



2.3

Environmental Pillar

Environmental pillar

Viscofan works with the commitment to avoid climate change and promote economic growth dissociated from the use of limited natural resources.

This sustainable future means tackling challenges throughout the supply chain, from the selection of raw materials and packaging with a better use and reuse of these, the optimisation and purification of water used in the production process, the efficient use of energy and the promotion of renewable energies as a path towards decarbonisation, while collaborating with our customers in their sustainability challenges.



Material aspects Environmental pillar

Axis of action

- Climate change
- Energy transition
- Greenhouse gas emissions
- Energy efficiency
- Environmental management
- Circular economy
- Integrated water cycle
- Responsible supply chain management



- We invest in technologies in the pursuit of decarbonisation such as the installation of energy equipment with the capacity to use green hydrogen in Cáseda and we promote the use of renewable electricity and the implementation of energy efficiency measures.
- We have a commitment to sustainability in the main raw materials used.
- Viscofan invests in technologies that allow production with less production waste, seeks to reduce the intensity of waste disposed of, and also develops and promotes the use of natural, biodegradable or recyclable materials, highlighting the advances in the family of plastics with the EFAN casing.
- We carry out a sustainable management of water by investing in technology with reduced water collection requirements.
- We invest in water purification facilities to improve discharge quality.

2023 Highlights

- The Viscofan Group has increased the percentage of renewable electricity consumed to 58%.
- A reduction of 3.1% in energy intensity and of 3.0% in CO2 emissions intensity thanks to energy efficiency and decarbonisation measures, in particular the installation of a mechanical recompression evaporator in Cáseda, using technology with lower energy consumption, and the installation of solar panels at the Hasselt plant.
- A reduction of 3.3% in the intensity of water withdrawal as a result of the installation of production capacity and auxiliary facilities with lower water requirements, as well as the promotion of reuse projects.
- Compliance with the 2030 objectives of a 30% reduction in the intensity of scope 1 and 2 emissions per metres extruded and a 10% reduction in water withdrawal per metres extruded.

2.3.1. Governance, strategy, and resources for environmental sustainability

Environmental sustainability encompasses relevant aspects identified in the materiality analysis and as such is included in the Group's governance and operational management processes. It is an essential part of our risk mitigation in our Sustainability Action Plan.

Governance

The Board of Directors is ultimately responsible for environmental sustainability management. By extension, the Board's Appointments, Remuneration and Sustainability Committee, among its functions, promotes and supervises compliance with sustainability policies in environmental matters, ensuring that they are improved and that they take into account the legitimate interests of stakeholders.

The Audit Committee is also responsible for reviewing the effectiveness of the Group's systems of internal control and management of financial and non-financial risks, including environmental risks, and for monitoring and evaluating the process of preparing and presenting the Group's non-financial information.

As the chief executive officer of Viscofan's activities, the CEO is the first executive responsible for environmental sustainability and leads the Executive Sustainability Committee in charge of coordinating and supervising the objectives, initiatives and long-term work plans established by Viscofan in the field of sustainability, and in particular environmental sustainability.

The management of environmental aspects at Group level is the responsibility of the Corporate Operational Sustainability Department, reporting to the Operations Department, which is in charge of coordinating and supervising this matter in all the Group's production plants.

Climate change management is regulated in the Climate Change Policy, and demonstrates the Group's commitment to the control of atmospheric emissions, energy efficiency, as well as a business strategy related to the development of alternative energy sources.

In addition, the Group has an Environmental Policy which sets out that the Group's procedures must be carried out with respect for the environment, which means incorporating sustainable development criteria in all areas of activity, guaranteeing the efficient management of natural resources, and minimising the undesirable effects of the activity.

Remuneration is an important component of corporate governance used to encourage and guide the implementation of commitments and actions within Viscofan.



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In this context, the remuneration systems for members of the Board of Directors and employees are aligned with the Beyond25 strategy, and in particular with sustainability, given its importance as one of the four strategic pillars. Consequently, sustainability indicators are integrated into our short and long-term incentives.

Strategy, risk, and opportunity management

The Group has a Sustainability Action Plan for the period 2022-2025 approved by the Board of Directors, in line with the Beyond25 strategic plan.

This plan, among other aspects, identifies risks and opportunities and establishes the Group's metrics, objectives, and initiatives in relation to them.

Environmental sustainability brings with it a number of risks and opportunities for the casing industry that need to be identified and managed in order to minimise negative impacts on our environment, while taking advantage of all the associated positive aspects.

Identification of risks and opportunities Climate change

In particular, climate change is a risk identified in the Global Risk Map, since its implications may hinder the achievement of long-term objectives and the creation of value for stakeholders.

Viscofan's climate risk and opportunity management model is based on the COSO ERM and Task Force on Climate-Related Financial Disclosures (TCFD) recommendations, as well as the company's Risk Control and Management Policy, which also considers impacts and dependencies.

Viscofan has identified a total of 15 climate risks and 8 opportunities, based on TCFD's own recommendations, reference institutions (IEA and IPCC), and the analysis of comparable companies.

For this analysis, three global warming scenarios have been established (1.5°C, 2.4°C, and 4.0°C), referring to the risks and opportunities at different materialisation time horizons:

- **Current or already materialised**, or short-term future: materialisation in a period of less than 5 years
- **Near or medium-term future**: materialisation in the next 5 to 15 years, applicable for all scenarios that offer projections to 2030.
- **Long-term future**: materialisation in a period of more than 15 years, applicable for all scenarios that offer projections to 2040 or later.



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Subsequently, to determine which risks and opportunities could have a material financial impact on the organisation, the Executive Sustainability Committee has evaluated their potential impact, probability and the mitigating actions put in place, and a scenario analysis has been carried out. This shows the main effects of the most significant risks on Viscofan's business, and on its strategy and financial planning, to be:

- Shortage of collagen skins
- Shortage of water
- Regulatory changes
- Transitional to low-emission technologies

The most significant opportunities are:

- Access to new markets
- Efficiency of production processes
- Promotion of renewable and sustainable energies

Impact and response to risks and opportunities

Viscofan's objective is to avoid or mitigate risks by actively deciding on how to respond, while also seeking to take advantage of opportunities by incorporating them into our strategy.

Where necessary, we take appropriate countermeasures or, to the extent possible and economically acceptable, transfer them to third parties (such as insurers). Opportunities and risks are continuously monitored using indicators, so that, for example, changes in the economic or legal environment can be identified at an early stage and, if necessary, appropriate response measures implemented.

Below is the long-term annual assessment of climate-related risk impacts and opportunities, and the mitigation response:

Transition. Regulatory changes.

Potential impact: Viscofan's production process is energy intensive, so legislative proposals related to this resource and aimed at mitigating climate change may have a particular impact on the business. This is the case of the increase in the price of CO₂, carbon taxes or emission restrictions, which may affect the industrial and other energy-intensive sectors.

In this respect, the increased price of greenhouse gas emissions and the extension of its mechanism worldwide has an impact on the Group's operating costs. Based on the analysis of the scenarios, this risk could entail an additional cost in the long term in the range of €20Mn to €70Mn.

Impact in 2023: The CO₂ emission rights expenditure is €22.6 million.

Response: Viscofan is implementing actions within its decarbonisation plan:

- **Investment in energy equipment with the capacity to use green hydrogen as a renewable energy source.** Specifically, the Cáseda plant has energy equipment to use this energy vector, and which has replaced others whose useful life had come to an end. In 2022 and 2023, Viscofan also carried out tests using green hydrogen in a co-generation engine, testing the feasibility while producing casings.
- **Electric boilers are being installed at the Cáseda plant** and a study has been done and a project approved to carry out a PPA (Purchase Power Agreement) for solar panels at the Cáseda plant for self-sufficiency in renewable electricity.
- **Work has begun on the installation of a biomass boiler** at the Cáseda plant.



