opportunity	Reducing the amount of resources used will probably be the most economically-viable pathway for all scenarios. However, in the short-term, recertifying manufacturing processes is too expensive.	Valneva, Suppliers, Distributors	3.4.5
	Impact on the environment due to vaccines' packaging waste, primary packaging waste and resources depletion.	Negative Impact	Primary packaging is not recyclable and leads to biological waste which requires special waste treatment. Secondary vaccines' packaging leads to waste.	Valneva, Regulatory compliance	3.4.5
Tertiary packaging footprint	Financial risks due to packaging's regulations	Risk (financial)	The Group faces financial risks associated with tightening regulations that may require the Group to invest in replacing the shipment packaging with more sustainable materials, as this would lead to increase in costs from the supply chain (materials and services).	Valneva, Suppliers, Distributors	3.4.5
	Reduction of waste generation due to a more sustainable shipment packaging	Opportunity	When defining a Sustainable Procurement strategy Valneva can define key and strategic collaborations and projects with suppliers and service providers to look for more sustainable shipment packaging options, which would lead to the reduction of waste generation and the costs associated with waste management.	Valneva, Suppliers, Distributors	3.4.5
	Impact on the environment due to carbon emissions from packaging.	Negative Impact	Tertiary packaging or shipment packaging lead to waste.	Valneva, Suppliers, Distributors	3.4.5
External/shipment packaging environmental footprint	Impact on the environment due to carbon emissions from packaging.	Negative Impact	As part of defining its sustainable procurement strategy, Valneva could establish key partnerships with its suppliers and service providers to explore more sustainable shipping packaging options, which would help reduce waste production and the costs associated with their management.	Valneva, Suppliers, Distributors	3.4.5
Cost of raw materials	Increase in the cost of raw material, leading to additional expenses for Valneva	Risk (operational and financial)	Increase in the cost of raw material may result in additional expenses for Company's direct operations and potentially pass-through costs from the supply chain (materials and services).	Valneva, Suppliers	3.4.5
	Single-sourcing of key inputs	Risk (operational and financial)	Need a further ESG-analysis of Valneva's critical tier 1 suppliers, to understand how this risk may or may not affect the Group. This risk may affect Valneva on the shorter term (unpredictable).	Valneva, Suppliers, Distributors	3.4.5
	Availability and rising cost of biosourced molecules	Risk (operational and financial)	Depending on the scenario, animal products may become more expensive (as they are usually more carbon-intensive) or plant products may become more costly (if climate change increases). Specific research needs to be conducted to understand how climate change can impact the list of biosourced molecules used by Valneva.	Valneva, Suppliers	3.4.5

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Sustainability Statement 3
ESRS 2 – About this Report

ESRS S1 – OWN WORKFORCE

Material challenges identified	IRO description	Type of IRO	IRO impact on Valneva and its stakeholders	Location in value chain and or business model	Section number
Workplace accident prevention	Impact on physical and mental health of Valneva's employees in case of unsafe working conditions, leading to accidents	Negative Impact	Failure to provide the necessary health and safety measures might lead to employees' or subcontractors' accidents.	Valneva, Employees, Suppliers, Subcontractors	3.5.1
	Risks due to health and safety issues	Risk (operational and financial)	Accidents, absenteeism, and occupational health issues pose a risk to company by potentially increasing operational expenses. This includes higher insurance premiums, costs associated with temporary workers, and payouts for insurance claims and compensations.	Valneva, Employees, Subcontractors	3.5.1
Gender Pay Gap	Reputational and financial risks due to unequal pay for equal work leading to the reduction of Valneva's attraction and employees' satisfaction and the increase of turnover	Risk (operational, financial, legal and reputational)	Closing the gap has a financial impact, losing key women force (increased turnover) has a financial impact. It affects employee engagement and satisfaction (loss of productivity) and reduces the attraction of new talents. Violating equal pay regulations may lead to fines.	Valneva, Employees, Subcontractors	3.5.1
	Failing to ensure equal pay for equal work leading to gender inequality amongst employee	Negative Impact	A significant disparity in pay between men and women for comparable work, could reflect deeper structural inequalities within the organization, leading to gender discrimination.	Valneva, Employees, Subcontractors	3.5.1
Engagement with own workforce and representatives	Deterioration of employees and management relations	Risk (operational and financial)	Failure to engage proactively with its workforce could hinder Valneva's ability to effectively manage, develop, and retain its workforce.	Valneva, Employees, Subcontractors	3.5.1
	Increase employees' commitment and maximize their time in the Group by building trust between management and employees.	Opportunity	Proactive and active engagement with workers' councils demonstrates a commitment to transparent communication and collaborative decision-making, which builds trust between management and employees. This can lead to higher employee satisfaction levels and employees' commitment thus maximize their time working at Valneva, by reducing turnover rates.	Valneva, Employees, Subcontractors	3.5.1
Employee level of engagement/ satisfaction	Potential increase of turnover due to employees' disengagement	Risk (operational and financial)	Low level of employee engagement and/or satisfaction with the Group strategy and decisions may lead to an increase on Valneva's turnover and the loss of key and strategic positions within the Group. In an industry where employees are high-skilled and recruitment is challenging, this may lead to cost increase and operational impact (teams' re-structuring, etc.).	Valneva, Employees, Subcontractors	3.5.1
	Increase in business growth and efficiency	Opportunity	Investing in programs to increase the employees' satisfaction level may reduce employee turnover, increase in efficiency and support business growth by reducing recruitment costs, substitutions, temporary workers, consultants, etc.	Valneva, Employees, Subcontractors	3.5.1
Recruitment, training and promotion	Turnover and loss of key and strategic positions	Risk (operational and financial)	Lack of a good training and competences overview (global & individual) and programs may lead to stagnant career paths and the decrease of employee satisfaction and increase of employee turnover.	Valneva, Employees	3.5.1
	Impact on employees' commitment due to the possibility offered to them to be trained, boosting their employability	Positive impact	Company positively impacts its employees by enabling them to continuously learn, acquire new skills and expand their expertise. This enhances their professional growth and boosts their employability.	Valneva, Employees	3.5.1

ESRS S3 – AFFECTED COMMUNITIES

Material challenges identified	IRO description	Type of IRO	IRO impact on Valneva and its stakeholders	Location in value chain and or business model	Section number
Communities affected by Valneva's operations	Increase communities' awareness of vaccines to become a key player from business, social, and environmental perspectives	Opportunity	Opportunity to increase proactively the interactions with local communities to increase the level of awareness on the value of the products the Group manufactures with the aim of becoming a key player of the local communities where Valneva operates not only from a business perspective, but from a social and environmental perspective as well.	Valneva, Communities	3.5.2

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Sustainability Statement
ESRS 2 – About this Report
3

ESRS S4 – CONSUMERS AND END-USERS

Material challenges identified	IRO description	Type of IRO	IRO impact on Valneva and its stakeholders	Location in value chain and or business model	Section number
Training and awareness of consumers	Risk of the spread of diseases and reductions of sales due to misinformation on vaccines	Risk (financial)	Vaccine hesitancy derived from the widespread misinformation around the safety of vaccines is a big threat to Global Health. It can lead to low rates of travelers interested in getting vaccinated and thus a decrease in the Group's potential sales and increase in diseases' spread during outbreaks.	Valneva, Communities	3.5.3
Training and awareness of providers	Risk of misinformation and insufficient awareness leading to the reduction of Valneva's sales and health's problems	Risk (financial)	It is essential that healthcare providers in countries where the vaccines are available are aware of Valneva´s products and how they may be used. Failure to create sufficient awareness in a given market could significantly impact the sales in that market.	Valneva, Customers, Communities	3.5.3
	Increase vaccines' knowledge leading to the reduction of disease transmissions and increase of sales	Opportunity	Increase vaccines' knowledge leading to the reduction of disease spread transmissions and potential increase of sales. The more informed healthcare providers are regarding diseases and the vaccines that can prevent them, the greater the potential sales will be. Additionally, this will reduce the likelihood of disease spread transmission and its associated consequences, particularly among countries with high traveler traffic.	Valneva, Customers, Communities, Scientific community	3.5.3
Inclusion of people at risk of vulnerability	Include diverse people in clinical trial and expand geographic scope of trials leading to reputational and financial opportunities	Opportunity	Possible opportunities associated with low- and middle-income countries, targeting diversity in clinical trial participants and expanding geographic scope of trials.	Valneva, Regulators, Customers, Clinical trial participants	3.5.3
	Respect of the rights and privacy of the diverse people included in clinical trials	Positive impact	Making clinical trial data available to the research community advances science and medicine, builds knowledge, improves public health, and earns trust. When sharing its data, Valneva takes into account the rights and privacy of the individuals who participate in the clinical trials.	Valneva, Regulators, Customers, Clinical trial participants	3.5.3
Consumers and end-users in products' design and implementation	Operational opportunity due to the involvement of medical experts	Opportunity	Opportunity to proactively involve medical experts on potential changes and improvements on Valneva´s products.	Valneva, Customers	3.5.3
Maintaining pharmacovigilance	Impact on public health, by ensuring the safe use of vaccines	Positive impact	Pharmacovigilance contributes positively to broader public health objectives. By continuously monitoring vaccines post-market, companies provide regulators and healthcare providers with data to update safety profiles, ensuring the safe use of vaccines. This helps minimize risks, leading to safer immunization programs, higher vaccination uptake, and better control of diseases.	Valneva, Regulators, Customers, Communities, Scientific community	3.5.3

ESRS G1 – BUSINESS CONDUCT

Material challenges identified	IRO description	Type of IRO	IRO impact on Valneva and its stakeholders	Location in value chain and or business model	Section number
Corporate culture and business conduct policies	Risk of employees' disengagement due to a weak corporate culture	Risk (operational and regulatory)	A robust corporate culture contributes to improved employee retention, while clear business conduct policies bolster trust and reputation among customers, healthcare providers, and regulatory bodies.	• Valneva	• 3.6.1
	Increase employees' commitment and Valneva's reputation with a strong corporate culture and business conduct policies	Opportunity	Having a strong corporate culture allows higher employee retention rates, and business conduct policies allows companies to enhance trust and reputation within customers, healthcare providers and regulators.	Valneva, Employees, Regulators	• 3.6.1
	Impact on customers' health due to strong ethical values, prioritizing safety at all stages and processes	Positive impact	Having a strong corporate culture and business conduct policies allows companies to ensure regulatory compliance which is key at an industry where safety and quality are paramount. Having strong ethical values ensures as well that customers' safety is always prioritized at all company stages, processes, and functions.	Valneva, Employees, Customers	• 3.6.1
Lobbying	Risks due to lobbying practices	Risk (legal and reputational)	While lobbying is a legitimate tool for influencing public policy, it carries risks, particularly around reputation, compliance, and ethics. Companies and organizations need to ensure that their lobbying practices are transparent, comply with local and EU regulations, and avoid conflicts of interest to maintain public trust and avoid legal or financial penalties.	Valneva, Regulators, Governments	• 3.6.1
Respect of animal welfare	Impact on animals due to R&D activities and vaccines' tests	Negative Impact	The welfare of animals used in research and development, production, and testing of vaccines may be jeopardized.	Valneva, Regulators	• 3.6.1
Suppliers and quality issues	Risk of non-compliance leading to business difficulties and reductions of sales	Risk (regulatory and financial)	Tier 1 suppliers providing materials and services for the Group must comply with very stringent and complex regulations such as Good Manufacturing Practices (GMP) and Good Clinical Practices (GCP) which is essential for ensuring the safety, efficacy, and reliability of vaccines. Lack of compliance could have a significant impact on Valneva´s operations and sales.	• Valneva, Suppliers	• 3.6.1
	Ensuring suppliers to adhere to GMP and GCP, leading to cost reduction	Opportunity	Working on further systems and processes to ensure tier 1 suppliers adhere to GMP and GCP practices may allow Valneva to reduce costs derived from quality issues during R&D process.	• Valneva, Suppliers	• 3.6.1

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Sustainability Statement 3
ESRS 2 – About this Report

INDUSTRY SPECIFIC

Material challenges identified	IRO description	Type of IRO	IRO impact on Valneva and its stakeholders	Location in value chain and or business model	Section number
Green Chemistry	Regulatory risks due to tightening regulations in relation to vaccines' components leading to increasing products' regulatory approvals	Risk (financial and regulatory)	The Group faces financial and regulatory risks associated with tightening regulations that may require the Group to invest in replacing vaccines' components by "greener" options, as this would lead to regulatory approvals and changes to the Group's product portfolio.	Valneva, Regulators, Investors	3.4.2
	Green chemistry allowing production process (re-)engineering	Opportunity	Some production processes could be (re-)engineered using the principles of green chemistry. This could reduce the overall environmental impact of Valneva's products and be a differentiation lever when there is competition.	Valneva	3.4.2
R&D investment	Investment in R&D leading to strengthening of Valneva's reputation	Opportunity	By strategically investing in R&D, Valneva can significantly contribute to the advancement of global health with products that address unmet medical needs and neglected diseases. This will strengthen Valneva's reputation and may qualify Valneva for additional funding, including from investors, organizations (*e.g.*, CEPI), and governments.	Valneva, Governments, Investors, Communities, Scientific community	3.5.3
	Global health improvements thanks to R&D investments	Positive impact	The level of R&D investment in pharmaceutical companies is a key driver of global health improvements. It fosters the development of new treatments and cures, improves public health outcomes, enhances accessibility and affordability of medicines, and promotes health equity.	Valneva, Communities, Scientific community	3.5.3
Vaccine equity and universal access incl pricing	Support in vaccines' universal access, leading to the growth of Valneva's market and new financial partnerships	Opportunity	By supporting universal access, Valneva can reach underserved or previously untapped markets, including low- and middle-income countries, significantly increasing its customer base. This could also open doors for partnerships with governments, NGOs, and global health organizations, which can provide funding, subsidies, and logistical support, reducing financial risks and supporting vaccine distribution.	Valneva, Governments, Communities	3.5.3
	Impact on people by providing access to vaccines for everyone	Positive impact	Having the access and pricing strategy in place allows customers in LMICs and endemic countries to have access to Valneva's vaccines.	Valneva, Customers	3.5.3
Future pandemic preparedness	Risks due to the prioritization of certain vaccines in pandemic situations	Risk (operational)	In pandemic situations, the government may compel Valneva to prioritize vaccine production, which could lead to a reduction or halt in its other production and development activities.	Valneva, Governments, Communities	3.5.3
	Opportunity from selling vaccines combating pandemics	Opportunity	Within a medium-term horizon of 2-5 years, this could offer the Group a reputational and financial opportunity to be recognized as a key entity in combating pandemics and mosquito-borne disease outbreaks, which may have financial implications.	Valneva, Communities	3.5.3
	Investment against pandemics and mosquito-borne diseases, leading to financial opportunities	Opportunity	Reputational and financial opportunity for Valneva to be seen as a key player against pandemics and outbreaks derived from mosquito-borne diseases which could have a financial impact.	Valneva, Investors, Communities	3.5.3
	Spread of vector-borne diseases to new regions	Opportunity	Rising temperatures are linked to new cases of vector-borne diseases and their apparition in new regions of the world. If average temperature continues rising, then vector-borne diseases may develop.	Valneva, Communities	3.5.3
	Impact on global health by responding to future pandemics thanks to Valneva's activities	Positive impact	Having a strong corporate culture and business conduct policies allows companies to ensure regulatory compliance which is key at an industry where safety and quality are paramount. The nature of the business (vaccines manufacturing and commercialization) allows Valneva to respond to future pandemics or outbreaks.	Valneva, Suppliers, Distributors, Governments, Communities	3.5.3
Antimicrobial resistance	Development of new partnerships to face disease resistance can lead to reputational and financial opportunities	Opportunity	As resistance increasingly poses a challenge, new prospects for funding and partnerships may emerge.	Valneva, Communities	3.5.3
	Impact on global health, as vaccines combat antibiotic resistance	Positive impact	Some vaccines play a pivotal role in combating antibiotic resistance by preventing infections, which can reduce antibiotic use and limit the spread of resistant bacteria.	Valneva, Communities	3.5.3
Transparency of clinical trial data	Impact on global medicine knowledge and public health with the share of clinical trial data	Positive impact	When sharing its data, Valneva fully respect the rights and privacy of the individuals who participate in the clinical trials.	Valneva, Customers, Regulators, Clinical trial participants, Scientific community	3.5.3

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To the best of Valneva's knowledge, no significant financial impacts from material IROs are expected to lead to substantial adjustments in the carrying value of our assets and liabilities during the upcoming annual reporting period. Valneva is currently working on defining the necessary internal process to facilitate the quantification of the current financial effects of material IROs.

This reporting period marks the first time Valneva has conducted a DMA. As such, all identified material IROs described in the table above are new and have not been previously reported.

Material impacts

From the preceding list of IROs identified in Valneva's double materiality assessment, several material impacts affect its stakeholders. The characteristics of those impacts are detailed in the following table, including a description of the time-horizon of those impacts and the location in the value chain or business model.

Material impacts identified	Positive or Negative	Actual or potential?	Description	Impact on people or environment	Time horizon
ESRS – E1					
Own carbon emissions management	Negative	Actual	The Group's activities, particularly its manufacturing and R&D activities, produce carbon emissions.	These emissions affect the Group's environmental footprint and contribute to climate change.	Short-term
Supply chain and subcontractor carbon emissions	Negative	Actual	The Group's value chain, which includes suppliers of materials used for the manufacturing of the Group's products and distributors of the Group's finished products, produces carbon emissions.	Carbon emissions from supply chains and subcontractors contribute to the overall carbon footprint, impacting climate change and necessitating targeted reduction strategies.	Short-term
Renewable energies generation and consumption	Positive	Actual	The consumption of energy with renewable origin may reduce the Group's CO_2 footprint (market-based approach) and promotes the development of local renewable energy grids.	It considerably reduces Valneva's CO_2 footprint (market-based approach) and promotes the development of local renewable energy grids.	Short-term
ESRS – E2					
Air pollution legal thresholds and prevention and control of emissions to air	Negative	Actual	The discharge of pollutants to the air from the Group's operations and across its value chain may affect air quality.	Exceeding air pollution legal thresholds and inadequate control of emissions can significantly harm air quality, public health, and the environment.	Short-term
Water pollution legal thresholds and prevention and control of emissions to water	Negative	Actual	Wastewater derived from Valneva's manufacturing activities needs wastewater treatment; improper treatment may cause water pollution.	Breaching water pollution legal thresholds and insufficient management of emissions to water can lead to detrimental effects on aquatic ecosystems, water quality, and human health.	Short-term
Products that are, contain, or are manufactured with SoC or SoVHC	Negative	Actual	People working with SoC or SoVHC may be exposed to high-risk working environments. The improper handling of SoC or SoVHC may lead to chemical waste disposal and released into water systems. Using SoVHC leads to hazardous waste generation.	These substances can impact consumers' safety and damage the environment.	Short-term
ESRS – E3					
Use and sourcing of water or marine resources in own operations	Negative	Actual	The Group uses water in its manufacturing and R&D processes. This consumption may affect water availability at local level.	The management of water or marine resources affects local ecosystems, water availability for communities, and the overall health of marine environments.	Short-term

Material impacts identified	Positive or Negative	Actual or potential?	Description	Impact on people or environment	Time horizon
ESRS – E4					
Dependency on biosourced ingredients	Negative	Actual	Horseshoe Crabs blood products are used for pharmaceutical development and manufacturing for endotoxin testing, ensuring drug product safety. The species of Horseshoe Crab affected is Limulus polyphemus (East Coast of the US and the Indo-Pacific). Their blood is used to produce Limulus Amebocyte Lysate (LAL) and Tachypleus Amebocyte Lysate (TAL) respectively, both being extracted without harming the crabs, who are typically collected, a measured amount of blood extracted and released back into the wild.	The use of products based on horseshoe crab blood increase the risks for an endangered species.	Medium-term
ESRS – E5					
Vaccine packaging environmental footprint	Negative	Actual	Primary packaging is not recyclable and leads to biological waste which requires special waste treatment. Secondary vaccines' packaging leads to waste.	The environmental footprint of vaccine packaging and tertiary packaging can result in resource depletion and waste generation, underscoring the importance of sustainable packaging practices in the pharmaceutical industry.	Short-term
External/shipment packaging environmental footprint	Negative	Actual	Tertiary packaging or shipment packaging lead to waste.		Short-term
ESRS – S1					
Workplace accident prevention	Negative	Actual	Failure to provide the necessary health and safety measures might lead to accidents involving employees or subcontractors.	Workplace accident prevention directly enhances workers' safety, health, and overall well-being, fostering a secure and productive environment.	Short-term
Recruitment, training and promotion	Positive	Actual	The Group positively impacts its employees by enabling them to continuously learn, acquire new skills, and expand their expertise. This enhances their professional growth and boosts their employability.	These commitments result in fair employment opportunities and impact the professional growth and development potential of talented individuals.	Long-term
Inclusion of people at risk of vulnerability	Positive	Potential	Making clinical trial data available to the research community advances science and medicine, builds knowledge, improves public health, and earns trust. When sharing its data, Valneva fully respects the rights and privacy of the individuals who participate in its clinical trials.	Regulatory requirements to involve the necessary groups of people at the different stages of vaccines' development already exist.	Short-term

Material impacts identified	Positive or Negative	Actual or potential?	Description	Impact on people or environment	Time horizon
			ESRS – S4		
Maintaining pharmacovigilance	Positive	Actual	Pharmacovigilance contributes positively to broader public health objectives. By continuously monitoring vaccines post-market, companies provide regulators and healthcare providers with data to update safety profiles, ensuring the safe use of vaccines. This helps minimize risks, leading to safer immunization programs, higher vaccination uptake, and better control of diseases.	Valneva's pharmacovigilance practices ensure ongoing monitoring of vaccine safety, contributing to customers trust and well-being.	Short-term
			ESRS – G1		
Corporate culture and business conduct policies	Positive	Actual	Having a strong corporate culture and business conduct policies allows companies to ensure regulatory compliance which is key in an industry where safety and quality are paramount.	A robust corporate culture contributes to higher employee retention rates, while business conduct policies help companies build trust and enhance their reputation among customers, healthcare providers, and regulators. Additionally, these policies ensure regulatory compliance. Upholding strong ethical values also guarantees that customers safety is always prioritized across all stages, processes, and functions within the Group.	Short-term
Respect for animal welfare	Negative	Actual	The welfare of animals used in R&D, production, and testing of vaccines may be jeopardized.	Animal research plays a crucial role in Valneva's mission to develop and deliver safe and effective vaccines. Certain biological processes, particularly in the vaccine and immune system areas, cannot yet be replicated without the use of living organisms. Animal testing remains essential to confirm the safety and efficacy of the vaccines, as required by regulatory authorities.	Short-term

Material impacts identified	Positive or Negative	Actual or potential?	Description	Impact on people or environment	Time horizon
			ESRS – I/S		
Global health improvements thanks to R&D investments	Positive	Actual	The level of R&D investment in pharmaceutical companies is a key driver of global health improvements. It fosters the development of new prophylactic improves public health outcomes, enhances accessibility and affordability of medicines, and promotes health equity.	Valneva's products address unmet medical needs and neglected diseases.	Short-term
Support in vaccines' universal access, leading to the growth of Valneva's market and new financial partnerships	Positive	Potential	Having access and pricing strategy in place allows customers in LMICs and endemic countries to have access to Valneva's vaccines.	Universal and affordable access strategies improve public health, reduce disease burden, and promote social equity.	Short-term
Investment against pandemics and mosquito-borne diseases, leading to financial opportunities	Positive	Potential	The nature of Valneva's business (vaccines manufacturing and commercialization) allows it to respond to future pandemics or outbreaks.	Valneva has all competences in-house for the rapid development of vaccines in outbreak situations. Chikungunya is already an outbreak disease and is considered to have endemic or pandemic potential.	Short-term
Antimicrobial resistance: spread of vector-borne diseases to new regions	Positive	Potential	Vaccines play a pivotal role in combating antibiotic resistance by preventing infections, which reduces antibiotic use and limits the spread of resistant bacteria.	Some of the products listed on Valneva's portfolio combat antimicrobial resistance *e.g.* Shigella, cholera, etc.	Short-term
Transparency of clinical trial data: impact on global medicine knowledge and public health with the share of clinical trial data	Positive	Potential	When sharing its data, Valneva fully respects the rights and privacy of the individuals who participate in its clinical trials.	Making clinical trial data available to the research community advances science and medicine, builds knowledge, improves public health, and earns trust.	Short-term

The following table discloses the impacts, risks and opportunities that are covered by ESRS Disclosure Requirements as well as those covered by additional Industry Specific (I/S) disclosures,

Environment	Social	Governance
E1-1 – Transition plan for climate change mitigation	S1-2 – Processes for engaging with own workers and workers' representatives about impacts	G1-1– Corporate culture and business conduct policies and corporate culture
E1-3 – Actions and resources in relation to climate change policies	S1-8 – Collective bargaining coverage and social dialogue	G1-2 – Management of relationships with suppliers
E1-4 – Targets related to climate change mitigation and adaptation	S1-13 – Training and skills development metrics	G1-5 – Political influence and lobbying activities
E1-5 – Energy consumption and mix	S1-14 – Health and safety metrics	
E1-6 – Gross Scopes 1, 2, 3 and Total GHG emissions	S1-16 – Pay gap between women and men	
E2-4 – Pollution of air, water and soil	S3 Affected communities	
E2-5 – Substances of Concern and Substances of Very High Concern	S4 Consumers and End Users	
E3-4 – Water consumption	I/S Antimicrobial resistance	
E4-2 – Policies related to biodiversity and ecosystems	I/S Vaccine equity and universal access incl pricing	
E5-5 – Resource outflows	I/S Future pandemic preparedness	
I/S Green Chemistry	I/S Transparency of clinical trial data	
	I/S R&D investment	

Valneva's material impacts are intrinsically connected to its strategy and business model. The connection with Valneva's ESG strategy is explained below.

Preserving the Planet

- Valneva acknowledges that CO_2 emissions are an inherent aspect of its industrial activities. The Group's strategy to address this includes implementing energy-efficient practices and investing in cleaner technologies. These efforts are in line with Valneva's business model, which integrates environmental responsibility into its operational framework
- Valneva's impacts on water and air pollution, including through the use of SoC or SoVHC in its products and manufacturing processes arises from the necessity of employing materials that have the potential to become pollutants during production and throughout the value chain.
- The Group's impact on water resources is due to operational needs for, R&D, manufacturing and the production of supplies.
- The negative impact of Valneva on horseshoe crab populations originates from the operational need for this species for various quality assurance tests.
- Valneva's approach to minimizing the environmental footprint of its vaccine packaging, including tertiary packaging, is a reflection of its strategic commitment to sustainability. By eco-designing and/or reducing vaccines' packaging, Valneva aims to reduce the consumption of raw materials, reduce waste generation and the associated costs of waste management. In addition, when defining a Sustainable Procurement strategy Valneva can define key and strategic collaborations and projects with suppliers and service providers to look for more sustainable shipment packaging options, which would lead to the reduction of waste generation and the costs associated with waste management.
- The Group's impact on animal welfare is related to the need for animal testing to confirm the safety and efficacy of its vaccines, as required by regulatory authorities.

Reaching People

- The positive and negative impacts on the Group's workforce are directly linked to its vaccine manufacturing processes, which are governed by stringent safety and quality standards, including adherence to Good Manufacturing Practice (GMP) certifications and Environmental Health and Safety (EHS) policies. These standards are integral to the Valneva's operational strategy and ensure the safety and efficacy of its products.

Protecting Lives

- As its activity generates data from clinical trials, Valneva is committed to making this trial data accessible to the research community, leading to a positive impact on society. This initiative not only advances science and medicine but also enhances knowledge, improves public health, and fosters trust.This transparency has a significant impact on the credibility of Valneva's research and the acceptance of its vaccine products in the market.
- Valneva chooses to incorporates in its strategy a robust pharmacovigilance system to monitor the safety of its vaccines throughout their lifecycle. By continuously monitoring vaccines post-market, companies provide regulators and healthcare providers with data to update safety profiles, ensuring the safe use of vaccines.
- The positive impact resulting from the assurance of high-quality products is a cornerstone of Valneva's business strategy and model. The Group's commitment to quality is evident in its rigorous product development lifecycle, which includes extensive testing and validation to meet international standards. This dedication to quality not only fulfills regulatory requirements but also reinforces the Group's reputation for excellence in vaccine innovation, directly influencing its strategic positioning in the market.
- Valneva's commitment to vaccine equity and universal access is a key aspect of its strategy and business model. The Group endeavors to make its vaccines available at fair prices, contributing to global health initiatives and ensuring that all individuals, regardless of socioeconomic status, have access to life-saving immunizations.
- Valneva's strategic planning includes measures for future pandemic preparedness, recognizing the potential impacts of viruses on people and on its business model. The nature of Valneva's business (vaccines manufacturing and commercialization) allows the Group to respond to future pandemics or outbreaks. The Group's investment in research and infrastructure aims to ensure rapid response capabilities and resilience in the face of emerging health threats.
- Valneva's prophylactic vaccines that are targeting bacterial pathogens and aiming to prevent the diseases they cause will avoid the use of antibiotics and hence contribute to fight against AMR, and to the solution of the ongoing AMR crisis.

Effects of material IROs

The implications of risks and opportunities on Valneva's business model, value chain, strategy, and decision-making are explicitly delineated in the risks and opportunities description provided in Section 3.3.3. Regarding the impacts outlined in Section 3.3.3 they may necessitate increased investments and expenditures aimed at mitigating these effects, as evidenced by the policies, actions, and targets detailed in the subsequent Sections of this Sustainability Report.

Resilience of Valneva's strategy and business model regarding IROs

The main risks for Valneva's resilience include potential reduction of international travel driven by the low-carbon transition, lack of awareness and misinformation about vaccines, potential disruptions and increase of costs in the supply chain, energy prices and availability, potential regulations affecting vaccines packaging, and difficulties in attracting and retaining skilled talent. To address those IROs, the Group has integrated an analysis of all material risks into its enterprise risk management (ERM) tool. The results of the bi-annual ERM report, which currently does not assess opportunities, were presented to the Audit Committee in December of 2024.

3.3.4 Materiality assessment process

This section addresses the process of identifying and assessing material IROs. It includes a description of methodologies, assumptions, and decision-making processes used, as well as how these processes are integrated into overall risk management. Specific details are given about the processes relating to environmental and governance IROs. Additionally, this section provides information on the specific disclosure requirements included in this Sustainability Statement, detailing which topics are deemed material or not, and which information derives from other EU legislation.

Description of the processes to identify and assess material IROs

In January 2024, Valneva initiated a double-materiality assessment (DMA). This procedure encompasses a series of engagements and analytical processes designed to discern and rank the environmental, social, and governance (ESG) issues that present the most substantial IROs for Valneva. Moreover, it assesses the areas where Valneva has or could generate an impact on ecological, societal, and governance spheres. The assessment was performed on a gross basis (pre-mitigation measures).

The outcomes of this assessment are instrumental in shaping strategic corporate decisions, as they aid in the prioritization of IROs relating to ESG topics. Additionally, the evaluation serves as a foundation for Valneva's non-financial disclosures, aligning with the requirements of the CSRD framework.

Given that this constitutes Valneva's first DMA, the procedure executed to ascertain material IROs diverges from methodologies employed in preceding years. Certain risks, including employee well-being and anti-corruption, have been integral to Valneva's risk management framework for an extended period. The Group is currently disclosing them together with the newly identified material IROs ascertained through the DMA for the current reporting cycle.

Process to identify ESG topics

To systematically identify, evaluate, prioritize, and oversee material IROs within the scope of the double-materiality analysis, Valneva has established the following methodological approach.

The first step of identifying and assessing material IROs included a comprehensive review of the 37 ESG sub-topics outlined in the CSRD ESRS 1 General Requirements. That list was complemented with the review of the following list of sector-related standards:

- Organization for Economic Cooperation and Development (OECD) Pharmaceutical Innovation and Access to Medicines;
- Sustainability Accounting Standards Board (SASB) Sustainability standard for Biotechnology & Pharmaceuticals;
- Dow Jones Sustainability Index CSA criteria for the Pharmaceutical Industry;
- topics defined as "material" by Valneva's competitors and peers have been also considered, if those were not part of any of the standards mentioned above.

This evaluative process resulted in the compilation of an inventory comprising 99 ESG matters for subsequent appraisal, categorization on IROs, quantification, and analysis. This inventory includes 53 environmental, 30 labor and social, and 16 governance-related matters. This inventory of matters was shared with internal and external stakeholders with an aim to identify any missing ESG relevant matter and add it to the list, as well as consulting them on all topics for further analysis and categorization.

Process to identify IROs

The process of pinpointing IROs associated to each matter drew upon prior impact evaluations and various resources described in Section 3.3.3. Most of the environmental impacts were detected by Valneva's environmental specialists at the R&D and Manufacturing facilities. The Group constructed a foundational mapping of environmental IROs. This mapping was substantiated by a selection of publications addressing the ESG IROs inherent to pharmaceutical companies[1]. External and further internal stakeholders were consulted to classify and quantify those impacts.

By interviewing different functions within the Group, Valneva constructed a first mapping of social and governance IROs which was then shared with internal and external stakeholders for consultation, classification, and quantification of those.

Valneva actively engaged with a diverse set of internal and external stakeholders:

- Internal Stakeholders: These included Executive Committee members, manufacturing site representatives, and regulatory affairs professionals. In total, 15 internal functions and Valneva's entire Executive Committee participated in the assessment;
- External Stakeholders: Valneva consulted commercial partners, suppliers, health organizations, and analyzed industry peers. Despite limited collaboration from certain external stakeholders, Valneva made reasonable efforts to gather insights.

The Commercial team engaged with various external partners, who predominantly expressed reluctance or unpreparedness to engage in sustainability-related dialogues. The Procurement team's outreach to suppliers yielded comparable responses. All feedback shared during the meetings held with those commercial partners and tier 1 suppliers was incorporated into the assessment. Vaccines Europe, a specialized group within the European Federation of Pharmaceutical Industries and Associations (EFPIA), agreed to participate in Valneva's DMA process.

[1] *https://www.pwc.de/en/sustainability/sustainability-in-the-pharmaceuticals-and-life-sciences-industry.html*
https://www.cornerstone-group.com/2024/04/12/green-pharma-how-the-pharmaceutical-industry-is-embracing-sustainability/#:~:text=Due%20to%20its%20reliance%20on,especially%20in%20water%2Dscarce%20regions.
https://www.integritynext.com/industries/pharmaceuticals-health-care
https://www.adaptideations.com/addressing-sustainability-challenges-in-the-pharmaceutical-supply-chain

In the course of conducting the double-materiality analysis, Valneva has considered the entirety of its activities, with a specific focus on Valneva's value chain broken down into its primary components: upstream processes, R&D, manufacturing, clinical trials, business travel, packaging, marketing, downstream operations, and product utilization. The prioritization of IROs described below thus incorporated an assessment of the maximal potential impacts arising from Valneva's value chain activities. Aside from the IROs linked to pandemic preparedness, there are no specific geographies that demonstrate a heightened risk compared to others.
Valneva's core elements of due diligence has also informed the identification of material IROs, please see Section 3.3.2 for more information.

By analyzing the inputs, processes, and outputs of each primary activity of its value chain, Valneva has been able to separate impacts arising from upstream and downstream value chain and own operations.

