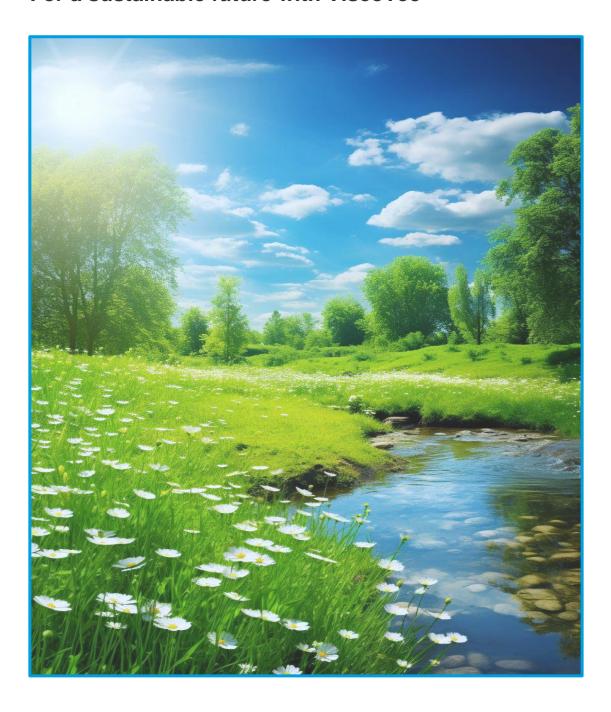
# **Environmental Directive**

# For a sustainable future with ViscoTec





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1 Preface

As a leading company in pump and dosing technology, we recognize the urgency of environmental

problems and man-made climate change. Our environmental policy is the result of our corporate values,

which place the pillars of environmental protection, resource efficiency and social responsibility at the

heart of our company's success. It serves as a guideline for sustainable business practices and our

contribution to environmental protection. In addition to the self-imposed goals of the environmental

guideline, ViscoTec complies with applicable law.

2 Objectives of the Environmental Directive

ViscoTec's environmental policy serves to provide all stakeholders with an overview of the relevant

environmental topics within the company.

The guideline serves to make efforts in relation to environmental protection visible. Improvements

are traceable and potential is revealed.

The guideline makes it possible to measure the degree of target achievement.

The guideline serves as orientation for the company's employees in their actions and conveys

ViscoTec's corporate values.

3 Areas of application of this directive

The environmental guideline applies to all business and operational areas of ViscoTec in Germany.

Particular attention is paid to the departments and operations with the greatest environmental impact.

Business operations inevitably cause emissions that must be monitored and reduced. The reference

value used in this guideline is the annual turnover. All key figures are related to this for a better

comparability.

3.1 Energy consumption, greenhouse gases and air quality

ViscoTec is a pump technology manufacturer in the industrial sector of mechanical engineering. All

products are classified as dosing technology, in particular progressive cavity pump technology. The

products are largely assembled in-house and shipped to customers, subsidiaries, and locations

worldwide. In addition to its own milling shop, assembly and elastomer production facilities, the company

also uses offices and pilot plant rooms. Operational emissions are primarily generated by the company's

own fleet of vehicles and the gas and pellet firing of the heating systems. Other relevant emissions are

caused by purchased energy in the form of electricity (Scope 1 and 2 emissions).

By far the largest share of emissions is caused by upstream and downstream processes (Scope 3 emissions), which are mainly attributable to the transportation sector. The current annual figures can be found in the respective CSR report. The firing systems for heat generation are regularly maintained and comply with technical standards. The effects on air quality are monitored regularly by means of flue gas measurements.

