

Society, the environment and future generations

Belimed Sustainability Report 2022

Belimed
Infection Control



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Foreword

Operating in a responsible and sustainable manner has been deeply ingrained in Belimed's strategy for many years. Together with our Holding Company Metall Zug Group, we have a clear focus and commitment through an ongoing program of sustainable activities for our employees, society and the environment.

Dear Reader

Global economic development over the past 60 years has enhanced the quality of life and well-being of billions of people around the world, however, it poses a huge threat to the environment. Our eco-systems are being degraded, natural resources are being depleted and greenhouse gas levels are climbing. Numerous reports and statistics have highlighted the exponential growth in both global and social trends since 1950¹. Examples include population growth, greenhouse gas emissions, fertiliser consumption, telecommunications and surface temperature. If the growth in each of these sectors continues at the same pace as today, we will ALL have huge problems.

Everyone has a role to play: governments, financial institutions and, of course, businesses such as Belimed. This is why Belimed is launching our own sustainability initiatives to make us the global leader in sustainable infection control by 2025.

Global challenges

Global economic growth is simply not sustainable and we need to change. To make things worse, the COVID-19 crisis has intensified these trends, especially those affecting global healthcare². As the world's population continues to live longer, the demand for healthcare and hospitals (our main customers) increases. With 24/7 operation, all hospitals are huge consumers of power, water and consumables, which poses a significant challenge for the environment (carbon emissions, waste product, chemicals). This growing demand, combined with cost pressures, also has a direct impact on the well-being of healthcare staff and patients.

Over the past 18 months, all Belimed regions have seen a sharp increase in the number of projects requiring environmental or corporate sustainability information at the design or tender stage (including examples of where equipment and solutions can benefit the environment). This shows a growing need for energy-efficient equipment and sustainable services for the lifecycle of the facility, and no longer simply on capital equipment costs. This growing awareness of sustainability is now starting to impact the choice of suppliers and service providers.

We hope you enjoy reading our 2022 Sustainability Report, and invite all Belimed customers and partners to join us on our sustainability journey!

Danny Cummins

Executive Vice President,
Business Unit Medical

Daniel Steiner

Executive Vice President,
Operations

1 Introduction



1 Introduction

Since the end of WW2, global production and consumption has risen exponentially, such that global economic development now poses a threat to the sustainable future of the environment. It is a threat to all major industries and businesses globally and to the long-term economy.



Figure 1 – UN Sustainable Development Goals

According to the European Commission (2008), '... the way we produce, use and dispose of goods is unsustainable and is rapidly depleting the planet's natural resources.'

In recent years a new set of international standards have been established, including the **Paris Agreement on climate change**. Belimed supports the pursuit of the **UN Sustainable Development Goals (SDGs)**. These initiatives now provide a sustainable global agenda for businesses and society to follow. Of particular importance for us are the climate objectives, good health and well-being, the responsible use of resources and living up to all our responsibilities as an employer.

The 2021 report from the U.N.'s Intergovernmental Panel on Climate Change (IPCC)³ went well beyond the relatively sedate tones of its prior assessments. Impacts of climate change are already here, and some could be 'irreversible' for centuries to come. Climate change is a nightmare, and last year's floods, fires and extreme heat (in such diverse regions as China, Australia, Siberia and British Columbia) are reminders that the problem is rapidly growing worse.

Sustainability is therefore becoming more important for all industries and companies around the world. An estimated **62 % of executives** consider a sustainability policy essential to be competitive today⁴, with **a further 22 %** who agree it will be needed in the future.

1 Introduction

An example of the dramatic, exponential growth rate in human activity can be seen in the Great Acceleration¹, which highlights the human impact of consumption and production on the Earth's geology and its ecosystems.