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Physical - Chronic. Shortage of water:

Potential impact: The increase in the planet's average temperatures can increase the risk of water stress, causing a lack of supply at production plants. According to the World Resources Institute (WRI), Viscofan is present in some countries where water stress is expected to increase. Drought and water shortage events could lead to restrictions on water use in these areas, directly affecting the company's production chain.

Supply shortages at plants could cause production stoppages, leading to a shortfalls to meet demands several days a year. On this basis, according to the climate scenarios analysed, this risk could have a long-term impact of an annual loss of equivalent sales of between €17 Mn and €70 Mn.

Impact in 2023: The Viscofan Group plants have had no water supply problems during the year.

Response: Viscofan is implementing measures to mitigate this risk:

- Within the **Sustainability Action Plan, Viscofan is analysing possible scenarios and measures to be implemented faced** with this possible long-term risk.
- Likewise, the 2030 **commitments** include **reducing the intensity of water withsraval. To comply with this, Viscofan is developing and investing in technologies that require less water**, promoting and studying the viability of reusing water in the production process and investing in the best available water treatment and discharge technologies.

Transition - low emission technology:

Potential impact: High ambition on the part of governments to achieve carbon neutrality may accelerate the replacement of equipment that is not fully amortised and cause the company to incur unforeseen extra costs.

Impairment of existing energy assets and investment in equipment that uses renewable energy sources or that generates fewer carbon emissions. If the speed of this transition is faster than the amortisation period of the equipment or requires non-mature energy technologies to be adopted, it can lead to significant associated costs and investments, as well as loss of overall product competitiveness.

Based on Krishnan et al 2021 estimates, the Net Zero 2050 scenario would require spending on physical assets equivalent to around 7.5% of GDP during the period 2021 to 2050. Based on this assumption, this risk could entail a long-term investment in assets of around €60 million, calculated according to a linear proportion between production at base prices and national GDP and using the regional average to calculate the contribution of factories to GDP.

Impact in 2023: For now, based on the analysis carried out following the Net Zero Emissions (NZE) scenario of the IAE, the transition commitments to low-emission technology of the different governments of the countries in which Viscofan is present have a time horizon longer than the useful life of the energy equipment.

Response: **Viscofan, as part of its decarbonisation objective, is seeking to invest in energy equipment that uses renewable energies** to the extent that the existing ones have reached the end of their useful life, as well as the diversification of energy sources to achieve greater self-consumption.

Transition - Market. Rising raw material prices.

Potential impact: The physical consequences of global warming or climate change regulation itself may lead to higher prices for raw materials, affecting the company's procurement, transport and distribution worldwide. Increases in the price of raw materials may be caused by their reduced access or availability, or by their carbon footprint.

The cumulative effects of climate change impacts on global forage productivity could translate into falls of 7 to 10% in livestock numbers by 2050 if warming of 2.2°C materialises. At temperatures above 30°C, animals eat 3-5% less per additional degree of temperature, which reduces their productivity and fertility. These climate change consequences may lead to a lower availability of collagen hides and so to increases in its price.

Using the IPCC RCP2.6, IPCC RCP4.5, and IPCC RCP8.5 scenarios, and in the hypothetical case that these effects occur in the regions where Viscofan is present, a possible lower revenue impact has been estimated in the range of €50 Mn to €100 Mn due to lack of availability of collagen skin.

Impact in 2023: During the year, there have been no situations of lack of availability of collagen hides.

Response: Viscofan has mitigation tools to compensate for the increase in raw material prices:

- **Passing on cost inflation** through higher selling prices to customers.
- **Specific R&D projects** and production trials encouraging diversification of sources of supply and suppliers.
- **Investment and development of more efficient** and less wasteful production processes.

However, from the analysis performed, no impairment was identified on the current assets and no significant investments were envisaged to comply with the commitments established in our 2022-2025 Sustainability Action Plan.

Climate change opportunities

Viscofan's integral risk management system assesses and monitors the risks and their evolution, taking the necessary management measures which, aside from mitigating the risk, may generate opportunities.

Access to new markets: Viscofan has extensive experience in the sector and based on knowledge of the treatment of raw materials and processes, and continuous dialogue with the food sector, it can identify business opportunities in benefiting from product circularity, water savings and productive efficiencies, as well as the use of casings on vegetable sausages or other types of ingredients that contribute to a more sustainable diet.

Efficiency of production processes: the reduction in the intensity of use of resources such as energy or water, as well as a reduction in the generation of waste, could lead to savings for Viscofan and represent a competitive improvement compared to other market players that do not adopt this type of strategy. To this end, it is necessary to optimise and improve manufacturing processes, establishing circularity and efficiency measures in terms of water, waste, and energy.

Promotion of renewable and sustainable energies: Viscofan is working to promote the decarbonisation of its processes using green hydrogen as an energy vector. If this technology were available on a competitive and continuous basis, it would save on CO₂ emissions and the associated cost of emission rights.

Resources allocated

Viscofan's commitment to environmental improvement and the fight against climate change is also revealed in its human, operating and financial dimension.

Management systems

Environmental. ISO 14.001:

The breakdown of the Group's plants with the ISO 14.001 certificate at 31 December 2023 is as follows:

Country	Plant	ISO 14.001
Spain	Cáseda	Yes
	Urdiain	Yes
Germany	Weinheim	Yes
	Alfhausen	Yes
Serbia	Novi Sad	Yes
Czech Republic	České Budějovice	Yes
Belgium	Hasselt	Yes
	Danville	No
US	Montgomery	Yes
	New Jersey	Yes
Mexico	Zacapu	Yes
	San Luis Potosi	Yes
Brazil	Itu	Yes
	Matarazzo	Yes
Uruguay	Pando	Yes
China	Suzhou (2 plants)	Yes
Australia	Sydney	Yes

We are working to attain this environmental management certification at all our production plants. At 2023 year-end, 89% of the plants have this certificate. During the year, this certificate was obtained for the New Jersey (USA) plant.

ISO 50.001 energy efficiency certificates

The Cáseda and Urdiain (Spain), Weinheim (Germany) and České Budějovice (Czech Republic) plants have an ISO 50.001 standard certificate, enabling the plants to improve their efficiency, energy costs and green greenhouse emissions.

As part of its commitment to improve energy management, the Group plans to obtain this certificate for other plants.

Other certificates

Viscofan's New Business division obtained the ISCC PLUS certification from the plastic extrusion and plastic converting centres in Brazil, Mexico, Belgium and Germany. Furthermore, the extrusion and converting centre in the Czech Republic obtained the ISCC PLUS recertification. This certification system ensures the sustainability of raw materials and products for several markets.

The plant in the Czech Republic has received the PRS Green Label certificate from PRS Pooling for its implementation of the recycling system for non-standard pallets of raw materials (PRS). A certificate that represents recognition for contributing to sustainability in the industrial sector.



The breakdown of the Group's plants with the ISO 14.001 certificate.

Environmental investment

Part of Viscofan's industrial asset base relates to environmental management, seeking the best available technology in the management of water, energy, and waste, among others. Hence, at the end of December 2023, the gross value of this type of asset was €94.3 million (€78.0 million at 31 December 2022).

Viscofan continues its quest to improve environmental management and with this objective in mind, in 2023, it invested €16.3 million in this area (€12.6 million in 2022). The investment projects in energy equipment that contribute to the reduction of CO₂ such as electric boilers, energy recovery or solar panels; and also installations for processing waste from the production process.