#### **3.1.1. Targets**

- Balancing of all operational CO2 equivalents generated at the Töging site from 2020 onwards
- Compensation / investment in climate protection projects equivalent to all operational emissions through / in high-quality environmental protection projects (all Scope 1 and Scope 2 emissions)
- Reduction of CO2 equivalents emitted per turnover at the Töging site (Scope 1 and Scope 2 emissions) by 50% compared to 2020 by 2030
- Switch to at least 80% green electricity (own generation and external procurement) at the Töging site
  by 2027
- Conversion to 100% green electricity (own generation and external procurement) at the Töging site by 2030
- Reduction of fuel consumption by at least 50% by 2030
- Reduce gas consumption by at least 20% by 2030
- Further investment in renewable energies
- Significant reduction in Scope 3 emissions by 2030 (Explanation: Scope 3 emissions consist of upstream and downstream production processes, e.g. transportation, and can therefore only be influenced indirectly)

#### 3.1.2. Achievement of targets

Since 2020, all emissions at the German site have been accounted for in accordance with the GHG protocol and all emissions from operations (Scope 1 & 2) have been offset in high-quality carbon offset projects from myclimate and Char2Cool or invested in carbon offset projects. The accounting and investment was carried out with myclimate using the internationally recognised GHG protocol on the basis of ecoinvent 2.2 (until 2021) and from 2022 with ecoinvent 3.6 and the IPCC 2013 assessment method (GWP 100a).





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- CO<sub>2</sub> emissions per turnover fell by 21% in 2023 compared to 2020. The reduction target for 2030 is therefore realistically achievable.
- Since the beginning of 2024, the external electricity supply has been switched to local hydropower. This means that the site is supplied with 100% green electricity and the target set for 2030 has been met well in advance.
- CO<sub>2</sub> emissions from fuel consumption were reduced by 6% compared to 2020. The reduction target by 2030 is achievable, but further action is needed to reduce emissions.
- CO<sub>2</sub> emissions from gas consumption were reduced by 3% compared to 2020. The reduction target by 2030 is achievable, but further action is needed to reduce emissions.

#### 3.2 Water

Water, and drinking water in particular, is becoming an increasingly important resource. The prudent use of this resource is a matter of course for ViscoTec. In-house production and assembly do not require any water-intensive processes. The use of water by employees is responsible for most of the consumption. ViscoTec is committed to the careful use of fresh water and wastewater. Currently, water consumption is not considered a relevant environmental factor. Wastewater is treated in municipal sewage treatment plants and subsequently discharged into bodies of water. Rainwater is returned to the groundwater through infiltration trenches without stressing the sewage system. Despite the low environmental impact of the water used on the environment, ViscoTec undertakes to review this factor on a regular basis and, if necessary, to bring about improvements through individual measures. The results are presented in the respective CSR report.

#### 3.3 Land use and soil quality

Responsible land use and the appropriate treatment of habitats worthy of protection is an important basis for sustainable business. ViscoTec's production site and headquarters are located on the outskirts of Töging in the immediate vicinity of the A94 highway. The company premises are located far outside of protection zones with regard to animals, water, soil or noise protection. No further protection purposes are known. Built-up areas are used efficiently wherever possible (e.g. multi-storey buildings; parking lots covered with PV modules). No separate targets are set for this sub-area. ViscoTec undertakes to continue to take into account all protection criteria for land use and soil quality in the future.

Author: Raphael Lichtnecker

Creation date: 01.09.2023 Change date: 20.04.2024 3.4 Biodiversity and animal welfare

Biodiversity is an important building block in the preservation of our livelihoods. Wherever possible,

ViscoTec is committed to the preservation and promotion of biodiversity. The main site in Töging is not

located near an area that is relevant for environmental, landscape and water protection. As biodiversity

is difficult to quantify, ViscoTec has decided to promote biodiversity through individual measures on the

site. These measures are also subject to regular review. The results are presented in the respective CSR

report. In addition, ViscoTec undertakes to comply with all current animal welfare standards, where

applicable. As ViscoTec does not process any animal products, there are no separate targets for this

area. Purchased raw materials are obtained free of animal products - ADI ("Animal Derived Products").

3.5 Local and accidental pollution

The unintentional release of chemicals during production and operation can cause damage to people

and the environment. ViscoTec does not have any large quantities of substances that could be released

during production and harm the environment. The greatest risk is posed by product samples from

customers and their handling. The targets have no expiration date and are regularly updated.