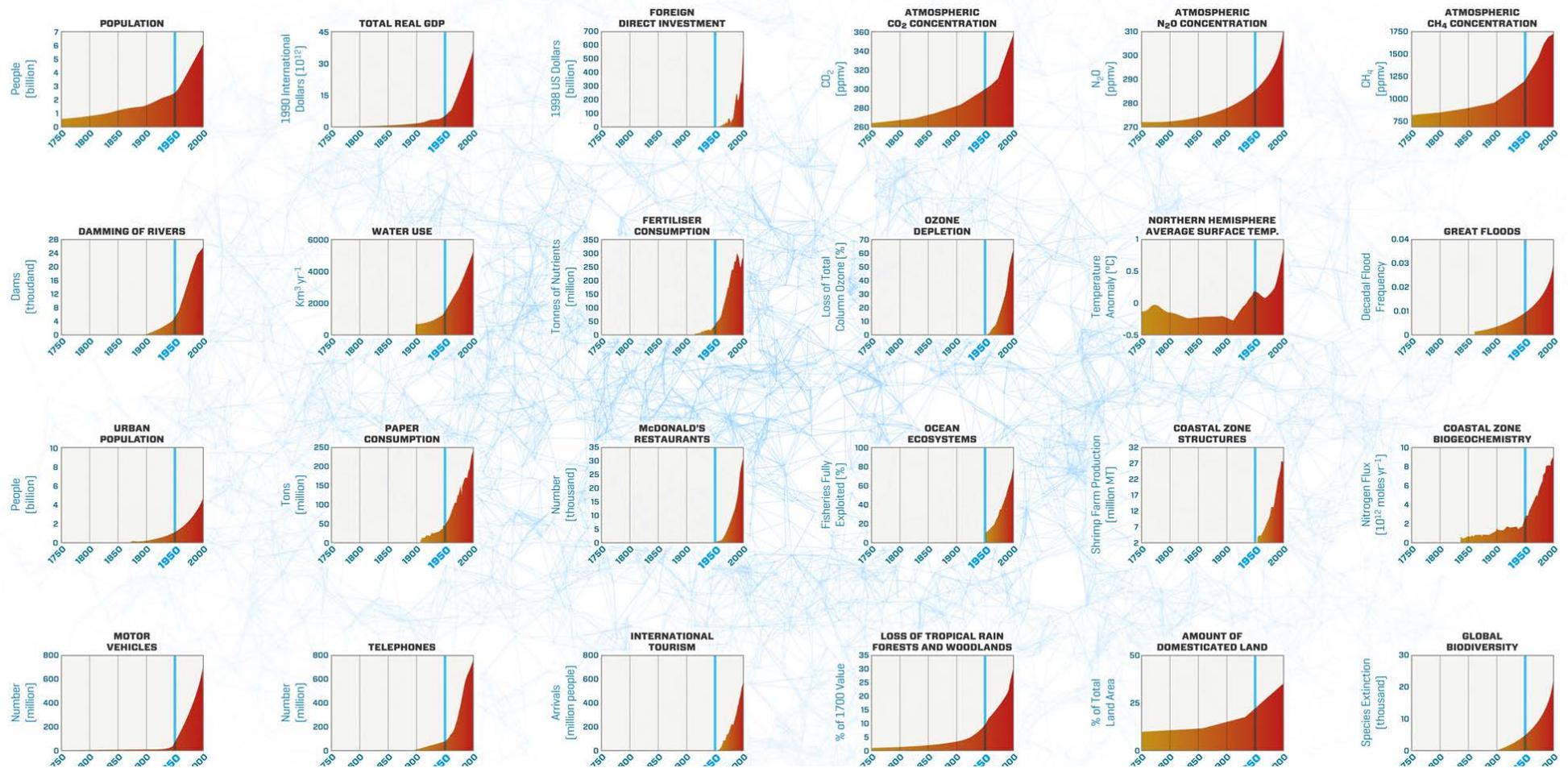


Figure 2 – The Great Acceleration (Steffen et al)

1.1 Sustainability as part of the corporate strategy

Belimed Infection Control views sustainability as a key strategic priority and aims to lead the way in relation to green products and solutions, environmentally friendly production methods and lean and efficient procurement and logistics. The slogan 'Engineers of Confidence' is part of the Belimed corporate strategy. All those in positions of responsibility act with a view to success and in line with Belimed core values.