Upstream: Valneva has leveraged its understanding of upstream stakeholders (see Section SBM-2 for more information) and the findings from the EcoVadis study (see Section SBM-1 for more information) to identify the most material topics (more information in Section 3.3.3),

R&D and Manufacturing: Valneva assessed the impacts derived from each of its R&D and manufacturing sites' activities as well as those impacts derived from business activities performed via Contract Manufacturing Organizations (CMOs) and Contract Research Organizations (CROs) have been considered. Valneva mapped all key processes which take place at each site from raw materials entering the sites until product is finalized and ready for commercialization. This included analyzing silent stakeholders. Nature was recognized as a silent stakeholder due to Valneva's reliance on natural-origin ingredients, such as horseshoe crab derivatives. Valneva has also integrated animal welfare considerations into its sustainability strategy and within its material IROs. Valneva conducted the analysis internally, involving experienced employees and consulting peer-reviewed academic studies

Downstream: Valneva has focused on the use and disposal of products, specifically the administration of vaccines and the management of packaging waste. Freight and wholesaler activities were included in the assessment as well. Valneva has also assessed the safety and environmental impact of vaccine ingredients, noting their negligible effect due to minimal quantities used, which are metabolized or excreted, primarily via urine via the revision of multiple studies and publications. Scientific, peer-reviewed papers were used to assess the actual / potential impacts, especially regarding the safety and elimination of vaccines ingredients.

Valneva has identified and incorporated feedback from key stakeholders to inform its materiality assessment process for some topics in particular:

- Employees: Input from 15 functions (Investor Relations, Supply Chain, Business Development, Compliance, Governmental Affairs, Manufacturing, Legal, Market Access, Quality Management, Regulatory Affairs, Technical Development and Operations) as well as all members of the Executive Committee via specific internally designed questionnaires which included the 99 ESG-matters and its categorization as IROs;
- Investors: The Chief Financial Officer and the Investor Relations function were engaged via specific internally designed questionnaires which included the 99 ESG-matters and its categorization as IROs. Sustainable investors' expectations were integrated passively into the DMA, based on the current questionnaires and requests that the Company is receiving;
- Distributors and Business Partners: The Supply Chain function was engaged via specific internally designed questionnaires which included the 99 ESG-matters and its categorization as IROs. External supply chain partners were interviewed online. Attempts to engage with several external supply chain partners resulted in very limited willingness to participate;
- Suppliers: The Supply Chain function was engaged via specific internally designed questionnaires which included the 99 ESG-matters and its categorization as IROs. Attempts to engage met with limited willingness to participate in sustainability discussions;
- Medical Experts and Patients: Represented by Vaccines Europe (part of EFPIA, actively participated via online interviews). Valneva's Chief Medical Officer, and Quality department were engaged on the DMA via specific internally designed questionnaires which included the 99 ESG-matters and its categorization as IROs;
- Clinical Trial Participants and Ethic Boards: Represented by Valneva's Chief Medical Officer who was engaged via specific internally designed questionnaires which included the 99 ESG-matters and its categorization as IROs;
- Authorities: Valneva's Regulatory Affairs and Governmental Affairs functions were engaged on the DMA via specific internally designed questionnaires which included the 99 ESG-matters and its categorization as IROs;
- Peers: Analysis of publicly available materiality assessments and Sustainability Reports from peers was incorporated into the assessment.

Valneva's impacts assessment and quantification

For Valneva, impacts are the effects that the Group has (actual) or could have (potential) on the economy, environment, and people (including human rights), with equal consideration of impacts with which Valneva is involved with through its activities as well as a result of its business relationships. Impacts can be intentional or unintentional.

- Actual impacts are those positive or negative impacts to the economy, the environment, or society which either took place in the past or are currently taking place.
- Potential impacts are those positive or negative impacts to the economy, the environment, or society which are likely to occur over the short-, medium-, or long-term.
- Positive impacts are those having an outcome or effect that is beneficial or advantageous for the sustainable development of the economy, the environment, or society.
- Negative impacts are those having adverse effects or consequences for the sustainable development of the economy, the environment, or society.

Actual positive impacts were assessed on scale and scope and potential positive impacts were assessed on scale, scope and likelihood:

Actual negative impacts were assessed on scale, scope, and irremediability, and potential negative impacts were assessed on scale, scope, irremediability, and likelihood:

- The scale for assessing impacts is qualitative and ranges from low (1) to high (3), based on the gravity of the impact on society, the economy, the employees, and nature;
- The scope is determined by the area and the number of people affected, with the same low (1) to high (3) scale.
- For potential impacts, the likelihood of occurrence is categorized as low (1) for events expected to happen in over 5 years or unlikely to occur, medium (2) for those expected within the next five years, and high (3) for those that have already occurred or are expected within the next year;
- Irremediability, applicable only to negative impacts, refers to the ability to restore the affected people or place, with a scale from low (1), indicating reversibility, to high (3), indicating near impossibility of restoration.

The final rating is computed as:

	Positive	Negative
Actual impact	Severity = Scale of Impact + Scope of Impact Should the severity meet a threshold of 5, the topic is deemed material	Severity = Scale of Impact + Scope of Impact + Irremediability Should the severity meet a threshold of 6, the topic is deemed material
Potential impact	Severity = Scale of Impact + Scope of Impact + Likelihood Should the severity meet a threshold of 5, and the likelihood a threshold of 2, the topic is deemed material	Severity = Scale of Impact + Scope of Impact + Irremediability + Likelihood Should the severity meet a threshold of 6, and the likelihood a threshold of 2, the topic is deemed material

The time-horizon for actual impacts is short-term, as they have already occurred or are currently taking place. For potential impacts, the time-horizon is categorized as short-term (less than 1 year), medium-term (1-5 years), or long-term (over 5 years).

The categorization of impacts (actual or potential, positive or negative) and their quantification was performed by the functions with the highest expertise in each field within the ESG Operating Committee. Each impact has been linked to the most affected part of Valneva's value chain to provide a clearer understanding of the stakeholders most significantly impacted.

Valneva's risks and opportunities assessment

The term "risks and opportunities" refers to the company's sustainability-related financial risks and opportunities, including those deriving from dependencies on natural, human and social resources, as identified through a financial materiality assessment. The methodology for identifying, assessing, prioritizing, and monitoring risks and opportunities with potential financial implications is based on the rating of Magnitude and Likelihood.

The magnitude-Scale (scale 1 to 3) categorizes the importance of risks and opportunities as follows:

- Low (1) – green (0-0.5% of sales or 0-0.3% costs);
- Medium (2) – yellow (1.5-15% sales or 1-10% costs);
- High (3) – red (>15% sales or >10% costs).

The "Likelihood" scale categorizes the frequency of risks and opportunities as follows:

- Low (1): Occurring once per decade or less frequently;
- Medium (2): Occurring once every three years;
- High (3): Occurring annually or more often.

The composite score is derived by multiplying the magnitude by the likelihood. A topic is considered material if the score exceeds a threshold of 6. The "Time Horizon" for evaluating risks and opportunities is segmented into short-term (less than one year), medium-term (1-5 years) and long-term (over 5 years).

Risks and opportunities were classified and rated on their magnitude/scale and likelihood through the consultation process (internal and external stakeholders).

Risk and opportunity mapping and management

During the DMA, as part of the identification of its financial risks and opportunities Valneva mapped identified dependencies and impacts to their associated risks and distinguished several categories of financial risks in order to evaluate them more precisely from the point of view of financial materiality:

- operational risks, such as disruptions or interruptions in operations;
- financial risks, which include rising costs or revenue losses;
- reputational and legal risks due to negative impacts that could tarnish Valneva's reputation or potentially result in legal penalties should these impacts become subject to regulation.

Valneva's risk management processes are based on thorough risks analysis and internal controls, with equal priority given to ESG-related risks identified via the DMA and other operational, reputational, or financial risks. The Internal Audit Department operates independently and objectively, focusing on control and advisory activities to enhance the Group's performance and protect Valneva's value through risk-based approaches. Internal controls procedures have been established to manage principal risks in alignment with the Executive Committee's objectives. In particular, regular meetings are held between Function Heads and the Risk Management Officer to address operational risks. Specific responsibilities within different functions have been defined for the assessment of those risks, including the definition of mitigation measures. Those risks will be reassessed twice a year, within the Group's risk review process.

Risks resulting from the DMA have been incorporated into Valneva's Enterprise Risk Management, and follow the bi-annual internal review and update process. The management of those risks includes the quantification of financial effects and mitigation plans' definition. It is important to note that not all IROs have been translated into specific or quantitative targets. Valneva looks to improve the IRO assessment, particularly in the quantification of financial effects (see Section 3.3.3 for more information on financial effects). Some Impacts identified in Section 3.3.3 have been translated into targets integrated within the Group's ESG Strategy and the ESG Operating Committee regularly reviews the status against those targets (more information about Valneva's ESG strategy can be found in Section 3.3.3).

Material opportunities were identified through internal and external consultation (see above) and are monitored by the relevant departments within Valneva. Most relevant IROs have their related targets integrated into Valneva's sustainability goals (see Section 3.3.3).

Validation of results

The final resulting materiality matrix combining both financial materiality and impact materiality was presented to the Executive Committee for review and to the Board's ESG and Audit Committees for final validation. There were no modifications to the materiality of the IROs following this review.

Information about process for identifying IROs and conducting consultations on climate change (ESRS E1)

Valneva has conducted a DMA to identify its climate change-related IROs. This process involves evaluating the entire value chain, incorporating stakeholder feedback, and considering operational locations, activities, sector-specific challenges, and transaction structures. Consultations with internal stakeholders (employees, business development, quality management) and external parties (regulators, peers, investors) have resulted in an inventory of thirteen key climate change-related IROs and five energy-related IROs (see Section 3.3.3), evaluated. The methodologies and tools used in this assessment are detailed in ESRS 2, under Disclosure Requirement IRO-1, above.

With respect to the impacts on climate change, Valneva follows established greenhouse gas (GHG) guidelines to estimate its emissions by analyzing all manufacturing and R&D sites, as well as offices, using coefficients from various sources. More information linked to Valneva's GHG emissions is described in Section E1-6.

Valneva completed a climate diagnosis workshop in order to assess its physical climate related risks and opportunities. This took place as part of Valneva's participation in the ACT (Assessing low-carbon Transition initiative), a sector-specific, future-oriented methodology designed to evaluate and support organizations for the low-carbon transition. ACT helps companies assess climate-related risks and opportunities while defining strategies to align with global decarbonization goals. As part of this initiative, Valneva completed an initial climate diagnosis in September 2024 which included an analysis of Valneva's current maturity regarding climate action and the identification of Valneva's vulnerabilities to climate change and the low-carbon transition. This was followed by a strategic planning phase starting in November 2024 to define Valneva's visions for climate integration and, by December, a clear framework composed of 3 strategic pillars and accompanying short-, medium-, and long-term goals was completed. The final implementation phase began in January 2025 to develop an action plan detailing to achieve existing strategic objectives. Each phase featured a workshop in which Valneva's Executive Committee was contributing and overseeing the ACT process.

The climate diagnosis identified climate-related physical risks within Valneva's operations and value chain, focusing on acute and chronic risks:

- Acute risks: sudden, extreme weather events that cause immediate disruption and damage.
  - Internal supply chain disruptions due to extreme temperatures and natural disasters (*e.g,* floods in Vienna and Germany have highlighted potential vulnerabilities in supply routes and public infrastructure).
  - Upstream supply chain disruptions caused by extreme temperatures, natural disasters, and geopolitical conflict.
  - Overload of work in healthcare systems due to climate events affecting the population, reducing time and willingness to invest in non-urgent care.
- Chronic risks: long-term, gradual changes in climate patterns that progressively cause disruption and damage.
  - Rising financial and operational costs: Temperature extremes affecting manufacturing and storage conditions (*e.g.*, Rising sea levels potentially impacting the manufacturing site in Solna, Sweden).
  - Availability of biosourced molecules: Climate change affecting the quality, availability, and price of plant- and animal-based molecules.
  - Operational and financial risks associated with Valneva's dependence on fossil fuels: Unstable energy prices due to global instability in the supply and availability of fossil fuels.

The Group is presently undertaking a project to enhance its identification and assessment of risks and opportunities arising from climate change. This project is scheduled to run from October 2024 until June 2025 (see below for more information).

The climate-related physical risks are prioritized across short, medium, and long term time horizons. Valneva has a project advancing from January 2025 onwards with the aim of conducting a physical climate risk assessment of own operations, value chain operations, and distribution activities, as well as the definition of an adaptation plan. The results of this screening will inform the Group's risk management strategies and adaptation measures, ensuring resilience in its operations.

In the near term, government bodies across Europe are increasingly focusing on ESG criteria. This is particularly evident in tenders, where ESG requirements are becoming a key component. Large organizations, such as the National Health Service in the UK, have already begun engaging tier 1 suppliers in ESG-related practices to meet requirements. Similarly, European legislation already includes clear objectives for the reduction and reuse of packaging in 2024. Some financial stakeholders too have already introduced programs to support their investees in decarbonizing their activities.

In parallel, fluctuations of energy prices—spanning electricity, gas, and oil—is increasingly common. As Europe transitions toward a higher share of renewable energy sources, the availability of fossil fuels may be reduced, resulting in rising costs for its consumers. Extreme weather events could disrupt infrastructure, production, and distribution, further exacerbating energy price volatility. Transportation costs are also being impacted by rising petrol prices, which directly influence logistics expenses across the supply chain. Mechanisms like the European Union Emissions Trading System (EU ETS, known as SEQE in French) are contributing to higher transportation costs, particularly for sea and air freight. These factors collectively highlight the pressing need for Valneva to address both immediate and evolving energy challenges.

In the medium term, climate change may lead to significant shifts in the cost of certain biosourced ingredients and products. Depending on the scenario, these could become more expensive due to their higher carbon intensity. Plant-based products may also see price increases if climate change exacerbates environmental challenges like droughts or crop failures. To prepare for these potential shifts, research must be conducted to assess how climate change could impact the list of bio-sourced molecules used by Valneva and to identify alternative solutions where necessary.

In the long-term, Sweden could see precipitation increase by 50% and temperatures rise by up to +5°C by 2071–2100, as reported by the Swedish Meteorological and Hydrological Institute. Climate Central maps also predict sea-level rise that could flood parts of Valneva's Solna site under a +2°C scenario. While supply chain disruptions due to extreme temperatures and natural disasters remain a potential risk, this may be more pronounced for Valneva's tier 1 suppliers located in more vulnerable regions compared to Europe. According to the Cross Dependency Initiative (2023), up to 1 in 12 hospitals globally could face partial or total shutdown due to extreme weather by century's end. As climate events increasingly strain healthcare systems, this may reduce willingness to invest in non-urgent care.

The climate diagnosis workshop assessed the operational impacts of all manufacturing and R&D sites, revealing their exposure to potential infrastructure challenges, resource inefficiencies, and potential regulatory pressures due to emissions and energy usage. Value chain vulnerability assessments concluded that complex multi-step supply chains are at risk from disruptions caused by extreme weather and natural disasters, and single-sourced key materials and bio-sourced molecules are sensitive to biodiversity pressures and regional climate disruptions.

Valneva is advancing its analysis to define its strategy and adaptation measures for climate-related physical risks, including the time horizons and how the risks are linked to the expected lifetime of Valneva's assets, strategic planning and capital allocation. This analysis is ongoing from January 2025.

The climate diagnosis identified several assets and business activities exposed and sensitive to climate-related hazards. Manufacturing sites (*e.g.*, Solna and Livingston) face risks from flooding, sea-level rise, and inefficient energy systems. Multi-step supply chains and single-sourced chemicals are vulnerable to physical disruptions and biodiversity pressures. Transportation and logistics are exposed to rising costs and extreme weather events. Additionally, employee access and operational activities are sensitive to infrastructure disruptions.

The climate diagnosis analysis assessed physical and transitional climate risks using different scenarios. A "Current Policies" scenario is used to anticipate physical risks such as temperature increases, flooding, and extreme weather events.

The climate diagnosis analysis did not include specific information regarding the scenarios used to identify assets at risk, nor precision on these scenarios. Valneva intends to conduct a scenario analysis in 2025.

In the climate diagnosis analysis, Valneva outlined the process for identifying and addressing climate-related transition risks and opportunities across Valneva operations and value chain. Transition risks are categorized into regulatory, market, technological, and reputational dimensions, with the following specific examples:

- **Transition Risks:**
  - **Regulatory:** Compliance with evolving environmental laws, such as the EU CSRD and packaging regulations, requiring changes to secondary and tertiary packaging and reduction in single-use plastics,
  - **Market:** Increasing energy and transportation costs due to carbon pricing and renewable energy transitions, as well as potential supply chain disruptions from geopolitical and climate pressures,
  - **Technological:** The need to redesign manufacturing processes to meet decarbonization and efficiency goals while managing regulatory hurdles and recertification costs,
  - **Reputational:** Growing investor and financial institution demand for ESG performance, with risks of exclusion from funding or partnerships for failing to contribute to global climate change mitigation efforts,
- **Opportunities:**
  - **Operations:** Implementing renewable energy systems (*e.g.*, solar panels, steam turbines) and optimizing energy and resource efficiency in manufacturing sites,
  - **Value Chain:** Restructuring supply chains to reduce reliance on high-risk steps and single tier 1 suppliers, eco-design of products, and adopting green chemistry principles,
  - **New Markets:** Expanding into regions with growing demand for vaccines due to the spread of vector-borne diseases and zoonoses (diseases that can be transmitted from animals to humans).

Valneva has screened its assets and business activities for exposure to transition events, identifying key risks such as regulatory changes (*e.g.*, EU packaging laws, ESG reporting requirements), increasing energy and transportation costs, and investor pressures tied to ESG performance. Manufacturing processes and supply chains are particularly exposed, with potential cost increases, re-certification needs, and market shifts influencing operations. Identified opportunities include adopting renewable energy systems, eco-design, and green chemistry to mitigate these risks while capitalizing on efficiency and market differentiation.

The assessment identified that assets and business activities are significantly exposed and sensitive to transition events. Regulatory requirements, such as EU packaging laws and ESG reporting, affect manufacturing and supply chains, while rising energy and transportation costs impact operational expenses. Investor and market expectations for decarbonization create reputational and funding risks. The sensitivity of these areas is heightened by the complexity of supply chains, reliance on single-sourced materials, and the need for costly process adjustments to meet compliance and sustainability goals.

The identification of transition events and assessment of exposure has been informed by climate-related scenario analysis produced by the Network for Greening the Financial System (NGFS), including "Net Zero" and "Delayed Transition" scenarios. These scenarios highlight potential regulatory changes, such as stricter packaging and ESG requirements, rising energy and transportation costs due to carbon pricing, and shifts in investor and market expectations.

The assessment identified several assets and business activities requiring significant efforts to align with a climate-neutral economy. These include manufacturing processes that depend on fossil fuel-based energy systems, single-use plastics in packaging, and supply chains reliant on carbon-intensive transportation methods such as air freight. Transitioning these areas will involve adopting renewable energy systems, redesigning packaging to meet new regulatory standards, and restructuring supply chains to reduce emissions and improve resilience.

Information about process for identifying IROs and conducting consultations on pollution (ESRS E2)

Valneva's DMA resulted in an inventory of four key pollution-related impacts and risks (see Section 3.3.3), evaluated based on scale, scope, and likelihood. The methodologies and tools used in this assessment are detailed in Section 3.3.1, above.

Valneva actively engages in consultations with stakeholders to address pollution-related concerns. These consultations involve discussions with employees experienced with environmental topics to ensure compliance with environmental standards and to assess the potential impact of substances used in vaccine development and manufacturing as well as with local environmental agencies.

During the DMA, Valneva consulted internal stakeholders to identify the material IROs related to pollution. Internal stakeholder consultations included functions such as EOHS, Technical Development, and Quality Management which are in close contact with external stakeholders like service providers of pollution assessments, or local environmental agencies.

The Group conducts regular internal reviews and external audits to identify any pollution risks associated with its processes and works collaboratively to develop mitigation strategies. Feedback from these consultations helps shape Valneva's approach to minimizing the environmental footprint of its operations, particularly concerning the use and disposal of potentially harmful substances.

Valneva's materiality assessment identified pollution as a relevant topic, particularly in relation to the use and disposal of SOC involved in vaccine development and manufacturing, as well as pollutants to air and to water. The most relevant business activities and sites related to pollution are manufacturing activities in the sites of Livingstone and Solna.

Information about process for identifying IROs and conducting consultations on water and Marine Resources (ESRS E3)

Valneva recognizes water consumption as a material issue for its operations, and the Group has conducted screenings to identify two actual and potential IROs related to water resources within Valneva's own operations (see Section 3.3.3.). Valneva's screening process involves assessing water usage patterns and understanding regional water scarcity issues.

To conduct this assessment, Valneva utilized a combination of methodologies and tools, including water footprint analysis and industry benchmarks, which allow the Group to measure their water usage effectively. Assumptions made during the screening include factors such as operational water needs, local water availability, and compliance with relevant regulations.

Valneva is committed to responsible water management and continuously monitors its water use to mitigate risks associated with water scarcity and ensure sustainable practices.

In the future, as Valneva's operations and sustainability priorities evolve, the Group will continue to enhance its screening processes to better understand the full scope of water-related impacts, including potential risks and opportunities that may arise in Valneva's upstream and downstream value chain.

Valneva has conducted consultations regarding water resources as part of its commitment to sustainable water management. These consultations have involved meetings and discussions to solicit feedback on Valneva's water management practices and address any concerns related to water consumption and availability. By fostering this dialogue, Valneva seeks to ensure that its strategies are informed by stakeholder perspectives and best practices in water sustainability.

Information about process for identifying IROs and conducting consultations on biodiversity and Ecosystems(ESRS E4)

Valneva has been able to identify two IROs related to biodiversity and dependencies on ecosystems as a result of the assessment performed on biosourced ingredients (see Section 3.3.3).

However, due to the phase-in provision applicable under Appendix C of ESRS 1, Valneva is not required to report on ESRS E4 in the first reporting year. Further information can be found in Section 3.3.1.

Information about process for identifying IROs and conducting consultations on resource and circular economy (ESRS E5)

Valneva employed a comprehensive screening process to identify twelve environmental IROs across its operations and value chain related to resource use and circular economy (see Section 3.3.3). This process involved consultations with environmental experts from R&D and manufacturing sites, commercial partners, CMOs, and different functions within the Group, supported by publications on the environmental impacts of pharmaceutical companies.

Furthermore, the Group analyzed the sustainability performance of its tier 1 suppliers using the EcoVadis platform (more information in Section 3.3.3).

The EcoVadis assessment provides detailed insights into each supplier's adherence to ethical, environmental, and quality standards, enabling Valneva to identify and prioritize actual and potential IROs within its upstream and downstream value chain.

Key assumptions include significant raw materials consumption during upstream transportation, R&D, manufacturing, packaging, commercialization, and downstream transportation, as well as at the end of vaccines' life.

The methodologies, assumptions, and tools employed in this screening process are detailed in Section 3.3.1. This section outlines the systematic approach Valneva has adopted to identify, evaluate, prioritize, and oversee material IROs, ensuring alignment with the CSRD framework.

Valneva engaged a diverse range of internal and external stakeholders in consultations on resource use and circular economy to ensure comprehensive feedback and perspectives. Key stakeholders include raw materials tier 1 suppliers, service providers (packaging and transportation), waste management companies at different manufacturing and R&D sites, regulatory experts, local communities, employees, distributors, customers, healthcare providers, and governmental organizations. The Group assessed partners and tier 1 suppliers against ethical, environmental, and quality standards through EcoVadis sustainability assessments and plans to integrate regular audits into the sustainable procurement processes.

Regular meetings with waste management companies focus on aligning waste destination with local legal requirements and reducing landfill waste.

Interaction with Regulatory Authorities takes place whenever primary packaging needs to be adjusted or modified as well as for secondary packaging authorization.

Valneva interacts with the direct and indirect packaging service providers for all its commercialized vaccines. These interactions take place in the context of the introduction of new versions of packaging materials. Such new versions are required when regulatory approvals have an impact on the content and appearance of the packaging material.

For a detailed description of these consultations, including the specific stakeholder engagement processes, please refer to the relevant topic-specific sections in Section 3.3,4.

Information about process for identifying IROs and conducting consultations on business conduct (ESRS G1)

As part of its DMA, Valneva identified its most material IROs concerning business conduct matters. This identification process covered the entire value chain of Valneva as well as its own activities.

These processes added to consultations with internal stakeholders (Legal department, Compliance department and Governmental Affairs department) and external parties (Valneva's peers, investors, etc.) led to an inventory of seven material business conduct IROs (see Section 3.3.3). This inventory is compiled and evaluated based on scale, scope, and likelihood.

By integrating these IROs into Valneva's Enterprise Risk Management and ESG Strategy, with findings reviewed by the Executive and ESG Committees, Valneva can effectively prioritize and address business conduct-related issues, aligning them with the Group's overall objectives and regulatory requirements. This comprehensive approach helps in mitigating potential risks, leveraging opportunities, and maintaining high standards of ethical conduct and governance across all facets of the business.

Valneva is committed to adhering to rigorous quality standards throughout its research, trial, and manufacturing processes, and it is imperative that its tier 1 suppliers meet these same stringent requirements. This concern is described in its two "suppliers and quality issues" IROs (one financial risk and one opportunity).

- Firstly, the risk of non-compliance could result in operational difficulties and a decline in sales.
- Secondly, working on further systems and processes to ensure tier 1 suppliers adhere to GMP and GCP practices may allow Valneva to reduce costs derived from quality issues during R&D process.

Those IROs are further disclosed in section 3.6.1. Valneva's strategy to identify potential ESG-related risks within its supply chain relies on EcoVadis' methodology, which is described in detail in Section 3.3.3 of this report. In 2025, Valneva will use the results of the assessment to define the strategy for suppliers engagement and monitoring.

Disclosure requirements in ESRS covered by Valneva's Sustainability Statement

The table disclosed at the beginning of ESRS 2 (see Section 3.3) outlines the Disclosure Requirements addressed in this report. The methodology for identifying pertinent information to disclose is steered by the directives set forth in Section 3.3.1 of this document, including the phase-in provisions. Should a specific data point be considered material, it will be incorporated into the sustainability statement.

Information deriving from other EU legislation

The table below provides the list of data points that derive from other EU legislation: the EU Climate Law and the Benchmark Regulation. The legislation listed in the CSRD applies to the non-financial sector.

LIST OF DATA POINTS THAT DERIVE FROM OTHER EU LEGISLATION

	ESRS	DR	Paragraph	Name	Section
Benchmark regulation and SFDR	ESRS 2	GOV-1	21d	Board's gender diversity	3.3.2
Benchmark regulation	ESRS 2	GOV-1	21e	Percentage of Board members who are independent	3.3.2
SFDR	ESRS 2	GOV-4	30	Statement on due diligence	3.3.2
Benchmark regulation, SFDR, Pillar 3	ESRS 2	SBM-1	40d (i)	Involvement in activities related to fossil fuel activities	Not material
Benchmark regulation and SFDR	ESRS 2	SBM-1	40d (ii)	Involvement in activities related to chemical production	Not material
Benchmark regulation and SFDR	ESRS 2	SBM-1	40d (iii)	Involvement in activities related to controversial weapons	Not material
Benchmark regulation	ESRS 2	SBM-1	40d (iv)	Involvement in activities related to cultivation and production of tobacco	Not material
Climate Law	E1	E1-1	14	Transition plan to reach climate neutrality by 2050	3.4.1
Benchmark regulation and Pillar 3	E1	E1-1	16g	Undertakings excluded from Paris-aligned Benchmarks	3.4.1
Benchmark regulation, SFDR and Pillar 3	E1	E1-4	34	GHG emission reduction targets	3.4.1
SFDR	E1	E1-5	38	Energy consumption from fossil sources disaggregated by sources (only high climate impact sectors)	Not material
SFDR	E1	E1-5	37	Energy consumption and mix	3.4.1
SFDR	E1	E1-5	40 to 43	Energy intensity associated with activities in high climate impact sectors	3.4.1
Benchmark regulation, SFDR and Pillar 3	E1	E1-6	44	Gross Scope 1, 2, 3 and Total GHG emissions	3.4.1
Benchmark regulation, SFDR and Pillar 3	E1	E1-6	53 to 55	Gross GHG emissions intensity	3.4.1
Climate Law	E1	E1-7	56	GHG removals and carbon credits	Not Applicable
Benchmark regulation	E1	E1-9	66	Exposure of the benchmark portfolio to climate-related physical risks	This topic will not be disclosed this year in accordance with the CSRD phase-in provisions.
Pillar 3	E1	E1-9	66a and 66c	Disaggregation of monetary amounts by acute and chronic physical risk + Location of significant assets at material physical risk	Due to the phase-in provision applicable under Appendix C of ESRS 1, Valneva is not required to report on E1 in the first reporting year. Currently only the information related to the Minimum Disclosure Requirements (MDR) is included below.
Pillar 3	E1	E1-9	67c	Breakdown of the carrying value of its real estate assets by energy-efficiency classes	This topic will not be disclosed this year in accordance with the CSRD phase-in provisions.
Benchmark regulation	E1	E1-9	69	Degree of exposure of the portfolio to climate- related opportunities	This topic will not be disclosed this year in accordance with the CSRD phase-in provisions.

	ESRS	DR	Paragraph	Name	Section
SFDR	E2	E2-4	28	Amount of each pollutant listed in Annex II of the E-PRTR Regulation (European Pollutant Release and Transfer Register) emitted to air, water and soil.	3.4.2
SFDR	E3	E3-1	9	Water and marine resources	3.4.3
SFDR	E3	E3-1	13	Dedicated policy	3.4.3
SFDR	E3	E3-1	14	Sustainable oceans and seas	Not material
SFDR	E3	E3-4	28c	Total water recycled and reused	3.4.3
SFDR	E3	E3-4	29	Total water consumption in m^3 per net revenue on own operations	3.4.3
SFDR	ESRS 2	E4.IRO-1	16a (i)	List of material sites in relation to biodiversity	Not material
SFDR	ESRS 2	E4.IRO-1	16b	Material negative impacts with regards to land degradation, desertification or soil sealing	Not material
SFDR	ESRS 2	E4.IRO-1	16c	Operations that effect threatened species	This topic will not be disclosed this year in accordance with the CSRD phase-in provisions.
SFDR	E4	E4-2	24b	Sustainable land/agriculture practices or policies	This topic will not be disclosed this year in accordance with the CSRD phase-in provisions.
SFDR	E4	E4-2	24c	Sustainable oceans/seas practices or policies	This topic will not be disclosed this year in accordance with the CSRD phase-in provisions.
SFDR	E4	E4-2	24d	Policies to address deforestation	This topic will not be disclosed this year in accordance with the CSRD phase-in provisions.
SFDR	E5	E5-5	37d	Non-recycled waste	3.4.5
SFDR	E5	E5-5	39	Hazardous waste and radioactive waste	3.4.5
SFDR	ESRS 2	S1.SBM-3	14f	Risk of incidents of forced labor	3.5.1
SFDR	ESRS 2	S1.SBM-3	14g	Risk of incidents of child labor	3.5.1
SFDR	S1	S1-1	20	Human Rights Policy	3.5.1
Benchmark regulation	S1	S1-1	21	Due diligence policies on issues addressed by the fundamental International Labour Organization Conventions 1 to 8	This topic will not be disclosed this year in accordance with the CSRD phase-in provisions.
SFDR	S1	S1-1	22	Processes and measures for preventing trafficking in human beings	This topic will not be disclosed this year in accordance with the CSRD phase-in provisions.
SFDR	S1	S1-1	23	Workplace Accident Prevention Policy or management system	This topic will not be disclosed this year in accordance with the CSRD phase-in provisions.
SFDR	S1	S1-3	32c	Grievance/complaints handling mechanisms	This topic will not be disclosed this year in accordance with the CSRD phase-in provisions.
Benchmark regulation and SFDR	S1	S1-14	88b and c	Number of fatalities and number and rate of work-related accidents	This topic will not be disclosed this year in accordance with the CSRD phase-in provisions.
SFDR	S1	S1-14	88e	Number of days lost to injuries, accidents, fatalities or illness	This topic will not be disclosed this year in accordance with the CSRD phase-in provisions.
Benchmark regulation and SFDR	S1	S1-16	97a	Unadjusted gender pay gap	This topic will not be disclosed this year in accordance with the CSRD phase-in provisions.

	ESRS	DR	Paragraph	Name	Section
SFDR	S1	S1-16	97b	Excessive CEO pay ratio	This topic will not be disclosed this year in accordance with the CSRD phase-in provisions.
SFDR	S1	S1-17	103a	Incidents of discrimination	This topic will not be disclosed this year in accordance with the CSRD phase-in provisions.
Benchmark	S1	S1-17	104a	Non-respect of UNGPs on Business and Human Rights and OECD	3.5.1
SFDR	ESRS 2	S2.SBM-3	11b	Significant risk of child labor or forced labor in the value chain	Not material
SFDR	S2	S2-1	17	Human Rights Policy	Not material
SFDR	S2	S2-1	18	Policies related to value chain workers	Not material
Benchmark regulation and SFDR	S2	S2-1	19	Non-respect of UNGOs on Business and Human Rights principles and OECD guidelines	Not material
Benchmark regulation	S2	S2-1	19	Due diligence policies on issues addressed by the fundamental International Labor Organisation Conventions 1 to 8	Not Material
SFDR	S2	S2-4	36	Human rights issues and incidents connected to its upstream and downstream value chain	Not material
SFDR	S3	S3-1	16	Human Rights Policy	This topic will not be disclosed this year in accordance with the CSRD phase-in provisions.
Benchmark regulation and SFDR	S3	S3-1	17	Non-respect of UNGPs on Business and Human Rights, ILO principles or/and OECD guidelines	This topic will not be disclosed this year in accordance with the CSRD phase-in provisions.
SFDR	S3	S3-4	36	Human rights issues and incidents	This topic will not be disclosed this year in accordance with the CSRD phase-in provisions.
SFDR	S4	S4-1	16	Policies related to consumers and end-users	This topic will not be disclosed this year in accordance with the CSRD phase-in provisions.
Benchmark regulation and SFDR	S4	S4-1	17	Non-respect of UNGPs on Business and Human Rights and OECD guidelines	This topic will not be disclosed this year in accordance with the CSRD phase-in provisions.
SFDR	S4	S4-4	35	Human rights issues and incidents	This topic will not be disclosed this year in accordance with the CSRD phase-in provisions.
SFDR	G1	G1-1	10b	United Nations Convention against Corruption	3.6.1
SFDR	G1	G1-1	10d	Protection of whistle-blowers	3.6.1
Benchmark regulation and SFDR	G1	G1-4	24a	Fines for violation of anti-corruption and anti-bribery laws	Not material
SFDR	G1	G1-4	24b	Standards of anti-corruption and anti-bribery	Not material

3.4 Environmental information

Valneva recognizes that environmental sustainability is fundamental to the long-term success and responsibility to future generations. Valneva´s actions are driven to support compliance with environmental regulations while fostering an ESG-focused mindset throughout each function of the organization, embracing transformational change, and striving for excellence alongside Valneva´s industry peers.

Preserving the Planet is a core pillar of Valneva´s three-pronged ESG strategy, enabling Valneva to mitigate the environmental footprint while contributing to a healthier, more resilient world with widespread access to essential medicines. The transition to a low-carbon business model is driven by meaningful emissions reductions, with the goal of halving Valneva´s Scope 1 and 2 emissions in the medium-term. This transformation is supported by initiatives such as green sourcing, the use of natural ingredients across operations, and sustainable manufacturing. Valneva strives to leverage key sustainable partnerships to achieve its sustainability vision. Currently, Valneva aims to actively manage the environmental footprint, for example by prioritizing energy efficiency, water conservation, waste reduction, and responsible waste disposal practices. As a critical consideration in the pharmaceutical industry, the company is deeply committed to promoting animal welfare across the sites by adopting industry best practices and integrating the latest scientific advancements into the processes.