**3.5.1. Targets** 

Risk minimization through proper storage, transport and handling of potentially hazardous

substances

Regular, annual training on the proper handling of hazardous substances and waste

Continuous (annual) review and, if necessary, improvement of the storage situation of hazardous

substances and product samples; monitoring by hazardous substances officer

3.5.2. Achievement of targets

Storage of hazardous substances in a separate hazardous substance container outside the

hazardous area

Appointment of an external occupational safety officer

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#### 3.6 Raw materials, chemicals and waste

ViscoTec processes and treats elastomers, semi-finished steel products and individual mechanical-technical components. The company uses cleaning agents and solvents to remove small amounts of contamination. In addition to waste from customer trials, residual waste, paper waste and recycling waste are also produced. The largest quantities of waste are generated by packaging material. The responsible handling of raw materials and waste is an important component of ViscoTec's sustainability strategy. The targets may not have an expiration date and are regularly updated.

#### 3.6.1. Targets

- Continuous reduction of the reject rate in the elastomer area.
- Increasing the degree of utilization of raw material (elastomer).
- Efficiency-enhancing measures in the production of elastomer parts.
- Dispensing with oil-based coolants and lubricants in new machines.
- Transition to "Blue Angel" certified printing paper by 2023.
- Switch to the use of recycled cardboard packaging.
- Use of alternative, environmentally friendly packaging imprints.
- Switching to alternating / reusable packaging (especially for regional suppliers) for all items with a high, recurring order volume.
- Recycling of packaging material for own packaging processes.
- Continuous improvement of the waste concept regarding office waste.
- Purchase of all shipping packaging with FSC certification from mid-2025

#### 3.6.2. Achievement of targets

- All printing paper will be sourced as "Blue Angel" certified paper from 2023.
- Conversion to cellulose fibre adhesive tape to increase the recyclability of cardboard packaging

3.7 Noise emissions

Continuous or very high noise pollution can cause damage to human health or disrupt the natural way

of life of animals. ViscoTec is aware of this and takes various measures to take it into account. In

general, ViscoTec carries out few activities that lead to high noise exposure. Employees are provided

with the appropriate personal protective equipment (PPE) for such activities. Regular training is

provided on how to use them correctly. The level of exposure is determined by measuring the noise at

the workstations and appropriate countermeasures are taken. Noise generated on the production side

is shielded from the outside by multi-glazed windows. Apart from delivery and passenger traffic, there

are no noise-generating systems on the premises. No specific targets are set for this area, as noise

protection is continuously taken into account.

3.8 Product usage

ViscoTec manufactures pump technology that is used in various industries. The main areas of application

are the chemical industry, the food and pharmaceutical industries, electronics manufacturing and

aerospace. Electricity is required to operate the pumps. Operation can also be supported by compressed

air. Depending on the application and material, the pumps and other products must be maintained and

cleaned by the user at regular intervals.

3.8.1. Targets

Sustainability considerations issues will be integrated into the product strategy starting from mid-

2023.

Environmental aspects will be included in the specifications for development projects.

The topic of temperature control and air conditioning will be included in all relevant development

processes in order to reduce the amount of electricity required to operate the systems The first

products should be ready for the market as of 2025.

In the development of new products with high air consumption, compressed air will be replaced by

electric drives wherever possible. The majority of systems will be converted accordingly by 2030.

Consideration of socio-ecological criteria (e.g. environmental impact, electricity requirements) in

development and in the approval process for internal developments by mid-2024.

Optimization of maintenance intervals through predictive and preventive maintenance to prevent

wear and damage. First project results expected in 2025.

Research into more environmentally friendly production materials for core components. Results

expected by 2025.

Easily dismantled product design for simple maintenance and repair. This goal is being continuously

developed.