Environmental training

Being more sustainable and reducing our impact on the environment is a commitment for all of us. In addition to allocating financial resources, measures are also promoted to improve the Group's values and commitments regarding environmental management among employees, with training courses standing as an essential element of the management approach.

The training carried out for people involved in the reporting process and the non-financial information control system implemented in the Group in 2023, as well as the training carried out at the local level for investigation of environmental events, are worthy of note.

Environmental fines and penalties

In 2023, the Viscofan Group had not received any significant environmental penalties.



Viscofan continues its quest to improve

environmental management and with this objective in mind, in 2023, it invested €16.3 million in this area.



2.3.2. Climate change management and energy efficiency

Viscofan is committed to energy efficiency and global climate protection. We seek to reduce the intensity of our atmospheric emissions by investing in and developing more efficient production technology, increasing the use of renewable energy, and leading the change in the industry towards technology that helps to fight against climate change. We also wish to positively influence the value chain, through sustainable casings that help our customers to reduce their emissions.

The reduction in energy consumption with new technologies and the availability of renewable energy sources are essential aspects of Viscofan's commitment to contribute to climate change protection and, hence, Viscofan works on three main axes:

- **Development and investment in more efficient production technologies:** As far as possible, Viscofan invests in improvements to reduce energy consumption and to make the most of the different ways in which this energy is present in our processes. Viscofan's strategy for reducing overall CO₂ emissions includes using heat, even in the effluents from our production processes, or replacing systems requiring high amounts of energy with more efficient systems.

During the year, the start-up at the Cáseda factory (Navarre) of a new evaporation plant that works with mechanical vapor recompression (MVR) technology is worthy of mention. This technology increases evaporation capacity and reduces energy consumption, and consequently CO₂ emissions.

- **Fostering the development of technologies that help to combat climate change:** In the current technological state, the most efficient way to generate energy to produce casings is on the basis of natural gas combustion. Nevertheless, within its decarbonisation plan, Viscofan boosts collaboration with public bodies and companies in the energy sector to develop green hydrogen capacities as a source of energy in the future casing production process.

During the year, Viscofan has successfully performed a second test using green hydrogen in a co-generation engine, this time with a greater capacity than the first one carried out in the previous year.

- **Viscofan promotes the use of renewable energy:** within this commitment, in 2023, Viscofan increased the use of renewable electricity at its plants, representing 58.0% of the total electricity acquired by the Group (54.8% in 2022).

**Renewable
electricity
consumed**

58.0%

of the total electricity
acquired (54.8% in 2022).

Energy consumption

The internal energy consumption expressed in Giga Wh is the following:

Energy consumption	2023	2022	2021	2020	2019	2018
Gigawatt-hour (GWh)	2,393	2,526	2,465	2,371	2,294	2,276

In fiscal year 2022, internal energy consumption increases by 2.5% compared to 2021 in a context of greater productive activity.

The breakdown by type of energy is as follows:

In GWh	2023	2022	2021
Natural gas	2,001	2,118	2,091
Electricity and other non-renewables	172	190	259
Renewable electricity	220	213	115
Renewable fuels	0	5	0
Total energy	2,393	2,526	2,465
Total renewable	220	218	115
% of total	9.2%	8.6%	4.7%

Due to the decarbonisation measures framed in the Sustainability Action Plan, the use of renewable energy has increased compared to 2023. Given the characteristics of the production process, the greatest energy intensity corresponds to thermal energy, the most efficient alternative being the use of natural gas. However, to the extent possible and as long as the processes have been able to be electrified, the use of a greater percentage of electricity from renewable sources has been actively sought. Thus, in 2023, 58.0% of the group's electricity was from renewable sources, compared to 54.8% in the previous year.

The detail of the Group's production plants with electricity purchased from renewable sources is as follows:

Detail of plants with electricity from renewable sources	2023	2022
Cáteda, Spain	100%	100%
Urdiain, Spain	100%	100%
Weinheim, Germany	100%	100%
Alfhausen, Germany	100%	100%
Novisad, Serbia	100%	100%
San Luis Potosi, Mexico	100%	100%
Itu, Brazil*	100%	33%
Ermelino Matarazzo, Brazil	100%	32%
Zacapu, Mexico *	4%	50%
Hasselt, Belgium **	12%	0%
České Budějovice, Czech Republic ***	10%	0%
Group	58%	55%

* There is a fall in electricity from renewable sources at the Mexico plants due to the change of supplier. Work is being done to obtain the renewable energy certificate in 2024.

** The Hasselt plant in Belgium installed solar panels in 2023, covering part of its operational energy needs.

*** The České Budějovice plant in the Czech Republic acquired electricity from renewable sources for the first time in the months of November and December 2023.

The energy efficiency measures implemented in the year and the consolidation of projects from previous years have led to an improvement in 2023 in the ratio of energy consumption intensity over metres of extruded casings. Its evolution is as follows:

Additionally, the Group promotes and drives the implementation of energy efficiency projects in its operations. The most relevant have been:

- **The installation of production capacity for collagen casings in several plants of the Group under dry-tech technology**, in which the lower use of water in the process implies less use of heat for drying the casing.

- **At the Cáseda plant, operational temperature parameters have been optimized in different production phases** in fibrous, cellulosic and collagen facilities.

- **Installation of LED lights** in Weinhein plants in Germany, Serbia, Belgium, Czech Republic and Australia.

- **Renewal of equipment with greater energy efficiency** both in the production process and in energy equipment.

The energy efficiency measures implemented in the year and the consolidation of projects from previous years have led to an improvement in 2022 in the ratio of energy consumption intensity over metres of extruded casings. Its evolution is as follows:

Base 100 year 2018	2023	2022	2021	2020	2019	2018
Consumption in GWh/ Metres produced	84	87	90	94	102	100

Emissions

Calculation method

For scope 1 CO₂ emissions, Viscofan is using the GHG Protocol tool "GHG emissions from stationary combustion".

For scope 2 CO₂ emissions, Viscofan uses a conversion factor requested from the supply company or, the official factor provided by the government or by the IPPC (Intergovernmental Panel on Climate Change).

Scope 1 and 2 CO₂ emissions

Casing production is an on-going process all year round that requires a lot of heat, especially in casing drying processes. The main energy input used in the process is natural gas, electricity, and steam.

In the case of Cáseda (Spain), it has a co-generation plant with an installed capacity of 48MW for part of the energy demand of the Viscofan plant. This operation allows greater efficiency in the production of casings from an environmental and cost efficiency point of view as the combustion of natural gas allows to heat water, steam, and electricity is produced. A part of the latter is sold to the grid.

Viscofan avoids CO₂ emissions with its co-generation plant in Cáseda compared to another equivalent alternative of heating water, producing steam, and generating electricity. However, the overall activity of the co-generation plant, including the production of electricity sold to the grid, entails for the case of Viscofan more Scope 1 emissions compared to those theoretically emitted to obtain the co-generation steam by means of conventional boilers.



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all year round that requires a lot of heat, especially in casing drying processes. The main energy input used in the process is natural gas, electricity, and steam.