By integrating sustainability into its core culture and corporate strategy, Valneva aims not only to address the risks posed by climate change but also to create long-term value for its customers, employees, and the communities it serves.

3.4.1 ESRS E1 – Climate Change

This section addresses the Group's strategy for climate change mitigation adaptation, including policies, actions and resources related to climate change mitigation and adaptation, as well as metrics and targets such as energy consumption and GHG emissions.

The following table summarizes the IROs identified and related to ESRS E1 material topics:

ESRS E1 – CLIMATE CHANGE			
Material challenges identified	**IRO description**	**Type of IRO**	**IRO impact on Valneva and its stakeholders**
Supply chain and subcontractor carbon emissions	Financial costs due to the emergence of carbon pricing policies and operational risks on Valneva's product pipeline due to the challenges raised by the carbon reduction plans established	Risk (financial and operational)	(1) Potential costs associated with increasing the price of services when requesting sustainable solutions. (2) The Group's growth strategy, which includes expanding the Group's product pipeline and the geographic scope for distribution of its vaccines, will increase the complexity of the Group's value chain and the steps to be taken to reduce associated carbon emissions.
	Climate disruptions along the supply chain	Risk (operational)	Tier 1 suppliers across different geographical locations face unique climate conditions which may cause disruptions along the supply chain. Risk should be considered in mid-term to long-term scale as climate events may be sudden or progressive. Valneva's current supply chain contains lots of steps in different countries, which multiplies the risk of route interruption or site unavailability in case of climatic events.
	Operational and reputational improvements resulting from working with providers offering sustainable solutions	Opportunity	Attention to the Group's Scope 3 emissions and efforts to reduce these emissions could lead to operational and reputational improvements. For example, if the Group prioritizes working with providers with better environmental records and implements a sustainable procurement strategy, it may identify providers whose products or services could lead to efficiencies and better operational performance.

ESRS E1 – CLIMATE CHANGE			
Material challenges identified	**IRO description**	**Type of IRO**	**IRO impact on Valneva and its stakeholders**
Supply chain and subcontractor carbon emissions (continued)	Distribution and supply chain redesign for cost and efficiency optimization	Opportunity	Redesigning distribution and supply chain networks may enhance cost efficiency by optimizing logistics, transportation routes, and inventory management to minimize operational costs and improve delivery speed and reliability.
	Impact on the environment due to carbon emissions produced by the manufacturing and distribution of Valneva's products	Negative Impact	The Group's value chain, which includes tier 1 suppliers of materials used for the manufacturing of the Group's products and distributors of the Group's finished products, produces carbon emissions.
Climate regulatory context	Operational and financial risks due to the increase of regulatory requirements related to climate change.	Risk (operational and financial)	Enhanced emissions-reporting obligations would require compiling lengthy climate disclosures and could lead to mandatory carbon pricing via a carbon tax or cap-and-trade system. Valneva may be forced to ramp up investments in energy efficient technologies beyond its current capabilities to meet regulatory and cost pressures. The additional stress on financial and human resources could substantially increase the Group's operational costs.
	Increased pressure from financial institutions	Risk (financial)	Banks involved in the Net Zero Banking Alliance (NZBA) pledge to only invest in Net-Zero aligned companies. There could be fewer potential sources of financing for Valneva if it is unable to match the climate-related expectations of financial institutions.
	Increased pressure from investors	Risk (financial)	According to Morgan Stanley's 2024 report, sustainable funds already outperform traditional funds. For example, the biggest French PE firms (such as Eurazeo, Quilvest, Siparex, Infravia) are introducing support programs for their investees to decarbonize their activities, such as carbon footprint calculation, strategy, and Science-Based Targets initiative engagement.
	Increasing demands from government bodies	Risk (financial)	This risk is already developing as in Europe, tenders are increasingly including ESG criteria. For example, the UK's National Health Service requires such engagement from its suppliers. This may reach Valneva on the markets where the Group has competition.
	Rising cost of transportation	Risk (financial)	Increasing cost of petrol has an impact on transportation costs. Other mechanisms, for example Europe's SEQE (emission exchange) scheme, can have a direct impact on transportation costs (sea & air transportation).
	Reduction of international travel	Risk (financial)	Given Valneva's current reliance on international travel for business operations, higher costs associated with international travel driven by the low-carbon transition could potentially increase Valneva's operating cost.
	Investment in energy-related solutions facilitated by current climate regulatory context	Opportunity	The current climate regulatory context gives Valneva the opportunity to access sustainable-related grants to implement energy-related solutions which might support Valneva in its emissions reduction goal.
Own carbon emissions management	Impact on the environment due to carbon emissions resulting from manufacturing and R&D activities	Negative Impact	The Group's activities, particularly its manufacturing and R&D activities, produce carbon emissions.

ESRS E1 – CLIMATE CHANGE			
Material challenges identified	**IRO description**	**Type of IRO**	**IRO impact on Valneva and its stakeholders**
Non-renewable energy **Climate change mitigation**	Operational and financial risks associated with Valneva's dependence on fossil fuels	Risk (operational and financial)	Valneva is at risk of relying on fossil fuels for its operations, which not only increases its carbon footprint but also exposes the Group to financial risks associated with rising energy costs. Additionally, regulatory risks may arise as certain fossil fuel sources could be restricted or banned in the future.
	Unstable prices for energy (fossil fuels & electricity)	Risk (financial)	The current market prices for energy (electricity, gas, oil) fluctuate and may result in increased costs for Valneva.
Renewable energies generation and consumption	Investment in renewable energies leading to energy price stabilization and costs reduction	Opportunity	Investing in renewable energies whenever economically and operationally feasible might lead to energy price stabilization (becoming independent from external supply) and reduction of costs. This would also support Valneva on its path to decarbonizing its business operations in the long-term.
	Energy independence from on-site renewables	Opportunity	Unstable energy prices—spanning electricity, gas, and oil—are increasingly common. As Europe transitions toward a higher share of renewable energy sources, the availability of fossil fuels may be reduced, resulting in rising costs for its consumers. Extreme weather events could disrupt infrastructure, production, and distribution, further exacerbating energy price volatility. Energy independence could mitigate potential business disruptions and rising operational costs.
	Positive impact on the environment and local economy with the use of renewable energy	Positive impact	The consumption of energy with renewable origin may reduce the Group's CO_2 footprint (market-based approach) and promotes the development of local renewable energy grids.

Sustainability-related performance in incentive schemes

Integration of sustainability-related performance in incentive schemes

For information related to the integration of sustainability-related performance in incentive schemes, please see ESRS 2 "Governance at Valneva".

Transition plan for climate change mitigation

Transition plan for climate change mitigation

Valneva has not developed a transition plan to mitigate climate change for this reporting period. Valneva is currently developing its transition plan.

Climate-related material impacts, risks, and opportunities and their interaction with strategy and business model

Description of the processes to identify and assess material climate-related IROs

Please see Section 3.3.3 "Description of IROs" for information about Valneva's processes for identifying and assessing climate change-related IROs. This includes methodologies for estimating GHG emissions, evaluating physical and transition risks across various time horizons, and the extent to which assets and business activities are exposed to these risks.

Material IROs and their interaction with strategy and business model

Valneva has conducted a climate diagnosis analysis to identify physical and transitional climate-related risks. These risks were classified based on distinct projected climate scenarios: Low Carbon (LC), Intermediate (I), and Fossil Fuel Development (FDD). Compared to 1850-1900, global average surface air temperature over the period 2081–2100 is very likely to increase by 1.0°C–1.8°C under a Low Carbon scenario, 2.8°C–4.6°C under an Intermediate scenario, and 3.3°C–5.7°C under a Fossil Fuel Development scenario.

Material challenges identified	IRO description*	Type of IRO	Term	Scenario**	Type of climate-related risk
Climate regulatory context	Increased pressure from financial institutions	Risk	Medium-term (2040)	• Low carbon SSP1 – 1.9 • Intermediate SSP2 – 4.5	Transition risk (reputational risk)
	Increased pressure from investors	Risk	Near term (2025-2030)	• Low carbon SSP1 – 1.9 • Intermediate SSP2 – 4.5 • Fossil Fuel Development SSP5 – 8.5	
	Increasing demands from government bodies	Risk	Near term (2025-2030)	• Low carbon SSP1 – 1.9 • Intermediate SSP2 – 4.5 • Fossil Fuel Development SSP5 – 8.5	Transition risk (regulatory risk)
	Rising cost of transportation	Risk	Near term (2025-2030)	• Low carbon SSP1 – 1.9 • Intermediate SSP2 – 4.5 • Fossil Fuel Development SSP5 – 8.5	Transition risk (market risk)
	Reduction of international travel	Risk	Long-term (2050)	• Low carbon SSP1 – 1.9	
Non-renewable energy Climate change mitigation	Unstable prices for energy (fossil fuels & electricity)	Risk	Near term (2025-2030)	• Low carbon SSP1 – 1.9 • Intermediate SSP2 – 4.5 • Fossil Fuel Development SSP5 – 8.5	Transition risk (market risk)
Supply chain and subcontractor carbon emissions	Climate disruptions along the supply chain	Risk	Long-term (2050)	• Intermediate SSP2 – 4.5 • Fossil Fuel Development SSP5 – 8.5	Physical risk

* *Impact felt.*

** *Data from the Shared Socioeconomic Pathways research group: SSP1 – 1.9: low-emission, sustainability-focused pathway aiming to limit warming to 1.5°C; SSP2 – 4.5: moderate-emission, business-as-usual scenario with warming around 2.5–3°C;SSP5 – 8.5: high-emission trajectory driven by fossil-fuel reliance, leading to over 4°C warming by 2100.*

For more information on the climate diagnosis analysis, please see Section 3.3.4.

Valneva has not conducted a complete resilience analysis for this year. The Group aims to continue developing and implementing a complete analysis, to be completed by the end of 2025.

Policies, targets and actions linked to climate change

Valneva's Corporate Environmental, Occupational Health and Safety (EOHS) Policy, effective January 2025, applies to all individuals working for Valneva globally and establishes a framework for promoting health, safety, and environmental responsibility. The EOHS Policy applies to all operations and activities within Valneva, including vaccine development, manufacturing, and packaging processes The policy emphasizes the importance of creating a safe working environment, minimizing environmental impacts, and ensuring compliance with relevant laws and standards, while fostering a culture of accountability among employees. Additionally, it outlines procedures for reporting incidents, conducting risk assessments, and engaging with stakeholders, alongside commitments to sustainability and continuous improvement in health and safety practices. The policy addresses climate- and energy-related IROs.

- Supply chain and subcontractor carbon emissions: The policy emphasizes the commitment to improve the circularity of manufacturing activities and those of the supply chain and the expectation that business partners uphold high standards of environmental protection.
- Climate regulatory context, own carbon emissions management and climate change mitigation: According to the policy actions must be aligned with the Paris Agreement goals.
- Non-renewable energy: The policy commits to a rational and sustainable use of resources, which includes managing potential risks associated with non-renewable energy use.
- Renewable energies generation and consumption: Valneva expresses support for the use of renewable energy when technically feasible and economically reasonable.

The most senior level accountable for the implementation of the policy is Valneva's Chief Operating Officer. EOHS Teams are responsible for the day-to-day implementation and monitoring of the policy. Managers at all levels are responsible for ensuring that the policy is effectively communicated and implemented within their respective areas.

In its EOHS Policy, Valneva commits to adhering to relevant third-party standards and initiatives, including the Paris Agreement, relevant local and EU health and safety legislation, relevant environmental legislation, and guidelines provided by regulatory bodies like the U.S. Environmental Protection Agency (EPA) or equivalents. The Group also aligns with standards set by organizations such as EcoVadis for evaluating the sustainability of its supply chain.

In setting this policy, Valneva considered the interests of key stakeholders, including employees, customers, tier 1 suppliers, and the broader community. Consultations and engagements support integration of stakeholder perspectives into policy development and implementation. The Group engages with its stakeholders through various channels, including meetings, forums, and its website.

The EOHS Policy is made available to all potentially affected stakeholders and those who need to help implement them through Valneva's website, internal communications, and training programs.

The EOHS Policy covers energy efficiency and development of renewable energy. Valneva's Preserving the Planet Pillar covers climate change mitigation through its key commitment related to transitioning to a lower carbon business model.

Valneva is currently drafting a specific Climate Change Policy.

Targets related to climate change

In order to contribute to a world where no one dies or suffers from a vaccine-preventable disease, Valneva has established three Environmental, Social, and Governance commitments: Protecting Lives, Reaching People, Preserving the Planet (see Section 3.3.3 for more information on these commitments). As part of its Preserving the Planet commitment, Valneva is focused on transitioning to a lower carbon business model and to managing its environmental footprint.

In line with this strategy and its EOHS Policy, Valneva's 2025 decarbonization strategy will include the following key levers:

1. To improve the sustainability of the supply chain manufacturing activities in order to reduce supply chain and subcontractor carbon emissions: strengthening collaboration between procurement and tier 1 suppliers on supply chain optimization to minimize freight needs and avoid carbon-intensive transport, improving logistics efficiency with commercial distributors, and updating supplier contracts and guidelines to incorporate emissions reporting and reduction commitments.
2. To promote a rational and sustainable use of non-renewable energy and to support the use of renewable energy: obtaining renewable energy contracts, integrating on-site renewable energy production through solar panels and wind turbines, and monitoring production processes to identify and implement energy-saving measures like optimizing machinery operating schedules.
3. To contribute to limiting global temperature rise: refining Scope 3 emissions calculations to set clear reduction targets, conducting waste, water, and energy audits, conducting a resilience analysis and developing an adaptation strategy, collaborating with design teams to reduce packaging waste through product design, and reviewing production processes to identify and mitigate sources of waste and pollution.

Key actions include the implementation of energy-saving measures at production sites, the increased use of sustainable materials in packaging, and a commitment to renewable energy generation to power facilities.

The following tables provide more details on Valneva's targets and action plans for the three levers. Each table includes specific descriptions, milestones, and end goals to ensure a comprehensive understanding of Valneva's sustainability initiatives.

Stakeholders, including employees, tier 1 suppliers, and customers, have been actively involved in setting these targets and action plans through consultations and engagements.

1. IMPROVE THE SUSTAINABILITY OF THE SUPPLY CHAIN MANUFACTURING ACTIVITIES

Section	Description
Action	Reduce supply chain and subcontractor carbon emissions
Scope	CMOs, CROs, and distribution/transportation partners
IRO	Supply chain and subcontractor carbon emissions
Operational targets and metrics	By 2026, define a Sustainable Procurement Policy including environmentally-friendly criteria for selecting and contracting with suppliers. By 2026, assess 100% of key suppliers in EcoVadis and share the Business Partners Code of Conduct with 100% of tier 1 suppliers.
Current situation 2024	In 2024, Valneva published its Business Partners Code of Conduct which includes a requirement for partners to measure and report their carbon footprint and GHG emissions and pledge to voluntarily reduce them. This Code of Conduct is available on Valneva's website and intranet. In 2024, Valneva entered into an agreement with EcoVadis to facilitate engaging with its tier 1 suppliers on sustainability terms, including on their carbon performance. In 2024, Valneva implemented a new software for the reporting of non-financial information which will allow tracking of information regarding its carbon emissions. In 2024, Valneva published for the first time a partial selection of Scope 3 categories and their associated emissions based on the GHG Protocol's methodology.
Action plan and milestones	(1) Collaborate with suppliers to optimize transport, reduce emissions, and promote the use of eco-friendly materials – 2025 to 2028 (2) Assess opportunities to optimize logistics and transportation – by 2027
Monitoring and reporting system	See above
Financial resources	The initiatives implemented are covered under the Company's ordinary operating expenses.

2. CONTRIBUTE TO LIMITING GLOBAL TEMPERATURE RISE

Section	Description
Action	Identify, manage and reduce Valneva's direct and indirect carbon emissions
Scope	Manufacturing and R&D sites (own operations)
IROs	Climate regulatory context Own carbon emissions management
Operational targets and metrics	Reduce Valneva's CO_2 emissions from the laboratories and manufacturing sites by 50% from a 2022 baseline by 2030 (Scope 1 and 2).
Current situation 2024	Between 2022 and 2023, Valneva experienced a significant production boost at the Livingston site. While electricity consumption increased at Group level during this period, the impact was likely mitigated by Valneva's transition to green electricity across manufacturing and R&D sites. In 2023, 100% of electricity contracted by Valneva's manufacturing and R&D sites had renewable origin. In 2024, Valneva was able to calculate and publish a partial Scope 3 emissions inventory for the first time, based on the GHG Protocol's methodology.
Action plan and milestones	In 2025, establish a 5- to 10-year master plan to support reduction of Valneva's CO_2 emissions and achievement of its carbon reduction targets.
Monitoring and reporting system	Valneva has implemented a software for non-financial reporting which integrates the Group's carbon footprint calculation at site and corporate level, giving Valneva the chance to identify and understand main sources of direct and indirect emissions by site and define tailored measures to reduce emissions. The ESG Operating Committee will follow up quarterly on Valneva's CO_2 performance and status against defined targets.
Financial resources	The initiatives implemented are covered under the Company's ordinary operating expenses. After completing the master plans mentioned above, Valneva will be able to quantify the financial resources to be allocated to these activities in the future.

Valneva's ability to implement decarbonization actions depends on the availability of financial, technological, and human resources, with substantial capital and operational capacity required for initiatives like transitioning to renewable energy and collaborating with sustainable tier 1 suppliers.

Valneva's CapEx and OpEx related to climate and energy are linked to various activities such as the renovation of buildings, maintenance and repair of energy-efficient equipment, installation of electric vehicle charging stations, and other measures to support the manufacture of medicinal products. These expenditures are necessary for the daily maintenance of assets classified as property, plant, and equipment. The financial information used for identifying the monetary amounts comes from Valneva's information systems and was analyzed and verified jointly by the financial teams of the Group to ensure consistency with the consolidated turnover, CapEx, and OpEx for the 2024 financial year.

Valneva is required to publish the KPIs of its eligible turnover, OpEx, and CapEx in relation to the economic activities defined in the taxonomy classification system. Detailed information about turnover, OpEx and CapEx KPIs is outlined in Section 3.3.1.

Valneva has set a GHG emission reduction target. This target, to reduce CO_2 emissions (scopes 1 and 2) at Valneva's manufacturing and R&D sites by 50% in 2030 from the 2022 baseline, is associated with several sub-objectives, summarized in below. A recalculation of Valneva 2022 baseline was conducted following the transition of its calculations in-house, leading to changes in the emissions factor databases used. Since Valneva Scope 1 and Scope 2 targets are based on this baseline, it was necessary to update these figures to ensure consistency and accuracy in its reporting and progress tracking.

In 2022, the base year of Scope 1 and Scope 2 GHG emissions, the gross Scope 1 emissions were recorded at 1890 tCO_2e, Similarly, gross location-based Scope 2 emissions were 1919 tCO_2e in 2022. The combined total for Scopes 1 and 2 was 3809 tCO_2e in 2022, at a company level. By 2030, the target for combined Scope 1 and Scope 2 emissions reduction from laboratories and manufacturing sites is 50% to achieve a combined Scope 1 and Scope 2 emissions of no more than 1905 tCO_2e by 2030. This objective covers 100% of Scopes 1 and 2 and includes all seven greenhouse gases taken into account under the GHG Protocol. Intensity values are not applicable for this reporting period.

Valneva does not have any emissions from regulated trading schemes in Scope 1 as this is not applicable and no calculations have been made with the market-based approach regarding Scope 2 as certificates of origin have yet to be secured to validate such calculations. In the short term, the location-based approach allowed Valneva reflect the differences in emissions at each of its sites brought about by distinct geographical locations. In 2025 the market-based approach will also be calculated to highlight and evaluate the impact of renewable energy purchases across sites and other tailored initiatives. A baseline for Scope 3 emissions will also be set along with appropriate emissions reduction targets.

Working towards comprehensive climate change mitigation planning

Currently, Valneva has not set specific absolute GHG reduction targets for its Scope 1 and Scope 2 beyond 2030 and no targets have been set for Scope 3 yet as the Group works to define the boundaries within which it may best meet climate change mitigation expectations. This applies to reduction targets as a percentage of the base year as well. Valneva aims to build a detailed decarbonization plan in 2025 that will help the Group evaluate its current position and weigh its future options to make a precise numerical assessment prior to target setting.

Valneva's baseline year for GHG emission reduction targets is 2022 for scope 1 and 2, these include a 50% emissions reduction by 2030. The scope 3 baseline year is a work in progress.

Valneva has set its GHG emission reduction targets based on the same accounting rules as its GHG inventory.

Valneva is currently working to establish long-term decarbonization targets to contribute to limiting global temperature rise. The focus is on evaluating and exploring specific and transformative actions to support decarbonization on a large scale. The Group is focusing on reducing its direct and indirect carbon emissions across its operations and supply chains, actively pursuing renewable energy consumption, and improving energy efficiency. Valneva has not yet implemented decarbonization levers but has already identified four key strategic areas – further developed at the beginning of this Section – that will be integral to the development of its decarbonization strategy:

- Procurement and supplier relationships;
- Freight, commercial distributions, and packaging;
- Production processes involving resource consumption, waste and pollution;
- Research, design of new products and processes.

Actions and resources in relation to climate change policies

To promote a rational and minimal use of non-renewable energy and support the use of renewable energy, Valneva started to introduce actions for energy efficiency back in 2023. For example, the renovations at the Nantes R&D facility reduced solar absorption, also lowering the demand for air conditioning, while the installation of LED lighting throughout the site improved energy efficiency. Additionally, Valneva worked on the cooling system, not only extending its life but also reducing its energy usage. Both the Nantes R&D site and commercial office in Lyon benefited from improved temperature regulation, with thermostats set to energy-saving levels of 19°C in winter and 26°C in summer, contributing to overall electricity savings.

More recently, in 2024, the construction of Valneva's new manufacturing building within the Livingston site was finished and the new building inaugurated. That new construction considered several energy efficiency measures:

- Different systems with Variable Speed Drive (VSD) control (air compressors system, steam generators, chilled water system, all chillers, boosted chilled water system, all 9 Heating, Ventilation, and Air Conditioning (HVAC) system);
- Equipment with Building Management System (BMS) control (all facility equipment, all heating and air conditioning, chillers, kill tank systems);
- 100% LED lighting with Passive Infrared (PIR) control;
- Programming of all corridor and stair lighting to shut down to 25% if not in use after 10 minutes, and then shut off completely after 30 minutes.

The implementation of an internal non-financial reporting software during 2024 allows Valneva to track its sites' energy performance on a quarterly basis. The ESG Operating Committee will follow up quarterly on Valneva's energy and CO_2 performance and status against defined climate change mitigation target. The initiatives implemented by Valneva in 2024 are covered under Valneva's ordinary operating expenses and are not expected to result in significant increases of operational or capital expenditures in the future.

In 2025, Valneva aims to draft a 5- to 10-year master plan for all Valneva manufacturing and R&D sites to support meeting strategic targets and identifying actions to reduce energy consumption. Conducting energy building performance audits on all manufacturing and R&D sites could also identify cost-saving opportunities and reduce energy consumption. Performing waste assessments could lead to the identification of potential reduction measures. The performance of water use assessments could lead to the identification of water consumption reduction measures.

Energy consumption and mix

VALNEVA'S ENERGY CONSUMPTION AND MIX

(in MWh)	2024
1. Fuel consumption from coal and coal products	0
2. Fuel consumption from crude oil and petroleum products	<1
3. Fuel consumption from natural gas	2,899
4. Fuel consumption from other fossil sources	0
5. Consumption of purchased or acquired electricity, heat, steam, and cooling from fossil sources	1,863
6. Total fossil energy consumption (calculated as the sum of lines 1 to 5)	4,762
SHARE OF FOSSIL SOURCES IN TOTAL ENERGY CONSUMPTION *(%)*	**20**
7. Consumption from nuclear sources	119
SHARE OF CONSUMPTION FROM NUCLEAR SOURCES IN TOTAL ENERGY CONSUMPTION *(%)*	**<1**
8. Fuel consumption from renewable sources, including biomass (also comprising industrial and municipal waste of biologic origin, biogas, renewable hydrogen, etc.)	0
9. Consumption of purchased or acquired electricity, heat, steam, and cooling from renewable sources	19,219
10. The consumption of self-generated non-fuel renewable energy	0
11. Total renewable energy consumption (calculated as the sum of lines 8 to 10)	19,219
SHARE OF RENEWABLE SOURCES IN TOTAL ENERGY CONSUMPTION *(%)*	**80**
TOTAL ENERGY CONSUMPTION (CALCULATED AS THE SUM OF LINES 6, 7 AND 11)	**24,100**

ENERGY INTENSITY PER NET REVENUE

	2024
TOTAL ENERGY CONSUMPTION FROM ACTIVITIES IN HIGH CLIMATE IMPACT SECTORS *(in MWh)*	**24,100**
TOTAL ENERGY CONSUMPTION PER NET REVENUE FROM ACTIVITIES IN HIGH CLIMATE IMPACT SECTORS *(in MWh/€million)*	**142**

Valneva's activities fall under the category of "wholesale of pharmaceutical goods," which is recognized as a high climate impact sector. Consequently, all of Valneva's activities are encompassed within this KPI. The net revenue amount reported in the financial statements, €169.6 million, is fully aligned with the denominator used in the energy intensity calculation.

GHG emissions

GROSS SCOPES 1, 2 AND 3 – CONSOLIDATED GROUP AND OPERATIONAL CONTROL

	2024	
(in tCO_2e)	Consolidated group	Operational control
Gross Scope 1 emissions	1,277	1,277
Gross Scope 2 emissions (market-based)	Not available	Not available
Gross Scope 2 emissions (location-based)	2,499	2,499
Gross Scope 3 emissions	55,534	55,534
TOTAL	**59,310**	**59,310**

	2024		
(in tCO_2e)	Upstream	Own operations	Downstream
Gross Scope 1 emissions		1,277	
Gross Scope 2 emissions		2,499	
Gross Scope 3 emissions	48,942		6,592
TOTAL GHG EMISSIONS	**48,942**	**3,776**	**6,592**

Scope 2 market-based emissions are not yet calculated due to pending certificates of origin. A location-based approach was used for 2024, with a market-based approach. Valneva is working, in 2025, to establish its Scope 3 baseline.

Emissions for the previous reporting year, 2023, were calculated; however, they are not included in the table above. This is due to a change in the databases used, as emissions calculations were brought in-house in 2024. To ensure consistency in tracking targets, the 2022 baseline was recalculated using the new methodology. However, no recalculation was performed for 2023. Including 2023 values in this table would create a biased representation and would not accurately reflect emissions changes.

RETROSPECTIVE

	Base year (2022 for Scope 1 & 2)	2024
SIGNIFICANT SCOPE 3 GHG EMISSIONS *(tCO_2e)*		
TOTAL GROSS INDIRECT (SCOPE 3) GHG EMISSIONS	**NOT APPLICABLE**	**55,534**
Percentage of GHG Scope 3 calculated using primary data	not available	22
1. Purchased goods and services	not available	34,964
2. Capital goods	not available	2,029
3. Fuel and energy-related Activities (not included in Scope1 or Scope 2)	not available	203
4. Upstream transportation and distribution	not available	9,044
5. Waste generated in operations	not available	18
6. Business traveling	not available	1,619
7. Employee commuting	not available	1,065
8. Upstream leased assets	not applicable	not applicable – emissions from leased vehicles accounted for in scope 1
9. Downstream transportation	not available	5,791
10. Processing of sold products	not applicable	not applicable
11. Use of sold products	not applicable	not applicable
12. End-of-life treatment of sold products	not available	802
13. Downstream leased asset	not applicable	not applicable
14. Franchises	not applicable	not applicable
15. Investments	not applicable	not applicable
TOTAL GHG EMISSIONS *(tCO_2e)*		
TOTAL LOCATION BASED GHG EMISSIONS		**59,310.00**
TOTAL MARKET BASED GHG EMISSIONS	**NOT APPLICABLE**	**NOT APPLICABLE**

For the 2024 footprint calculations, certain categories were deemed not applicable. Emissions from upstream leased assets (3-8) were accounted for in Scope 1, as they pertain to leased vehicles. The processing of sold products (3-10) was also excluded, as vaccines are typically sold as finished products and do not require further processing before use. Similarly, the use of sold products (3-11) does not generate significant emissions, unlike consumer goods, since vaccines are administered directly to patients. Downstream leased assets (3-13) were not considered, as Valneva does not lease assets to third parties in a way that would generate emissions under its operational control. Additionally, franchises (3-14) were not relevant, as Valneva's business model does not include franchising. Lastly, investments (3-15) were excluded from the footprint calculations since Valneva does not have significant investments in external entities.

Valneva has made significant changes in the definition of its reporting undertaking and value chain, which may affect year-to-year comparability of reported GHG emissions. Specifically, Valneva has refined the scope to focus exclusively on transport travel, waste, and energy in the value chain, excluding other Scope 3 categories due to data limitations. For the same reason, Valneva has not set targets on Scope 3 reduction.

These changes aim to enhance the accuracy and relevance of Valneva's emissions data but may result in lower reported GHG emissions compared to previous years. As a result, stakeholders should consider these adjustments when evaluating year-over-year comparisons, as the current figures reflect a more focused approach to Valneva´s sustainability reporting.

Valneva is not aware of any significant events or changes in circumstances that have occurred between the reporting dates of entities within its value chain and the date of the Group's general purpose financial statements that would affect its GHG measurements.

The calculation methods used for estimating Scope 1 & 2 emissions involve, among others:

- Direct Emissions from Stationary Combustion: Utilizing emissions factors based on fuel volume and energy consumption. Data sourced from DEFRA;
- Direct Emissions from Mobile Combustion: Calculated using emissions factors specific to vehicle type, considering fuel volume, distance traveled, energy consumption, and direct emissions. Data sourced from DEFRA and supplier-specific emission factors;
- Direct Process Emissions: Based on direct emissions data with calculations sourced from DEFRA and supplier-specific emission factors;

- Direct Fugitive Emissions: Estimated using gas refill volumes, gas contained, and energy usage. Evaluated for air conditioning devices (water-based and other types). Data sourced from DEFRA, IPCC, and supplier-specific emission factors;
- Indirect Emissions from Electricity Consumption: Calculated based on energy consumption and direct emissions. Data sourced from EEA, EPA, European Commission and DEFRA;
- Indirect Emissions from Steam, Heat, and Cold Consumption: Based on exact consumption data from local heating networks. Emission factors derived from District heating and cooling in Vienna and Norrenergi,UK Department for Business, Energy & Industrial Strategy (BEIS), France's *Agence de la transition écologique* (ADEME), Swedish Environmental Protection Agency (Naturvårdsverket), and the EPA;
- Valneva has not identified its type of contractual instruments. Therefore, Valneva does not currently calculate its Scope 2 GHG emissions associated with contractual instruments. These instruments would include:
  - contractual instruments used for sales and purchase of energy bundled with attributes about energy generation,
  - contractual instruments used for sales and purchase of unbundled energy attribute claims.

Valneva has calculated about 22% of its Scope 3 GHG emissions using primary data sources. This includes direct measurements and data collected from the Group's transport and travel activities, waste management practices, and energy consumption in Valneva's value chain.

The calculation methods used for estimating Scope 3 emissions involve:

- Transport Travel: Utilizing emissions factors based on distance traveled and vehicle type, alongside travel data from expense reports. Estimated total yearly ton-kilometers of transported goods. Data sourced from DEFRA, EPA, and the European Commission;
- Waste: Applying emissions factors relevant to waste types and disposal methods, informed by data from waste management service providers. Based on purchase quantities and waste volume, including water consumption. Data sourced from DEFR;.
- Energy in the Value Chain: Estimating emissions based on the energy consumption of facilities and operations, using relevant emissions factors from recognized sources;
- Purchased Goods and Services: Estimated using purchase expenses, quantities, and distance data. Adjustments made for non-respondents in meal surveys. Top 20–25 tier 1 suppliers at the Nantes site account for over 90% of purchase volume. Includes emissions from vehicle fleets, furniture, hotel stays, maintenance, meals, paper & cardboard, and raw materials. Data sourced from the UK's Carbon Saver database;
- End-of-Life of Sold Products: Assumed all products undergo incineration as the predominant waste treatment for hazardous materials. Returns accounted for where data was available; otherwise, assumed zero. If dose weight was unavailable, Sweden's benchmark (61.8 grams/dose) was used. Data sourced from DEFRA;
- Capital Goods: Estimated using surface area, purchase quantities, and costs, covering buildings, IT materials, and machinery. Data sourced from The Inventory of Carbon and Energy (ICE) database;
- Fuel and Energy-Related Activities: Calculated using distinct emissions factors based on vehicle type, including fuel volume, distance traveled, and direct emissions. Data sourced from DEFRA;
- Business Travel: Utilizing emissions factors based on transport mode and accommodation type, with data from travel expense reports. Data sourced from DEFRA;
- Employee Commuting: Calculated using transport mode-specific emissions factors, with extrapolations for non-respondents in employee surveys. Data sourced from DEFRA.

GHG INTENSITY PER NET REVENUE

(in tCO_2eq/Monetary unit)	2024
TOTAL GHG EMISSIONS (LOCATION-BASED) PER NET REVENUE	**350**
TOTAL GHG EMISSIONS (MARKET-BASED) PER NET REVENUE	**NOT APPLICABLE**

(in Monetary millions)	2024
Reconciliation to financial statements of net revenue used for calculation of GHG emissions intensity	
Net revenue used to calculate GHG intensity	169,579
Net revenue (other than used to calculate GHG intensity)	169,579
TOTAL NET REVENUE (IN FINANCIAL STATEMENTS)	**169.579**

3.4.2 ESRS E2 – Pollution

This section describes the policies, actions, and resources related to pollution management and provides metrics and targets linked to the pollution of air and water, and SOC. Additionally, it addresses green chemistry initiatives to reduce or eliminate hazardous substances.

The following table summarizes the IROs identified and related to ESRS E2 material topics:

ESRS E2 – POLLUTION			
Material challenges identified	**IRO description**	**Type of IRO**	**IRO impact on Valneva and its stakeholders**
Products that are, contain, or are manufactured with Substances of Concern (SOC) or Substances of Very High Concern (SoVHC)	Non-compliance with the regulations related to the use of certain substances, leading to reputational and financial costs	Risk (operational, financial and reputational)	There is a risk that the Group may not comply with regulations related to the use of these substances. Non-compliance could result in suspension of the Group's operations, fines, criminal prosecutions, and/or harm to the Group's employees.
	Impact on the environment, workers, and consumers' safety due to the use of SoC or SoVHC	Negative impact	The use of SoC or SoVHC is highly regulated. The Group has in the past had to invest in additional safeguards in order to comply with applicable regulations and cannot exclude the possibility that in the future it may be required to make further such investments. People working with SoC or SoVHC may be exposed to high-risk working environments. The improper handling of SoC or SoVHC may lead to improper chemical waste disposal and release into water systems. Using SoVHC leads to hazardous waste generation.
Air pollution legal thresholds and prevention and control of emissions to air	Impact on the environment and public health due to the discharge of pollutants	Negative impact	The discharge of pollutants to the air resulting from Valneva's operations and those of its value chain may affect air quality.
Water pollution legal thresholds and prevention and control of emissions to water	Impact on the environment and aquatic ecosystems in case of improper treatment of wastewater	Negative impact	Wastewater derived from Valneva's R&D and manufacturing activities requires treatment; improper treatment may cause water pollution.
Green Chemistry	Regulatory risks due to tightening regulations in relation to vaccines' components leading to increasing products' regulatory approvals	Risk (financial and regulatory)	Valneva faces financial and regulatory risks associated with tightening regulations that may require the Company to invest in replacing vaccines' components with "greener" options, as this would lead to regulatory approvals and changes to the Company's product portfolio.
	Green chemistry allowing production process (re-engineering)	Opportunity	Some production processes could be (re-)engineered using the principles of Green Chemistry. This could reduce the overall environmental impact of Valneva's products and be a differentiation lever when there is competition.