The term sustainability has its most known roots in the 1987 Brundtland Report, which officially defined sustainable development for the first time.



Belimed maintains a culture of responsibility and reliability. We understand corporate responsibility as ensuring a future for our business beyond the next generation by addressing social governance and environmental issues. We act with a long-term view in order to create sustainable success for all our stakeholders such as our customers, employees and owners.



1.2 Internal/external stakeholder feedback

At Belimed AG, we place high value on the feedback from our customers as well as from our own internal teams. In 2021, together with the Metall Zug Group, we carried out a series of global customer interviews to establish the most important sustainability topics. The highest priority within the medical business sector was given to safe and resource-efficient products, followed by environmental concerns, such as greenhouse gas emissions, reductions in CO₂ / energy reduction and material and resources efficiency. These topics go hand in hand with our ongoing commitment to maximize occupational health and safety, both for our customers and our employees.

The feedback from our interviews is summarized in a materiality matrix (see below). Based on the results, Belimed has implemented a roadmap of sustainable initiatives:

- To minimize the environmental impact of our activities, from the footprint of our products to services over the lifecycle of a facility
- To ensure we are fully responsible in our dealings with customers, employees and suppliers
- To conduct business that is environmentally and climate friendly, as well as socially sound across the entire value chain
- To contribute to regional activities and social initiatives at Belimed locations around the world