Under this premise, in 2023, CO₂ emissions associated with the Cáseda co-generation plant represent 23.7% of total CO₂ of the Group compared to 76.3% of the production of casings and new business:

In tonnes	2023	2022	2021	2020	2019	2018
Scope 1 emissions						
Cáseda cogeneration	112,175	121,615	113,365	120,884	126,083	127,628
% of total emissions Group (scope 1 and 2)	23.7%	24.4%	20.7%	21.5%	23.3%	23.5%
In tonnes	2023	2022	2021	2020	2019	2018
Scope 1 emissions Traditional Business and New Businesses	281,08	293,567	291,934	277,075	260,138	250,5
Scope 2 emissions Traditional Business and New Businesses	79,932	83,444	142,682	165,228	154,58	164,138
Total emissions Traditional Business and New Businesses	361,012	377,011	434,616	442,303	414,718	414,638
% of total emissions Group (scope 1 and 2)	76.3%	75.6%	79.3%	78.5%	76.7%	76.5%
Total Group emissions	473,187	498,626	547,981	563,188	540,801	542,266

In 2023, CO₂ emissions were reduced by 5.1% compared to the previous year, partly due to the energy efficiency measures in our production processes discussed above and to a greater use of electricity from renewable sources.

Within the decarbonisation projects, it should be noted that Viscofan has successfully completed new tests, with greater capacity to use green hydrogen as fuel in one of the co-generation engines at the production plant in Cáseda (Navarre) that supplies to this production centre hot water, steam, and electricity. This project lays the foundation for the engine supplier Bergen to develop an engine powered by 100% green hydrogen. Likewise, investment is being made in the installation of two electric boilers in Spain.

Also, the installation of solar panels at the Hasselt plant (Belgium) has made it possible to generate renewable electricity for self-consumption. During the year, emissions from this plant were down by 1,574 tons compared to 2022.

Other greenhouse gas emissions of the Viscofan Group

In tonnes	2023	2022	2021	2020	2019	2018
NOX	720	762	735	713	657	643
SOX	30	32	29	29	32	n.a.

Emission intensity on extruded metres

Base 100 year 2018	2023	2022	2021	2020	2019	2018
Intensity of Group CO ₂ emissions/millions of extruded metres	70	72	84	94	101	100
Intensity of NOX emissions/ millions of extruded metres	90	93	95	100	103	100
Intensity of SOX emissions/ millions of extruded metres	74	77	74	80	100	n.a.

The Viscofan Group has begun the preliminary analysis for the calculation of Scope 3 emissions, i.e., the other indirect emissions that occur in the value chain, with the aim of obtaining a better understanding of the Viscofan Group's complete carbon footprint, and of meeting future reporting obligations for this indicator.

In this analysis, taking for reference the Scope 3 calculation technical guide published by GHG protocol, the most relevant categories would be: "Procured goods and services", "Activities related to fuels and energy not included in scope 1 or 2" and "End of life-cycle treatment for products sold".

Emission savings:

Electricity production through co-generation

In 2023, Viscofan avoided the emission of CO₂ into the atmosphere, by using co-generation compared to the theoretical emissions from co-generation steam using conventional boilers at the Cáseda (Spain) and Weinheim (Germany). Below is a detail of the equivalent tonnes of CO₂ avoided:

In tonnes	2023	2022	2021	2020	2019	2018
CO ₂ avoided by energy optimisation	76,745	85,845	94,033	90,449	90,531	91,715

Thanks to the co-generation installed, it is worth noting that over the last ten years, the Viscofan Group has managed to avoid the emission of nearly one million tonnes of CO₂ into the atmosphere.

Commitment to reduce the intensity of CO2 emissions and Pursuit of the Net Zero objective in Viscofan

The United Nations Global Compact, of which Viscofan is a signatory member, is committed to SDG 13. Climate action. Viscofan's commitment has materialised with a target by 2030, of a 30% reduction in scope 1 and 2 CO₂ emissions over a million extruded metres with respect to 2018.

The promotion of the use of renewable energies and the energy efficiency measures of recent years have allowed Viscofan to achieve in advance in 2023 the goal set for 2030.

The variations in the ratio on a baseline of 100 for 2018 are as follows:

Base 100 year 2018	2030 Commitment	2023	2022	2021	2020	2019	2018
CO2 emissions scope 1 and 2/Extruded metres	70	70	72	84	94	101	100

At Viscofan we work with the objective of limiting the rise in the planet's temperature to below 1.5C within our possibilities. In this regard, having met in 2023 the emissions intensity reduction target set for 2030, Viscofan is working on the design of a plan, based on the Science Based Targets initiative (SBTi), to achieve climate neutrality by 2050.

The preliminary work will involve detailed analysis of the energy equipment in all the Viscofan Group plants on 4 continents, the technological alternatives for the replacement of fossil fuels, the viability and promotion of renewable electricity in different countries, and analysis of scope 3 greenhouse emissions to determine if they are material with respect to scope 1 and 2, and, if so, work will be carried out to study and establish objectives.

2.3.3. Responsible management of the end-to-end water cycle

Water is essential for life, and also for the viability of Viscofan's business, since the casing production process and a large part of raw materials used depend on water. We acknowledge that it is a resource whose availability is affected by climate change and by a growing global demand.

Viscofan's production plants require water withdrawal for different phases of the process, mainly in the cleaning of casings, refrigeration, steam production and the moistening of said casings.

At Viscofan's production plants, in 2023, 13% of the captured water was evaporated, was incorporated into the product, or was consumed, while the remaining 87% was conducted to purification plants installed at Viscofan's production plants to be processed before being returned to freshwater surfaces or conducted to municipal processing plants.

Viscofan's water management focuses its efforts two-fold. Firstly, by seeking production technology with a lower water requirement, mainly in phases of the process that involve the washing of casings. Once the water has been used, Viscofan works to improve the quality of what we discharge even further and to understand the risks associated with its availability and use in the areas in which we operate.



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Withdrawal, responsible use of water

Water collection by source type. m ³	2023	2022	2021	2020	2019	2018
Surface water	4,127,443	4,127,443	4,269,619	4,107,250	3,849,469	3,755,026
Groundwater	2,929,859	2,929,859	2,810,428	2,756,290	2,643,301	2,636,088
Municipal supplies	3,634,433	3,634,433	3,701,020	3,515,107	2,947,574	3,021,961
Rainwater	0	0	0	0	0	0
Waste water	0	0	0	0	0	0
TOTAL	10,691,735	10,691,735	10,781,067	10,378,646	9,440,345	9,413,076
Consumption in process	1,770,905	1,770,905	2,348,446	2,107,470	1,679,531	1,745,719

During the year, water withdrawal and its intensity per metre of extruded casings were reduced by 5.4% and 3.3%, respectively, in a context of lower casings production activity and thanks to water consumption efficiency initiatives implemented during the year and the consolidation of initiatives implemented in previous years. Of particular note:

- **At the Cáseda plant (Spain)**, installation of the new evaporation plant allows the water to be used for a washing circuit, the change in filtering technology requires less water consumption in cleaning operations on the equipment itself, and a new Legionella treatment in cooling towers requires fewer circuit purges.

- **In the New Jersey (USA)** plant, the installation of production lines under dry-tech technology to produce collagen casings, with lower water requirements than the previous production technology, the better use of the wash flow in post extrusion, and optimisation of raw material recipes to reduce washing.

- **At the Danville plant (USA)** the stabilisation of the plant with the new cellulose casings technology.

- **At the Ermelino plant (Brazil)** a greater control in consumption processes and reuse of water when washing viscose filters.

In addition, as part of its efficient water management strategy, Viscofan seeks the greatest possible reuse of water. In 2018, it was endeavoured to make greater use of reused water in China, but it did not have the expected results. However, the reuse project at the Pando plant (Uruguay) commenced in 2020 is being consolidated and various projects have been implemented in Brazil to reuse water from the production process to wash the equipment, to supply the fire system, and to irrigate the garden.

These projects, of great importance and technical complexity, have increased the percentage of water reuse:

	2023	2022	2021	2020	2019	2018
Water reused in m3	85,341	57,077	16,942	15,172	1,069	26,635
% of the water consumed	6.7%	3.2%	0.7%	0.7%	0.1%	1.5%

All captures are strictly regulated by Public Administrations, which assign permits and determine the maximum permitted capture volumes to preclude significant effects. Hence, in 2023 there have been no recorded water sources significantly affected by the withdrawal of water from the organization.