Pollution-related material impacts, risks, and opportunities

Description of the processes to identify and assess material pollution-related IROs

Please see ESRS 2, Section IRO-1, for information about Valneva's processes for identifying and assessing pollution-related IROs.

Policies, targets and actions linked to pollution

Policies related to pollution

Valneva originally formalized a Global EOHS Policy in 2017 based on five core principles related to environmental and safety risks: Protect, Prevent, Manage, Analyze, and Minimize. In the EOHS Policy, which was updated in 2024, Valneva specifically addresses the mitigation of two negative impacts related to air and water pollution, as described in the IRO table above. The objective is to minimize the impact on the environment and aquatic ecosystems in the event of improper wastewater treatment, as well as to reduce the impact on the environment and public health due to the discharge of pollutants. In addition, Valneva asserts its commitment to the rational and sustainable utilization of water and returning water to the environment in an appropriate condition.

The remaining risk (non-compliance with regulations related to the use of certain substances) related to the global IRO "Products that are, contain, or are manufactured with SoC or SoVHC" is not currently addressed in the policy, as Valneva follows applicable regulations, which provides and ensures a high level of safety. Moreover, Valneva's EOHS policy does not currently address substituting and minimizing use of SoC or SoVHC.

Targets related to pollution

Valneva has not yet set targets related to the IROs for pollution. With respect to air and water pollution, Valneva believes that adherence to the applicable legal thresholds is an appropriate standard for managing the negative impacts and risks. The Group will evaluate whether to set a target related to SoC and SoVHC following completion of the inventory and assessment of these substances described above.

Actions and resources related to pollution

Valneva strives to dispose of sewage, refuse, and other waste (including solids, liquids, or gaseous by-products from manufacturing) in a safe, timely, and sanitary manner. Containers or pipes for waste material are clearly identified. Analytical data demonstrating the conversion of these substances and their residues to non-hazardous waste materials are available at the relevant facility and kept up to date. Valneva is currently completing its inventory and assessment of SoC and SoVHC aiming to identify available substitutes and assess substitution feasibility before the end of 2025.

Moreover, Valneva has implemented safety measures to promote the safe handling and storage of chemicals. The used chemicals are securely stored in safety cabinets. Laboratory staff receive comprehensive training from their managers on the proper use and handling of these chemicals in order to prepare them to manage any potential risks. Additionally, hazardous materials are stored in a locked container until they final disposal.

Valneva is currently strengthening its sustainable purchasing approach with the aim of managing its IROs in its upstream value chain, including on pollution topics (more information on the target to define a Sustainable Procurement Policy in Section 3.4.1 and on the Ecovadis risk assessment of providers in Section 3.3.3). Additionally, in 2025, Valneva will conduct waste and chemical assessments that will allow it to better formulate appropriate actions to mitigate negative environmental impacts.

Valneva is already subject to legal thresholds regarding air and water pollutants, as defined by local environmental authorities. These thresholds are often on par with or more conservative than those set by the European Pollutant Release and Transfer Register (E-PRTR), particularly given Valneva's scale and industry. The Group's facilities monitor emission levels and can alert technical supervisors if these thresholds are overrun.

The air and water pollution thresholds are the following:

Pollutant to	Pollutant name	Pollutant legal threshold and Valneva's target	Frequency of reporting to authorities	Frequency of measurement at site	Country
Air	NOx (as NO_2) mg/m^3 (as a 30 minute mean)	100mg/m^3	Annual reporting plus incident report if exceedance occurs	Annual	Scotland
Air	CO (as NO_2) mg/m^3 (as a 30 minute mean)	50mg/m^3	Annual reporting of spot sampling plus incident report if exceedance occurs	Annual	Scotland
Air	CO	80 mg/m^3	No regular reporting to authorities, but documents have to be presented in case of an inspection performed by the authorities at site.	Every 5 years	Austria
Air	NOx (as NO_2) mg/m^3	125 mg/m^3	No regular reporting to authorities, but documents have to be presented in case of an inspection performed by the authorities at site.	Every 5 years	Austria
Air	CO (ppm)	100mg/m^3	No regular reporting to authorities, but documents have to be presented in case of an inspection performed by the authorities at site.	Every 3 years	France

Pollutant to	Pollutant name	Pollutant legal threshold and Valneva's target	Frequency of reporting to authorities	Frequency of measurement at site	Country
Water	Trade Effluent	pH 5-9, max temp 40 DEG C	Only if exceeded	Continuous; sampling by regulator when requested	Scotland
Water	Phosphate	5,000 kg	Once a year	Annually	Scotland
Water	pH-Value	DIN EN ISO 10523:2012-04	Every 2 years	Every 2 years	Austria
Water	HNO_3/H_2O	DIN EN ISO 15587-1&2:2002	Every 2 years	Every 2 years	Austria
Water	Copper	DIN EN ISO 17294-1:2006	Every 2 years	Every 2 years	Austria
Water	Zink	DIN EN ISO 17294-1:2006	Every 2 years	Every 2 years	Austria
Water	Biochemical Oxygen Demand	8,000 mg/l	Once a year	5 times a year	Sweden
Water	Phosphate	400 mg/l	Once a year	5 times a year	Sweden
Water	Nitrogen	600 mg/l	Once a year	5 times a year	Sweden
Water	Total Organic Carbon	5,000 mg/l	Once a year	5 times a year	Sweden
Water	pH	6,5-11	Once a year	5 times a year	Sweden
Water	pH	6,5-7,5 (Legal 5,5-8,5)	No reporting to authorities required	Daily monitoring	France
Water	DBO5	800 mg/L	No reporting to authorities required	No measurement	France
Water	DCO	2,000 mg/L	No reporting to authorities required	No measurement	France
Water	MES	600 mg/L	No reporting to authorities required	No measurement	France
Water	T°	30°C	No reporting to authorities required	No measurement	France

The initiatives implemented by Valneva in 2024 are covered under Valneva's ordinary operating expenses and are not expected to result in significant increases of operational or capital expenditures in the future. Further details regarding the action plan and milestones and progress of the above-mentioned actions are not available for this initial Sustainability Report.

Metrics on pollution of air and water

Valneva discloses emissions to air and water pollutants from its own operations, in accordance with the list of pollutants listed in Annex II of Regulation (EC) No 166/2006 of the European parliament, with the exception of GHGs which are disclosed within ESRS E1 – Climate Change.

None of Valneva's sites release to air or water any pollutant specified in Annex II for which the applicable threshold value specified there is exceeded. Therefore, the Company does not disclose that information in this Statement.

Both water and air pollution are strictly regulated under the local environmental legislation of each country where Valneva operates. Emission permits issued by local authorities and applicable to the Group define specific thresholds for each pollutant. Valneva conducts regular monitoring of pollutant levels in both air and water. The frequency of this monitoring is determined by the specific requirements of local environmental legislation. Typically, external service providers are engaged to capture samples and measure emissions, supporting the objectivity and reliability of the data.

In recent years, as Valneva has advanced in the development of new vaccines, the Group has implemented increasingly stringent controls and regulations to minimize the use of materials containing regulated pollutants. This shift is reflected in a reduction in pollutants impacting air, water, and soil, thanks to improved formulations that require fewer or alternative stabilizers and preservatives. Valneva continues to prioritize sustainable practices, seeking materials that maintain vaccine safety and efficacy while reducing the Group's environmental footprint. Valneva's measurement methodologies for air and water pollution have evolved significantly, with advanced techniques and improved pollutant identification systems now integrated into the Group's manufacturing facilities. These enhancements have strengthened the accuracy and reliability of Valneva's data, supporting both regulatory compliance and environmental stewardship. Additionally, these systems facilitate greater transparency, enabling Valneva to share comprehensive pollution metrics with stakeholders and to take proactive measures to further reduce its environmental impact.

The collected data are recorded in Valneva's data repository, where they are subject to review to maintain accuracy and ensure alignment with environmental standards. In cases where anomalies or deviations from regulatory thresholds are identified, immediate investigations and corrective actions are triggered. Additionally, Valneva implements routine checks and cross-departmental verifications to validate the quality and integrity of the collected data. This multi-layered review process supports transparency and reliability in the Group's pollution-related accounting and reporting, reinforcing its commitment to regulatory compliance and environmental stewardship.

Valneva's estimation methodology is based on measured concentrations of pollutants – often requested for regulatory and monitoring purposes – and total gas or water consumption which may be extrapolated from continuous flow rates and yearly operational hours depending on data availability. The choice of methodology for quantifying emissions was based on the need for streamlined implementation across all facilities, given current technological limitations and resource constraints. While alternative methodologies offer a higher degree of accuracy, they also require specialized equipment and expertise not yet feasible across Valneva locations. Additionally, Valneva needs to estimate its real emissions to the air and to water, as the Group currently relies on monitoring on an annual or five-year basis rather than continuous monitoring. The current approach allows for consistent, comparable data that meets regulatory requirements while enabling efficient monitoring and reporting. Additional information on the methodology is reported in Section 3.3.1.

Metrics on substances of concern and substances of very high concern

SoC and SoVHC are still needed in the pharmaceutical industry for several reasons, despite their associated risks. Their use is often due to the unique properties they provide in pharmaceutical development, manufacturing, or commercialization, which may not yet be fully replicable by safer alternatives.

SoVHC: to identify and classify the SoVHC used at Valneva, the Company referred to the Candidate List of SoVHC: managed primarily through the REACH regulation. Despite Valneva's use of different, well-identified, and quantified SoVHC in its manufacturing and R&D activities, these are not disclosed in this Statement following the thresholds defined under the REACH Regulation.

SOC: to identify and classify the SOC used at Valneva, the Company referred to *22nd Adaptation to Technical Progress, i.e. Commission Delegated Regulation (EU) No 2024/2564 of 19 June 2024 amending Regulation (EC) No 1272/2008 of the European Parliament and of the Council as regards the harmonized classification and labelling of certain substances*. The information included in the table below covers the SoC used on Valneva's R&D sites, in Nantes (France) and Vienna (Austria), and the manufacturing site in Solna (Sweden). The data regarding the SoC used at Valneva's manufacturing site in Livingston (Scotland) were not available at the time of publication due to the incompatibility of the existing reporting systems on site with the classification of chemicals done on the regulation mentioned above. Estimating these data was not possible due to the complexity and singularity of the manufacturing processes which take place on that site.

SOC	Total amount used *(kg)*[1]	Included on final product?
Formaldehyde solution 37% (stabilized with approximately 10% methanol)		Yes (<10mM)
Potassium hydroxide	0.2	No
Sodium disulfite (sodium metabisulfite)	0.2	No
Sodium hydroxide (50% aqueous solution)	59	No
Nitric acid (65% aqueous solution)	<0.1	No
Hydrochloric acid (fuming, 37%)	2	No
Ammonia (25% solution)	149	No
Sodium hypochlorite solution (6-14% active chlorine)	10	No
Benzalkonium chloride Polymer	882	No
Octhilinone (Octylisothiazolinon)	15.5	No
Trifluoroacetic acid	0.5	No
Trichloroacetic acid	0.5	No
Sodium hypochlorite	110.2	No
Ethanol	73.2	No
Isopropanol (propan-2-ol)	37.6	No
Methanol	8.1	No
Acetonitrile	61	No
o-Phenylenediamine dihydrochloride	<0.1	No
Diethanolamine (DEA, 2,2′-iminodiethanol)	0.1	No
Formic acid	0.1	No
Imidazole	0.4	No
Chloroform	0.1	No
Sulphuric acid	5.2	No
Limonene	<0.1	No
Trypsin	<0.1	No
Sodium Carbonate	<0.1	No
Subtilisin	0.3	No
Sodium azide	0.1	No
Triethylamine	<0.1	No
Acetic anhydride	<0.1	No
Zinc sulfate anhydrous	<0.1	No
Hydrogen peroxide solution	10.7	No
Sodium hydroxide; caustic soda	1	No
Phosphoric acid 100 % (orthophosphoric acid)	1	No
Sulfamic acid (amidosulfonic acid)	0.1	No
Cobalt dinitrate	<0.1	No
Copper sulphate pentahydrate	<0.1	No
Silver nitrate	<0.1	No
Cadmium nitrate	<0.1	No
Toluene	<0.1	No
n-hexane	0.1	No
Formaldehyde (solution)	0.9	No
Acetone (propan-2-one)	<0.1	No
3-propanolide (1,3-propiolactone)	<0.1	No
Acetic acid (100%)	2.6	No
Methanesulphonic acid	<0.1	No
Guanidinium chloride (guanadine hydrochloride)	<0.1	No
Tetrasodium EDTA (tetrasodium ethylene diamine tetraacetate)	0.5	No
EDTA (edetic acid, ethylenediaminetetraacetic acid)	0.1	No
Citric acid	1	No
4,4′-(4-iminocyclohexa-2,5-dienylidenemethylene)dianiline hydrochloride (C.I. Basic Red 9)	<0.1	No
4-[4,4′-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3)	0.6	No
C.I. Basic Violet 3 with ≥ 0.1 % of Michler's ketone (EC no. 202-027-5)	<0.1	No
Methyl-1H-benzotriazole	<0.1	No

(1) Estimations made to convert certain substances from liters to kg: Hydrochloric acid, fuming, 37% (1.19 kg/L), Benzalkonium chloride (0.98 kg/L), Octhilinone (1.03 kg/L), and Trifluoroacetic acid (1.49 kg/L).

The figures reported in the table above are manually calculated from the available data and are subject to significant uncertainty. The weight of substances is calculated according to their concentration in the material. If information on concentration is not available, the assumption is that 100% of the material consists of substance(s) in scope. Consequently, certain metrics might be overestimated. The scoping of the materials included in the calculations may not be exhaustive.

Valneva is currently undertaking a comprehensive project aimed at analyzing the use of SoC and SoVHC across all its manufacturing and R&D sites, as well as its associated processes.In 2025, this will result in the compilation of a centralized inventory of the SOC used at Valneva, including their respective quantities. This analysis will support Valneva in making informed decisions regarding the potential substitution of certain substances, thereby reinforcing the Group's commitment to regulatory compliance and sustainable practices.

Valneva is initiating a project to assess opportunities for replacing chemicals related to SOC/SoVHC within its operations. This initiative will support the establishment of relevant targets for future sustainability efforts. Valneva invested during the last years in additional safeguards in order to comply with applicable regulations and cannot exclude the possibility that in the future it may be required to make further such investments.

Green Chemistry

As defined by the United States Environmental Protection Agency (EPA), Green Chemistry is the design of chemical products and processes that reduce or eliminate the generation of hazardous substances. For the pharmaceutical industry, and specifically for Valneva, scientific innovation begins in the lab, where chemistry is foundational to designing and delivering vaccines to prevent and treat disease. The adoption of green chemistry principles may allow Valneva to evaluate, innovate, and identify more effective practices.

For details on the roles of administrative, management, and supervisory bodies, sustainability incentives, risk management in reporting, stakeholder views, material IROs, and their assessment processes related to Green Chemistry, see the section on ESRS 2.

Valneva is working to implement manufacturing processes to minimize waste and energy consumption. The efforts led to formalizing clear commitments in 2024, as summarized in the table below and described in detail in the Sections dedicated to ESRS E1 and ESRS E5 (3.4.1 and 3.4.5 respectively). In particular, as part of its emissions reduction goals, the Group aims to achieve a 50% reduction in Scope 1 and 2 company GHG emissions from its laboratories and manufacturing sites by 2030. Furthermore, Valneva will continue its existing Zero waste to landfill practices on certain sites. Working to reach those targets, which belong to the Preserving the Planet pillar of Valneva's ESG strategy, in 2025, Valneva plans to start a new project to identify, understand, and evaluate the Green Chemistry opportunities applicable to its labs and manufacturing sites' practices. As of today, Valneva has not established a policy to address this topic, and Valneva will further evaluate any chance to define one. Additionally, the company does not utilize metrics beyond those presented in the other Sections (see table below).

The table below provides further details about key areas of Green Chemistry in Valneva's industry and indicates where to find further information about Valneva's responses.

Key Areas of Green Chemistry in the Pharmaceutical Industry	Description	Section
Reduce waste	Minimize waste generation during manufacturing processes.	ESRS E5 Section 3.4.5
Safer solvents	Use environmentally friendly and less hazardous solvents.	ESRS E2 Section 3.4.2
Green catalysis	Employ catalysts that enhance efficiency and reduce byproducts.	ESRS E2 Section 3.4.2
Energy efficiency	Design processes to minimize energy consumption.	ESRS E1 Section 3.4.1
Renewable feedstocks	Utilize raw materials derived from renewable resources.	Valneva is currently using a large variety of biosourced ingredients on its development and manufacturing processes. ESRS E2 Section 3.4.2
Design safer chemicals	Create products that are effective but pose fewer risks to health and the environment.	ESRS E2 Section 3.4.2
Pollution prevention	Prevent contamination of air, water, and soil during production and disposal.	ESRS E2 Section 3.4.2

The initiatives implemented by Valneva in 2024 are covered under Valneva's ordinary operating expenses and are not expected to result in significant increases of operational or capital expenditures in the future.

Valneva has not yet set any targets related to Green Chemistry. The Group will evaluate whether to set any target(s) related to SoC and SoVHC following completion of the inventory and assessment of these substances described above.

3.4.3 ESRS E3 – Water and marine resources

This section outlines policies, actions, and resources related to the management of water and provides metrics and targets such as specific goals for water consumption levels.

Currently, none of Valneva's manufacturing or R&D sites are located in water-stressed regions or recycle, reuse, or store any water. The following table summarizes the IROs identified and related to ESRS E3 material topics:

ESRS E3 – WATER AND MARINE RESOURCES			
Material challenges identified	**IRO description**	**Type of IRO**	**IRO impact on Valneva and its stakeholders**
Use and sourcing of water or marine resources in own operations	Operational risk on production timelines in case of water shortages	Risk (operational)	In case of water shortages, maintaining the necessary supply of purified water for manufacturing and R&D processes could become difficult, impacting production timelines.
	Impact on water availability for communities due to Valneva's and its suppliers water consumption	Negative impact	The Group uses water in its manufacturing and R&D processes. This consumption may affect water availability at local level. Some of the Group's suppliers consume water in their operations which may affect water availability at local level.

Water-related material impacts, risks, and opportunities

Description of the processes to identify and assess material water and marine resources-related IROs

Please see ESRS 2, Section IRO-1, for information about Valneva's processes for identifying and assessing water and marine resources-related IROs.

Policies, targets and actions linked to water consumption

Policies related to water and marine resources

Valneva's Corporate Environmental, Occupational Safety, and Health (EOHS) Policy outlines in its "Committed to environmental care" section the Group's commitment to minimizing environmental impact, promoting sustainability, and ensuring the safety and health of its employees. The policy includes commitments to make a rational and sustainable use of all resources, including water, and to ensure that water is returned to the environment in the required condition, which encompasses the management of the risk and negative impact associated with the use and sourcing of water. The EOHS Policy applies to all operations and activities within Valneva, including vaccine development, manufacturing, and packaging processes. For more information regarding the EOHS Policy, refer to Section ESRS E1.

As part of its Preserving the Planet pillar, Valneva has identified three key commitments, one of which relates to water topics.

As outlined in the EOHS Policy, Valneva is committed to using natural capital sustainably. In particular, Valneva is committed to making rational and sustainable use of water, managing the potential risks relating to water scarcity and ensuring that water used is returned to the environment in the required condition. Moreover, Valneva is committed to sustainable water stewardship and to finding solutions that allow the Group to be more efficient in the use of water and reduce its use. Valneva has also adopted the necessary measures to ensure compliance with all local regulatory thresholds on wastewater discharge.

Valneva's EOHS Policy advocates for the sustainable use of all natural resources by implementing regular reviews and assessments to enhance emissions control measures, ensure compliance with air and wastewater quality regulations across all facilities, and align with the latest guidelines from regulatory bodies like the U.S. Environmental Protection Agency (EPA) or equivalent organizations (*e.g.*, European Environment Agency (EEA) or ADEME (Agency for Ecological Transition).

Targets and actions related to water and marine resources

Valneva has not yet defined actions or targets related to water use. The Group expects to determine whether to define target(s) following further assessment of its water use at its manufacturing and R&D sites.

There is currently no applicable legislation restricting Valneva's water consumption. Within its own operations, Valneva has no activity in areas at water risk.

Metrics on water consumption

WATER CONSUMPTION

(m^3)	2023	2024
R&D	9,167	9,027
Manufacturing	67,012	44,516
TOTAL	**76,179**	**53,543**

Calculation methodology: Qualitative information was provided on the methods used for measuring or estimating water consumption at each site, with diverse methodologies used, including quarterly internal meter readings, measurement or estimates.

Although Valneva strives to use direct measurement figures whenever possible, based on its invoices and meter readings, it must sometimes resort to extrapolation or estimates when invoices are not available. Those estimations, if any, are based on previous years' information. It is estimated that as much as 15% of the reported water metrics of Valneva come from direct measurement

The water intensity ratio represents the total water consumption in Valneva's own operations. In 2024, this ratio amounts to 315.7 m^3 per million EUR net revenue.

In previous years, Valneva made big efforts to reduce its water consumption: in 2023, Valneva's R&D sites in Nantes and Vienna reduced their water consumption by 30% and 40%, respectively, compared to 2022. In Vienna, this was achieved by replacing research equipment that consumed excessive water. In Nantes, the cessation of COVID-19 research and the adoption of remote working significantly reduced water usage. At corporate level, overall water consumption decreased by 17% in 2024. In Solna, this reduction was primarily due to two factors: the sale of the research division of Valneva Sweden midway through the year and extensive efforts to optimize the fill-finish process. The latter resulted in a higher yield per batch, which in turn reduced the number of cleaning cycles required.

Valneva has also improved the accuracy of water consumption data during the last years, coming from a pure estimation methodology to the installation of water meters or renegotiation of contractual building leasing agreements including regular communication on water consumption information. At Valneva's manufacturing site in Livingston, a project was initiated to remove ineffective humidifiers and reuse steam from boilers, thereby improving control over water consumption.

3.4.4 ESRS E4 – Biodiversity and ecosystems

This section aims at addressing the integration of biodiversity and ecosystems into the Group's strategy and business model, along with related policies, actions, Due to the phase-in provision applicable under Appendix C of ESRS 1, Valneva is not required to report on ESRS E4) in the first reporting year. Currently only the information related to the Minimum Disclosure Requirements (MDR) is included below.

Valneva has been able to identify two IROs related to biodiversity and dependencies on ecosystems as a result of the assessment performed on biosourced ingredients which are summarized on the following table:

ESRS E4 – BIODIVERSITY AND ECOSYSTEMS			
Material challenges identified	**IRO description**	**Type of IRO**	**IRO impact on Valneva and its stakeholders**
Dependency on biosourced ingredients	Impact of climate change on quality, availability, and price of biosourced molecules (plant- & animal-based)	Risk (operational and financial)	Some molecules used during the manufacturing process are biosourced. Therefore, they are subjected to biodiversity pressure, climate change, and price variations linked to variable harvesting or change in animal population.
	Operations requires horseshoe crab blood for various quality assurance tests, a species which is listed as Vulnerable on the IUCN Red List	Negative impact	Horseshoe crab blood products are used for pharmaceutical development and manufacturing for endotoxin testing related to drug product safety. The species of horseshoe crab affected is Limulus polyphemus (East Coast of the US and the Indo-Pacific). Their blood is used to produce Limulus Amebocyte Lysate (LAL) and Tachypleus Amebocyte Lysate (TAL) respectively, both being extracted without harming the crabs, who are typically collected and then released back to the wild after a measured amount of blood is extracted.

Policies, targets and actions linked to biodiversity and ecosystems

Valneva has not addressed this issue in policies in 2024.

Currently, Valneva has not set a specific quantitative target related to these IROs, but the Company aims to complete an assessment of biosourced material dependencies and potential substitutes by 2027.

The blood of horseshoe crabs is of critical importance for assessing the safety of vaccines and other medical interventions, as it contains important immune cells that are sensitive to toxic bacteria and can be used to detect bacterial endotoxin contamination– a technique used across the globe since the 1970s. Biotechnology-derived materials can, in some cases, replace the use of the horseshoe crab blood.

The bacterial endotoxin test (BET) performed by Valneva currently makes use of horseshoe crab-derived material (LAL), as is the case for most BETs in the industry. To reduce the reliance on this endangered species, Valneva is considering alternative methods and has started feasibility studies for the introduction of recombinant factor C (rFC) technology for two of its commercialized vaccines (BET is not used in the production of DUKORAL), and if possible, Valneva may extend the alternative BET method to products in its R&D pipeline. Demonstrating equivalency between the BET that depends on LAL and the method using rFC is a comprehensive project, requiring highly skilled personnel and dedicated instruments, and may take up to two years for each product in scope.

If successful, this analysis will support Valneva in making an informed decision regarding the potential substitution of horseshoe crab blood.

3.4.5 ESRS E5 – Resource use and circular economy

This section addresses policies, actions, and resources related to resource use and the circular economy. Additionally, it discloses metrics and targets for resource use, including resource outflows and waste.

Vaccine manufacturers face a unique regulatory context concerning packaging requirements, leading to significant challenges for implementing circular economy policies within the pharmaceutical industry. Each vaccine must adhere to numerous regulatory standards to ensure the quality of each unit sold. Market authorization for vaccines requires approval from health authorities, who review the quality of manufacturing processes and enforce stringent safety standards for active ingredients, excipients, devices, and packaging materials. Additionally, health authorities must approve any major modifications to processes, substances, or materials used in vaccine production, including environmental risk assessments. These requirements collectively pose substantial barriers to advancing environmental sustainability.

Primary packaging material at Valneva encompasses the container units with direct contact with the active ingredients and some built-in components, forming a unit of use. For Valneva's vaccines, container units are glass containers (vials or syringes). Built-in components are materials such as rubber stoppers for closure, caps (vials), plunger rods, finger rests (syringes), and a product label firmly adhered to the container unit. The primary packaging provides predefined physico-chemical properties to ensure the quality standards of the active ingredients are maintained over the shelf life of the product and to allow a usability of the product by the end user.

Primary packaging materials are subject to approval by regulatory authorities. Regulators strictly assess the primary packaging since the product within the primary packaging is injected into the human body. Any substances potentially leaching from the primary packaging might cause safety concerns (due to potential harm to the human body) or deteriorate the product quality over its shelf life. Since the existing primary packaging matches strict regulatory safety and quality criteria, Valneva is unable to pursue actions and targets related to advancements on environmental improvements of the primary packaging materials.

The secondary packaging is the final vaccine product in its packaged status. The secondary packaging materials include materials other than the unit of use such as blister tray inserts, blister lids, customer information leaflets, and the outer carton. Secondary packaging of Valneva's vaccines supports the quality requirements of the primary packaging, *e.g.*, providing an environment for the primary packaging (unit of use) that protects from breakage, light exposure, vigorous mechanical stress, etc. The secondary packaging materials themselves and the content printed onto the secondary packaging materials are subject to approval by regulatory authorities.

Tertiary packaging includes materials used for shipment of the final product (secondary packaging). Those materials include shipper boxes, pallets, shipper and pallet labels, corner protection angles, wraps, etc. Tertiary packaging materials provide a certain degree of protection from external influences like mechanical-, thermal- or moisture-stress factors. Tertiary packaging materials are not subject to approval by regulatory authorities.

In 2024, 99% of Valneva's vaccines' secondary packaging was recyclable, and 66% of Valneva's commercial vaccines had plastic-free secondary packaging and blister-free packaging.

At the end of 2024 100% of Valneva's manufacturing sites achieved zero-to-landfill which leads to 100% of Valneva's commercial products manufactured in zero-to-landfill sites.

The below table includes Valneva's identified material IROs related to ESRS E5 resource use and circular economy.

ESRS E5 – RESOURCE USE AND CIRCULAR ECONOMY			
Material challenges identified	**IRO description**	**Type of IRO**	**IRO impact on Valneva and its stakeholders**
Vaccine packaging environmental footprint	Increase in regulatory approvals and financial costs due to tightening regulations	Risk (financial and regulatory)	The Group faces financial and regulatory risks associated with tightening regulations that may require the Group to invest in replacing primary and/or secondary packaging components with more sustainable materials, as this would lead to new regulatory approval for those new materials.
	Reduction of financial costs with the products' eco-conception and the reduction of packaging	Opportunity	By eco-designing and/or reducing vaccines' packaging, Valneva could reduce the consumption of raw materials and reduce waste generation and the associated costs of waste management.
	New product eco-design guidelines and regulations	Opportunity	Eco-design guidelines can include trying to prioritise design of oral vaccines instead of syringe-injected vaccines, reducing packaging size, weight or modifying material, etc. See the 2024 European laws/objectives on reduction & reuse for packaging.
	Redesign of manufacturing processes for cost and efficiency optimization	Opportunity	Reducing the amount of resources used will probably be the most economically viable pathway for all scenarios. However, in the short-term, re-certifying manufacturing processes is too expensive.
	Impact on the environment due to vaccines' packaging waste, primary packaging waste, and resources depletion	Negative impact	Primary packaging is not recyclable and leads to biological waste which requires special waste treatment. Secondary vaccines' packaging leads to waste.
Tertiary packaging footprint	Risks of regulations impacting packaging	Risk (financial)	The Group faces financial risks associated with tightening regulations that may require the Group to invest in replacing its shipment packaging with more sustainable materials, as this would lead to increase in costs from the supply chain (materials and services).
	Reduction of waste generation due to a more sustainable shipment packaging	Opportunity	When defining a sustainable procurement strategy, Valneva could define key and strategic collaborations and projects with suppliers and service providers to look for more sustainable shipment packaging options, which would lead to the reduction of waste generation and the costs associated with waste management.
	Impact on the environment due to carbon emissions from packaging.	Negative impact	Tertiary packaging or shipment packaging lead to waste.
External/shipment packaging environmental footprint	Impact on the environment due to carbon emissions from packaging.	Negative impact	As part of defining its sustainable procurement strategy, Valneva could establish key partnerships with its suppliers and service providers to explore more sustainable shipping packaging options, which would help reduce waste production and the costs associated with their management.
Cost of raw materials	Increase in the cost of raw material, leading to additional expenses for Valneva	Risk (operational and financial)	Increase in the cost of raw material may result in additional expenses for Company's direct operations and potentially pass-through costs from the supply chain (materials and services).
	Single-sourcing of key inputs	Risk (operational and financial)	Valneva would need a better analysis of its key suppliers and their regions to understand how this risk may affect the Group. This risk may affect Valneva in the shorter term (unpredictable).
	Availability and rising cost of biosourced molecules	Risk (operational and financial)	Depending on the scenario, animal products may become more expensive (as they are usually more carbon-intensive) or plant products may become more costly (if climate change increases). Specific research needs to be conducted to understand how climate change can impact the list of biosourced molecules used by Valneva.

Policies, targets and actions linked to circular economy

Policies related to resource use and circular economy

Valneva's Corporate Environmental, Occupational Health and Safety (EOHS) Policy outlines the Group's commitment to minimizing environmental impact, promoting sustainability, and ensuring the safety and health of its employees. The EOHS Policy encompasses all material IROs concerning ESRS E5. The policy includes commitments to reduce the use of virgin resources, increase the use of secondary (recycled) resources, implement life cycle analysis, and optimize waste management and use of recycled materials. Key actions to implement these commitments include eco-design of Valneva's products, waste management strategies, and sustainable procurement practices.

Valneva's EOHS Policy underscores the importance of sustainable sourcing and the use of renewable resources as part of its commitment to minimizing environmental impact and promoting sustainability through the sustainable use of natural resources, the implementation of life cycle analysis, the eco-design of products, the application of a waste hierarchy, the optimization of waste management, and the use of recycled materials.

Valneva's EOHS Policy explicitly addresses the waste hierarchy by promoting the prevention of waste generation, preparing for re-use, recycling, and other recovery methods before considering disposal. The policy emphasizes the sustainable use of natural resources and the implementation of life cycle analysis and eco-design principles to minimize waste at the source. Valneva supports the application of the waste hierarchy by optimizing waste management practices, prioritizing the use of recycled materials, and collaborating with certified waste management companies to ensure proper handling and disposal of waste. The policy outlines measures to prevent hazards to humans and the environment, and when prevention is not possible, to reasonably minimize those impacts.

The EOHS Policy applies to all operations and activities within Valneva, including vaccine development, manufacturing, and packaging processes.

The most senior level accountable for the implementation of the policy is Valneva's Chief Operating Officer. EOHS Teams are responsible for the day-to-day implementation and monitoring of the policy. Managers at all levels are responsible for ensuring that the policy is effectively communicated and implemented within their respective areas.

In its EOHS Policy, Valneva commits to adhering to relevant third-party standards and initiatives, including the Paris Agreement, relevant local and EU health and safety legislation, relevant environmental legislation, and guidelines provided by regulatory bodies like the U.S. Environmental Protection Agency (EPA) or equivalents. The Group also aligns with standards set by organizations such as EcoVadis for evaluating the sustainability of its supply chain.

In setting this policy, Valneva considered the interests of key stakeholders, including employees, customers, tier 1 suppliers, and the broader community. Consultations and engagements support integration of stakeholder perspectives into policy development and implementation. The Group engages with its stakeholders through various channels, including meetings, forums, and its website.

The EOHS Policy is made available to all potentially affected stakeholders and those who need to help implement them through Valneva's website, internal communications, and training programs.

Targets and actions related to resource use and circular economy

The IROs associated with resource use and circular economy present numerous considerations for the Group's future approach to use and sourcing of materials. Valneva has currently set one target related to these topics: to define by 2026 a Sustainable Procurement Policy including environmentally-friendly criteria for selecting and contracting with suppliers. Valneva believes that the process of defining and implementing this policy will generate information that will inform potential additional targets that Valneva may set in the future. For IROs related to the packaging of its products or supplies, Valneva believes it will be able to establish more informed and impactful actions and targets after further internal and external engagement on these topics over the course of 2025.

The foreseeable actions for the next future regarding secondary packaging at Valneva include engaging with internal development teams for researching on potential plastic-free secondary packaging options to be considered at initial technical product development stages. Engaging with material suppliers for future plastic-free and blister-free secondary packaging is also considered a potential measure for improvement.

Regarding tertiary packaging, Valneva will look into potential solutions to eliminate virgin plastic, transitioning in to recycled and recyclable materials to reduce its environmental impact and enhance sustainability,

Metrics on waste management

Valneva has identified and established key performance indicators to monitor and measure its progress in resource use and circular economy initiatives. All KPIs presented are meticulously tracked through Valneva's ESG Reporting tool and calculated within the tool. This data is collected and monitored to ensure accurate reporting and compliance with regulatory requirements.

RECYCLABLE CONTENT IN PRODUCTS PRIMARY AND SECONDARY PACKAGING

(%)	2024
TOTAL	**63**

The value shown is the average of the recycled content in the packaging of Valneva's three vaccines.