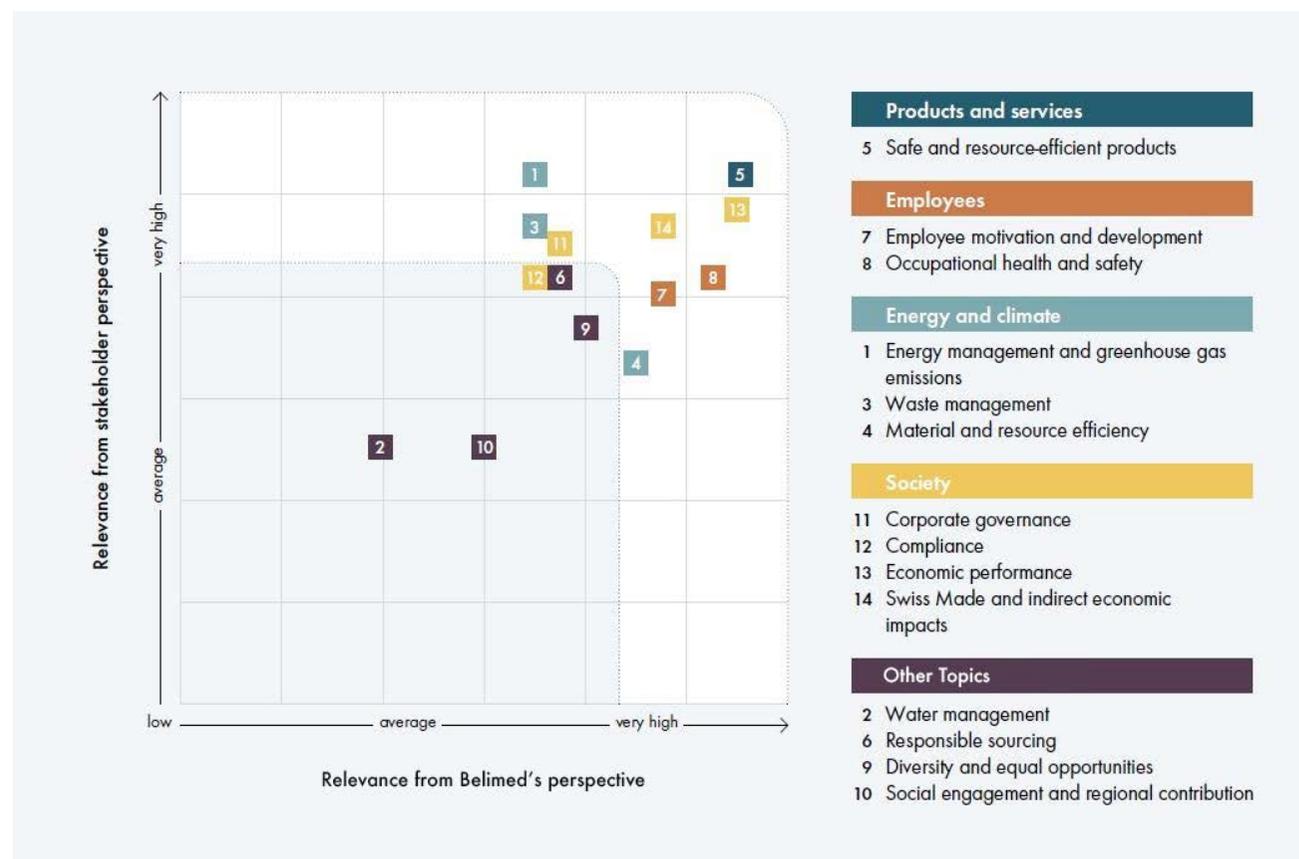
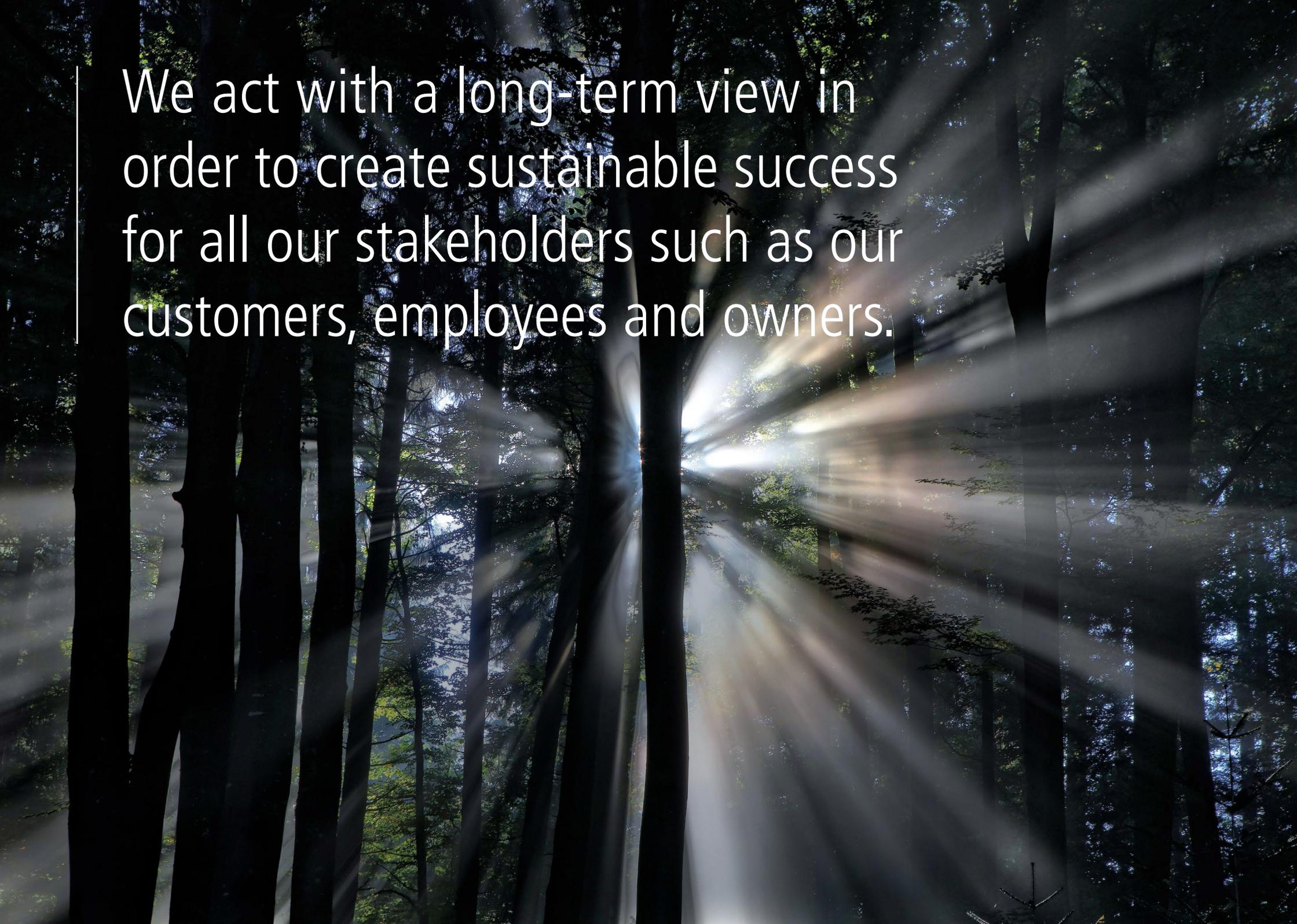