On another note, according to the World Resources Institute list, the plants of Belgium, Mexico, Brazil and China are located in countries of high or extremely high water stress, a risk that the Group has identified. They account for 22% of total water withdrawal and 23% of the Viscofan Group's total water discharge in 2023. In the year, problems of water supply were not declared in these areas.



As part of its efficient water management strategy, Viscofan seeks the greatest possible reuse of water.

Responsible discharge

Protecting the quality of the water that we discharge is one of Viscofan's commitments. Adequate water management also includes correctly purifying its wastewater and minimising the impact of its activities on the environment; thus, we apply the best available technologies in an on-going process such as that of the Group.

As a result, Viscofan has water purification plants at its manufacturing facilities, where the treatment of water makes it possible to improve the quality of discharges. Factories that treat 100% of the water are: Cáseda (Spain), Zacapu (Mexico), Koteks (Serbia), Itu (Brazil), Pando (Uruguay) and Suzhou (China).

Water discharge broken down by destination is as follows:



Viscofan has water purification plants at its manufacturing facilities, where the treatment of water makes it possible to improve the quality of discharges.

Water discharge in m3	2023	2022	2021	2020	2019	2018
Freshwater surface	5,415,241	5,157,283	4,643,755	4,588,313	4,354,863	4,279,568
Municipal processing plant	3,425,199	3,763,547	3,788,866	3,682,863	3,405,950	3,387,789
TOTAL	8,840,440	8,920,830	8,432,621	8,271,176	7,760,813	7,667,357

2030 commitment to reduce the intensity of water withdrawal

The United Nations Global Compact, of which Viscofan is a signatory member, is committed to SDG 6. Clean water and sanitation. Viscofan's commitment has materialised with a target by 2030 of a 10% reduction in water withdrawal over a million extruded metres with respect to 2018.

The installation of new production technologies with lower water needs, efficiency measures in the use of water and its reuse have allowed Viscofan to achieve in advance, in 2023, the objective set for 2030. This milestone makes us optimistic about analysis to look for new targets.

The variations in the ratio on a baseline of 100 for 2018 are as follows:

Base 100 year 2018	2030 Commitment	2023	2022	2021	2020	2019	2018
Water withdrawal in m ³ / Extruded metres	90	86	89	95	100	101	100



2.3.4. Circular economy

Population growth influences the availability of the planet's resources and the efficient use of resources and the circularity of the economy are essential. A global challenge requires environmental criteria to be included throughout the whole value chain to minimise the impact of Viscofan's activities.

Working in conjunction with the whole value chain, Viscofan promotes the sustainable use of resources. Firstly, through the selection, search, and homologation of raw materials, which are then transformed by mechanical and chemical means, producing millions of metres of casing per year. In this process, Viscofan is constantly searching for more efficient technology, which leads to less waste generation and a circular life cycle. Finally, Viscofan's product innovations aim to foster customer innovation and help them in their sustainability challenges.

Selection of raw materials

We take the utmost care with the raw materials we work with, ensuring that the highest standards of health and food safety are maintained at all stages of production. In addition, a significant proportion of these products are of natural, biodegradable, or recycled origin.

The breakdown of consumption cost by category of the 10 most relevant raw materials is as follows:

Key raw materials	2023	2022
Animal and plant origin	68%	65%
Plastic polymers	8%	10%
Auxiliary chemicals	24%	25%
Total	100%	100%

Animal and plant origin

- **Cellulose:** Cellulose is a linear polymer composed of glucose units found in the wall of cells in plants, wood, and natural fibres, usually combined with other substances such as lignin, hemicelluloses, and other components. To produce casings, the cellulose chain must be broken to obtain a polymer with the appropriate length for its extrusion in the form of a casing and with very specific elastic properties. This process requires cellulose with a high level of purity, also called "Premium cellulose" or "special cellulose" by our approved suppliers.

- **Collagen:** Collagen is a very common long fibrous protein with remarkable chemical and mechanical properties. It has been used for many years as a basic raw material for several applications, as well as for sausage casings. Among others, it is used in the fields of biomedicine and cosmetics, as well as applications in the food industry. It is also the basic material used in the extensive gelatine industry. The corium, or inner part of the skin of cattle, is mainly used to produce collagen casings, as it is very rich in collagen.

- **Abaca paper:** This is obtained from a herbaceous plant called *musa textilis*. Paper made from its fibres has a high mechanical and moisture resistance and is used at Viscofan to produce fibrous casings. Abaca fibre is also used by other industries to produce high quality paper and non-woven textiles for various uses such as tea bags, paper money and filters.

Plastic polymers: Plastic casings are obtained by treating different plastic polymers widely used in different industries. The most used polymers are polyethylene, polypropylene and polyamides.

Chemicals used as auxiliaries in the production of different types of casings, the most relevant are caustic soda and glycerine.

Packaging

Viscofan's business model is characterised by the sale of ingredients or auxiliary raw materials in large volumes to food production companies, so that the packaging sent by Viscofan to the customer is not individualised by product or unit of use. For this reason, packaging is a reduced cost and has not been identified as a relevant aspect within Viscofan's materiality matrix which, moreover, does not end at the final consumer. The majority by relevance and weight are caddies, boxes, and pallets mostly of renewable origin, being packaging used to protect the quality and safety of the casings sent to the customer.

Furthermore, as regards packaging of raw materials, a part of these use reusable packaging, such as the containers that store the collagen skins; another part is biodegradable and recycled, such as the cardboard containing the cellulose paper; and to a lesser extent, other packaging is of synthetic origin, for which Viscofan promotes the recycling of these as far as possible.

In 2023, Viscofan is carrying out a project to segregate cardboard, wood, plastic, and metal waste in containers labelled and identified at the plant, with the aim of having better waste identification to promote greater recovery.



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Efficient and circular management of waste

Viscofan is constantly searching for a more efficient production technology that allows, among other things, a reduction in production waste. Furthermore, as established by the Environmental Policy, the concept of circular economy is included in the decision-making processes on investments and in the planning and execution of activities.

The production of casing is an ongoing process whose characteristics mean that waste will be generated throughout, notably, viscose, collagen mass and discarded casing in the converting process. Likewise, associated with environmental management at the water purification plants and the gas treatment facilities, the Group generates a material amount of waste.

For the management of the waste generated, we use disposal methods that have been determined locally based on local regulations and good practices within the Group, taking into consideration the characteristics of the production process and the raw materials used.

The trend in waste by typology is as follows:

In tonnes	2023	2022	2021	2020	2019	2018
Recovered	36,055	37,345	29,400	26,648	22,673	25,755
Disposed	27,661	31,492	34,010	30,696	26,634	27,668
Total waste	63,716	68,837	63,410	57,344	49,307	53,423

In 2023, the tons of waste fell by 7.4% in a context of moderated production activity caused by the decline in the casings market due to a global trend of reduced customer inventories.

Viscofan is working on greater valorisation of waste by increasing the reuse of products, or recycled use of waste after its corresponding transformation, such as composting, or energy valorisation as a thermal source. In this regard, the consolidation of projects from previous years and the implementation of new ones has allowed the Group to increase the percentage of recovered waste to 57% in 2023 compared to 54% in 2022, and to reduce by 10.2% the intensity of waste eliminated per million metres of extruded casings.

Of the projects implemented in 2023, it is worth highlighting in Cáseda (Spain) the recovery of waste for use as fertilizer that was eliminated in 2022 and the reuse of viscose thanks to facilities designed for this purpose.

