

Acting sustainably, living responsibility

## FROM NATURE FOR LIFE





# **Biotest** – taking awareness of sustainability to the next level!

# Sustainability – a challenge for all of us

We all know that our ecological footprint has become too big for our planet. We don't have a lot of time left to reach global climate targets. As a company, we are fully aware of the responsibility we hold and have therefore committed ourselves to achieving complete climate neutrality at Biotest by 2035 with our vision "Go Future". By following its chosen path, our company is expected to grow in harmony with social and ecological requirements.

## Our social responsibility

Biotest produces vitally important drugs derived from human blood plasma to enable people with disorders of the immune or haematopoietic systems to lead lives as normal as possible. As we pursue this objective, our top priority is to ensure that our drugs are safe and effective. We adhere to the highest quality standards in all phases of research, development and manufacturing, including the sourcing of our raw materials – in our opinion, this is also a part of taking responsibility.

## Our ecological responsibility

An essential element of our environmental policy is to minimise the natural resources we use wherever this is feasible. At the same time, we choose sources of renewable raw materials to operate as climate friendly as possible – but we cannot yet make every process "green". That is why we have been offsetting 100% of our emissions since 2021. We can do this by combining green electricity, climate protection certificates and further climate protection programmes to get closer to our green goal. It is brought home to us each day that an ecological mindset goes hand in hand with product and process safety.

### "Go Future" – our vision for sustainability

Our future-oriented vision gave rise to the idea of the "Go Future"-campaign, which makes our commitment to greater sustainability both tangible and experienceable across all products and the company. The start of our production plant Biotest Next Level is an important step on our way to a more sustainable manufacturing. This plant will make it possible for us to produce immunoglobulins and other plasma products more sustainably than before — at a consistently high quality level! We also use ecological potential in our value chain: We produce in Germany and thus our customers and partners worldwide, but also we within the company, benefit from short transport routes.

# **Biotest** – efficient use of resources is in our DNA

We are aware that our production processes use a lot of energy and that this has certain ramifications for the environment. We have therefore implemented targeted measures for improving our ecological footprint. These include a certified energy management system for the systematic collection of data, their transparent presentation and the identification of optimisation potential. In addition, we operate highly efficient cogeneration plants with combined heat and power according to the trigeneration principle. As a result, we are not only able to generate the electricity we need, but also to use our waste heat or climate-friendly air-conditioning all year round through the use of absorption refrigeration systems, which, according to the German Federal Environmental Agency, represent an economically and ecologically sustainable solution. Our target in 2020 was to reduce our gross carbon emissions by 25% vs. previous year. We actually exceeded this target and reduced emissions by 26.8% – another milestone towards climate neutrality.

We are constantly working to develop our sustainability targets. Our innovative production plant Biotest Next Level, which is located on our Dreieich headquarter, has become a flagship for our vision "Go Future", which we want to achieve in the coming years.





### **Biotest Next Level Plant**

fractionation

plasma cutting



Level

#### **Gravity Flow**

We manufacture "from the top down". We have designed a multi-storey system that conserves resources such as electricity by using gravity to transfer materials from one production step and building level to another.



#### **Green Chemicals**

We use many derived natural substances that remain environmentally friendly from the beginning to the end of their life cycle. And what about afterwards? These substances are all fully biodegradable.



#### **Our Resource Plasma**

Human plasma is a renewable natural product, donated by people who want to help others. That is why we also design the plasma collection process to be sustainable. We are constantly expanding our plasma centres in Europe in order to keep transport distances short and to be able to help even more patients.



5th

4th Floor

3rd

Floor

2nd Floor

1st

Floor

Ground

Floor

Floor

buffer preparation

intermediates

### **Green Building**

Our buildings are constructed in compliance with the German Energy Saving Ordinance (EnEV 2015) to achieve environmentally friendly construction using low-pollution and low-emission materials.



#### **High-tech Upcycling** of Donor Plasma

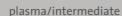
With this innovative process, we can produce medicinal products from the donor plasma with maximum yield of this valuable raw material.



### **Cogeneration plants**

We operate a highly efficient cogeneration plant with combined heat and power based on the principle of combined heat, power and cooling. This enables us to use waste heat for air conditioning all year round in addition to generating electricity for our own needs.





ware

house

drug substance

# **Biotest** – this is how we take responsibility for people and nature

Energy efficiency: this is how we create better (production) environments We have optimised the buildings on our production sites by adding special insulation materials and have achieved operational efficiency with cogeneration plants with combined heat and power that operate on the basis of trigeneration. If we need electricity, it has an ecological footprint that is 100% positive. If we take a look inside our production buildings, we see modern pumping systems that, among other things, help to imrpove the energy footprint of our facilities.

Process engineering: taking each step with care

At our Biotest Next Level production plant, we are able to merge several process steps during production into a single step. This is far more than the standard. The manufacturing process was designed from the beginning to use less ressources such as chemicals or water consumption. At the same time, we work to keep the number of individual steps to a minimum.

Resources for biological active ingredients: responsible and careful handling

We manufacture products from humans for humans on the basis of human blood plasma as a natural and renewable raw material. Through the use of high-tech upcycling, we are able to use the plasma so effectively to make as much immunoglobulin as possible. As a prevention of denaturation or distortion of the complex molecules in the plasma, a gentle vibromixing concept was developed that mixes strictly by vibration. Moreover, the frozen plasma undergoes "gentle thawing" to minimise the impact on product and environment and to ensure that no additional energy is required for this step – and that the product is handled with the optimum care. It is important to us to maintain a good relationship with our plasma donors. They are the ones who carry the valuable raw material from which we are allowed to produce the vital medicines for our patients.

Waste and packaging: it's all about recycling, reduction and prevention

We have reduced the amount of plastic waste we produce through improved nanofiltration. However, if waste is generated, we recycle or reuse 86% of the industrial waste and the remaining 14% undergoes thermal treatment. Wastewater from production is treated in a proprietary facility before being released to the public network. That is why we already use FSC-certified materials for some medicine packaging.



# Our mission is to gradually take on more ecological and social responsibility

We would like to ensure that our future activities are even more sustainable and help people lead better lives. We define sustainability on many levels. For us it stands for

- secure access to vital medicines for our patients
  - responsible handling of our plasma donors and the valuable resource of human plasma
    - a safe workplace with good working conditions for our employees
      - a responsible use of natural resources and the protection of our environment.

Our vision for 2035 is to achieve 100% climate neutrality, a target that everyone at our company is working to achieve. We are committed to using renewable energy sources and are planning to change all of our systems over to green or hydroelectric power. Furthermore, we will work to make our processes more efficient and to reduce our greenhouse gas emissions to 0.2 t CO2/MWh.



### Small actions add up to a big difference