Figure 3 – Belimed Materiality Matrix

1.2 Internal/external stakeholder feedback

Belimed Sustainability Roadmap



A photograph of a forest with sunlight rays filtering through the trees. The scene is dark, with the sun's rays creating a bright, hazy atmosphere. The text is overlaid on the left side of the image.

We act with a long-term view in order to create sustainable success for all our stakeholders such as our customers, employees and owners.

2

Problems and Challenges



2 Problems and Challenges

Today, humanity uses the equivalent of 1.7 planets to provide the natural resources required to manufacture products and goods and to absorb the waste that is generated.

Simply put, we are using up our natural resources faster than they can be replenished, and if we don't do something soon, there will be consequences.

In addition to governments and finance, businesses and industry must play a key role in supporting the SDGs. At Belimed, we believe that sustainable development is key for our economic growth, and at the same time will solve the challenges of over-consumption, inequality and climate change. Our commitment to sustainability includes evidence-based targets, regular measurement of KPIs and metrics, reporting progress and achievements (best practices) and by setting bold, ambitious targets.

Feedback from all Belimed employees – from executives to the shop floor – helps us to define and implement new policies and methods in sourcing and production, to improve wellness and well-being, to reduce greenhouse gas emissions and to establish new, sustainable sourcing standards.



2.1 The key challenges in healthcare

Of the many issues facing the healthcare industry today, the following three challenges are potentially the most important:

The world's population is ageing rapidly⁵.

People worldwide are living longer, with most people expected to live into their sixties and beyond. By 2050, the global population of people older than 60 is expected to jump to two billion. As a result, the demand for healthcare globally is growing and hospitals must keep up with demand.

All countries face major challenges in ensuring that their health and social systems can adapt to this demographic shift. The older generation plays an important role within families and communities and will naturally become involved in new activities in later life. Healthcare will continue to become more and more important for all of us.

Hospitals are huge consumers

With 24/7 operation, hospitals are huge consumers of power, water, medicines, consumables and waste⁷. This poses a significant challenge for the environment. According to a 2019 report in The Lancet, healthcare is responsible for **4.6% of global greenhouse gas emissions⁸** (a quarter of this is from the U.S.). Surgical care is considered the most energy- and waste-intensive area in healthcare. Operating rooms alone can consume three to six times more energy per square foot than elsewhere in a hospital, and 20% to 30% of a facility's total waste.

Continuously rising costs and higher productivity.

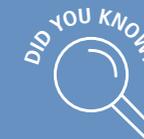
Not only are hospitals facing significant environmental challenges (carbon emissions, waste product, chemicals) but they also need to remain competitive in the current climate of rising costs. Patients today are also better informed and expect higher standards of healthcare⁹, as a result the technology requirements and hospital regulations are becoming more complex.