#### 3.8.2. Achievement of targets

Initiation of various efficiency projects in development

#### 3.9 End of product life

ViscoTec's products are primarily production technology. The main components are stainless steel in various qualities, elastomers and electrical components such as motors and controls. Worn parts (especially stressed parts such as rotors and stators) can be replaced in most cases. Usually, the products are scrapped at the end of their service life and sent for recycling.

#### 3.9.1. Targets

- Conversion to modular product design ensures that systems can be retrofitted. Initial results are expected by 2025.
- Reuse and take-back are continuously improved with the aim of preventing scrapping.
- Standardization of components ensures less variety of parts and therefore more efficient production options. Initial results are expected by 2025.
- Implementation of the WEEE Directive on the take-back of electronic devices for all new devices for which ViscoTec is registered as the manufacturer.

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3.9.2. Achievement of targets

Initiation of various efficiency projects in development.

Ageing products (> 3 years) are examined intensively internally and analyzed for sales opportunities.

Ageing products (> 3 years) are communicated to our sales offices / branches to highlight reusability

and sales opportunities.

Discontinued products in the loan and/or technical center stock are not automatically scrapped, but

are checked for reusability in the technical center stock of the branches.

Discontinued products are technically inspected and replaced in order to offer our customers

alternatives in price-sensitive markets.

Implementation of the WEEE Directive for the take-back of electronic devices for all electrical devices

for which ViscoTec is registered as a manufacturer since 2021.

3.10 Customer health and safety

The technology of our systems is characterized in particular by the fact that when dispensing from

containers, the remaining residue that has to be disposed is reduced to a minimum. Thanks to the

optimized possibility of changing containers and easily dismantling dispensers for cleaning,

contamination of the workplace by substances and mixtures is decreased enormously, if not completely

prevented.

The legal basis for all ViscoTec products is the Machinery Directive 2006/42/EC. The safety and

ergonomics requirements formulated therein and in the Low Voltage Directive 2014/35/EU are the

minimum level, which we expand and test in terms of usability and user protection.

We scrutinize the best possible safety and the necessary information for our customers across all phases

of our products' lives. Our operating and maintenance instructions provide clear and easy-to-understand

information on how to use the systems correctly to protect the health of users.

3.10.1. Targets

With the publication of the Machinery Ordinance on June 29, 2023 and its entry into force on January

14, 2027, a comprehensive review of our processes to meet the new requirements is imminent.

3.10.2. Achievement of targets

New systems from the vipro-FEED M plus series can be ordered with a user-friendly and safety-

optimized enclosure. Further versions are being planned.

Retrofit kit for ViscoMT-XS to increase operator safety.

3.11 **Environmental services and representation of environmental interests** 

Continuous improvement of the status quo is a high priority at ViscoTec. In addition to a company

suggestion scheme, which is managed by the elected employee representatives, employees can

contribute their ideas to the "Green Conscience" working group. The working group makes it possible to

exert a direct influence on company environmental policy decisions and promote projects to improve

environmental aspects. In addition, all employees can raise issues with their superiors or in the form of

a feedback box.

3.11.1. Targets

Anchoring of "sustainability" in the corporate values by 2022.

Adoption of an environmental guideline for the Töging site by the end of 2023.

Adoption of an environmental guideline for all locations by the end of 2025.

3.11.2. Achievement of targets

At the beginning of 2022, "sustainability" was incorporated into the company's values.

Adoption of an environmental guideline for the Töging site in 2023

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## 4 Responsibilities and scope of application

This environmental policy initially applies to ViscoTec's main site in Töging, Germany. Responsibility for defining and implementing the targets lies with the management. The responsibility for reviewing and updating the results lies with a person appointed by the management. The implementation of the derived measures is the responsibility of the respective managers and their employees.

### 5 Resubmission and review

This environmental guideline is reviewed and updated on an annual basis.

## **6 Version history**

Version	Change	Date
2.1	Translation from German to English 2024	20.04.2024
2.2	Additions Animal welfare, air and soil quality, noise emissions	21.01.2025

Franz Kamhuber

Management "commercial area"

**Martin Stadler** 

Management "technical area"