The breakdown of waste by type is as follows:

In tonnes	2023	2022	2021	2020	2019	2018
Reused	4,516	6,216	7,966	3,333	2,892	3,412
Recycled	6,206	7,299	6,393	5,142	5,103	7,069
Composted	15,298	16,107	12,995	17,173	13,694	14,029
Energy valorisation	10,035	7,723	2,045	1,000	984,000	1,245
Total waste recovered	36,055	37,345	29,400	26,648	22,673	25,755

In tonnes	2023	2022	2021	2020	2019	2018
Incinerated	3,231	3,314	4,009	4,035	3,902	3,989
Landfill	24,300	27,918	23,192	20,700	18,706	20,734
Other	130,000	260,000	6,809	5,960	4,026	2,945
Total waste elimination	27,661	31,492	34,010	30,696	26,634	27,668



For the management of the waste generated, we use disposal methods that have been determined locally based on local regulations and good practices within the Group,



Of the projects implemented in 2023, it is worth highlighting in Cáseda (Spain) the recovery of waste for use as fertilizer

	2023		
In tonnes	Non hazardous	Hazardous	TOTAL
Recovered	23,963	12,092	36,055
Eliminated	25,552	2,109	27,661
TOTAL	49,515	14,201	63,716

	2022		
	Non hazardous	Hazardous	TOTAL
	31,802	5,543	37,345
	28,950	2,542	31,492
TOTAL	60,752	8,085	68,837

Moreover, the Viscofan Group has implemented an environmental management system with a view to preventing spillages and leaks, in which it has established management mechanisms and technical control elements. There were no spills or leaks at Viscofan Group facilities in 2023 that had to be reported to the competent authorities, understood as those that cause damage to the external environment of the facility.

Commitment 2030 to reduce waste elimination

As a signatory of the United Nations Global Compact Viscofan is committed to SDG 12. Responsible production and consumption. Commitment that Viscofan has expressed in an objective with a horizon of 2030 and a base of 2018 to reduce non-circular waste.

Initially, the objective was focused on the reduction of waste destined for landfill, although, in the course of the 2022-2025 Sustainability Action Plan, the requirement has been increased in accordance with a greater identification of the destination of the waste, incorporating the objective of reducing everything that is not recovered, so that by 2030 there should be a 30% reduction in the tonnes of eliminated waste out of a million extruded metres.

The variations in the ratio on a baseline of 100 for 2018 are as follows:

Base 100 year 2018	2030 Commitment	2023	2022	2021	2020	2019	2018
Tonnes of waste eliminated / Metres extruded	70	80	89	102	100	97	100



2.3.5. Responsible supply chain management

In a world where consumption habits can lead to the use of unsustainable materials, at Viscofan a very significant part comes from raw materials considered to be renewable, i.e. of natural origin, or are biodegradable or come from raw materials that have already been recycled. Thus, 81% of our revenue comes from the sale of casings with these characteristics.

However, Viscofan also considers how sustainability issues impact not only on its own operations but also along the value chain: raw materials, packaging and helping customers with their sustainability challenges.

Raw materials

Viscofan has the following sustainability commitments for both renewable raw materials and the rest:

- **Cellulose and abaca pulp:** all our suppliers are certified by the international (PFEC and FSC) certification programme, which ensures that the cellulose they obtain comes from sustainably managed trees and forests and, therefore, does not contribute to the deforestation of the planet.

- **Collagen:** our collagen casings are a good example of circular economy in the world of casings, as the cow hide is used for recovery in the food industry. In addition, Viscofan seeks as far as possible to contribute to animal welfare under strict controls and by working with European leather suppliers that comply with animal welfare codes.

- **Plastic:** in 2023, plastic developments and operations have continued to progress in accordance with the 3R rules (reduce, reuse and recycle). The following advances made in the year are of particular note:

- Reduction of raw material waste in plastic product extrusion: Processes have been standardised and at the plant in the Czech Republic, a lean system has been implemented to improve the management and organisation of the operational processes. In total, thanks to these projects the Group has managed to make a saving of 200 tonnes of plastic raw materials.
- All the Group's plastic casings production were recertified according to the ISCC PLUS system. The Canadian subsidiary also received ISCC PLUS certification. For Viscofan, this means that all eFAN casings, manufactured with raw materials of biological origin and/or raw materials from recycled post-consumer plastic waste, can now be marketed worldwide.
- The Group in 2023 and 2024 is working on a project to obtain degradable plastic casings.

- **Vegetable proteins:** this raw material used for the veggie casing is a GMO (Genetically Modified Organism) free product.



The Group in 2023 and 2024 is working on a project to obtain degradable plastic casings

Packaging

Viscofan works with the ambition to make responsible use and minimise as much as possible the packaging of raw materials and the final product by promoting the circular economy. In recent years, concepts of reduction, reuse, redesign and recycling are being used in the packaging management strategy. The main initiatives implemented during the year are:

Optimisation and review of packaging used for cellulose casings by reducing the number of cardboard items used to achieve better use of the quantity stored and transported on a pallet. In addition, the number of carton references is also being rationalised and eliminated in the case of fibrous casings.

In collagen casings, it is planned to implement a project to reduce the size necessary to form a cardboard box of the same dimensions without affecting its properties.



Customers

With our developments, we seek to help customers meet consumer needs and achieve greater sustainability in their production processes, providing them with products with greater production efficiency that generate less food waste and, in addition, enable the reduction of CO₂ emissions during their processing.

2.3.6. European taxonomy for environmentally sustainable economic activities

According to the environmental taxonomy criteria of the European Union, around 85% of Viscofan's business volume is not eligible under the European taxonomy as it does not have a significant impact on the six environmental objectives.

The activity of cogeneration of heat/cold and electricity based on natural gas is eligible for the objectives of adaptation to and mitigation of climate change and the activity of manufacturing casings, films and bags obtained through the treatment of plastic polymers is eligible for the objective of transition to a circular economy as the manufacture of plastic containers.

In the case of cogeneration, the technical alignment requirements require further development to facilitate the replacement of fossil fuel in line with the pioneering decarbonisation work that the Group is carrying out in Spain.

Regarding casings, films and bags obtained through the treatment of plastic polymers, based on the preliminary analysis carried out, the value chain of this activity has not yet fully progressed to meet the technical alignment criteria established in the regulations, towards which Viscofan is working, particularly the development and promotion of casings with a percentage of recycled material and materials of natural origin.

Foundation

In its Communication of 8 March 2018, the European Commission published its "Action Plan: Financing Sustainable Growth", launching an ambitious and comprehensive strategy to make finance a key driver for moving towards an economy that ensures that the goals of the Paris Agreement and the European Union's (EU) 2030 Agenda for Sustainable Development are met.

In this context, the package of measures presented defines 10 specific actions that have as one of their main objectives to redirect capital flows towards sustainable investments. As a consequence of the first of these actions, the Taxonomy Regulation, Regulation (EU) 2020/852, has been published, which aims to establish a classification system that, based on objective criteria, determines which economic activities are sustainable.

The Taxonomy Regulations establishes six environmental objectives:

- Climate change mitigation
- Climate change adaptation
- The sustainable use and protection of water and marine resources
- The transition to a circular economy
- Pollution prevention and control
- The protection and restoration of biodiversity and the ecosystems

This regulation has been modified gradually over several years to include the technical selection criteria for the 6 objectives.

One, on 4 June 2021, the Delegated Regulation (EU) 2021/2139 was published on sustainable activities for the objectives to mitigate and adapt to climate change. Therefore, technical selection criteria were established to determine the conditions in which it is considered that an economic activity substantially contributes to these two objectives, and to determine if such economic activity does not cause significant harm to any other environmental objectives.