TOTAL WASTE GENERATED

(tons)	2022	2023	2024
Hazardous waste	195	171	119
Non-hazardous waste	261	281	230
TOTAL	**456**	**452**	**349**

TOTAL AMOUNT OF WASTE DIVERTED FROM DISPOSAL

(tons)	2024
HAZARDOUS WASTE	**86**
Preparation for Reuse	0
Recycling	0
Other recovery operations	86
NON-HAZARDOUS WASTE	**142**
Preparation for Reuse	2
Recycling	106
Other recovery operations	34
TOTAL	**228**

TOTAL AMOUNT OF WASTE DIRECTED TO DISPOSAL

(tons)	2024
HAZARDOUS WASTE	**33**
Incineration	22
Landfill	10
Other disposal operations	1
NON-HAZARDOUS WASTE	**88**
Incineration	1
Landfill	20
Other disposal operations	67
TOTAL	**121**

TOTAL AMOUNT OF WASTE

	2022	2023	2024
TOTAL WASTE *(tons)*	**456**	**452**	**349**
Amount of non-recycled waste *(tons)*	147	143	121
Amount of recycled waste *(tons)*	309	309	228
Amount of non-recycled waste *(%)*	32	32	35

Valneva tracks the waste streams relevant to its sector or activities through its ESG reporting tool. The waste generated by Valneva's production and R&D sites is categorized into two types:

- **Non-Hazardous Waste:** This includes paper, cardboard, plastics, and other similar materials;
- **Hazardous Waste:** This includes used chemicals, soiled plastic biological waste, electrical waste and electronic equipment, and other hazardous materials.

Overall, the total amount of waste generated decreased by approximately 10%. This reduction was driven by the sale of the research division of Valneva Sweden midway through the year, as well as lower production levels in some departments. Additionally, extensive efforts to optimize the fill-finish process led to a higher yield per batch, which in turn reduced the amount of waste produced. Furthermore, in Solna waste generation was notably high in 2023 due to the disposal of significant material from the COVID project, which was processed through incineration with heat recovery. Additionally, the clearance of a storage facility contributed to the increase, with a substantial amount of materials, primarily metal, being directed toward recycling.

A specific category within hazardous waste is biological waste, which is directly related to Valneva's activities in the field of biotechnology. Biological waste represents around 35% of the waste generated by R&D and production sites. The processing of this waste is subject to special monitoring due to the regulatory obligations of each country.

Valneva tracks the total amount of hazardous waste generated internally, and the total amount of radioactive waste generated internally.

Valneva systematically collects waste data across all its sites, categorizing it into specific waste fractions. This process combines internal tracking mechanisms with data from external waste management partners. The diversion of waste from disposal is monitored through reports provided by these external partners.

Waste is classified as non-hazardous (including cardboard, pallets, household recyclables such as metal cans and plastics, glass, and metal) or hazardous (such as biological solid waste, chemical waste, and electrical and electronic waste).

Valneva ensures that all waste data collection aligns with local regulations on classification, tracking, handling, and pre-disposal requirements. The waste management process is carefully monitored at every stage by dedicated internal teams and site leadership.

3.4.6 EU Taxonomy Disclosure

Article 8 of Regulation (EU) 2020/852 – Taxonomy

Presentation of the European Green Taxonomy

The Taxonomy Regulation is a key component of the European Commission's action plan to redirect capital flows towards a more sustainable economy. As a classification system for environmentally sustainable economic activities, it represents an important step towards achieving carbon neutrality by 2050 in line with EU climate goals [1].

This regulatory framework is defined by Regulation (EU) 2020/852 and has been implemented progressively by a series of regulations known as the "Delegated Acts", including the Climate Delegated Acts (2021/2139 and 2023/2485), the Environmental Delegated Act (2023/2486), and the Disclosures Delegated Act (2021/2178). Additional guidelines have also been published by relevant authorities, including the various question & answer (FAQ) documents published by the European Commission to facilitate implementation as well as reports published by the Platform on Sustainable Finance with regard to the four objectives and the minimum safeguards.

Under the EU Taxonomy, companies are required to publish the portions of their turnover, capital expenditures (CapEx) and operating expenditures (OpEx) eligible to and, as of 2024, substantially contributing to any of the following six environmental objectives[2]:

- Climate change mitigation (CCM);
- Climate change adaptation (CCA);
- Sustainable use and protection of water and marine resources (WTR);
- Transition to a circular economy (CE);
- Pollution prevention and control (PPC); and
- Protection and restoration of biodiversity and ecosystems (BIO).

[1] *Commission Delegated Regulation (EU) 2021/2178 of 6 July 2021 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by specifying the content and format of the information to be disclosed by companies subject to Articles 19a or 29a of Directive 2013/34/EU on environmentally friendly business activities, and specifying the methodology to be followed to comply with this disclosure obligation. Available at: https://eur-lex.europa.eu/legal-content/FR/TXT/PDF/?uri=CELEX:32021R2178&from=EN*

[2] *https://eur-lex.europa.eu/eli/reg/2020/852/oj/eng*

Reporting Requirements

Subject to the CSRD for the reporting year 2024, Valneva is required to publish the key performance indicators (KPIs) of its Taxonomy aligned turnover, OpEx, and CapEx in relation to the economic activities defined in the classification system. An economic activity is thus environmentally sustainable ("green") when it:

- is eligible for at least one of the environmental objectives;
- contributes substantially to the objective to which it is eligible;
- does not significantly harm any of the other environmental objectives;
- is carried out in compliance with the minimum safeguards.

After a progressive implementation, the Taxonomy regulation is now fully in effect. Therefore, activities that contribute to all six of the EU's objectives have been reviewed for eligibility and alignment as part of this reporting.

2024 Results

In view of the regulatory framework recalled above, Valneva has eligible turnover (77%), OpEx (16%), and CapEx (76%). This is due in large part to turnover that is eligible for activity "PPC 1.2. Manufacture of medicinal products", and the associated OpEx and CapEx (16% and 8% of Taxonomy-eligible OpEx and CapEx respectively). As in previous years, the Group has also identified OpEx and CapEx linked to "individual measures", corresponding to maintenance, purchases, and investment expenditure directly enabling the activities to become low-carbon or reduce GHG emissions – primarily the Real Estate activities described in Section 7 of Annex 1 of the Climate Delegated Act concerning climate change mitigation. Valneva has identified eligible activities for the environmental objectives of climate change mitigation, pollution prevention and control, and circular economy. No eligible activities were identified for the other environmental objectives of climate change adaptation, sustainable use and protection of water and marine resources, or protection and restoration of biodiversity and ecosystems

The scope of eligible activities in 2024 therefore concerns:

Eligible activities	Valneva activities
PPC 1.2 – Manufacturing of medicinal products	Vaccine production, including IXIARO, IXCHIQ, and DUKORAL
CCM 6.5 – Transport by motorbikes, passenger cars and light commercial vehicles	Leased and purchased corporate cars
CCM 7.3 – Installation, Maintenance and Repair energy-efficient equipment	HVAC and lighting system upgrades in Valneva facilities
CCM 7.5 – Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings	Replacement or maintenance of HVAC, energy, and gas supply monitoring systems
CCM 7.6 – Installation, maintenance and repair of renewable energy technologies	Replacement or maintenance of renewable energy technologies in Valneva facilities
CCM 7.7 – Acquisition and ownership of buildings	Introduction of a new building at the Livingston site

Activities 3.2 and 7.2 (related to renovations to manufacturing facilities) were conducted, however they were not included in the calculation of eligible spending as they presented less than 25% of the value of the building.

Presentation of the eligibility results

Turnover

Valneva's revenue streams include 1) the sale of medicinal proprietary products, 2) distribution of third-party products, and 3) revenue from collaborations, licensing, and service agreements. Based on the eligibility assessment conducted at the product level, turnover from the first revenue stream corresponds to a Taxonomy activity and is therefore eligible. The sale of medicinal products, including sale of IXIARO, DUKORAL, and IXCHIQ products, contributes to the Pollution Prevention and Control objective under activity "1.2. Manufacture of medicinal products";

In 2024, eligible turnover is €130 million or 77% of total turnover (€169,579 millions).[1] In 2023, Taxonomy-eligible turnover was 67%. This increase is due to the increased significance of the sale of medicinal products as part of the Group's turnover.

[1] *For reconciliation to the consolidated financial statements, see Section 1.4.3 (a) of this URD.*

OpEx

In accordance with the Taxonomy, OpEx includes direct, uncapitalized costs related to R&D, building renovation projects, short-term leases, maintenance, and repairs. It includes expenses necessary for the daily maintenance of assets classified as property, plant, and equipment.

Based on the types of OpEx included in the Taxonomy, the immateriality exemption does not apply to Valneva. The Taxonomy OpEx denominator represents 22% of the Group's total accounting OpEx[1] (*i.e.*, an absolute value of €58.8 million). Therefore, no materiality exemption was applied for the calculation the Taxonomy OpEx numerator.

In total, €9.3 million or 16% of the Group's Taxonomy OpEx is eligible. Of this, nearly 16% is attributable to the R&D and other maintenance to support the manufacture of medicinal products as eligible turnover under activity PPC 1.2 (OpEx Type A). This OpEx corresponds to the expenses that fall within the definition of Taxonomy OpEx incurred at the Solna and Livingston production facilities. Other "individual measures" amounting to 0.06% have also been identified as eligible OpEx for activities CCM 7.3, CCM 7.5, and CCM 7.6 (OpEx Type C). These activities involve leasing company cars, operating charging stations, and maintaining energy management systems. In 2023, the Group reported 2% of OpEx as Taxonomy-eligible. The change this year is due to additional OpEx being identified as contributing to support the manufacture of medicinal products as eligible turnover.

CapEx

In accordance with the Taxonomy, the CapEx denominator consists of additions to tangible and intangible fixed assets during the financial year, before depreciation, amortization, and any remeasurements, including those resulting from revaluations and impairments, as well as excluding changes in fair value. It includes acquisitions of tangible fixed assets (IAS 16), intangible fixed assets (IAS 38), right-of-use assets (IFRS 16).

For 2024, the variation in the Group's CapEx, or Taxonomy CapEx denominator, is €14.7 million, can be reconciled with the schedule of fixed assets variations.[2]

In total, €11.1 million or 76% of the Group's CapEx is eligible. This is primarily due to the acquisition and renovation of buildings related to Valneva's manufacturing site in Livingston and R&D site in Nantes. Of this, 8% is due to CapEx at the Solna and Livingston production sites for activity PPC 1.2 (CapEx Type A). The remaining 68% corresponds primarily to the acquisition of buildings at the Livingston production site under activity CCM 7.7 (CapEx Type C).

In 2023, the Group reported 93% of CapEx as Taxonomy-eligible. The change this year is due to reduced spending on renovation activities.

Presentation of the alignment results

Valneva has eligible activities for turnover, OpEx, and CapEx in 2024. As such, the Group has assessed alignment based on the criteria assigned to these activities concerning the substantial contribution to the environmental objectives, DNSH criteria, and the minimum safeguards.

Ultimately, no activities are aligned for 2024. This is primarily due to non-fulfilment of the "Climate Adaptation" DNSH criteria, which applies to all eligible activities. Valneva has not yet completed a climate risk and vulnerability assessment which applies to all eligible activities.

In carrying out the alignment assessment, Valneva also identified other elements of non-compliance and the necessary measures to improve alignment in the future. The results of this assessment are described below.

Compliance with the Do No Significant Harm (DNSH) criteria – Climate Adaptation

As noted above, Valneva has not yet completed a climate risk and vulnerability assessment as required by Appendix A to Annex 1 of the Climate Delegated Act and thus does not comply with this criterion for alignment, which is applicable for all eligible activities.

(1) *For the current fiscal year, the proceeds of sale of a "Priority Review Voucher", totaling at €90.8 million, have been excluded from OpEx, since it was a one-time extraordinary effect in 2024 in order to enable comparability year-over-year.*
(2) *See Section 1.4.3 (a) of this URD.*

Compliance with the substantial contribution criteria and DNSH criteria by activity

POLLUTION PREVENTION CONTROL

Eligible Activities	Alignment Assessment
PPC 1.2 – Manufacturing of medicinal products	The substantial contribution criteria are not fulfilled because, while the required BREF assessments have been conducted, the results remain non-compliant. However, other substantial contribution criteria, including product composition and information requirements, are addressed through regulatory approvals from agencies such as the FDA and MHRA. Concerning the DNSH criteria specific to this activity, the Water and Circular Economy criteria are addressed through the management plans in place. The Climate Change Mitigation and Biodiversity assessments will continue to be considered in subsequent years. For more information, refer to Sections 3.3.4, 3.4.1 and 3.4.4.

CLIMATE CHANGE MITIGATION

Eligible Activities	Alignment Assessment
CCM 6.5 – Transport by motorbikes, passenger cars and light commercial vehicles,	Leased company cars comply with the required CO2/km emission thresholds for M1 and N1 vehicles. Concerning the specific DNSH criteria for this activity, covering Pollution Prevention and Control and Circular Economy, Valneva will continue to work with its vendors to support alignment.
CCM 7.3 – Installation, Maintenance and Repair energy-efficient equipment,	HVAC and lighting system upgrades at Valneva facilities correspond to the types of installations permitted by the substantial contribution criteria. The specific DNSH criteria for Pollution Prevention and Control for this activity remains unfulfilled this year as the assessments are to be conducted. For more information, refer to Sections 3.3.4 and 3.4.1.
CCM 7.5 – Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings,	Most eligible projects for this activity fall outside of the scope of installations defined by the substantial contribution criteria and thus would not comply. For more information, refer to Sections 3.3.4 and 3.4.1.
CCM 7.6 – Installation, maintenance and repair of renewable energy technologies,	Upgrades to the heat pumps at the Solna site correspond to a measure permitted by the substantial contribution criteria for this activity. For more information, refer to Sections 3.3.4 and 3.4.1.
CCM 7.7 – Acquisition and ownership of buildings,	The energy efficiency assessments performed for the Livingston Building do not fulfill all of the substantial contribution criteria and thus would not comply. For more information, refer to Sections 3.3.4 and 3.4.1.

Compliance with the Do No Significant Harm (DNSH) criteria

Climate Adaptation

As noted above, Valneva has not yet completed a climate risk and vulnerability assessment as required by Appendix A to Annex 1 of the Climate Delegated Act and thus does not comply with this criterion for alignment, which is applicable for all eligible activities.

Valneva plans to conduct a climate risk assessment in 2025 for activities related to:

- Climate Mitigation;
- Circular Economy;
- Pollution Prevention;
- Water
- Biodiversity.

Compliance with the Minimum Safeguards

In 2024, an analysis of the Minimum Safeguards was conducted at the Group level. The safeguards consist of compliance with the OECD Guidelines for Multinational Enterprises, the UN Guiding Principles on Business and Human Rights, the UN International Bill of Human Rights, and the Fundamental Conventions of the International Labor Organization (ILO), and mainly cover human rights and business ethics (anti-corruption, responsible taxation, and competition law).

The Group meets the requirements on minimum safeguards, and the corresponding policies and action plans are detailed in other sections:

- Valneva is committed to respecting human rights throughout the value chain, as illustrated by the Human Rights Position Statement (see Section 3.5.1);
- Valneva's Anti-Corruption and Bribery Policy commits to zero-tolerance for corruption, supported by the Code of Conduct and Ethics and employee training, and reaffirms respect of local laws and the internal principles for the right to competition (see Section 3.6.1);
- The Code of Conduct for Business Partners establishes the Group's requirements of tier 1 suppliers to comply with ethical standards (see Section 3.3.3);
- Valneva enables whistleblowers to raise any concerns anonymously and without retaliation via a dedicated platform (see Section 3.6.1).

Methodological Note

Analyses are carried out within the scope of the financial consolidation.

The financial information used for the breakdown of eligibility and alignment indicators comes from Valneva's information systems (investment monitoring, consolidation) at the close of the 2024 financial year. It was analyzed and verified jointly by the financial teams of the group, in order to ensure their consistency with the consolidated turnover, CapEx and OpEx for the 2024 financial year to avoid any double counting of activities eligible for the numerator of the Taxonomy indicators, in accordance with Regulation (EU) 2023/2486.

As part of the eligibility analysis, all turnover, OpEx and CapEx were reviewed one by one and assigned to a taxonomic activity, taking into account the NACE codes. This analysis was carried out by the local Environment, Health and Safety (EHS) and Finance teams and reviewed by the global ESG and Finance teams. This line-by-line review conducted by the local teams also identified the OpEx and CapEx for activity PPC 1.2(OpEx and CapEx type A)at the Solna and Livingston production sites to distinguish from individual measures unrelated to the manufacture of medicinal products(OpEx and CapEx type C). The CapEx reported is individual CapEx. Green CapEx ratios by taxonomic activity are available in the tables in Appendix X.

Based on the eligibility analysis, an alignment assessment was carried out as follows:

- Turnover – No exclusion, all revenue streams are assessed;
- OpEx – all eligible expenses >5,000€ (providing a coverage of >99% of eligible Taxonomy OpEx);
- CapEx – all eligible expenses >20,000€ (providing a coverage of 93% of eligible CapEx).

Alignment assessments were carried out by the local EHS teams for each relevant activity as the asset/product level. Once completed, alignment was validated by the global ESG team and Chief Operating Officer.

A detailed explanation of the Group's EU Taxonomy eligibility and alignment assessment methodology is documented in the EU Taxonomy Methodological Note. This methodology is maintained by the global ESG Director. It is updated annually as the regulation is phased in and the Group's processes evolve.

Activities related to nuclear energy and fossil gas (Delegated Act 2022/1214, Annex XII)

Row	Nuclear energy related activities	YES/NO
1	The undertaking carries out, funds or has exposures to research, development, demonstration and deployment of innovative electricity generation facilities that produce energy from nuclear processes with minimal waste from the fuel cycle.	NO
2	The undertaking carries out, funds or has exposures to construction and safe operation of new nuclear installations to produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production, as well as their safety upgrades, using best available technologies.	NO
3	The undertaking carries out, funds or has exposures to safe operation of existing nuclear installations that produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production from nuclear energy, as well as their safety upgrades	NO
Row	**Fossil gas related activities**	**YES/NO**
4	The undertaking carries out, funds or has exposures to construction or operation of electricity generation facilities that produce electricity using fossil gaseous fuels.	NO
5	The undertaking carries out, funds or has exposures to construction, refurbishment, and operation of combined heat/cool and power generation facilities using fossil gaseous fuels.	NO
6	The undertaking carries out, funds or has exposures to construction, refurbishment, and operation of heat generation facilities that produce heat/cool using fossil gaseous fuels.	NO

Sustainability Statement 3
Environmental information

The key performance indicators ("KPIs") associated with the European Taxonomy include turnover, OpEx, and CapEx. For presenting the Taxonomy KPIs, Valneva uses the templates provided in Annex II to the Disclosures Delegated Act as amended by Annex V of the Regulation 2023/2486 (except for unaffected parts).

Turnover KPI

	Proportion of turnover/Total turnover	
	Taxonomy-aligned per objective	Taxonomy-eligible per objective
CCM	—%	—%
CCA	—%	—%
WTR	—%	—%
CE	—%	—%
PPC	—%	77%
BIO	—%	—%

				Substantial contribution criteria						DNSH Criteria									
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
Economic activities	Code	Turnover	Proportion of Turnover, year N	Climate change mitigation	Climate change adaption	Water	Pollution	Circular Economy	Biodiversity	Climate change mitigation	Climate change adaption	Water	Pollution	Circular Economy	Biodiversity and ecosystems	Minimum safeguards	Proportion of Taxonomy aligned (A.1.) or eligible (A.2.) turnover, year N-1	Category (enabling activity or)	Category (transitional activity)
		(k€)	%	Y ; N ; N/EL	Y ; N ; N/EL	Y ; N ; N/EL	Y ; N ; N/EL	Y ; N ; N/EL	Y ; N ; N/EL	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	E	T
A. TAXONOMY-ELIGIBLE ACTIVITIES																			
A.1. Environmentally sustainable activities (Taxonomy-aligned)																			
Turnover of environmentally sustainable activities (Taxonomy-aligned) (A.1)		**0**	**—%**														**— %**		
of which is enabling		*0*	*—%*														*— %*		
of which is transitional		*0*	*—%*														*— %*		
A.2 Taxonomy-Eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																			
Manufacture of medicinal products	PPC 1.2.	130,068	77%	N/EL	N/EL	N/EL	EL	N/EL	N/EL								— %		
Turnover of Taxonomy-eligible not but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		**130,068**	**77%**	**—%**	**—%**	**—%**	**77%**	**—%**	**—%**								**67 %**		
A. TURNOVER OF TAXONOMY ELIGIBLE ACTIVITIES (A.1 + A.2)		**130,068**	**77%**	**—%**	**—%**	**—%**	**77%**	**—%**	**—%**								**67 %**		
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES																			
TURNOVER OF TAXONOMY-NON-ELIGIBLE ACTIVITIES (B)		**39,510**	**23%**																
TOTAL (A + B)		**169,579**	**100%**																

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Sustainability Statement 3
Environmental information

OpEx KPI

	Proportion of OpEx/Total OpEx	
	Taxonomy-aligned per objective	Taxonomy-eligible per objective
CCM	—%	—%
CCA	—%	—%
WTR	—%	—%
CE	—%	—%
PPC	—%	15%
BIO	—%	—%

				Substantial contribution criteria						DNSH Criteria									
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
Economic activities	Code	Opex	Proportion of Opex, year N	Climate change mitigation	Climate change adaption	Water	Pollution	Circular Economy	Biodiversity	Climate change mitigation	Climate change adaption	Water	Pollution	Circular Economy	Biodiversity and ecosystems	Minimum safeguards	Proportion of Taxonomy aligned (A.1.) or eligible (A.2.) Opex, year N-1	Category (enabling activity or)	Category (transitional activity)
		(k€)	*%*	*Y; N; N/EL*	*Y; N; N/EL*	*Y; N; N/EL*	*Y; N; N/EL*	*Y; N; N/EL*	*Y; N; N/EL*	*Y/N*	*Y/N*	*Y/N*	*Y/N*	*Y/N*	*Y/N*	*Y/N*	*%*	*E*	*T*
A. TAXONOMY-ELIGIBLE ACTIVITIES																			
A.1. Environmentally sustainable activities (Taxonomy-aligned)																			
OpEx of environmentally sustainable activities (Taxonomy-aligned) (A.1)		**0**	**—%**														**—%**		
of which is enabling		*0*	*—%*														*—%*		
of which is transitional		*0*	*—%*														*—%*		
A.2 Taxonomy-Eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																			
Manufacture of medicinal products	PPC 1.2.	9,270	15%	N/EL	N/EL	N/EL	EL	N/EL	N/EL								—%		
Installation, Maintenance and Repair energy-efficient equipment	CCM 7.3	6	—%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								—%		
Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings	CCM 7.5	20	—%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								**—%**		
Installation, maintenance and repair of renewable energy technologies	CCM 7.6	10	—%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								**—%**		
OpEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		**9,306**	**15%**	**—%**	**—%**	**—%**	**15%**	**—%**	**—%**								**2%**		
A. OPEX OF TAXONOMY ELIGIBLE ACTIVITIES (A.1 + A.2)		**9,306**	**15%**	**—%**	**—%**	**—%**	**15%**	**—%**	**—%**								**2%**		
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES																			
OPEX OF TAXONOMY-NON-ELIGIBLE ACTIVITIES		**53,168**	**85%**																
TOTAL (A + B)		**62,474**	**100%**																

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Sustainability Statement 3
Environmental information

CapEx KPI

	Proportion of CapEx/Total CapEx	
	Taxonomy-aligned per objective	Taxonomy-eligible per objective
CCM	—%	57%
CCA	—%	—%
WTR	—%	—%
CE	—%	—%
PPC	—%	8%
BIO	—%	—%

				Substantial contribution criteria						DNSH Criteria									
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
Economic activities	Code	Capex	Proportion of Capex, year N	Climate change mitigation	Climate change adaption	Water	Pollution	Circular Economy	Biodiversity	Climate change mitigation	Climate change adaption	Water	Pollution	Circular Economy	Biodiversity and ecosystems	Minimum safeguards	Proportion of Taxonomy aligned (A.1.) or eligible (A.2.) Capex, year N-1	Category (enabling activity or)	Category (transitional activity)
		(k€)	*%*	*Y; N; N/EL*	*Y; N; N/EL*	*Y; N; N/EL*	*Y; N; N/EL*	*Y; N; N/EL*	*Y; N; N/EL*	*Y/N*	*Y/N*	*Y/N*	*Y/N*	*Y/N*	*Y/N*	*Y/N*	*%*	*E*	*T*
A. TAXONOMY-ELIGIBLE ACTIVITIES																			
A.1. Environmentally sustainable activities (Taxonomy-aligned)																			
CapEx of environmentally sustainable activities (Taxonomy-aligned) (A.1)		0	—%														—%		
of which is enabling		0	—%														—%		
of which is transitional		0	—%														—%		
A.2 Taxonomy-Eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																			
Manufacture of medicinal products	PPC 1.2.	1,2450	7%	N/EL	N/EL	N/EL	EL	N/EL	N/EL								—%		
Transport by motorbikes, passenger cars and light commercial vehicles	CCM 6.5	46	—%	EL	N/EL	N/EL	N/EL	EL	N/EL								—%		
Installation, maintenance and repair of energy efficiency equipment	CCM 7.3.	79	1%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								—%		
Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings	CCM 7.5	79	1%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								—%		
Acquisition and ownership of buildings	CCM 7.7.	9,674	56%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								—%		
CapEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		**11,134**	**65%**	**57%**	**—%**	**—%**	**8%**	**—%**	**—%**								**93%**		
A. CAPEX OF TAXONOMY ELIGIBLE ACTIVITIES (A.1+A.2)		**11,134**	**65%**	**57%**	**—%**	**—%**	**8%**	**—%**	**—%**								**93%**		
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES																			
CAPEX OF TAXONOMY-NON-ELIGIBLE ACTIVITIES		**6,104**	**35%**																
TOTAL (A + B)		**17,237**	**100%**																

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3.5 Social information

This Section encompasses Valneva's commitment to cultivating a diverse and supportive work environment, with policies that prioritize employee growth and health and safety, and presents the insights of Valneva´s ESG strategic pillar "Reaching People".

Valneva actively collaborates with communities surrounding its manufacturing and research and development sites to foster local integration and establish itself as a key contributor to regional economies.

Through relationships with healthcare professionals, and public health organizations, Valneva strives to improve health outcomes, aligned with our mission to reach people in need.

The research and development efforts, central to the "Reaching People" strategic pillar, focus on developing vaccines for critical health threats, potentially contributing to antimicrobial resistance and pandemic preparedness. The positive impacts of Valneva´s vaccines are far-reaching, addressing pressing health challenges in LMICs as well as well, ultimately contributing to global health equity and resilience.

3.5.1 ESRS S1 – Own workforce

This section addresses the policies, processes, and actions related to the management and engagement of Valneva's own workforce, including remediation of negative impacts and effectiveness of actions. Additionally, it addresses metrics and targets for managing IROs, as well as workforce characteristics, collective bargaining, training, and health and safety. This topic is only briefly disclosed this year in accordance with the CSRD phase-in provisions.

ESRS S1 – OWN WORKFORCE			
Material challenges identified	**IRO description**	**Type of IRO**	**IRO impact on Valneva and its stakeholders**
Workplace Accident Prevention	Impact on physical and mental health of employees in case of unsafe working conditions, leading to accidents	Negative impact	Failure to provide the necessary health and safety measures might lead to employee or subcontractor accidents.
	Financial and operational risks due to health and safety issues	Risk (operational and financial)	Accidents, absenteeism, and occupational health issues pose a risk of potentially increasing operational expenses. This includes higher insurance premiums, costs associated with temporary workers, and payouts for insurance claims and compensations.
Gender Pay Gap	Reputational and financial risks due to unequal pay for equal work leading to the reduction of Valneva's attractiveness, employees' satisfaction and the increase of turnover	Risk (operational, financial, legal and reputational)	Closing the gap has a financial impact, and losing key female employees due to increased turnover could have a financial impact. Any gap may affect employee engagement and satisfaction which might lead to loss of productivity. Violating equal pay regulations may lead to fines.
	Failing to ensure equal pay for equal work leading to gender inequality amongst employees	Negative impact	A significant disparity in pay between men and women for comparable work could reflect deeper structural inequalities within the organization, leading to gender discrimination.
Engagement with own workforce and representatives	Deterioration of relations between employees and management	Risk (operational and financial)	Failure to engage proactively with its workforce could hinder Valneva's ability to effectively manage, develop, and retain its workforce.
	Increase employees' commitment and maximize their time in the Group by building trust between management and employees.	Opportunity	Engagement with workers' councils demonstrates a commitment to transparent communication and collaborative decision-making, which builds trust between management and employees. This can lead to higher employee satisfaction levels, which reduces turnover rate.

ESRS S1 – OWN WORKFORCE			
Material challenges identified	**IRO description**	**Type of IRO**	**IRO impact on Valneva and its stakeholders**
Employee level of engagement/ satisfaction	Financial risk and increase of turnover due to employees' disengagement	Risk (operational and financial)	Low level of employee engagement and/or satisfaction may lead to an increase in Valneva's turnover and the loss of key positions within the Group. This may lead to cost increase and operational impact.
	Increase in business growth and efficiency	Opportunity	Investing in programs to increase the employees' satisfaction level may reduce employee turnover, increase in efficiency and support business growth by reducing recruitment costs, substitutions, temporary workers, consultants, etc.
Recruitment, training and promotion	Turnover and loss of key and strategic positions	Risk (operational and financial)	Low level of employee engagement and/or satisfaction with the Group strategy and decisions may lead to an increase of Valneva's employee turnover and the loss of key and strategic positions within the Company. In an industry where employees are high-skilled and recruitment is challenging, this may lead to cost increase and operational impact (teams' re-structuring, etc.). Lack of a good training and competences overview (global & individual) and programs may lead to stagnant career paths and the decrease of employee satisfaction and increase of employee turnover.
	Impact on employees' commitment due to the possibility offered to them to be trained, boosting their employability	Positive impact	Company positively impacts its employees by enabling them to continuously learn, acquire new skills and expand their expertise. This enhances their professional growth and boosts their employability.

Due to the phase-in provision applicable under Appendix C of ESRS 1, Valneva is not required to report on ESRS S1-16, addressing gender equality, in the first reporting year. Currently only the information related to the Minimum Disclosure Requirements (MDR) is included below. Policies, targets and actions associated to the gender pay gap IRO are yet to be developed.

Interests and views of stakeholders

Material IROs and their interaction with strategy and business model

All Valneva employees are included in the scope of the current reporting period, however the data for non-employees are not fully available for 2024 due to reporting challenges. As Valneva does not include non-employee personnel within the reporting scope, the material IROs assessment detailed hereby covers only employees.

Valneva defines employees as all people having an employment contract (open-ended or fixed-term contracts, including interns, students, trainees) in the last day of the month with Valneva SE or any of its subsidiaries or affiliates. Non-employees include external workforce and freelance workers.

As all Valneva R&D and manufacturing facilities are located within Europe, Valneva is subject to EU labor legislation, which contains thorough and stringent requirements on working conditions. During its Double Materiality Analysis, Valneva determined that, due to this regulatory environment, most of its activities are, by default, neutral with respect to its workforce, neither negatively nor positively affecting them. .

Moreover, Valneva operates in six countries and includes employees from various cultural backgrounds. Valneva acknowledges that certain groups, distinguished by gender, sexual orientation, religion, or other particularities may be more systematically impacted by specific risks and opportunities within the corporate environment. Nevertheless, Valneva has determined that its risks and opportunities affect its entire workforce in a similar manner.

It is worth noting that, as with all the impacts disclosed in this Sustainability Statement, the impact on Valneva's own workforce (scale, scope, irreversibility, and likelihood) has been assessed from a gross perspective, which excludes any mitigation that Valneva may implement. Therefore, even if the gross probability of an impact on the workforce is medium, which means that it could occur within the next five years, Valneva is determined to prevent it from happening at all by implementing the necessary controls and mitigation measures.

Moreover, Valneva is a pioneering company within the vaccines industry, distinguished by its unwavering commitment to making a positive impact through products and potential future products in development. For this reason, Valneva places an emphasis on cultivating an environment that not only fosters scientific innovation but also prioritizes the well-being and professional growth of its employees. Therefore, the Group has identified one positive impact related to the workforce.

Regarding the respect of human rights, Valneva's risk evaluation included consideration of whether the following factors, which are associated with an increased risk of modern slavery and forced or child labor, are present in Valneva's operations: the presence of migrant workers, short-term projects or engagements, low-skilled workers (for example in cleaning, security, maintenance, and transport services), outsourcing of labor, use of a third party to recruit or supply workers, and the location of the workers providing a service or manufacturing a product (for example, countries experiencing military conflicts and those with a high poverty rate, weak rule of law, and/or high level of corruption).

This evaluation leads Valneva to consider the risk of modern slavery and forced or child labor in its directly employed workforce to be extremely low. Indeed, the majority of Valneva's direct supply chain is in Europe, which Valneva believes decreases the level of risk of modern slavery and forced or child labor in the context of tier 1 suppliers. Moreover, the development of vaccines requires employees with advanced levels of education, and the manufacturing of pharmaceutical products is highly regulated. The Group's manufacturing facilities are subject to inspection by various regulatory authorities.

Policies, targets and actions linked to the workforce

Policies related to own workforce

Valneva has pledged several ESG commitments designed to meet the diverse needs across its products and services. The Group's commitment towards its workforce is reflected on the Group's Reaching People ESG strategy pillar. Reaching People encapsulates Valneva efforts to engage with its workforce, directly and with its representatives, improve the level of employee satisfaction, and increase the quality of its People & Organization (P&O) processes in general, from the recruitment to the promotion of its workers. These efforts are also linked to the Group's commitment to maintaining an upstanding corporate culture and business conduct policies.

With the aim of covering the material impacts, risks, and opportunities related to its own workforce, the following relevant policies are in place as of the date of this Statement:

- The People and Organization Policy details Valneva's attention to its engagement with its own workforce and their representatives, its focus on employee level of engagement and satisfaction, and its efforts on recruitment, training, and promotion. The policy will be available on the Group's website and will be communicated to employees;
- Valneva has implemented policies aimed at eliminating discrimination and protecting human rights to ensure a safe and healthy working environment for its workforce. These policies address Valneva's potential impact related to the inclusion of people from groups at particular risk of vulnerability:
  - The Human Rights Policy emphasizes Valneva's commitment to uphold and protect human rights in alignment with international laws, including the Universal Declaration of Human Rights and UN Guiding Principles. The policy outlines Valneva's dedication to preventing child labor, slavery, and human trafficking while promoting equality, safe working conditions, and employee privacy. It focuses on promoting equitable access to vaccines, particularly for underserved populations, and mandates ethical practices in clinical trials and in connection with intellectual property rights. Valneva commits to regular monitoring and updates of the policy to maintain its effectiveness. Valneva is committed to providing effective remedies to address any human rights impact that may arise from its operations. The Group has established reporting mechanisms, including a helpline and email address, to allow confidential reporting of concerns without fear of retaliation. Upon receiving reports, Valneva conducts thorough investigations and ensures accountability by involving relevant departments and experts,
  - The Global Anti-Harassment, Anti-Discrimination, and Anti-Bullying Policy builds upon the Code of Conduct & Ethics and reinforces Valneva's commitment to ensuring that all employees are treated fairly, with dignity and respect. It mandates that employees treat each other with the same dignity, free from harassment and bullying, and covers various grounds for discrimination, including racial and ethnic origin, color, sex, sexual orientation, gender identity, disability, age, religion, political opinion, national extraction, social origin, and other forms of discrimination as recognized by Union regulations and national laws. Furthermore, all employees are required to understand their obligations under this policy. The development of this policy was a collaborative effort by the Valneva Corporate Compliance Committee in conjunction with the People & Organization Department, highlighting the organization's dedication to fostering a respectful and inclusive workplace environment,
  - The Whistleblower Policy defines the protocols that must be followed upon receiving a complaint related to discrimination or harassment, detailing the steps for investigating the case and ensuring the protection of the whistleblower. By providing a clear framework for addressing grievances, the policy promotes a culture of accountability and transparency,
  - The Business Partners Code of Conduct mandates compliance with human rights laws and includes provisions specifically aimed at prohibiting human trafficking and ensuring that no child labor is employed. Through ongoing due diligence and regular audits of its business partners, Valneva actively works to identify and eliminate any risks associated with these human rights violations, that may affect its employees or other workers in the value chain;

- The Environment and Occupational Health & Safety Policy (EOHS) reaffirms Valneva's dedication to people's health and safety and its attentiveness to workplace accident prevention. It requires compliance with all applicable local and national safety laws and efforts to prevent accidents, avoid health risks, and promote the well-being of all people working for the Group. As part of the policy framework, the Group has established a Workplace Related Incidents Protocol to address any unintended event that could lead to or has resulted in damage, injury, or death. This protocol requires the collection of all recordable information for both employees and subcontractors working at different sites, with separate reporting requirements for each.