Every medical procedure has a carbon footprint and every year there are over 300 million surgical procedures throughout the world. There are many reasons behind the global increase in surgical procedures, including:

- Obesity and increased prevalence of metabolic and cardiovascular diseases
- Ageing population and increased prevalence of ageing diseases (e.g. cataracts, etc.)
- Trends in cosmetic surgeries and non-essential surgery
- Advances in diagnostics leading to increased rate of treatment of diseases
- Increasing demand for C-sections

The growth of green certification, eco-labelling and incentives for hospitals to deliver value and savings must be balanced against efficient patient care and the well-being of healthcare staff. The challenge is to manage both physical and mental stress so that mistakes are avoided. A vicious circle which, if not managed, will also affect patient safety.

If the health sector globally was a country, it would be the fifth largest emitter of greenhouse gases⁶.



2.1 The key challenges in healthcare

Number of 60+ year-olds per year (both sexes)

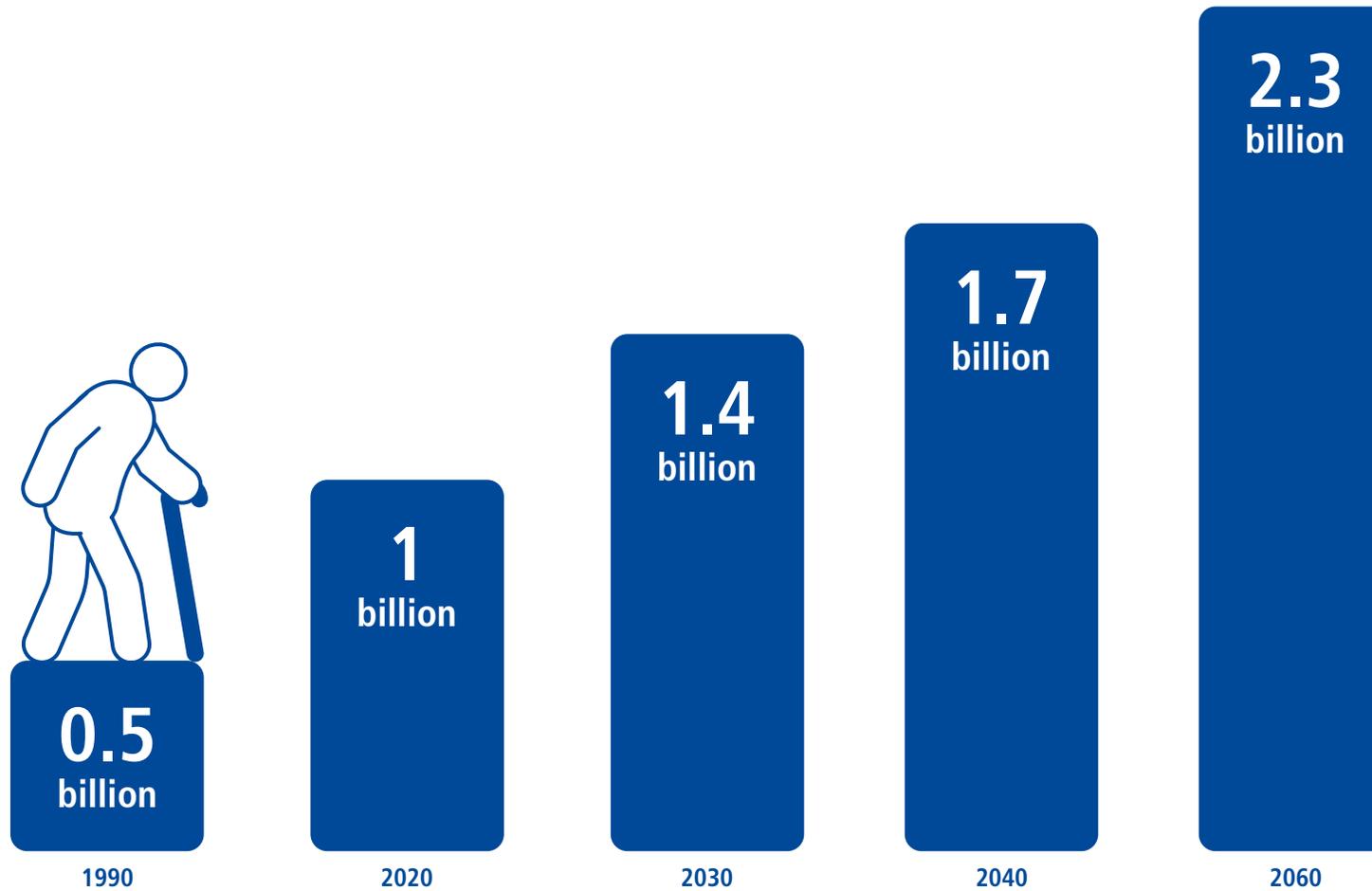


Figure 4 – Population Growth

2.2 The key challenges for business

The key challenge for business and industry has always been how to implement long term sustainable business policies, whilst remaining competitive. Over the past few years, the good news has been the increase in the number of **environmental initiatives in healthcare**¹⁰. An increasing number of our hospital projects are requesting corporate sustainability commitment at the design or tender stage (including examples of where equipment and solutions can benefit the environment).

Another challenge is **how to sell the value of energy-efficient equipment** and sustainable solutions in a highly competitive, price-driven market. For many years, projects were historically awarded on the basis of capital (procurement) costs, but this is also changing. More customers today are making decisions using a points system, which highlights the sustainable footprint of a vendor or a solution provider, and focuses on energy-efficient equipment and sustainable services for the lifecycle of the facility.

Belimed has joined this wave of sustainable businesses by implementing long-term business policies. Our manufacturing plants in Switzerland and Slovenia are constantly introducing new ways to reduce resources and to 'green' our supply chain. Our **sustainable message** is communicated throughout the Belimed organization, from manufacturing teams to sales and field service technicians, every Belimed employee is invited to buy into this initiative.