On 6 July 2021, the Commission adopted the Delegated Regulation (EU) 2021/2178, completing article 8 of the Taxonomy Regulation. This delegated act specifies the content, methodology and presentation of the information that must be disclosed to the financial and non-financial companies in relation to the proportion of environmentally sustainable economic activities with regard to its commercial, investment or lending activities.

On 9 March 2022, the European Commission published Delegated Regulation 2022/1214 amending Delegated Regulation (EU) 2021/2139 as regards economic activities in certain energy sectors and Delegated Regulation (EU) 2021/2178 as regards public disclosure of specific information on these economic activities.

On 27 June 2023, the European Commission adopted Delegated Regulation (EU) 2023/2486, which completes Regulation (EU) 2020/852 of the European Parliament and of the Council by establishing the technical selection criteria to determine in what conditions an economic activity will be considered to contribute substantially to the sustainable use and protection of water and marine resources, to the transition to a circular economy, to the prevention and control of pollution, or to the protection and recovery of biodiversity and ecosystems, and to determine whether such economic activity does not cause significant harm to any of the other environmental objectives. It also introduces amendments to Commission's Delegated Regulation (EU) 2021/2178, specifically with regard to the disclosure of specific public information on such economic activities.

On 27 June 2023, the Commission adopted Delegated Regulation (EU) 2023/2485, amending Delegated Regulation (EU) 2021/2139, establishing additional technical selection criteria to determine the conditions in which an economic activity contributes substantially to climate change mitigation or adaptation to climate change, and to determine whether that economic activity does not cause significant harm to any of the other environmental objectives.

Activity classification bases

In order to determine that an activity is "environmentally sustainable", it is necessary to start from the distinction established by the Regulation between two types of activities:

- **Eligible activities:** Those that have a significant impact on the achievement of any of the six environmental objectives set out in the Regulation, irrespective of whether that economic activity meets any or all of the technical selection criteria set out in those delegated acts.
- **Aligned activities:** Those that have a significant impact on the achievement of any of the six environmental objectives set out in the regulation and in addition:
 - Does not cause any detriment to the other environmental objectives set out in the Regulation
 - It complies with technical selection criteria established by the Commission.
 - It is carried out in accordance with the minimum guarantees set out in Article 18 of the Regulation.

Reporting obligations for the 2023 financial year

In accordance with the regulations in force on the date of formulation of this management report, Viscofan's reporting obligations with respect to the taxonomy are the following:

- For the objectives of mitigation and adaptation to climate change, Viscofan must report activities as eligible or non-eligible and whether they are aligned with the taxonomy, in the same way as in the previous year.
- For the other four environmental objectives, as set out in Article 10, paragraph 6 of Delegated Regulation (EU) 2021/2178, as amended in 2023 by Delegated Regulation (EU) 2023/2486, from 1 January 2024 to 31 December 2024 Viscofan is required to disclose the proportion of eligible and non-eligible economic activities according to the taxonomy under Delegated Regulation (EU) 2023/2486.

Analysis of implications for Viscofan

Analysis of eligibility with respect to the 6 environmental objectives

The Viscofan Group has conducted an analysis to identify the eligibility of the Group's activities with respect to the six environmental objectives:

The Traditional Business division, which represents 81% of the Viscofan Group's business volume (see note 20.1 of the consolidated report), includes the manufacture and distribution of cellulose, fibrous and collagen casings for sausages and other applications. This activity has not been identified by the European Commission as having a significant impact on any of the six environmental objectives, and, therefore, they are not eligible activities that are included in the annexes to the regulations described above.

The New Business division represents 12% of the Viscofan Group's business volume and encompasses several activities. Of these, the activity of manufacturing casings, films and bags obtained through the treatment of plastic polymers is included as an eligible activity in the objective of transition to a circular economy as the manufacturing of plastic containers. The rest of the division's activities are not eligible according to the taxonomy or are of little relevance.

Energy sales account for 7% of the Viscofan Group's business volume. They include the cogeneration activity, which in the Viscofan Group consists of the sale to third parties of the electricity that the Group does not use in the production process of its main activity, is included in Annexes 1 and 2 of the Regulation as an eligible activity with respect to the objectives of climate change mitigation and adaptation to climate change. The rest of the energy sales correspond to income from the sale of electricity transformed at the Zacapu facilities (Mexico), an activity that is not eligible according to the taxonomy.

Analysis of alignment with environmental objectives

Cogeneration

Viscofan has carried out alignment analysis of the cogeneration activity based on the provisions of Annex I of the Regulation, which includes the criteria that this activity must meet in order to be considered as making a substantial contribution to climate change mitigation.

In this regard, the technical criteria for selection of substantial contribution set out in section 4.30 (High efficiency cogeneration of heat/cold and electricity from gaseous fossil fuels) of this Annex set a minimum level of greenhouse gas emissions for a cogeneration activity to be aligned that is technically impossible to achieve with the use of 100% fossil fuel, requiring the blending of non-fossil fuels and the development of new technologies that would allow such consumption.

In this respect, within the search for decarbonisation of its processes, Viscofan is being a pioneer and in 2022 and 2023, it has successfully completed use of a cogeneration engine with green hydrogen as fuel. Although a regular continuous supply of green hydrogen is not currently available, Viscofan has already installed two cogeneration engines with the capacity to partially use green hydrogen and thus be prepared for a rapid transition when such a supply becomes available.

Manufacture of casings, films and bags through the treatment of plastic polymers

Viscofan has carried out alignment analysis of this activity based on the provisions of Annex II of the Regulation, which includes the criteria that this activity must meet in order to be considered as making a substantial contribution to the transition to a circular economy.

Based on this analysis, the activity of manufacturing casings, films and bags through the treatment of plastic polymers does not meet the established technical criteria of circularity and reuse.

Although, Viscofan, within its objective of promoting a circular economy, has developed the eFAN casing, which contains up to 95% recycled or bio-based plastic material, and although for now sales of this product are low, Viscofan is seeking to increase their importance through commercial promotion and by improving supply sources. The Group's main plastic extrusion and converting centres have the certification of ISCC PLUS, a sustainability certification programme for bio-based and circular (recycled) raw materials not regulated as transport fuels, according to the European Renewable Energy Directive, for all markets and sectors.

Calculation of indicators

The main key performance indicators have been calculated in accordance with the EU Commission Delegated Regulation, which complements Regulation (EU) 2020/852 of the European Parliament and of the Council. This regulation details the content and presentation of the information that must be disclosed by companies subject to articles 19 bis or 29 bis of Directive 2013/34/EU in relation to sustainable economic activities from an environmental perspective. It specifies the method for complying with the obligation to disclose information about the presentation of data related to economically sustainable activities from an environmental point of view.

Calculation of the key performance indicator on turnover

For the calculation of the indicator, the accounts required by the Regulation have been identified in the denominator, the turnover being the amount included as "Sales and services rendered" (see note 20 of the Notes to the Consolidated Financial Statements).

For the calculation of the numerator, the amount of sales and service provision of the eligible activities has been used.

Calculation of the key performance indicator for capital expenditure (CapEx)

To calculate the CapEx indicator, the denominator includes total investments in intangible assets, investments in property, plant and equipment and investments in assets for rights of use of the Viscofan Group, see notes 5, 6 and 7 of the Notes to the Consolidated Financial Statements.

For the numerator, projects carried out during the year that can be considered as eligible activities for the CapEx indicator as indicated in Article 8 of the Regulation are taken into account.