Valneva's social policies are designed with reference to international standards including:

- The UN Guiding Principles on Business and Human Rights, which encourage businesses to respect human rights through both avoiding the infringement of human rights and addressing any adverse human rights impacts of their direct, indirect activities;
- Prohibition of child labor in accordance with the International Labor Organization (ILO) Minimum Age Convention, 1973 (No. 138) and with the ILO Worst Forms of Child Labour Convention, 1999 (No. 182);
- Prohibition of forced labor in accordance with the ILO Forced Labour Convention, 1930 (No. 29) and with the ILO Abolition of Forced Labour Convention 1957 (No. 105);
- Article 5 of the Declaration of Human Rights, prohibiting harassment, violence, and retaliation;
- Freedom of association, dialogue and consultation with employees, and effective recognition of the right to collective bargaining in accordance with ILO Freedom of Association and Protection of the Right to Organize Convention, 1948 (No. 87), with ILO Right to Organize and Collective Bargaining Convention 1949 (No. 98), and with ILO Workers' Representatives Convention, 1971 (No. 135) to prevent any form of discrimination on the grounds of trade union involvement.

These policies also demonstrate Valneva's attention to its employees' interests. Its workforce is a valuable asset and a significant driver of performance, and the Group is adamant in maintaining a dynamic, open, and friendly work environment that drives both individual and organizational success.

In 2024, Valneva developed Promotion Guidelines, detailing the procedure for the career advancement of employees. Furthermore, the People & Organization Policy notably details how the onboarding framework, orientation sessions, and regular check-ins support new employees during their initial months to better understand their expectations. Employees are welcome to voice their concerns, share ideas, and participate in decision-making processes at any time during their journey in the Group. In a sector where workers seek not only well-being and safety but also development opportunities, Valneva provides training paths, career development support, and competitive compensation.

The Executive Committee has overall responsibility to ensure that all workforce policies comply with legal and ethical obligations. The Corporate Compliance Officer and the People & Organization managing teams, both at corporate and site levels, are accountable for day-to-day program implementation, monitoring, and engaging with people to guarantee policy adoption. Any infringement to policy content may lead to disciplinary actions.

These policies are communicated to Valneva's workforce through its intranet (People and Culture Portal) and to other stakeholders on the Group website. They will be reviewed at least every two years and evolve depending on the Group's needs and feedback received from internal stakeholders.

Targets and actions on material workforce IROs

Valneva has designed a People & Organization action plan for the period 2025-2027 aimed at preventing potential adverse impacts on Valneva's own workforce and to improve employee level of engagement and satisfaction.

This plan is made of three pillars: developing company values and behaviors, employee training and monitoring (through the development of a Global Leadership Development Curriculum and the generalization of People Review), employee listening (notably through the launch of a targeted employee satisfaction survey as well as of global offboarding surveys and the implementation of exit interviews). This action plan may evolve to consider other workforce-related impacts and objectives.

Valneva has identified two targets relating to its material topics and is currently working on aligning its actions, policies, and targets with the objective of setting targets.

Material challenges identified	Targets
Employee level of Engagement/ Satisfaction	By 2026, include language about Valneva's approach to diversity and inclusion in all job postings.
	By 2027, implement an annual employee satisfaction survey to identify areas of focus for future engagement.

Valneva's employees are its most valuable asset, and therefore the Company wishes to collect further information about what actions and targets may have the greatest positive impact.

Actions: the table below contains some of the actions Valneva put in place during 2024. The initiatives implemented are covered under Valneva's ordinary operating expenses and are not expected to result in significant increases of operational or capital expenditures in the future.

Material challenges identified	Actions in 2024	2024 results
Employee level of Engagement/Satisfaction	Exit Interviews: Establish a comprehensive exit interview framework to systematically understand and to gain deeper insights into the underlying reasons for employee departures.	26% employees
	Offboarding Survey: Valneva implemented a standardized survey for all departing employees to gather quantitative data on their reasons for leaving.	8% departing employees
Engagement with own workforce and representatives	Valneva established behavioral goals for its employees. Valneva strives to cultivate a feedback culture aligned with company behaviors, including the implementation of bottom-up feedback processes.	93% employees
Recruitment, training and promotion	Valneva developed Promotion Guidelines, detailing the procedure for the career advancement of employees	No KPI for 2024

Engaging with own workers and their representatives

Processes for engaging with own workers and workers' representatives about impacts

At Valneva, employee perspectives play a crucial role in decision-making and in managing actual and potential impacts. To include these perspectives, Valneva has taken different actions:

1. Valneva has structured its governance to fosters a culture of open dialogue, actively listening to employee opinions and suggestions, which helps identify risks and opportunities from an internal perspective, enriching strategic and operational decisions.
2. For example, town hall meetings at country level are designed to gather feedback from employees, and then People & Organization regularly report employees' perspectives to the Group's management, which allows understanding and integration of employees' opinions and suggestions.
3. Furthermore, Valneva has developed helplines to gather all the issues raised by employees. Employees are urged to alert People & Organization Business Partners, either in-person or through the helpline, when they are aware of a people-related risk, such as discrimination, harassment, or the infringement of human rights. Valneva strives to ensure that acute risks are effectively prevented and if not, mitigated and corrected as soon as possible.
4. Finally, the content from local feedback meetings is reported at site and corporate level, to ensure that employees' perspectives are incorporated into the day-to-day activities of the companies. Transforming feedback from words into concrete actions is important for the Group, as it affects both the well-being of the workers and the communities in which Valneva operates.

Engagement with the workforce or their representatives occurs through structured and ongoing dialogue. Valneva maintains regular communication channels, such as All-Employee Meetings, at least once per quarter, as well as local town hall meetings and one-on-one meetings with supervisors. Valneva has also developed a whistleblower hotline to allow its employees to anonymously raise any concern or problems. Furthermore, P&O professionals are available on a day-to-day basis, either at site or corporate level to engage with employees on their potential concerns.

The majority of Valneva's employees are covered by a collective bargaining agreement. As a European company, Valneva is proud to maintain an internal organization that represents its European workforce (including employees in the UK), the International Work Council (IWC). Furthermore, Valneva engages with Local Works Councils in Austria, France, Scotland and Sweden. These two types of Works Councils allow Valneva to raise issues and concerns and to ensure the well-being of its employees. During interactions with Works Councils, the Group addresses social topics, improves working conditions, and aligns on key initiatives.

The 12 IWC members – and, since Brexit, three "guest" members representing UK employees – were elected in 2021 for a four-year term and meet at least twice a year. They are informed about and consulted on Valneva's cross-border operations, contributing to a better understanding of the cultural and organizational specificities of each European site.

In addition to the IWC and Local Works Councils in Europe, the Canadian and U.S. site leaders and P&O team members maintain a constant, open dialog with the local workforce.

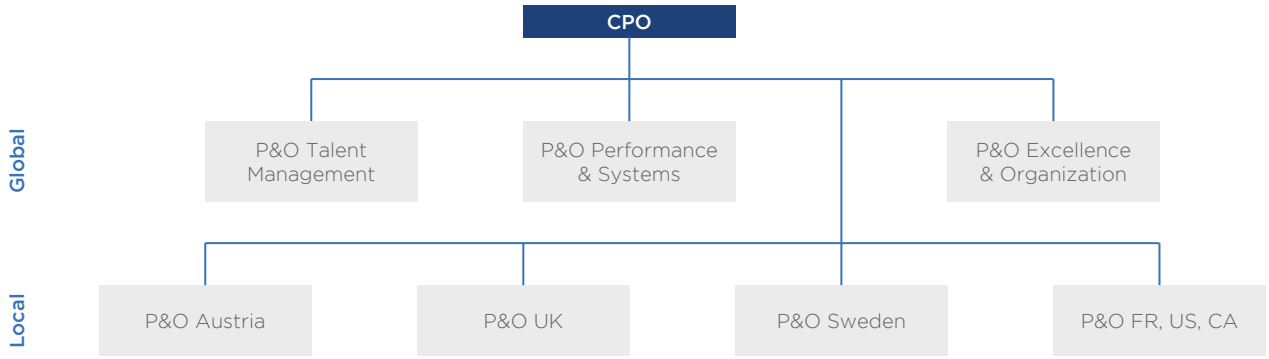
This collaborative approach helps the Group better manage impacts, enhance workplace satisfaction, and foster a culture of transparency and trust across the organization.

Moreover, Valneva ensures that employee engagement is encouraged at all steps of employees' journey within the Group. The onboarding framework includes orientation sessions and regular touchpoints to gather the feedback of new recruits. They are then urged to voice their concerns as part of focus groups, country town hall meetings, and one-on-one feedback sessions. The frequency of these dialogue platforms varies depending on the specific activity but typically includes quarterly meetings, at Group and country level, and continuous open-door policies for direct feedback, ensuring that workforce input is regularly incorporated into organizational decisions. Ultimately, employees who plan to leave are invited to exit interviews, a measure that is currently being deployed across the Group. These opportunities for employee's engagement are summarized hereby:

Employee lifecycle	Engagement type	Engagement frequency
Start	Employee onboarding	Once
During Employment	Focus group	On People & Organization's Business Partners' request
	Local town hall meetings	Quarterly
	All-employee meetings	Quarterly
	Helpline	On employee request
End	Exit interview	Once

At Valneva, the P&O function has operational responsibility for ensuring that engagement with the Group's own employees takes place and that the results of the consultation and engagement processes inform the Group's decisions.

Valneva's Chief People Officer (CPO) steers engagement initiatives and ensures that they are effectively implemented across the organization and that the insights gathered are communicated to the Executive Committee and integrated into strategic decision-making processes. The CPO works closely with the P&O leadership team to align workforce feedback with the Group's broader goals and operational practices.



Valneva and labor unions set rules regarding working conditions, employment, and social guarantees notably in respect of human rights. Valneva's commitment towards human rights is also formalized in its Human Rights Policy (see Section S1-1 for more information).

The effectiveness of engagement with the workforce is assessed qualitatively and quantitatively. P&O teams constantly report to country and global management on employee engagement (as witnessed by their participation in quarterly meetings), feedback, and overall sentiment.

Qualitative assessments are also gathered through focus groups and exit interviews. Metrics such as employee retention rates, internal mobility, and productivity indicators help gauge the impact of engagement initiatives. These results are analyzed periodically to identify trends and areas for improvement, assess alignment with organizational goals, and ensure that engagement strategies remain relevant and effective in addressing workforce needs.

To gain insights into the perspectives of employees who may be particularly vulnerable or marginalized, the Group leadership implemented several measures, that vary country by country. For example, at Valneva´s Livingston site, employees are contacted to answer anonymous surveys that include targeted questions on topics such as inclusion, equity, and workplace well-being. Additionally, the creation of focus groups and employee resource groups that provide safe spaces for individuals from underrepresented communities to share their experiences is encouraged. Valneva has confidential reporting channels, such as whistleblowing hotlines, that allow employees to express concerns without fear of retaliation. The P&O team regularly review this feedback to ensure that the voices of these groups are considered in the decision-making processes, minimizing potential negative impacts and fostering an inclusive and supportive work environment.

Characteristics of Valneva's employees

As of December 31, 2024, Valneva employed 713 people.

NUMBER OF EMPLOYEES BY GENDER

ID (DP)	2022	2023	2024
Male	309	292	294
Female	410	384	417
Other [1]	—	—	2
TOTAL	**719**	**676**	**713**

(1) Gender as specified by the employees themselves.

NUMBER OF EMPLOYEES BY COUNTRY

Valneva's workforce is located in six countries, whose headcount is presented below:

ID (DP)	2022 (total)	2023	31.12.2024	2024 (average)
US	23	28	30	29
Canada	5	8	10	9
UK	183	178	167	172.5
France	59	67	72	69.5
Sweden	183	124	129	126.5
Austria	266	271	305	288

Valneva employs a majority of permanent workers, with the split available below:

ID (DP)	Headcounts	Permanent (open-ended)	Temporary (fixed-term)	Non-guaranteed hours	Total
Headcounts by Contract and by Gender – number	Female	403	14	—	417
	Male	291	3	—	294
	Other gender [1]	2	—	—	2
	Not reported	—	—	—	—
	TOTAL	**696**	**17**	**—**	**713**
Headcounts by Contract and by Gender – average	Female	385	15	—	400
	Male	290	2.5	—	292.5
	Other gender [1]	2	—	—	2
	Not reported	—	—	—	—
	TOTAL	**677**	**17.5**	**—**	**694.5**

(1) Gender as specified by the employees themselves.

In 2024, 121 employees left the Group voluntarily or due to dismissal or retirement, which corresponds to a turnover rate of 17.4%.

Country P&O teams collect data based on the employees' personnel files and employment contracts. Information relevant to this Sustainability Report is recorded in Valneva's P&O information system.

Employees include all people having an employment contract (open-ended or fixed-term contracts, including interns, students, trainees) in the last day of the month with Valneva SE or any of its subsidiaries or affiliates. Two methods are used to collect employee data:

- The P&O management system, which is deployed in all countries and covers most of the reporting perimeter;
- A questionnaire sent to country P&O teams to collect the data for the entities which are not yet included in the P&O information management system [if applicable].

Employee data are in headcount terms, which means that every employee is counted as "one" regardless of his or her contractual working time (or activity rate) and this number is reported at the end of reporting period, on December 31.

During 2024, Valneva's workforce evolved from 676 to 713. This change in the workforce can be explained by several factors. Activity related to new potential vaccine candidates led to an increase in headcount in the Pre-Clinical and Clinical teams. Following approval of Valneva's chikungunya vaccine, the Group focused on sales activities, which increased the headcount in the Commercial team.

Employee-related data are also disclosed in Note 7 of Valneva's consolidated financial statements, in Section 4.1.5 of this URD.

Collective bargaining coverage and social dialogue

The percentage of employees covered by collective bargaining agreements within or outside EU is summarized in the table below:

	Within EU			Outside EU		
	Austria	France	Sweden	United Kingdom	United States	Canada
Percentage of employees covered by collective bargaining agreements	100%	100%	100%	0%	0%	0%
Percentage of employees covered by workers' representatives within EEA		100%				

71.5% of Valneva's employees are covered by collective bargaining agreements. Employees who are not covered by those agreements (28.5%) are based on the United Kingdom, United States, and Canada, where there are minimum wage regulations in place. Therefore, 100% of employees within EU are covered by collective bargaining agreements.

Valneva is committed to ensuring the freedom of association and the right to collective bargaining for its own employees and the people working across Valneva's company's value chain. Across Valneva, employee representation is organized through the Local Works Councils and/or the Group's International Workers Council. The specific responsibilities of these groups include raising any issues or concerns with management and ensuring the well-being of employees. Valneva respects the right of workers to form and join workers' organizations of their own choosing, seek representation, and bargain collectively, as permitted by and in accordance with locally applicable laws and regulations.

Training and skills development metrics

Training plays a crucial role in Valneva's success by enhancing employee skills, ensuring compliance, driving innovation, and promoting adaptability in a constantly evolving business landscape.

Training refers to structured learning activities designed to help Valneva employees acquire, maintain, and enhance the necessary knowledge, skills, and competencies required to perform their roles in compliance with regulatory, quality, and company-specific requirements.

These training programs cover key areas such as GxP and GMP compliance, corporate governance, business ethics, sustainability practices, job-specific competencies, health, safety, and environmental regulations, as well as leadership development.

Training methods include instructor-led sessions (both in-person and virtual), e-learning modules, on-the-job training, workshops, and competency assessments. Valneva evaluates training effectiveness through participation rates, completion rates, competency assessments, and feedback mechanisms. Due to the phase-in provision applicable under Appendix C of ESRS 1, Valneva is not required to report on ESRS S1-13 in the first reporting year. Currently only the information related to the Minimum Disclosure Requirements (MDR) is included below.

Performance Reviews are tracked through Valneva's Performance Management System. As depicted below, 100% of Valneva's workforce participated in performance and careers reviews.

Category	Type of contract	Gender	Percentage of employees that participated in regular performance and career development reviews
Employee	Permanent employees	Female	100 %
		Male	100 %
		Other than female and male	100 %
		Gender not reported	— %
	Temporary employees	Female	100 %
		Male	100 %
		Other than female and male	— %
		Gender not reported	— %
	Full-time employees	Female	100 %
		Male	100 %
		Other than female and male	— %
		Gender not reported	— %
	Part-time employees	Female	100 %
		Male	100 %
		Other than female and male	— %
		Gender not reported	— %
Non-employee	Self-employed people	Female	— %
		Male	— %
		Other than female and male	— %
		Gender not reported	— %
	People provided by undertakings primarily engaged in employment activities	Female	— %
		Male	— %
		Other than female and male	— %
		Gender not reported	— %

Health and safety metrics

At Valneva 100% of employees are covered by its Health and Safety management system. Only Valneva's UK site has the legal obligation to implement a formalized health and safety system in compliance with local regulations. Other sites, while not subject to regulatory requirements, adhere to Valneva's internal health and safety guidelines and processes, as well as recognized local health and safety guidance, ensuring widespread protection for all employees.

The Group implemented during 2024 a new specific reporting software for accident reporting and management with a clear focus on accident prevention. All employees worldwide have access to that software and can report on accidents, incidents, and near-misses. EHS experts review the reported cases and drive an investigation via the new software.

With the goal of obtaining ISO 45001 certification in 2027, Valneva's largest manufacturing site (Livingston, Scotland) made significant efforts related to safety management in 2023 and 2024.

Valneva is currently working on defining targets related to workplace accident prevention.

Forty four accidents took place at Valneva in 2024, seven of which resulted in time lost, as evidenced by the Group's Lost Time Injury Frequency Rate (LTIFR) of 5.89.

ID (DP)	Description of the data point	Employees	Total	Type of info
S1-14_01	Percentage of people in its own workforce who are covered by health and safety management system based on legal requirements and (or) recognized standards or guidelines	100%	100%	Percentage
S1-14_02	Number of fatalities in own workforce as result of work-related injuries and work-related ill health	0	0	Integer
S1-14_03	Number of fatalities as result of work-related injuries and work-related ill health of other workers working on undertaking's sites	0	0	Integer
S1-14_06	Number of cases of recordable work-related ill health of employees	0	0	Integer
S1-14_07	Number of days lost to work-related injuries and fatalities from work-related accidents, work-related ill health and fatalities from ill health of employees	46	46	Integer
Internal KPI	Number of recordable work-related accidents for own workforce without lost time	37	37	integer
Internal KPI	Number of recordable work-related accidents for own workforce with lost time	7	7	Integer
S1-14_04	**TOTAL NUMBER OF RECORDABLE WORK-RELATED ACCIDENTS FOR OWN WORKFORCE**	**44**	**44**	**INTEGER**
S1-14_05	**RATE OF TOTAL RECORDABLE WORK-RELATED ACCIDENTS FOR OWN WORKFORCE**	**37**	**37**	**PERCENTAGE**

As part of Valneva's commitment to a safer, healthier, and more sustainable workplace, its manufacturing site in Solna, Sweden, further strengthened its focus on workplace safety in 2024. Managers completed comprehensive training on safety protocols and best practices, enabling them to take a more active role in safety initiatives, drive accountability, and integrate a proactive, preventive approach into daily operations.

Enhanced reporting and follow-up on potential safety risks fostered a culture of continuous improvement. This heightened awareness empowered employees to actively participate in identifying and reporting safety enhancements. Additionally, safety became a central topic in weekly newsletters and site meetings, reinforcing its importance across all levels of the organization.

Valneva systematically monitors accident data across all its R&D and manufacturing sites. In addition to tracking overall incidents, Valneva collects detailed data on the proportion of accidents with and without lost time, minor injuries that do not result in lost time, and near misses—unplanned events with the potential to cause harm but that do not result in actual injury. Valneva also tracks high-potential events, which are incidents that could have realistically led to major or catastrophic consequences. This may vary slightly by site, as it aligns with each location's individual commitment and approach to safety culture and any requirements linked to compliance with local regulations.

3.5.2 ESRS S3 – Affected Communities

The below table includes Valneva's identified material opportunity related to ESRS S3 Affected Communities. Due to the phase-in provision applicable under Appendix C of ESRS 1, Valneva is not required to report on ESRS S3) in the first reporting year. Currently only the information related to the Minimum Disclosure Requirements (MDR) is included below.

ESRS S3 – AFFECTED COMMUNITIES			
Material challenges identified	**IRO description**	**Type of IRO**	**IRO impact on Valneva and its stakeholders**
Communities affected by Valneva's operations	Increase communities' awareness of vaccines to become a key player from business, social, and environmental perspectives	Opportunity	Reputational: Opportunity to increase proactively the interactions with local communities to increase the level of awareness of the value of the products Valneva manufactures with the aim of becoming a key player of the local communities where Valneva operates not only from a business perspective, but from a social and environmental perspective as well.

Policies, targets and actions related to affected communities

Affected communities are defined as people or groups living or working in the same area that has been or may be affected by Valneva´s operations or through its value chain .In 2024 Valneva did not have any policy, target or action linked to this IRO.

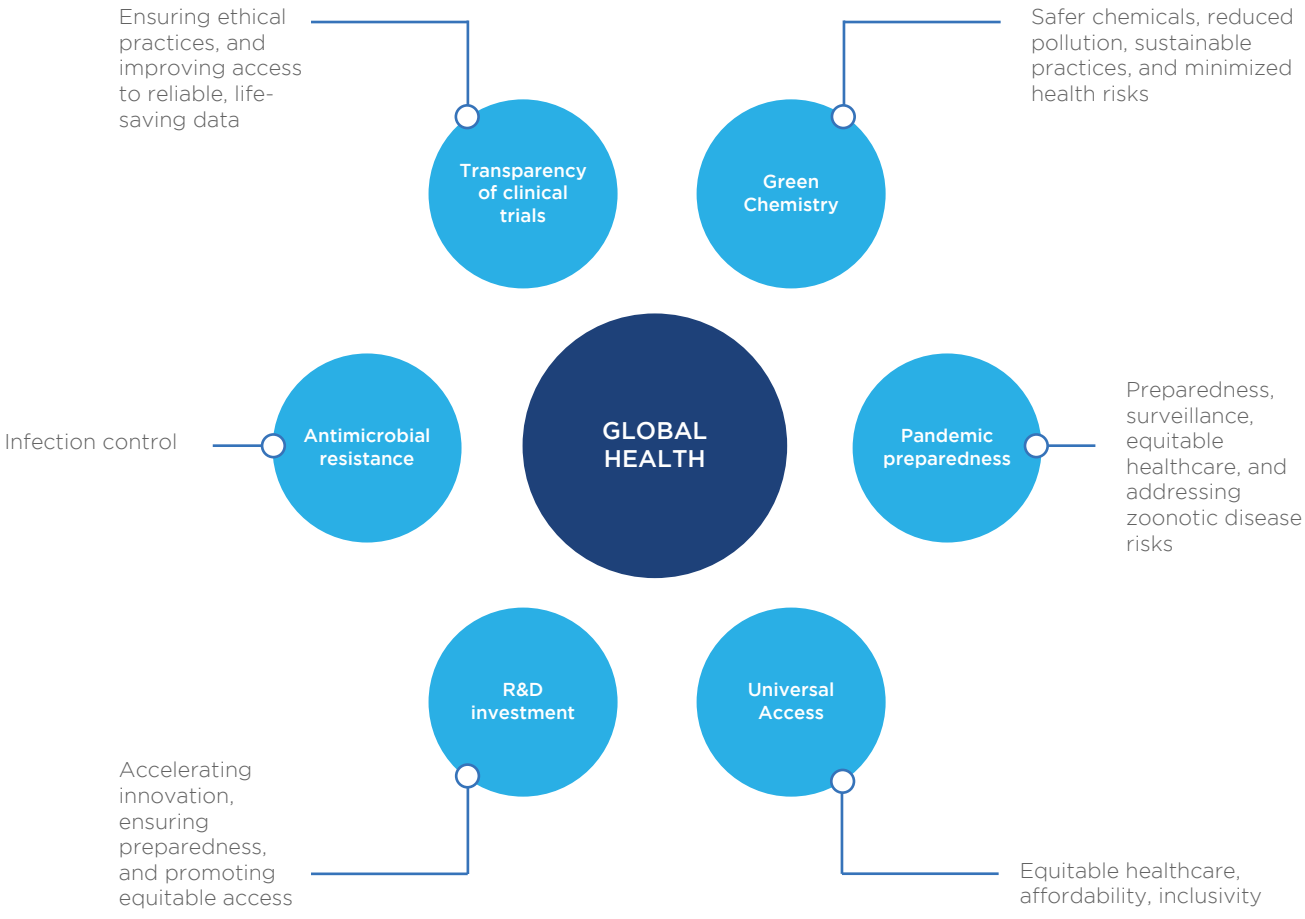
3.5.3 ESRS S4 – Consumers and end-users

Valneva is committed to consumer and end-user well-being and advancing global health by developing and delivering high-quality, safe, and effective vaccines to protect individuals and communities worldwide. In alignment with the European Sustainability Reporting Standards (ESRS) S4, this section outlines Valneva's efforts to uphold the highest standards of transparency, accessibility, and accountability in serving the needs of consumers and end-users. Valneva recognizes the critical role vaccines play in preventing disease and saving lives and is deeply committed to ensuring their safety, efficacy, and equitable distribution.

Valneva's ESG strategy reflects this commitment within the Protecting Lives Pillar, with a clear view on investing in R&D to develop best-in-class vaccines for unmet medical needs. Prioritizing universal access and ensuring trust in vaccine safety are at the core of the Company's strategy.

Valneva is committed to promoting global access to life-saving vaccines, particularly in underserved regions, through partnerships, technology transfers, and a pricing strategy that aims to reduce barriers for low- and middle-income countries (LMICs). Valneva focuses on fair distribution, supporting local healthcare infrastructure, and promoting global health equity while navigating the challenge of offering affordable vaccines at a profitable margin.

Valneva is committed to pandemic preparedness, and through its ongoing work on outbreak modeling to assess risks and impacts. The Company is focused on global health security, including stockpiling vaccines and collaborating with governments and organizations to ensure timely access, while also recognizing the disproportionate impact of pandemics on LMICs.



ESRS S4 – CONSUMERS AND END-USERS			
Material challenges identified	**IRO description**	**Type of IRO**	**IRO impact on Valneva and its stakeholders**
Training and awareness of consumers	Risk of the spread of diseases and reductions of sales due to misinformation on vaccines	Risk (financial)	Vaccine hesitancy derived from the widespread misinformation around the safety of vaccines is a big threat to global health. It can lead to low rates of travelers interested in getting vaccinated and thus a decrease in the Company's potential sales and increase in diseases' spread during outbreaks.
Training and awareness of providers	Risk of misinformation and insufficient awareness leading to the reduction of Valneva's sales	Risk (financial)	It is essential that healthcare providers in countries where Valneva's products are available are aware of these products and how they may be used. Failure to create sufficient awareness in a given market could significantly impact sales in that market.
	Increase healthcare providers' knowledge of vaccines, leading to the reduction of disease transmissions and increase of sales	Opportunity	The more informed healthcare providers are regarding diseases and the vaccines that can prevent them, the greater Valneva's sales will be. Additionally, this will reduce the likelihood of disease transmission and its associated consequences, particularly among countries with high traveler traffic.
Consumers and end-users in products' design and implementation	Operational opportunity due to the involvement of medical experts	Opportunity	Opportunity to proactively involve medical experts on potential changes and improvements on the products.
Inclusion of people at risk of vulnerability	Include diverse populations in clinical trials and expand geographic scope of trials leading to reputational and financial opportunities	Opportunity	Possible opportunities associated with low- and middle-Income countries, targeting diversity in clinical trial participants and expanding geographic scope of trials.
	Respect of the rights and privacy of the diverse people included in clinical trials	Positive impact	Making clinical trial data available to the research community advances science and medicine, builds knowledge, improves public health, and earns trust. When sharing its data, Valneva respects the rights and privacy of the individuals who participate in its clinical trials.
Maintaining pharmacovigilance	Impact on public health, by ensuring the use of safe vaccines	Positive impact	Pharmacovigilance contributes positively to broader public health objectives. By continuously monitoring vaccines post-market, companies provide regulators and healthcare providers with data to update safety profiles, ensuring the use of safe vaccines. This helps minimize risks, leading to safer immunization programs, higher vaccination uptake, and better control of diseases.

Policies, targets and actions linked to consumers and end-users

Training and awareness of consumers and end-users

Consumers and end-users in products' design and implementation

Currently the Company does not have any policy governing these IROs.

Currently, Valneva has not set a specific quantitative target related to these IROs.

Valneva has various actions in place to ensure transparent, informed, and safe interactions with consumers. These measures include rigorous oversight of vaccine communication, safety monitoring, and consumer education to enhance trust and compliance:

- Promotional Review Committee: This committee evaluates marketing materials, advertisements, and other promotional content to verify that they align with regulatory guidelines and provide truthful, balanced, and evidence-based information to consumers and healthcare professionals. This ensures ethical and accurate communication;
- Product Information Leaflet and Medical Information: Clear and comprehensive vaccine information is a critical component of consumer training and awareness. Valneva provides detailed product information leaflets that include indications, usage guidelines, precautions, and potential side effects. Additionally, a dedicated Medical team respond to consumer and healthcare professional inquiries, ensuring that reliable and up-to-date information is readily available;
- Quality Monitoring Board: this Board oversees the adherence to high product standards and regulatory requirements. This board assesses consumer feedback, complaint trends, and product quality reports, taking necessary actions to improve patient safety and product reliability;
- Pharmacovigilance Processes, Systems, and Channels: Pharmaceutical companies maintain robust pharmacovigilance systems to monitor, detect, and report adverse drug reactions. Further information on pharmacovigilance actions can be found later in this section;
- Product Safety Reports: Regularly updated product safety reports summarize the ongoing monitoring of vaccine performance, adverse reactions, and risk mitigation measures. These reports contribute to regulatory filings and public safety communications, reinforcing consumer trust through transparency.

Inclusion of people at risk of vulnerability

Valneva is working on the definition of a Clinical Trial Policy (to be published in 2025) and has a Data Protection Policy in place which supports these two IROs.

By 2026, the Company will enable access to Valneva's single-shot chikungunya vaccine in Brazil and India by enabling local manufacturing and access through technology transfers. See further information on Section 3.5.3 Vaccine equity and universal access.

Valneva commits to follow diversity, equity, and inclusion principles in all stages, including in Phase 3 of clinical trials.

Maintaining pharmacovigilance

Valneva has a policy in place on Pharmacovigilance and medical information governing this IRO.

Currently, Valneva has not set a specific quantitative target related to this IRO.

There are several actions in place related to maintaining pharmacovigilance at Valneva: Healthcare professionals and consumers have direct access, by phone and email, to Valneva's Medical Information professionals who provide timely and accurate information on the Group's products.

Provision of standard quality of development and marketed products and ongoing quality control by prospective quality checks according to international and company standards is considered a prerequisite to protect individuals´ health.

In accordance with local and global applicable regulations relevant information is disseminated subsequently to the scientific community, physicians and users if necessary.

Periodic Safety Update Report (PSURs) are required to be compiled and submitted to the relevant authorities.

Valneva is committed to patient safety and strives for transparent and rapid communication of individual case safety reports to the authorities. Valneva seeks to ensure that 100% of these reports are submitted to the authorities on time. In 2024, 99.1% were submitted on time.

Industry-specific IROs identified under ESRS S4

The industry-specific disclosure standards published so far by ESRS are not relevant for Valneva's business model and value chain. The DMA performed by the Company and the ESG risk analysis have, however, highlighted the importance for Valneva of protecting global health. The associated IROs identified as Industry Specific and listed below are seen as crucial for Valneva's business model and also have significant impacts on external stakeholders. Some of those topics are explored in the following Sections, including the respective IROs, relevant policies, targets and actions.

INDUSTRY SPECIFIC			
Material challenges identified	**IRO description**	**Type of IRO**	**IRO impact on Valneva and its stakeholders**
R&D investments	Investment in R&D leading to strengthening of Valneva's reputation	Opportunity	By strategically investing in R&D, Valneva can significantly contribute to the advancement of global health with products that address unmet medical needs and neglected diseases. This will strengthen Valneva's reputation and may qualify Valneva for additional funding, including from investors, organizations (*e.g.*, CEPI), and governments.
	Global health improvements thanks to R&D investments	Positive impact	The level of R&D investment in pharmaceutical companies is a key driver of global health improvements. It fosters the development of new treatments and cures, improves public health outcomes, enhances accessibility and affordability of medicines, and promotes health equity.
Antimicrobial resistance	Spread of vector-borne diseases to new regions	Opportunity	Rising temperatures are linked to new cases of vector-borne diseases and their apparition in new regions of the world. If average temperature continues rising, then vector-borne diseases may spread.
	Impact on global health by responding to future pandemics through Valneva's activities	Positive impact	The nature of Valneva's business (vaccines manufacturing and commercialization) could allow the Group to respond to future pandemics or outbreaks.
	Development of new partnerships to face disease resistance can lead to reputational and financial opportunities	Opportunity	As resistance increasingly poses a challenge, new prospects for funding and partnerships may emerge.
Vaccine equity and universal access	Support universal access to vaccines, leading to the growth of Valneva's market and new financial partnerships	Opportunity	By supporting universal access, Valneva can reach underserved or previously untapped markets, including low- and middle-income countries, significantly increasing its customer base. This could also opens doors for partnerships with governments, NGOs, and global health organizations, which can provide funding, subsidies, and logistical support, reducing financial risks and supporting vaccine distribution.
	Impact on people by providing access to vaccines for everyone	Positive impact	Having the right access and pricing strategy in place allows customers in LMICs and endemic countries to have access to Valneva's vaccines.
Future pandemic preparedness	Operational risks due to the prioritization of certain vaccines in pandemic situations	Risk (operational)	In pandemic situations, a government may compel the company to prioritize vaccine production, which could lead to a reduction or halt in its other production and development activities.
	Investment against pandemics and mosquito-borne diseases, leading to financial opportunities	Opportunity	Opportunity for Valneva to be seen as a key player against pandemics and outbreaks derived from mosquito-borne diseases which could have a financial impact.
Transparency of clinical trial data	Impact on global medicine knowledge and public health with the share of clinical trial data	Positive impact	When sharing its data, Valneva respects the rights and privacy of the individuals who participate in clinical trials.

R&D, antimicrobial resistance and unmet needs

Valneva's R&D portfolio primarily reflects its scientific, technical, and clinical competencies in vector-borne infectious diseases and in other viral and bacterial infectious diseases.

Valneva wants to make a difference in people's lives by applying innovative and pioneering science to address potential vaccine-preventable diseases. Valneva's pipeline includes vaccines candidates against infectious diseases with major unmet needs, where vaccines are currently unavailable. All consumers and end-users who can be materially impacted by Valneva's business are included in the scope of disclosure under ESRS 2.

End-users of Valneva's current vaccines are persons travelling to areas where cholera, Japanese encephalitis, or chikungunya are prevalent. Valneva works with partners to make its chikungunya vaccine also available to people living in endemic areas. Valneva's R&D pipeline further aims to expand the product portfolio for these end-users with vaccine candidates against additional disease targets, such as diarrhea caused by Shigella or Enterotoxigenic *escherichia coli* (ETEC), Zika, and Lyme disease. Valneva's pipeline also includes a vaccine candidate against infectious mononucleosis, caused by Epstein-Barr virus, intended for use in the adolescent population.

Some vaccines, like the one for cholera, materially impact travelers to endemic regions as well as persons living in such regions, primarily young children. The Japanese encephalitis and chikungunya vaccines will materially impact anyone living in or travelling to endemic areas, as could the Lyme disease vaccine candidate, if approved. The Zika vaccine candidate, if approved, could materially impact women of child-bearing potential that are travelling to or living in endemic regions. The infectious mononucleosis (EBV) vaccine candidate, if approved, could materially impact adolescents and adults, who are at risk of infectious mononucleosis and subsequently the risk of its sequelae, multiple sclerosis.

Valneva has an R&D portfolio targeting a wide range of unmet medical needs. In addition to vaccine programs targeting Lyme disease and infectious mononucleosis due to EBV, the other key pillars of Valneva's business strategy can bring significant improvement to global public health, with prophylactic vaccines that can help in the prevention of Zika, and severe diarrhea due to Shigella, and Enterotoxigenic Escherichia coli (ETEC).

The level of R&D investment in pharmaceutical companies is a key driver of global health improvements. It fosters the development of new treatments and cures, improves public health outcomes, enhances accessibility and affordability of medicines, and promotes health equity.

Policies, targets, and actions linked to R&D, antimicrobial resistance and unmet needs

Valneva has not addressed this issue in policies in 2024.

Currently, Valneva has not set a specific quantitative target related to these IROs.

All actions related to R&D, AMR (antimicrobial resistence) and unmet needs are addressed in the following sections.

Getting ahead of AMR

Treatment of Shigella or ETEC infection focuses on rehydration and antibiotics, but for both pathogens, antibiotic resistance is becoming more and more common. Valneva's prophylactic vaccine candidates targeting these pathogens aim to prevent the diseases they cause, which could avoid the need for antibiotics and hence contribute to the solution of the ongoing AMR crisis.

Valneva's business strategy is aligned with Sustainable Development Goal 3, especially 3.3: "by 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases" and 3.8: "achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all". In 2024, the revenue from Valneva's three commercial vaccines was about 80.7% of the Group's total revenue, contributing to SDG 3.

By strategically investing in R&D, Valneva may significantly contribute to the advancement of global health with products that address unmet medical needs and neglected diseases. This would strengthen Valneva's reputation and may qualify Valneva for additional funding, including from investors, organizations (*e.g.*, CEPI), and governments.

Furthermore, one of the consequences of climate change is the expansion of the habitat of mosquitos that can transmit viruses responsible for dengue, chikungunya, Zika, Japanese encephalitis and other diseases. Valneva has marketed vaccines against chikungunya (IXCHIQ) and Japanese encephalitis (IXIARO; JESPECT in some markets). The company is committed to making these vaccines available to people living in endemic areas through partnerships with local vaccine manufacturers. It is also Valneva's goal to develop vaccines against additional mosquito-borne diseases to protect people who are living in current and potential future endemic areas.

The vaccines industry is strictly regulated, and vaccine candidates are subject to rigorous clinical testing in both healthy adults and the appropriate target populations, for example young children, prior to licensure. Pregnant women and immunocompromised persons are of particular concern for the administration of vaccines, owing to potential additional risks. The effect on these target populations may be studied in dedicated clinical trials or by strict monitoring post- licensure, *e.g.* so-called pregnancy registries, to ensure safety.

Valneva is, however, currently investing in the development of vaccines for prevention of infectious diseases, such as Lyme, diarrhea caused by shigella or ETEC, Zika, and infectious mononucleosis caused by EBV. Valneva is also investing in post-licensure commitments to demonstrate effectiveness of its chikungunya vaccine and, together with partners, to make this more broadly available in endemic areas.

R&D of novel vaccines generally continues until licensure or until clinical trial data suggest that further development is futile. Development of vaccines is notoriously lengthy, but varies depending on the indication and availability of suitable populations to conduct clinical trials.

Committed to a prophylactic vaccine against Zika

Zika fever or Zika virus disease is an illness caused by Zika virus, transmitted by Aedes mosquitoes, such as A. aegypti and A. albopictus. In addition, Zika virus can be sexually transmitted, and the virus can persist in male testis for months. While around 80% of infections are asymptomatic, and while symptomatic cases are usually mild and self-limiting within a week, Zika infection during pregnancy can cause microcephaly and other brain malformations in the fetus as was observed during the 2015-2016 outbreak. There is currently no prophylactic vaccine, and prevention focuses on the avoidance of mosquito bites in Zika endemic areas and the use of condoms. The World Health Organization has suggested to prioritize development of inactivated and other non-live Zika vaccines, which would be safe to use in pregnant women. Valneva has previously developed and licensed an inactivated whole virus vaccine (IXIARO against Japanese encephalitis or VLA2001 against COVID) and is currently testing a novel inactivated whole virus Zika vaccine in a Phase 1 clinical study.

Preventing diarrhea caused by Enterotoxigenic Escherichia coli (ETEC)

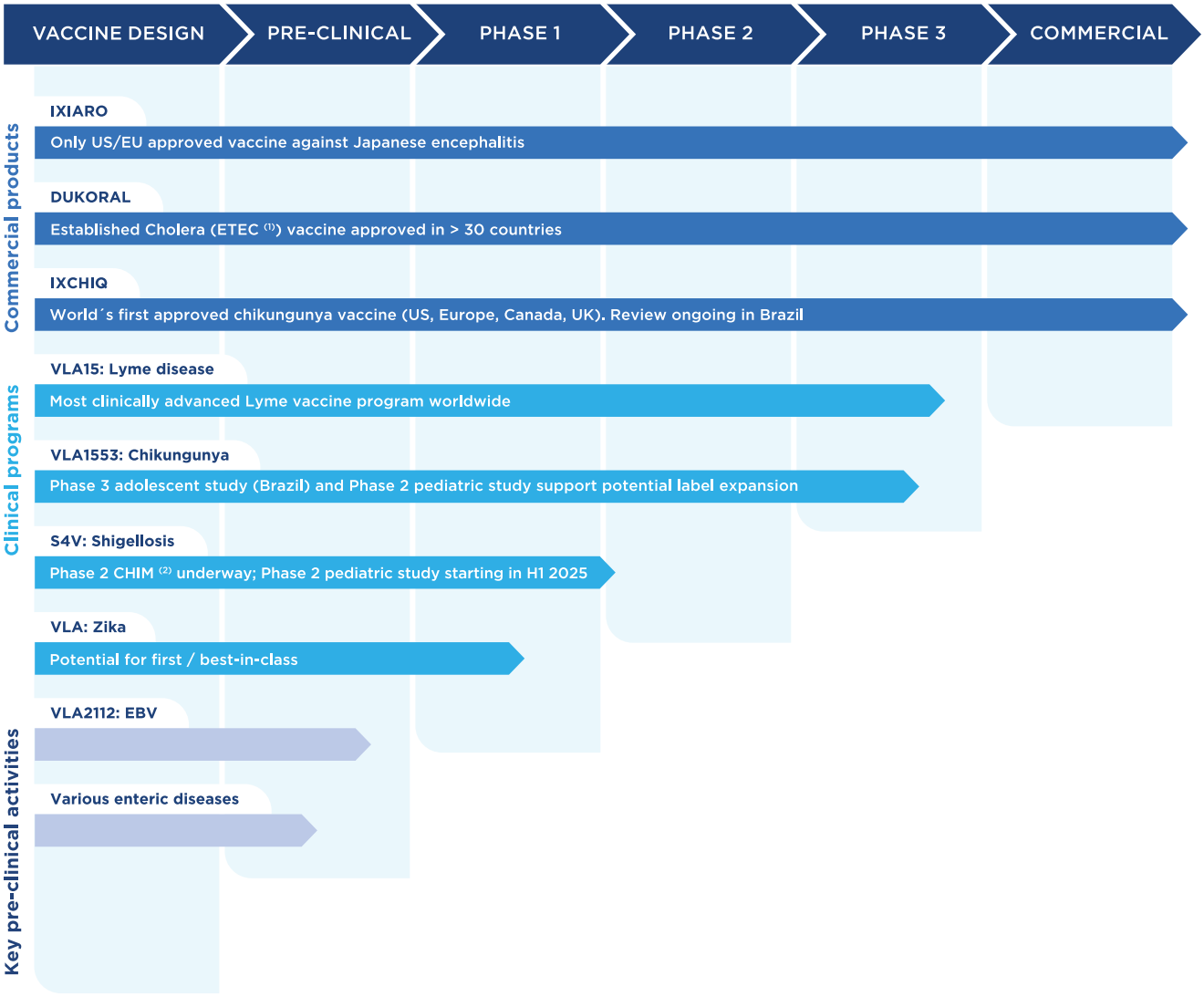
Infection with ETEC can cause profuse, watery diarrhea with no blood or leukocytes and abdominal cramping. To date, no licensed vaccines specifically target ETEC, though a few are in various stages of development. Natural or experimental infection provides protective immunity against ETEC, suggesting that vaccine-induced ETEC immunity should be feasible. Prevention through vaccination is a critical part of the strategy to reduce the incidence and severity of diarrheal disease due to ETEC, particularly among children in low-resource settings. ETEC is a longstanding priority and target for vaccine development for the World Health Organization. Treatment for ETEC infection includes rehydration therapy and antibiotics, although ETEC is frequently resistant to common antibiotics.

Dealing with Shigella, the 2nd leading cause of fatal diarrheal disease worldwide

In 2024, Valneva expanded its R&D pipeline with a prophylactic tetravalent Shigella vaccine, through a strategic partnership with LimmaTech. Shigellosis, caused by Shigella bacteria, is the second leading cause of fatal diarrheal disease worldwide. Symptoms of shigellosis usually develop within one to three days after exposure and can range from mild diarrhea to severe dysentery, which includes blood and mucus in the stool. In addition to the gastrointestinal symptoms, the infection can lead to complications, particularly in vulnerable populations such as young children, the elderly, and those with weakened immune systems. Transmission of Shigella typically occurs through the fecal-oral route, often via contaminated food or water, or through direct contact with an infected person. The bacteria are highly infectious, requiring only a small number of bacteria to cause illness, which makes outbreaks common in areas with poor sanitation and hygiene practices. Shigellosis also affects international travelers from high-income countries and deployed military personnel in endemic regions. Treatment of shigellosis includes rehydration therapy to prevent dehydration, and in some cases, antibiotics may be prescribed to shorten the duration of the illness and reduce transmission. However, increasing antibiotic resistance among Shigella strains poses a challenge to effective treatment. The Shigella vaccine program at LimmaTech is supported by The Bill & Melinda Gates foundation currently in a Phase 2-b pilot efficacy study in a controlled human infection model.

R&D investment

The following overview of the Valneva commercial portfolio and R&D pipeline and progress towards development goals is updated quarterly and published in the corporate presentation.



(1) ETEC indication in some markets only;
(2) Controlled human infection model

R&D investments are disclosed in regular financial updates. The annual R&D expenses in each of the past five full years and reporting year 2024 are shown in the table below. Those results were included in the corresponding financial statements. Future R&D investments are not disclosed for competitive reasons.

R&D PL [a]

(in kEUR)	2019	2020	2021	2022	2023	2024
	FY	FY	FY	FY	FY	FY
TOTAL R&D EXPENSES	**37,884**	**84,454**	**173,283**	**104,922**	**59,894**	**74,143**

(a) Reported R&D cost do not include Valneva's payments to Pfizer for the Lyme Phase III clinical trial as these costs are recorded in the balance sheet against refund liabilities

To support its commitment to vaccine equity and universal access, Valneva allocates both operational expenditure (Opex) and capital expenditure (Capex) to fund key projects designed to improve accessibility, affordability, and availability of vaccines across underserved regions. These investments enable Valneva's long-term partnerships, technology transfers, and local production initiatives critical for sustainable health outcomes in low- and middle-income countries. Opex funding is allocated to cover operational costs associated with local partnerships, capacity building, and regulatory support. This includes expenses related to Valneva´s ongoing collaborations with institutions such as Instituto Butantan and BioE, where local development and commercial distribution are facilitated to maximize vaccine reach. Capex investments are strategically directed towards expanding infrastructure and scaling production capacity to ensure that Valneva can meet the high demand for drug substances in LMICs. This includes technology transfer milestones, which underpin the scalability and reliability of vaccine availability in these regions. These targeted Opex and Capex expenditures support Valneva's strategy to bridge vaccine access gaps globally, enhancing Valneva's ability to reach more people with life-saving vaccines while aligning with the core mission to advance health equity

Over the next few years, Valneva aims to focus on creating a robust pipeline of future products, a move that reflects its commitment to innovation in service of public health. By focusing on early-stage assets, Valneva is not only broadening its research horizons but also laying the groundwork for a long-term portfolio renewal strategy. These early clinical programs represent the foundation of future commercial vaccines, ensuring a steady stream of potential products that can address emerging public health needs.

Valneva's efforts underscore a deliberate strategy to build a growing portfolio of novel development programs. It highlights Valneva's forward-thinking approach, ensuring that it remains competitive in an industry where innovation is key to success. Valneva demonstrates a clear commitment to growth and sustainability in its operations and product offerings.

Valneva aims to potentially introduce a new vaccine into the market in the next 5+ years, which will further increase the size of its commercial portfolio compared to 2020, when Valneva's portfolio included two commercial vaccines. Reaching those milestones will highlight Valneva's ability to transition R&D initiatives into tangible commercial successes.

In parallel with this commercial growth, Valneva plans to advance two new vaccine candidates into early clinical development, specifically Phase 1/2 trials. Valneva has set the strategy based on its previous experience and knowledge of the substances as well as of the markets, and the pipeline has been defined after studying the population's needs and market opportunities. These stages of development are critical, as they assess the safety and appropriate dosing of the vaccine (Phase 1) and its preliminary efficacy and safety in a larger cohort (Phase 2).

R&D investment, with historical figures provided above, provides one useful metric for Valneva's commitment to developing novel vaccines to prevent infectious diseases. The performance and effectiveness of this investment can be measured in the number of pipeline programs at different stages of clinical development.

Pre-clinical programs are often not disclosed and therefore the number of preclinical programs is not a useful metric for comparison. As of end of 2024, and as shown in the figure above, Valneva has two disclosed programs (EBV and ETEC) in preclinical development, one program (Zika) in Phase 1, one program (Shigella, partnered) in Phase 2, and one program (Lyme, partnered) in Phase 3 of clinical development. In addition, there are ongoing Phase 2 and Phase 3 trials in support of label extensions for Valneva's chikungunya vaccine, IXCHIQ.

R&D investments are calculated and reported according to standard financial practices. All metrics are factual after the fact (R&D investment) or current status (pipeline status). Overall, Valneva's finances and pipeline are under supervision of the company's Board of Directors.

Vaccine equity and universal access

Policies, targets, and actions linked to vaccine equity and universal access

Valneva has two policies related to universal access to vaccines. In 2024, the Company drafted a Pricing Policy, which represents the overall approach to pricing any new product/vaccine to meet the business's objectives for both wholesale and third party logistics (3PL). This policy applies the requirements laid out in the Code of Conduct and other Valneva policies. The Pricing Policy should be followed by all employees involved in pricing, sales, and marketing decisions. It describes the role of the Commercial Excellence and Pricing team, each Country commercial team, the members of the Finance Department, and the members of the PC. Valneva's Chief Commercial Officer is the owner of the Pricing Policy. The Pricing Policy is shared only with the Pricing Operating Committee and the teams involved in the pricing strategy and its application, due to its commercial sensitivity. Valneva also has a Human Rights Policy, as described in Section 3.5.1. The Human Rights Policy is publicly available on Valneva´s official website and applies to all employees.

Target: By 2026, enable access to Valneva's single-shot chikungunya vaccine in Brazil and India by enabling local manufacturing and access through technology transfers. Further information on Valneva's technology transfers can be found below.

All actions related to vaccine equity and universal access are addressed in the following section.

Valneva's vision is to contribute to a world where no one dies or suffers from a vaccine-preventable disease. This means targeting unmet medical needs, by ensuring access to vaccines. Valneva is committed to developing new prophylactic vaccines for infectious diseases with significant unmet medical need. Valneva strives to advance vaccines that are first-in-class or best-in-class, thus ensuring differentiation and supporting its vision.

Valneva recognizes that every individual has the right to essentials supporting good health, including access to safe and nutritious food, clean drinking water, health-related education, and gender equality in medical treatment. Valneva believes it has a duty to make its vaccines available to all who need them.

Valneva has a specialty commercial capability for the distribution of its travelers' vaccines in key travel vaccine markets (in Europe and North America). Vaccines for travelers play a crucial role in limiting the spread of diseases, and hence supporting global health security. This is accomplished by preventing travelers from contracting diseases while abroad, as well as by reducing the risk of re-importing new diseases upon arriving back home.

Valneva's current pipeline is made up of vaccines covering unmet medical needs. The commercial distribution reaches travelers across the world, with a footprint extended through distribution partners and technology transfers – Valneva's collaborative efforts to develop a network of innovation stakeholders. No negative impact was detected for said activities.

Although the Group's scale prevents Valneva from directly manufacturing and distributing its commercial vaccines to all who could benefit, Valneva is committed to supporting global access by partnering with various stakeholders, including transferring its proprietary technologies to partners in LMICs. When possible and within the limits of applicable regulations and Valneva's commitment to ethical business practices, Valneva promotes greater access to its vaccines.

Despite its focus on travelers, Valneva believes that all people should have access to the vaccines they need. That is why Valneva seeks to improve access for underserved populations together with partners of reference in different countries and regions. Valneva commits to making all new products and major innovations available in the medium to long-term after first launch, wherever Valneva can make an impact for customers, and when external conditions allow. Global access need is established during early pipeline phase to determine which products, countries and access solutions to develop. Valneva considers industry-specific best practices, namely: the WHO's framework Global Strategy and Plan of Action on Public Health, Innovation, and Intellectual Property to enhance access to essential medicines, and the WHO's Essential Medicines List, which defines the most critical medicines that should be universally available and affordable for each specific country.

Commercialization decisions and access to Valneva products depend on (1) unmet medical need, (2) accessibility to market either through direct Valneva presence or through distributor partners, and (3) manufacturing capacity. Commercialization strategy is developed by the commercial team in collaboration with the medical, market access and manufacturing teams and endorsed by the Executive Committee and finally approved by the Board of Directors.

The Pricing Operating Committee (PC) sets the pricing strategy and ensures consistency of Valneva's global product in line with local regulatory requirements and external regulations. The PC is governed by the Pricing Policy and co-chaired by the CCO and CFO with cross-functional input from market access, commercial, finance.

Ensuring global access to Valneva's vaccines presents several opportunities for Valneva:

- Engaging globally aligns with Valneva's vision of a world where no one suffers or dies from a vaccine preventable disease, enhancing the company's reputation and commitment to global health;
- Collaborating with local governments and NGOs can lead to valuable partnerships, fostering trust and facilitating future joint endeavors both for commercial vaccines as well as for products in development. At the same time, there may be grants, subsidies, and funding from international organizations aimed at improving healthcare in the Global South, reducing financial risks for Valneva's projects;
- Establishing Valneva's brands and vaccines now can pave the way for future opportunities in LMIC, as economies grow and healthcare needs evolve.

Valneva seeks to make its vaccines become more accessible to the population of LMICs through its business and pricing strategies. Valneva has identified several factors that it may leverage in the future to promote expanded access to vaccines:

- Pricing vaccines in a way that reflects their fair value and development costs without creating additional barriers to access;
- Promote fair and ethical distribution of vaccines by:
  - Collaborating with local governments, NGOs, and community organizations to ensure vaccines reach rural and underserved areas,
  - Implementing robust monitoring and evaluation systems to track vaccine distribution and impact,
  - Investing in local healthcare infrastructure and capacity-building initiatives alongside technology transfer efforts,
  - Engaging in selected global health initiatives and partnerships aimed at improving health equity.

Japanese Encephalitis

Japanese encephalitis (JE) is a deadly infectious disease for approximately one-third of those who develop clinical disease, with many survivors experiencing severe impairment[1]. There are between 30,000 and 50,000 global cases of Japanese encephalitis each year. Twenty-four countries in South-east Asia and the Western Pacific and Australia have endemic Japanese encephalitis virus transmission placing more than three billion people at risk for infection. There is currently no specific antiviral treatment available for JE. Treatment is supportive to relieve symptoms and stabilize the patient.

To reduce the risk for JE, all travelers to Japanese encephalitis-endemic areas should take precautions to avoid mosquito bites, and JE vaccines are available to prevent the disease. Despite implementation of vaccination programs in recent years, reported JE cases have remained. stable due to effects of global warming, increased flooding, and agricultural practices moving to periurban areas[2].

IXIARO is registered in North America, Europe, Australia and New Zealand (under the trademark JESPECT), and some selected developed markets in Asia. Valneva operates directly in North America and some European markets, while within Asia/Pacific Valneva works with local distributors to ensure that the Japanese Encephalitis vaccine is made available to local populations.

Additionally, to enable wider distribution and address unmet medical need, Biological E and Valneva (then Intercell) established a partnership in 2005 for the development and commercialization of a Japanese encephalitis vaccine for endemic regions, based on Valneva's JEV technology. The vaccine, which was successfully developed under this partnership, is being marketed in India under the trade-name JEEV and commercialization in other JE-endemic countries[3].

Chikungunya

Chikungunya is a viral disease transmitted to humans by infected mosquitoes, primarily the *Aedes aegypti* and *Aedes albopictus* species. The disease is characterized by sudden onset of fever and severe joint pain, which can be debilitating. Chikungunya has been identified in >100 countries over five continents. Acute chikungunya, seen in up to 97% of those infected, typically presents with sudden onset of high fever and joint pain. There are no effective treatments available and, as such, chikungunya is a major public health threat. Up to 78.6% of cases may have persistent muscle and joint symptoms at 27.5 months after infection[4].

Over 3/4 of the world's population lives in areas at risk of Chikungunya Virus. Outbreaks have occurred in Asia, Africa and across Latin America with the potential for it to happen in the U.S. and Europe; recent outbreak in Paraguay with PAHO issuing an epidemiological alert for the Americas[5], India (reporting over 190 thousand cases in 2024) and La Réunion [6]. The total estimated cost associated with the 2014–2015 chikungunya outbreak in the U.S. Virgin Islands can range from $14.8 to $33.4 million (approximately 1% of gross domestic product[7].

To make Valneva's chikungunya vaccine (IXCHIQ) more accessible to low- and middle-income countries (LMIC), Valneva and Instituto Butantan (IB) in Brazil signed an agreement in January 2021 for the development, manufacturing and marketing of the vaccine. The collaboration falls within the framework of the agreement signed between CEPI and Valneva in July 2019, which provides funding of up to $24.6 million with support from the European Union's Horizon 2020 program. Under the collaboration, Valneva will transfer its chikungunya vaccine technology to Instituto Butantan, who will develop, manufacture and commercialize the substances in LMICs. In addition, Instituto Butantan will be involved in specific clinical and Phase 4 observational studies that Valneva will use to meet regulatory requirements. IB will make the vaccine affordable and accessible under various pricing assumptions based on national pricing approval by recommendation and pricing bodies. Once a public price is set, IB will then make sure that various pricing schemes will need to be implemented such as tiered pricing based on numbered of vaccines needed for an outbreak and or stockpiling.

To accelerate and expand access to the single-shot chikungunya vaccine in Asian LMICs that are vulnerable to chikungunya outbreaks, Valneva and Serum Institute of India (SII), the world's largest manufacturer of vaccines by number of doses, entered into a license agreement in 2024 that enables supply of the vaccine in Asia. Under the terms of the agreement, SII has committed to priority supply of the chikungunya vaccine at an affordable price to public health markets in LMICs.

Cholera

Since the first recorded pandemic in the 19th century, cholera has resulted in millions of deaths worldwide. Cholera is an acute diarrheal infection that can kill within hours if left untreated. Cholera is caused by ingesting water or food that has been contaminated with Vibrio cholerae bacteria and is most likely to spread in places with inadequate water treatment, poor sanitation, and inadequate hygiene [8].

(1) *Solomon T, et al. J Neurol Neurosurg Psychiatry. 2000;68:405-415. 2. Centers for Disease Control and Prevention. Yellow Book 2024; Section 5: Japanese Encephalitis. 3. Campbell GL. Bull World Health Organ. 2011;89:766-774E*
(2) *Sakamoto R, et al. Annals Global Health. 2019;85(1):111:1-7*
(3) *Moore SM. PLoS Negl Trop Dis. 2021;15(10):e0009385.*
(4) *EssackjeeK, et al. Postgrad Med J. 2013;89(1054):440-447.*
(5) *Bettis AA, L'Azou Jackson M, Yoon IK, et al.*
(6) *ECDC Chikungunya worldwide overview, https://www.ecdc.europa.eu/en/chikungunya-monthly. accessed January 2025*
(7) *Feldstein LR, et al. PLoS Negl Trop Dis. 2019;13(7):e0007563*
(8) *World Health Organization. Cholera fact sheet. Available at: https://www.who.int/news-room/fact-sheets/detail/cholera. Accessed: January 2024*

Cholera is now endemic in ~50 countries, primarily in Africa and South and South-east Asia, however outbreaks in non-endemic countries frequently occur [1]. Surges in cholera cases have been reported globally since mid-2021, with higher mortality than in previous years. Up to mid-June 2023, 24 countries had reported cholera cases. Only 16 countries reported cholera cases during the same period in 2022 [2].

The global burden of cholera remains significant, approximately 1.3 to 4.0 million cases and between 21,000 to 143,000 deaths annually worldwide and is predicted to be much higher than reported due to limitations in surveillance [3]. Oral vaccinations are available to protect against cholera for residents of affected regions. The WHO recommends cholera vaccination in the following circumstances: (1) in areas where local transmission of cholera occurs, (2) during humanitarian crises with a high risk of cholera, and (3) during cholera outbreaks.

DUKORAL is indicated for active immunization against disease caused by Vibrio cholerae in adults and children from 2 years of age visiting endemic/epidemic areas. It is available in Canada, UK, Europe, Australia, New Zealand and some Asian countries. DUKORAL has WHO prequalification since 2001.

Shigella

In 2024 Valneva, entered into a strategic partnership and exclusive licensing agreement for the development, manufacturing and commercialization of Shigella4V (S4V), a tetravalent bioconjugate vaccine candidate against shigellosis. Shigellosis, a diarrheal infection caused by Shigella bacteria, under development in collaboration with LimmaTech Biologics AG. Shigellosis is the second leading cause of fatal diarrheal disease worldwide. It is estimated that up to 165 million cases of disease and an estimated 600,000 deaths are attributed to Shigella each year, particularly among children in LMICs. No approved Shigella vaccine is currently available outside of Russia or China, where two vaccines exist for limited use. The development of Shigella vaccines has been identified as a priority by the World Health Organization (WHO). In October 2024, the U.S. FDA granted Fast Track designation to S4V2, recognizing its potential to address a serious condition and fill an unmet medical need.

In October 2024, Valneva and LimmaTech announced the launch of a Phase 2b controlled human infection model (CHIM) study to assess the safety and preliminary efficacy in approximately 120 healthy Shigella-naïve participants aged 18 to 50 years at three sites in the United States. In addition to the CHIM study, LimmaTech will conduct a Phase 2 pediatric study in Low- and Middle-Income Countries expected to begin in the first quarter of 2025. Valneva will assume all further development, including CMC (chemistry, manufacturing and controls) and regulatory activities, and be responsible for its commercialization worldwide, if approved.

Pandemics preparedness

One pressing global health concern is the rise of mosquito-borne diseases, exacerbated by climate change. Valneva has always assumed a responsibility to help protect against these kinds of threats and to develop potential solutions.

Some of Valneva's vaccines can be used to prevent diseases that can occur in epidemics, *e.g.* IXCHIQ, the first licensed vaccine against chikungunya. Valneva's customers are typically healthcare professionals or public institutions who buy the vaccine. End-users are the customers receiving the vaccines. Vaccinating in cases of, or to prevent, an outbreak can protect not only the individuals but potentially also entire communities by interrupting transmission. By vaccinating certain groups, such as first responders, institutions can continue to provide their critical services in case of an outbreak, serving the whole community.

Policies, targets, and actions linked to pandemic preparedness

Currently, Valneva does not have policies dedicated to pandemic preparedness, and has not set a specific quantitative target related to these IROs.

All actions related to pandemic preparedness are addressed in the following section.

Valneva is interacting with policymakers in Europe and the United States to discuss appropriate means to protect people in case of epidemic outbreaks, such as of chikungunya, since implementing preparedness plans may prove to be critical for addressing future epidemics (for example, by lessening alarm or ensuring a seamless response). Valneva interacts with academics, medical professionals, and key opinion leaders to further the understanding of the epidemiology of certain diseases and the risk they pose endemically and to travelers.

Outbreaks, by definition, can occur very suddenly, and depending on the underlying pathogen, can be very fast. For example, chikungunya outbreaks can peak within weeks. In contrast, manufacturing vaccines usually takes several months: from the start of production until the release of the finished product by the manufacturer, production lead time can range between 12-36 months [4]. Consequently, vaccines must be available and stored to be timely deployed in case of an outbreak. The development of policies for such stockpiling is of great relevance to ensure public health systems can respond to crises.

[1] *World Health Organization. Multi-country outbreak of cholera*
[2] *World Health Organization. Cholera fact sheet. Available at: https://www.who.int/news-room/fact-sheets/detail/cholera Accessed: January 2024. 2. Centers for Disease Control and Prevention. Yellow Book 2024; Section 5: Cholera*
[3] *World Health Organization. Cholera fact sheet. Available at: https://www.who.int/news-room/fact-sheets/detail/cholera Accessed: January 2024. 3. World Health Organization. Cholera – Global situation. Available at: https://www.who.int/emergencies/disease-outbreak-news/item/2023-DON437 Accessed: January 2024*
[4] *Source: Pasté et al. in: Addressing vaccine supply challenges in Europe: Expert industry perspective and recommendations. Health Policy. 2022;126:35–42*

Failure to prepare for pandemic and epidemic events can lead to substantial health and economic costs to society, as evidenced at global scale during the COVID-19 pandemic. But also outbreaks of chikungunya can have significant effects on society. According to an article recently published in The British Medical Journal, a total of 18.7 million chikungunya cases were reported in 110 countries between 2011 and 2020, causing 1.95 million disability-adjusted life years (Disability-adjusted life years, or DALY) lost. Long-term chronic illness was the source of most costs and DALYs lost. The total economic burden caused by chikungunya over these ten years was estimated at $2.8 billion in direct costs and $47.1 billion in indirect costs worldwide, primarily in Latin American and the Caribbean. The article, titled, "The Global Health and Economic Burden of Chikungunya from 2011 to 2020: A Model-Driven Analysis on the Impact of an Emerging Vector-Borne Disease," shows that chikungunya has a higher disease burden than was previously estimated, and costs related to the disease are substantial. According to the BMJ article, chikungunya could significantly impact local health systems due to its unpredictable and explosive nature.

During the COVID-19 health crisis, Valneva stayed true to its vision to contribute to a world where no one dies or suffers from vaccine preventable diseases. Valneva developed and manufactured a vaccine against SARS-CoV-2, and expanded its capabilities while doing so. Valneva now has more laboratory and production facilities graded Biological Safety Level 3, the second-highest level of containment in which many pathogens with pandemic potential can be handled. Since then, Valneva brought its chikungunya vaccine to approval and market in the United States and Europe. when the vaccine is approved by its regulator, Brazil will be the first of the low- and middle-income countries where a vaccine will become available to prevent from this viral disease that causes recurrent epidemic outbreaks. Valneva also pursued the development of a vaccine against Zika, another disease caused by a mosquito-borne virus that can lead to large outbreaks, such as the one in Brazil in 2015. By definition, pandemics or epidemic outbreaks affect populations at large scale, and vaccination can be an effective way of responding to such health threats. With climate change, mosquitos such as the Aedes (tiger) mosquitoes become more and more prevalent in temperate zones, such as large parts of Europe and the U.S. And with the spread of the mosquitoes, the diseases they can transmit become a relevant risk in new geographies. The European Center for Disease Control noted that the risk of chikungunya fever spreading in EU is high, as the virus could be imported by a traveler and then be spread by local mosquitoes .

Valneva's scientists are working to understand the epidemiology of certain diseases, such as chikungunya or Zika. This is necessary to devise relevant clinical trials, but also useful to inform policy makers about outbreak potential and to determine the risk for travelers to certain destinations. In addition to the recently published article on "The Global Health and Economic Burden of Chikungunya from 2011 to 2020", Valneva also contributes to work on modelling outbreaks of chikungunya. This will help to assess the risk of outbreaks in urban areas in continental Europe or Southern United States, and estimate the impact vaccination can have to reduce the burden of disease.

Valneva is dedicated to global outbreak preparedness, with a special emphasis on combating the chikungunya disease through its IXCHIQ vaccine. Through outbreak modeling studies, Valneva has provided valuable insights into chikungunya outbreak dynamics, allowing to better assess the risks and potential impacts in regions susceptible to transmission. Valneva's models focus on temperate regions in Europe, such as Rome and mainland France, high-risk areas in the United States, including Miami and Houston, as well as endemic areas with a history of outbreaks, such as La Réunion and Puerto Rico. Valneva is committed to further refining and expanding these analyses to contribute to the scientific community and enhance the understanding of chikungunya's outbreak potential in areas where Aedes mosquitoes are established. The Rome outbreak model, the first one to be published in a peer-reviewed scientific journal, predicts up to 170,762 infections during an outbreak originating in Rome but demonstrates that timely reactive vaccination could reduce cases by 82%. Similarly, the Houston model indicates that responding to outbreak with vaccination and achieving 20% vaccine coverage could reduce infections by nearly 70%.

The findings highlight the critical role IXCHIQ could play in effectively containing chikungunya outbreaks across diverse settings. Valneva is committed to making its vaccines available for outbreak scenarios but also recognizes the need for collaborative efforts to ensure timely access. Governments and overarching bodies must take action to establish the necessary stockpiles to enable rapid response. Valneva is actively engaging with stakeholders to raise awareness and work toward realistic, practical solutions that balance preparedness with implementation feasibility, ensuring effective outbreak response strategies where needed.

In terms of risks for Valneva, in the UK Valneva has ongoing obligations to the government pursuant to the now-terminated supply agreement for the COVID-19 vaccine. In case of pandemics, certain governments could force Valneva to produce the necessary vaccines, thus reducing or stopping other production and development activities, especially where Valneva has ongoing obligations.

On the other hand, there is a commercial opportunity for Valneva to deliver vaccines ahead of time and support countries and institutions in creating stockpiles to respond rapidly to new outbreaks. Valneva recognizes the disproportionate impact pandemics and epidemics can have on low- and middle-income countries (LMICs), where healthcare infrastructure may be less equipped to handle widespread outbreaks. Valneva is committed to making some vaccines available within these regions through partnerships, such as Valneva's partnership with Instituto Butantan in Brazil or Serum Institute of India, and technology transfer. By pursuing stockpiling initiatives and donating doses to high-risk regions such as the U.S. Virgin Islands, Valneva aims to mitigate outbreak risks, protect vulnerable populations, and strengthen local healthcare responses. These efforts align with Valneva's commitment to leverage its innovative solutions for equitable healthcare access, reducing the societal and economic burden of infectious diseases in LMICs.