Calculation of the key performance indicator for operating expenses (OpEx)

To calculate the OpEx indicator, the Viscofan Group's accounting accounts for research and development expenses, building renovation measures, short-term leasing expenses and maintenance and repairs or expenses to ensure the proper functioning of the assets have been identified. The sum of these accounts is the denominator.

For the numerator, the breakdown of the accounts by Cost Centre has been extracted by analysing the nature of the expenditure in order to identify whether it is associated with an eligible activity as indicated in Article 8 of the Regulation.

Economic indicators

This section includes the indicators by economic activity in relation to their eligibility and alignment with the Taxonomy of Sustainable Finance. They have been presented following the templates included in Commission Delegated Regulation (EU) 2021/2178, of 6 July 2021, modified by Commission Delegated Regulation (EU) 2023/2486, of 27 June 2023:

Information about activities related to fossil gas

This information responds to the reporting requirements of Delegated Regulation (EU) 2022/1214 of 9 March 2022 for the key performance indicators applicable to activities related to fossil gas. In particular, for Viscofan the cogeneration activity referred to in section 4.30 of Annexes I and II of Delegated Regulation (EU) 2021/2139.

In million €	Year 2023			Substantial contribution criteria						Criteria for the absence of material injury						Proportion of turnover that conforms to the taxonomy. 2022	F	T
	ID	Absolute Turnover	Proportion of turnover	Climate change mitigation	Climate change adaptation	Water and marine resources	Circular economy	Contamination	Biodiversity and ecosystems	Climate change mitigation	Climate change adaptation	Sustainability and protection of water and marine resources	Transition to circular economy	Pollution prevention and control	Protection and restoration of biodiversity and ecosystems	Minimum guarantees		
Economic activities		€	%	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		
A. ACTIVITIES ELIGIBLE ACCORDING TO TAXONOMY																		
A.1 Environmentally sustainable activities (conforming to the taxonomy)																		
Turnover of environmentally sustainable activities (that conform to the taxonomy) (A.1)		0	0%	N/A	N/A	N/A	N/A	N/A	N/A								0.0%	
A.2 Activities eligible according to the taxonomy but not environmentally sustainable (activities that do not conform to the taxonomy)																		
Row legend		€	%	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL		
High-efficiency cogeneration of heat/cooling and electricity from fossil fuels	CCM, 4.30.	79.5	6.5%	EL	EL	N/EL	N/EL	N/EL	N/EL				Not applicable				7.1%	
Manufacture of plastic containers	CE, 1.1	109.5	8.9%	N/EL	N/EL	N/EL	EL	N/EL	N/EL			Not applicable					N/A	
Turnover of activities eligible according to taxonomy but not environmentally sustainable (activities that do not conform to the taxonomy) (A.2)		189.0	15.4%	6.5%	N/A	N/A	8.9%	N/A	N/A								7.1%	
Turnover from activities eligible according to taxonomy (A.1 + A.2)		189.0	15.4%	6.5%	N/A	N/A	8.9%	N/A	N/A								7.1%	
B. INELIGIBLE ACTIVITIES ACCORDING TO THE TAXONOMY																		
Turnover from activities not eligible according to taxonomy		1,036.8	84.6%															
TOTAL		1,225.8	100.0%															

In million €			Year 2023		Substantial contribution criteria						Criteria for the absence of material injury						%	Category: Facilitating activity	Category: Transition activity
Economic activities	ID	CapEx	€	%	Climate change mitigation Y; N; N/EL	Climate change adaptation Y; N; N/EL	Water and marine resources Y; N; N/EL	Circular economy Y; N; N/EL	Contamination Y; N; N/EL	Biodiversity and ecosystems Y; N; N/EL	Climate change mitigation Y/N	Climate change adaptation Y/N	Sustainability and protection of water and marine resources Y/N	Transition to circular economy Y/N	Pollution prevention and control Y/N	Protection and restoration of biodiversity and ecosystems Y/N	Minimum guarantees Y/N	Proportion of CapEx that conforms to the taxonomy 2022	
	Row legend				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		T
A. ACTIVITIES ELIGIBLE ACCORDING TO TAXONOMY																			
A.1 Environmentally sustainable activities (conforming to the taxonomy)																			
CapEx of environmentally sustainable activities (that conform to the taxonomy) (A.1)					N/A	N/A	N/A	N/A	N/A	N/A								0.0%	
A.2 Activities eligible according to the taxonomy but not environmentally sustainable (activities that do not conform to the taxonomy)																			
Row legend					EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL		
High-efficiency cogeneration of heat/cooling and electricity from fossil fuels					EL	EL	N/EL	N/EL	N/EL	N/EL	N/EL	N/EL	N/EL	N/EL	N/EL	N/EL	N/EL	0.5%	
Manufacture of plastic containers					N/EL	N/EL	N/EL	EL	N/EL	N/EL								N/A	
CapEx of activities eligible according to taxonomy but not environmentally sustainable (activities that do not conform to the taxonomy) (A.2)					0.4%	N/A	N/A	8.8%		N/A								0.5%	
CapEx of eligible activities according to taxonomy					7.8	9.2%													
CapEx of eligible activities according to taxonomy (A.1 + A.2)					7.8	9.2%												0.5%	
B. INELIGIBLE ACTIVITIES ACCORDING TO THE TAXONOMY																			
CapEx of ineligible activities according to taxonomy					76.3	90.8%													
TOTAL					84.1	100.0%													

Legend:

Y: YES; N:No; EL: Eligible; N/EL: Not eligible; CCM: Climate Change Mitigation; F: Facilitator; T: Transition

In million €		Year 2023		Substantial contribution criteria						Criteria for the absence of material injury						%	F	T		
Economic activities	ID	OpEx	Proportion of OpEx	Climate change mitigation	Climate change adaptation	Water and marine resources	Circular economy	Contamination	Biodiversity and ecosystems	Climate change mitigation	Climate change adaptation	Sustainability and protection of water and marine resources	Transition to circular economy	Pollution prevention and control	Protection and restoration of biodiversity and ecosystems	Minimum guarantees	Proportion of OpEx that conforms to the taxonomy, 2022	Category, Facilitating activity	Category, Transition activity	
	€	%	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; N/EL	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%			
A. ACTIVITIES ELIGIBLE ACCORDING TO TAXONOMY																				
A.1 Environmentally sustainable activities (conforming to the taxonomy)																				
OpEx of environmentally sustainable activities (that conform to the taxonomy) (A.1)		0.0	0%	0%	N/A	N/A	N/A	N/A	N/A								0.0%			
A.2 Activities eligible according to the taxonomy but not environmentally sustainable (activities that do not conform to the taxonomy)																				
Row legend		€	%	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL				
High-efficiency cogeneration of heat/cooling and electricity from fossil fuels	CCM. 4.30.	2.8	7.8%	EL	EL	N/EL	N/EL	N/EL	N/EL								6.4%			
Manufacture of plastic containers	CE. 1.1	1.2	3.4%	N/EL	N/EL	N/EL	EL	N/EL	N/EL								N/A			
OpEx of activities eligible according to taxonomy but not environmentally sustainable (activities that do not conform to the taxonomy) (A.2)		4.1	11.2%	7.8%	N/A	N/A	3.4%	N/A	N/A								6.4%			
OpEx of eligible activities according to taxonomy (A.1 + A.2)		4.1	11.2%	7.8%	N/A	N/A	3.4%	N/A	N/A								6.4%			
B. INELIGIBLE ACTIVITIES ACCORDING TO THE TAXONOMY																				
OpEx of ineligible activities according to taxonomy		32.5	88.8%																	
TOTAL		36.5	100.0%																	

Legend:

Y: YES; N: No; EL: Eligible; N/EL: Not eligible; CCM: Climate Change Mitigation; F: Facilitator; T: Transition