To evaluate its performance and effectiveness in relation to material IROs arising from outbreak preparedness, Valneva will utilize the number of peer-reviewed publications and presentations related to outbreak modelling and preparedness as a key performance indicator. This metric reflects Valneva's commitment to driving external engagements and contributing to the scientific community and help shape policies around outbreak preparedness. By disseminating insights through these publications, Valneva aims to support governments and healthcare systems in understanding the optimal use of IXCHIQ under diverse outbreak scenarios, thereby enhancing preparedness strategies and maximizing public health outcomes.

3.6 Governance information

This Section focuses on the ethical principles that guide Valneva's business conduct, underscoring its commitment to maintaining the highest standards of integrity and responsibility in every aspect of its operations. It describes the implementation of the whistleblowing policy, which ensures that all employees can report concerns about unethical practices without fear of retaliation, reinforcing Valneva's dedication to transparency and accountability. Additionally, the Section covers Valneva´s approach to political influence and responsible lobbying, emphasizing the commitment to advocating for policies that align with Valneva´s values while maintaining fairness and integrity in all external engagements. Finally, the Section explores the company´s efforts to uphold animal welfare in research and development practices, ensuring that ethical considerations are at the forefront of scientific progress. Through these measures, Valneva demonstrates its ongoing commitment to ethical business practices that foster trust and sustainability.

3.6.1 ESRS G1 – Governance, risk management, and internal control

This section outlines policies and actions regarding corporate culture and business conduct policies, animal welfare, and political influence and lobbying activities.

The below table includes Valneva's identified material IROs related to ESRS G1 Business Conduct, as well as the policy, actions and targets linked to these IROs.

ESRS G1 – BUSINESS CONDUCT			
Material challenges identified	**IRO description**	**Type of IRO**	**IRO impact on Valneva and its stakeholders**
Corporate culture and business conduct policies	Risk of employees' disengagement due to a weak corporate culture	Risk (operational and regulatory)	A robust corporate culture contributes to improved employee retention, while clear business conduct policies bolster trust and reputation among customers, healthcare providers, and regulatory bodies.
	Increase employees' commitment and Valneva's reputation with a strong corporate culture and business conduct policies	Opportunity	Having a strong corporate culture allows higher employee retention rates, and business conduct policies allows companies to enhance trust and reputation with customers, healthcare providers, and regulators.
	Impact on customers' health due to strong ethical values, prioritizing safety at all stages and processes	Positive impact	Having a strong corporate culture and business conduct policies allows companies to ensure regulatory compliance which is key in an industry where safety and quality are paramount. Having strong ethical values ensures as well that customers' safety is always prioritized at all company stages, processes, and functions.
Lobbying	Legal and reputational risks due to lobbying practices	Risk (legal and reputational)	While lobbying is a legitimate tool for engaging with policy makers and advancing proposals to improving public policies, it carries risks, particularly around reputation, compliance, and ethics. Companies and organizations need to ensure that their lobbying practices are transparent, comply with local and EU regulations, and avoid conflicts of interest to maintain public trust and avoid legal or financial penalties.
Respect of animal welfare	Impact on animals due to R&D activities and vaccines' tests	Negative impact	The welfare of animals used in R&D, production, and testing of vaccines may be jeopardized.
Suppliers and quality issues	Risk of non-compliance leading to business difficulties and reductions of sales	Risk (regulatory and financial)	Tier 1 suppliers providing materials and services for the Group must comply with very stringent and complex regulations such as Good Manufacturing Practices (GMP) and Good Clinical Practices (GCP) which is essential for ensuring the safety, efficacy, and reliability of vaccines. Lack of compliance could have a significant impact on Valneva´s operations and sales.
	Ensuring suppliers to adhere to GMP and GCP, leading to cost reduction	Opportunity	Working on further systems and processes to ensure tier 1 suppliers adhere to GMP and GCP practices may allow Valneva to reduce costs derived from quality issues during R&D process.

For Valneva, the following governance and ethics topics fall under the denomination of business conduct: corporate culture and business conduct policies, lobbying, and animal welfare. The use of the term "business conduct" in this section therefore references all these topics.

The role of the administrative, supervisory, and management bodies on business conduct material IROs

Please see ESRS 2, Section IRO-1, for information on this section.

Policies, targets and actions linked to corporate culture and business conduct

Valneva's unwavering commitment to conducting business with ethical responsibility and in compliance with applicable laws, rules, and regulations is deeply rooted in the belief that an upright corporate culture and ethical business practices significantly enhance its capacity to address global health needs effectively.

The Group diligently examines its practices and processes from an ethical perspective and seeks to adjust quickly to an ever-evolving regulatory landscape.

Policies linked to business conduct

Valneva's cohesive set of policies, procedures, and guidelines promotes adherence to ethical standards and regulatory requirements. The cornerstone of the Group's business conduct and corporate conduct framework is the Code of Conduct & Ethics, which defines Valneva's fundamental values and principles in the areas of human rights, labor, environmental protection, and anti-corruption and apply to all employees. This policy is part and parcel of Valneva's relations-management practices for its employees but also current and future Business Partners, as detailed in the Business Partners Code of Conduct. Thus, the Group applies strict business conduct guidelines throughout its value chain.

The Corporate Compliance & Ethics framework of the Group also consists of additional policies including the Global Anti -Bribery and Anti-Corruption Policy, the Whistleblower Policy, and the Lobbying Policy.

ABAC Policy

The Anti-Bribery and Anti-Corruption (ABAC) Policy aligns Valneva's business with the best practices in the industry and the highest compliance and ethics standards. The ABAC Policy builds upon the Code of Conduct & Ethics by providing specific standards to ensure Valneva's business activities are conducted ethically and do not attempt to improperly influence others (including by paying, offering, or accepting bribes in any form, directly or indirectly). This policy was designed in compliance with applicable global anti-bribery and anti-corruption laws including, but not limited to, the UK Bribery Act, the U.S. Foreign Corrupt Practices Act (FCPA) and the Canadian Criminal Code and Corruption of Foreign Public Officials.

An ABAC risk assessment conducted at Valneva identified the functions most vulnerable to corruption and bribery, specifically the medical and commercial departments, due to their direct interactions with HCPs and HCOs. To mitigate these potential risks, specific measures were established, including targeted training and enhanced internal controls.

Whistleblowing Policy

The Whistleblower Policy defines the protocols that must be followed upon receiving a complaint related to discrimination or harassment, fraud, insider trading, protection of personal data, retaliation, harassment, discrimination, and accounting matters. By providing a clear framework for addressing grievances and ensuring protection from retaliation, the policy promotes a culture of accountability and transparency.

Valneva's Whistleblower Policy encompasses complaints related to accounting matters. It was designed to prevent any of the following reporting irregularities:

- Fraud, deliberate error, gross negligence, or recklessness in the preparation, evaluation, review, or audit of Valneva's financial statements or financial records;
- Deficiencies in Valneva's internal accounting controls or noncompliance with them;
- Misrepresentation or false statements to management, regulators, outside auditors, or others by a senior officer, accountant, or another employee regarding financial records, financial reports, or audit reports;
- Any other deviation from full and fair reporting of Valneva's results or financial condition.

The Whistleblower Policy outlines rigorous procedures for the receipt, review, and investigation of complaints. First, the Corporate Compliance Officer or his or her designees must acknowledge reception of any written complaint within seven days and provide the employee having raised the complaint with an acknowledgment of receipt of the report. Upon receipt of a complaint, the Corporate Compliance Officer (or his or her designee) determines whether the information alleged in the complaint pertains to a matter covered by this policy. The Company's General Counsel and Chief Financial Officer will be notified promptly of all complaints that pertain to an accounting matter, will determine the planned course of action, and will inform the Audit, Compliance and Risk Committee of the Board of Directors. Issues not pertaining to accounting matters are directly investigated by the Corporate Compliance Officer. If the investigation confirms that a violation has occurred, Valneva promptly takes appropriate corrective action concerning the persons involved. This may include discipline up to and including termination. Further, in appropriate circumstances, the matter may be referred to governmental authorities that may investigate and initiate civil or criminal proceedings.

Lobbying Policy

The Lobbying Policy raises awareness of at what point interactions with authorities and decision makers become lobbying activities and provides procedures and internal requirements for such lobbying activities (see Section .6.1.3 for more information on lobbying activities). It regulates Valneva's actions to influence the development, adoption, modification, or implementation of any policy or legislation and the corresponding decision-making process. The policy notably mandates that employees must seek approval from the Corporate Compliance Officer and Valneva's relevant Executive Committee member before engaging in any lobbying activities, and these lobbying efforts must be conducted ethically and in compliance with legal requirements. The policy was designed in line with lobbying regulations, including, but not limited to, the OECD Principles for Transparency and Integrity in Lobbying, the U.S. Foreign Agents Registration, the U.S. Lobbying Disclosure Act, and other international and national criminal codes and pharmaceutical laws and codes.

Animal Welfare Policy

Valneva is committed to transparency and active engagement with stakeholders on matters of animal welfare. The Animal Welfare Policy is a cornerstone of the Group's sustainability strategy, providing clear insights into Valneva's ethical standards and practices regarding animal care, research, and testing. The policy is available on Valneva's website and intranet, and employees have received updates via email to promote awareness and accessibility.

The document supports humane treatment of sentinel animals and compliance with all relevant laws. Valneva's approach is governed by national laws (Austrian Tierversuchsgesetz 2012, Tierversuchs-Verordnung 2012) and international regulations (EU Directive 2010/63/EU) about laboratory animal housing and the performance of animal experiments. All Valneva personnel involved in proposing, commissioning, planning, or conducting scientific work using laboratory animals are required to train and comply with these standards, as stated in the policy.

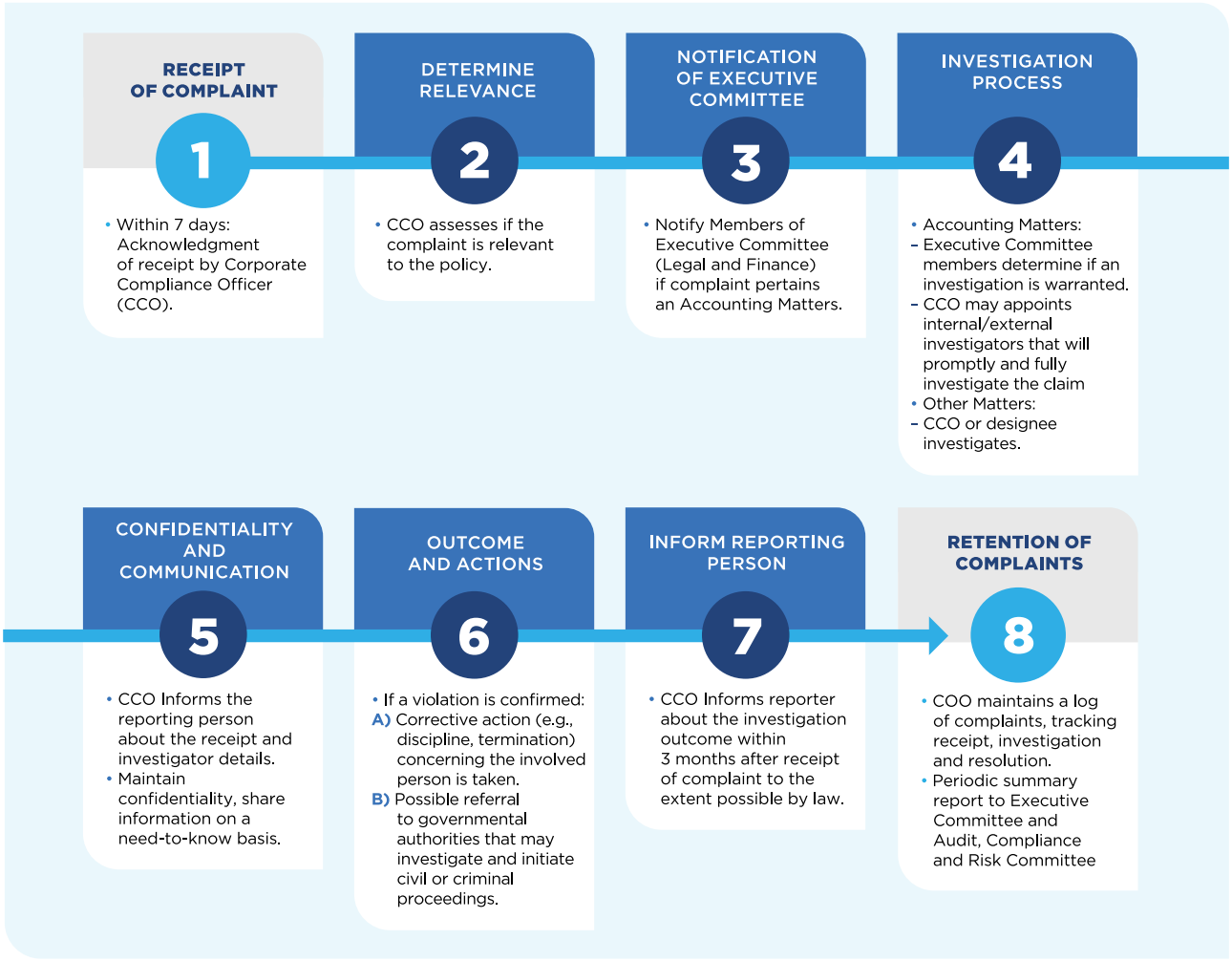
Targets related to business conduct

Material topic	Targets
Corporate culture and business conduct policies	By 2026, update Valneva's Code of Conduct & Ethics to reinforce conduct required by other Group policies and provide training on the updated Code to all employees.
	Currently, Valneva has not set a specific quantitative target related to this IRO.
Animal welfare	By 2026, define criteria related to animal welfare for the selection and monitoring of GxP and R&D suppliers involved in external in vivo testing.
	By 2026, discontinue use of animals for routine monitoring of contaminating pathogens in Valneva's animal facility and replace with in vitro testing.
Lobbying	Currently, Valneva has not set a specific quantitative target related to this IRO.

Actions related to business conduct

Compliance

Valneva is committed to investigating business conduct incidents with promptness, independence, and objectivity. Valneva maintains a log of all complaints, tracking their receipt, investigation, and resolution. Periodic summary reports are prepared for the Executive Committee and the Audit, Compliance and Risk Committee, supporting transparency and accountability of the investigation process.



All Valneva employees have 24/7 access to a secured compliance helpline system. If an employee has a concern or believes in good faith that a law, a rule or one of the principles in Valneva's Code of Conduct & Ethics has been – or is about to be – violated, the employee can inform his or her manager, one of Valneva's internally-designated Compliance Officers, or the compliance helpline. Since the 2016 decision to use this helpline service, Valneva has vowed to ensure that employees are not disciplined or discriminated against for reporting any possible incident, even if the facts reported prove to be inaccurate, provided that they have acted in good faith.

Valneva believes that it has built a strong corporate culture, based on a set of values and behaviors that, when adopted by every stakeholder within the Group, will enable Valneva to reach and exceed its goals. It provides all employees with a solid framework to develop their potential and foster the behaviors the Group believes will make Valneva successful. It shows the way Valneva's employees interact with colleagues, team members, peers, and clients. These values and behaviors are outlined in many of the Group's policies and processes, notably the People & Organization Policy and the Code of Conduct & Ethics:

VALUES OF INTEGRITY, AGILITY AND RESULTS

BEHAVIORS OF ACCOUNTABILITY, CUSTOMER-FOCUSED, END-TO-END MINDSET AND ENTREPRENEURIAL SPIRIT

The importance of Integrity and Accountability illustrates the Group's attention to monitoring and reporting any business conduct risks. Employees are urged to ask for guidance and voice their concerns, both on their personal responsibility but also their duty to comply with the Group's policy. Any violations of the Code of Conduct & Ethics, other policies, or other laws or regulations applicable to the Group is subject to disciplinary action, up to and including termination of employment.

The Group not only spreads its corporate culture as part of its policies and processes but also through the social and cultural events it organizes on a regular basis. Events are organized at all sites simultaneously to encourage cohesion within the Group. Internal news stories are published regularly to inform employees and bring Valneva's corporate culture to life. In addition, an intranet is used to relay the Group's social events and activities.

September is designated as Compliance & Ethics (C&E) Month at Valneva, during which the Group aims to raise awareness of compliance and ethics matters among employees. In 2024, the Group-wide C&E Month activity was an interactive, digital "Compliance Bake-Off", where employees learned tips on how to make the best baked goods can also relate to compliance and ethics and were challenged to answer related questions on compliance at Valneva. While participation in C&E Month is optional, compliance-related training at Valneva is not. The Group implemented an e-learning platform that measures successful participation via required quizzes during and after each e-learning course.

As Valneva also expects third-party suppliers, service providers, agents, consultants, distributors and business partners to conduct business ethically and responsibly, the Group provides its partners with additional information on the Corporate Compliance & Ethics website. It contains the training modules on anti-corruption notions for third parties, conflicts of interest, and giving, receiving, and handling of confidential information.

Animal Welfare

Animal research plays a crucial role in Valneva's mission to develop and deliver safe and effective vaccines that address significant unmet medical needs. While Valneva is dedicated to exploring and adopting alternative methods wherever possible, certain biological processes, particularly in the vaccine and immune system areas, cannot yet be replicated without the use of living organisms.

Animal testing remains essential to confirm the safety and efficacy of vaccines, as required by regulatory authorities.

- The Group strives to go beyond mere compliance and works to improve its practices and set higher standards in animal welfare. Valneva follows the 3R principle (Replacement, Reduction, and Refinement) to minimize the use of animals in research and continually seeks new ways to enhance the welfare of animals involved in necessary testing. Therefore, Valneva's Animal Welfare framework is based on key guidelines: the 3Rs approach, the recommendations of the American Institute for Laboratory Animal Research (ILAR) and the German Society of Laboratory Animal Science (GV-SOLAS), aimed at creating the best possible conditions and responsible treatment of laboratory animals.
- The governance of animal welfare topics is exerted by the Animal Welfare Body, which oversees all aspects of animal welfare within Valneva's laboratory animal facility. This multidisciplinary Body is legally mandated by national and European law. It is chaired by the Animal Welfare Officer and includes veterinarians, technicians, scientists, and optional members such as the Head of the Laboratory Animal Facility. The Animal Welfare Body provides oversight and guidance on animal acquisition, housing, daily management, and experimental procedures, as well as overseeing external animal testing commissioned by Valneva. This ensures that all external tests adhere to Valneva's ethical standards and align with internal animal welfare practices.
- Both internal and external animal testing applications go through an approval and ethical review: Valneva operates a state-of-the-art laboratory animal facility in Vienna, ensuring that the vast majority of testing is conducted in-house under strict control. Testing applications are thoroughly reviewed by the Animal Welfare Officer, the Animal Welfare Body, and relevant experts. External testing is only conducted in rare cases, when it cannot be performed internally and when required by regulatory obligations. External testing is overseen by the responsible teams in Valneva's Regulatory Affairs Department and R&D Organization, including the Animal Welfare Body, and carried out by selected Preclinical Contract Research Organizations (CROs) that meet Valneva's ethical and regulatory standards. Valneva's Animal Welfare Body plays a critical role in ensuring that both internal and external testing align with Valneva's stringent ethical standards. This multidisciplinary committee reviews all project applications and oversees animal welfare practices. This provides assurance that all testing, internal and external, is rigorously controlled and closely monitored to guarantee adherence to strict ethical guidelines.
- Animal testing practices are also subject to comprehensive monitoring and audits to ensure the enforcement of the Group's policy. External audits include unannounced inspections by local authorities to verify compliance with both regulatory and ethical standards. Internally, the Quality Assurance Department conducts annual audits to ensure "Good x Practices" (where the "x" in GxP stands for the field the guidelines and regulations applied to) and compliance in the laboratory animal facility.

Moreover, Valneva has achieved different actions in 2024:

- The Group established comprehensive policy documents on Animal Welfare, expanded the scope of the Animal Welfare Body to include internal and external in vivo testing, and initiated supplier evaluation, ensuring animal welfare is central to all research and industrial activities;
- Valneva centralized the registration and data collection of all external animal studies into Valneva's internal testing database, managed by the Laboratory Animal Facility, providing unified oversight and enhancing the monitoring of animal welfare across all studies;
- The Group successfully completed a pilot study implementing a non-live animal-based sentinel monitoring program in R&D, reducing the number of animals used in non-GxP studies to zero.

The initiatives implemented by Valneva in 2024 are covered under Valneva's ordinary operating expenses and are not expected to result in significant increases of operational or capital expenditures in the future.

Valneva remains steadfast in its responsibility to maintain the highest standards of animal welfare, promoting ethical and responsible research practices as it continues to develop life-saving vaccines.

Political influence and lobbying activities

It is part of Valneva's business activities to inform the public, authorities, and decision-makers about recent developments and available products. In 2023, Valneva created a Governmental Affairs function, which is responsible for overseeing the Group's lobbying activities and translating the Group's strategy for its portfolio into clearly articulated political and stakeholder engagement plans. Governmental Affairs provides relevant advice to Valneva's Executive Committee, in meetings or via email. This function´s expertise is necessary for training purposes and compliance measures, as lobbying activities are subject to numerous regulations, notably in the pharmaceutical industry.

The Corporate Compliance Officer acts as a point of contact for employees who have questions about lobbying activities or plans to engage in such activities. The Corporate Compliance Officer initiates the approval process, and may support, if necessary, Governmental Affairs in the set-up and the provision of adequate training measures and meeting other preconditions related to lobbying compliance. As of 2024, the Group has no registered lobbyist with a European Parliament accreditation, but the Group is registered in the European Transparency registry, as well as similar databases in European and American countries, where applicable.

Valneva does not make any financial or in-kind donations in support of any political parties or candidates. This also applies to working groups, youth organizations, associations and similar of political parties.

Given Valneva's experience in emerging diseases, the Group's business is actually or potentially affected by most of the policies related to Public Health, Research and Innovation. It is also part of the Group's business activities to inform the public, authorities, and decision-makers about recent developments and available products. Public policies of interest for Valneva include, but are not limited to, Horizon Europe (Horizon 2020), EU4Health, Cross Border Health Threats Regulation, Pharmaceutical Strategy and Legislation, New Industrial Strategy for Europe, Union Civil Protection Mechanism, RescEU, HERA, EU FAB, European Critical Medicines Alliance, Biotech Act.

Valneva is registered in the EU Transparency Register, which discloses information on companies' lobbying activity within the European Union, as well as in the German and Austrian national databases.

No member of Valneva's Executive Committee held a significant position in public administration in the two years preceding their appointment to that group.

3.7 Report on the certification of sustainability information and verification of the disclosure requirements under Article 8 of Regulation (EU) 2020/852

This is a translation into English of the statutory Auditors report on the certification of sustainability information and verification of the disclosure requirements under Article 8 of Regulation (EU) 2020/852 of the Company issued in French and it is provided solely for the convenience of English speaking users.

This report should be read in conjunction with, and construed in accordance with, French law and the H2A guidelines on "Limited assurance engagement - Certification of sustainability reporting and verification of disclosure requirements set out in Article 8 of Regulation (EU) 2020/852".

Year ended 31 December 2024

To the General Assembly

VALNEVA SE
6 rue Alain Bombard
44800 Saint-Herblain

The present report is issued in our capacity as auditors of VALNEVA SE. It covers sustainability information and the information provided for in Article 8 of Regulation (EU) 2020/852, relating to the financial year ended December 31, 2024, and included in the group's management report, presented in sections 3.1 to 3.6 of Chapter "3. Sustainability Statement" appearing in the universal registration document (hereinafter "Sustainability Statement").

Pursuant to Article L. 233-28-4 of the French Commercial Code, VALNEVA SE is required to include the above mentioned information in a separate section of the group management report. This information has been prepared in the context of the first time application of the aforementioned articles, a context characterized by uncertainties regarding the interpretation of the laws and regulations, the use of significant estimates, the absence of established practices and frameworks in particular for the double-materiality assessment, and an evolving internal control system. It enables to understand the impact of the activity of the Group on sustainability matters, as well as the way in which these matters influence the development of the business of the Group, its performance and position. Sustainability matters include environmental, social and corporate governance matters

Pursuant to Article L.821-54 paragraph II of the aforementioned Code our responsibility is to carry out the procedures necessary to issue a conclusion, expressing limited assurance, on:

- compliance with the sustainability reporting standards adopted pursuant to Article 29 *ter* of Directive (EU) 2013/34 of the European Parliament and of the Council of 14 December 2022 (hereinafter ESRS for European Sustainability Reporting Standards) of the process implemented by VALNEVA SE to determine the information reported, and compliance with the requirement to consult the social and economic committee provided for in the sixth paragraph of Article L. 2312-17 of the French Labour Code;
- the compliance of the sustainability information included in the Sustainability Statement with the requirements of Article L.233-28-4 of the Commercial Code, including with the ESRS; and
- compliance with the reporting requirements set out in Article 8 of Regulation (EU) 2020/852.

This engagement is carried out in compliance with the ethical rules, including independence, and quality control rules prescribed by the French Commercial Code.

It is also governed by the H2A guidelines on "Limited assurance engagement - Certification of sustainability reporting and verification of disclosure requirements set out in Article 8 of Regulation (EU) 2020/852".

In the three separate sections of the report that follow, we present, for each of the sections of our engagement, the nature of the procedures that we carried out, the conclusions that we drew from these procedures and, in support of these conclusions, the elements to which we paid particular attention and the procedures that we carried out with regard to these elements. We draw your attention to the fact that we do not express a conclusion on any of these elements taken individually and that the procedures described should be considered in the overall context of the formation of the conclusions issued in respect of each of the three sections of our engagement.

Finally, where deemed necessary to draw your attention to one or more disclosures of sustainability information provided by VALNEVA SE in the Group management report, we have included an emphasis of matter paragraph hereafter.

Limits of our engagement

As the purpose of our engagement is to express limited assurance, the nature (choice of techniques), extent (scope) and timing of the procedures are less than those required to obtain reasonable assurance.

Furthermore, this engagement does not provide guarantee regarding the viability or the quality of the management of VALNEVA SE, in particular it does not provide an assessment, of the relevance of the choices made by VALNEVA SE in terms of action plans, targets, policies, scenario analyses and transition plans, which would go beyond compliance with the ESRS reporting requirements.

It does, however, allow us to express conclusions regarding the entity's process for determining the sustainability information to be reported, the sustainability information itself, and the information reported pursuant to Article 8 of Regulation (EU) 2020/852, as to the absence of identification or, on the contrary, the identification of errors, omissions or inconsistencies of such importance that they would be likely to influence the decisions that readers of the information subject to this engagement might make.

Any comparative information that would be included in the Group management report are not covered by our engagement.

Compliance with the ESRS of the process implemented by VALNEVA SE to determine the information reported, and compliance with the requirement to consult the social and economic committee provided for in the sixth paragraph of Article L. 2312-17 of the French Labour Code

Nature of procedures carried out

Our procedures consisted in verifying that:

- The process defined and implemented by VALNEVA SE has enabled it, in accordance with the ESRS, to identify and assess its impacts, risks, and opportunities related to sustainability issues, and to identify those material impacts, risks, and opportunities that have led to the publication of sustainability information in the Sustainability Statement; and
- the information provided on this process also complies with the ESRS.

We also checked the compliance with the requirement to consult the social and economic committee.

Conclusion of the procedures carried out

On the basis of the procedures we have carried out, we have not identified any material errors, omissions or inconsistencies regarding the compliance of the process implemented by VALNEVA SE with the ESRS.

Concerning the consultation of the social and economic committee provided for in the sixth paragraph of Article L. 2312-17 of the French Labour Code we inform you that as of the date of this report, this consultation has not yet been held.

Elements that received particular attention

We present below the elements that have received particular attention from us regarding the compliance with ESRS of the process implemented by VALNEVA SE to determine the published information.

Concerning the identification of stakeholders

The information related to the identification of stakeholders is mentioned in the Group's management report and presented in paragraph "3.3.3. Valneva's Strategy and Business Model" of the Sustainability Statement.

We have reviewed the analysis conducted by VALNEVA SE to identify:

- the stakeholders, who can affect the entities within the scope of the information or can be affected by them, through their activities and direct or indirect business relationships in the value chain;
- the main users of the sustainability statements (including the main users of the financial statements).

We have discussed with management and/or the individuals we deemed appropriate and have reviewed the available documentation.

Our due diligence consisted of :

- assessing the consistency of the main stakeholders identified by VALNEVA SE with the nature of its activities and its geographical location, taking into account its business relationships and value chain;
- exercising our critical thinking to evaluate the representativeness of the stakeholders identified by VALNEVA SE;
- assess the appropriateness of the description given in the Sustainability Statement, particularly regarding the methods for collecting the interests and viewpoints of stakeholders implemented by the entity.

Concerning the identification of impacts, risks and opportunities ("IRO")

The information related to the identification of impacts, risks, and opportunities is mentioned in paragraphs "3.3.3. Valneva's Strategy and Business Model" and "3.3.4. Double Materiality Assessment Process" of the Sustainability Statement.

We have reviewed the process implemented by VALNEVA SE concerning the identification of impacts (negative or positive), risks, and opportunities, real or potential, related to sustainability issues mentioned in paragraph AR 16 of the "Application Requirements" of ESRS 1, and where applicable, those specific to the entity, as presented in paragraph "3.3.3. Valneva's Strategy and Business Model" of the Sustainability Statement.

In particular we appreciated the approach implemented by the entity to determine its impacts and dependencies which can be sources of risks or opportunities, especially the dialogue established, if applicable, with stakeholders.

We have reviewed the tables prepared by VALNEVA SE of the identified IROs, including the description of their distribution in the core activities and the value chain, as well as their time horizon (short, medium, or long term), and assessed the consistency of these tables with our knowledge of the entity and, where applicable, with the risk analyses conducted by the Group's entities.

We have:

- assessed the approach used by VALNEVA SE to gather information from subsidiaries;
- evaluated how the entity considered the list of sustainability topics enumerated by the ESRS 1 standard (AR 16) in its analysis;
- assessed how VALNEVA SE has taken into consideration the different time horizons;
- assessed whether VALNEVA SE has taken into account the risks and opportunities that may arise from both past and future events due to its own activities or business relationships, including actions taken to manage certain impacts or risks;
- assessed the approach used by VALNEVA SE for the identification of IROs in the upstream value chain.

Concerning the assessment of impact materiality and financial materiality

The information related to the assessment of impact materiality and financial materiality is mentioned in paragraph "3.3.4. Double Materiality Assessment Process" of the Sustainability Statement.

We have reviewed, through interviews with management and inspection of the available documentation, the process of evaluating impact materiality and financial materiality implemented by VALNEVA SE, and assessed its compliance with the criteria defined by ESRS 1.

We have:

- assessed the consistency of the thresholds thus determined with our knowledge of the Group;
- verified that all real or potential impacts (positive or negative), risks, and opportunities identified by VALNEVA SE have been evaluated in accordance with the criteria defined by chapter 3 of ESRS 1;
- evaluated whether VALNEVA SE assessed the IROs independently of any mitigation measures;
- verified that the evaluation of financial materiality was conducted without inappropriate compensation between risks and opportunities.

We have reviewed the decision-making process and internal control procedures implemented by the entity, and appreciated the presentation made in the Group's management report in paragraph "3.3.2. Governance at Valneva" of the Sustainability Statement

We have evaluated how VALNEVA SE established and applied the materiality criteria defined by the ESRS 1 standard, including the setting of thresholds, to determine the material information published:

- regarding the indicators related to the material IROs identified in accordance with the relevant ESRS thematic standards;
- regarding the information specific to VALNEVA SE.

The compliance of the sustainability information included in the Sustainability Statement with the requirements of Article L.233-28-4 of the Commercial Code, including with the ESRS.

Nature of procedures carried out

Our procedures consisted in verifying that, in accordance with legal and regulatory requirements, including the ESRS:

- the information provided allows for understanding the preparation and governance methods of the sustainability information included in the Sustainability Statement, including the methods for determining information related to the value chain and the disclosure exemptions chosen.
- the presentation of this information ensures its readability and understandability;
- the scope chosen by VALNEVA SE for providing this information is appropriate; and
- on the basis of a selection, based on our analysis of the risks of non-compliance of the information provided and the expectations of users, that this information does not contain any material errors, omissions or inconsistencies, i.e. that are likely to influence the judgement or decisions of users of this information.

Conclusion of the procedures carried out

Based on the verifications we have carried out, we have not identified any significant errors, omissions, or inconsistencies regarding the compliance of the sustainability information included in the Sustainability Statement with the requirements of Article L.233-28-4 of the Commercial Code, including with the ESRS.

Emphasis of matter

Without undermining the conclusion expressed above, we draw your attention to the note "Metrics on substances of concern and substances of very high concern" in paragraph "3.4.2. ESRS E2 Pollution" of the Sustainability Statement, which mentions, in the context of the first application of the CSRD, the reasons why data on the use of substances of concern ("SoC") at the Livingston site (Scotland) could not be collected or estimated.

Elements that received particular attention

Information provided in accordance with environmental standards (ESRS E1 to E5)

The information published under climate change (ESRS E1) is mentioned in paragraph "3.4.1 ESRS E1 Climate Change" of the Sustainability Statement.

Below, we present the elements that have received particular attention from us regarding the compliance of this information with the ESRS.

Regarding the information published under the greenhouse gas emission inventory, our diligence has notably consisted of:

- reviewing the internal control and risk management procedures implemented by VALNEVA SE to ensure the compliance of the published information;
- reviewing the protocol for establishing the greenhouse gas emission inventory used by the entity to establish the greenhouse gas emission inventory and assessing its application methods, on a selection of emission categories and sites, on scope 1 to 3;
- assessing the appropriateness of the emission factors used and the calculation of related conversions as well as the calculation and extrapolation assumptions, considering the inherent uncertainty in the state of scientific or economic knowledge and the quality of external data used;
- verifying the arithmetic accuracy of the calculations used to establish this information.

Compliance with the reporting requirements set out in Article 8 of Regulation (EU) 2020/8

Nature of procedures carried out

Our procedures consisted in verifying the process implemented by VALNEVA SE to determine the eligible and aligned nature of the activities of the entities included in the consolidation.

They also involved verifying the information reported pursuant to Article 8 of Regulation (EU) 2020/852, which involves checking:

- the compliance with the rules applicable to the presentation of this information to ensure that it is readable and understandable;
- on the basis of a selection, the absence of material errors, omissions or inconsistencies in the information provided, *i.e.* information likely to influence the judgement or decisions of users of this information.

Conclusion of the procedures carried out

Based on the procedures we have carried out, we have not identified any material errors, omissions or inconsistencies relating to compliance with the requirements of Article 8 of Regulation (EU) 2020/852.

Elements that received particular attention

We have determined that there were no such elements to communicate in the report.

Neuilly-sur-Seine and Paris-La-Défense, on March 24, 2025.

The Statutory Auditors

PricewaterhouseCoopers Audit	Deloitte & Associés
French original signed by	French original signed by
Philippe T Nguyen	Didier Obrecht Jean-Baptiste Barras

A EUROPEAN COMPANY (SOCIETAS EUROPAEA) WITH A BOARD OF DIRECTORS

Registered office:
6 rue Alain Bombard, 44800 Saint-Herblain (France)
Nantes Trade and Companies Registry (R.C.S.)
No. 422 497 560