2.3 Our commitment to making change

Global economic development poses a threat to the sustainable future of the environment, to business and to the long-term economy. It will affect all major businesses globally and it is inevitable. In addition to the primary concerns for Belimed's customers today (regulatory compliance and cost pressure), there are signs of a growing awareness of sustainability topics, which are now starting to impact the choice of suppliers and service providers.

By making a commitment to sustainability and driving energy-efficient and sustainable solutions, Belimed is addressing the market forces of growing demand and rising costs within healthcare. These actions are now providing both operational and strategic opportunities for Belimed and now becomes an important differentiator for hospital and healthcare customers. Whether we look to reduce our carbon footprint, increase productivity, create more energy-efficient workflow solutions or improve our impact upon society, this creates value for employees, partners and investors.

Ever since Belimed started working on a set of sustainability initiatives (together with the other Metall Zug divisions) all stakeholders have bought-in to this idea. Whilst the COVID-19 pandemic has affected the operation and finances of all hospitals globally, it will hopefully have highlighted the importance of sustainable business planning, the scarcity of resources and the need for a sustainable infection control partner.

Companies profit from employees who feel comfortable at work, resulting in a reduction in absenteeism and occupational accidents, and an increase in production¹¹. Aside from our own staff, Belimed is helping customers achieve employee satisfaction with a new machine generation, combining excellent ergonomics with attractive design and easy operation. Our Belimed Academy also provides training modules, e-Learning, best-practice sharing, benchmarking and other collaboration projects

A success can only really be counted as such if it's sustainable and has been achieved with due respect for society and without tarnishing the reputation of the company.



'Whether we look to reduce our carbon footprint, increase productivity, create more energy-efficient workflow solutions or improve our impact upon society, this creates value for employees, partners and investors.'

2.4 Sustainability goals

As part of our corporate strategy and Vision 2025 program, Belimed has set a number of corporate sustainability goals for our business. Our SMART sustainability goals are tracked regularly and build on the corporate sustainability targets and reporting guidelines of the Metall Zug Group.

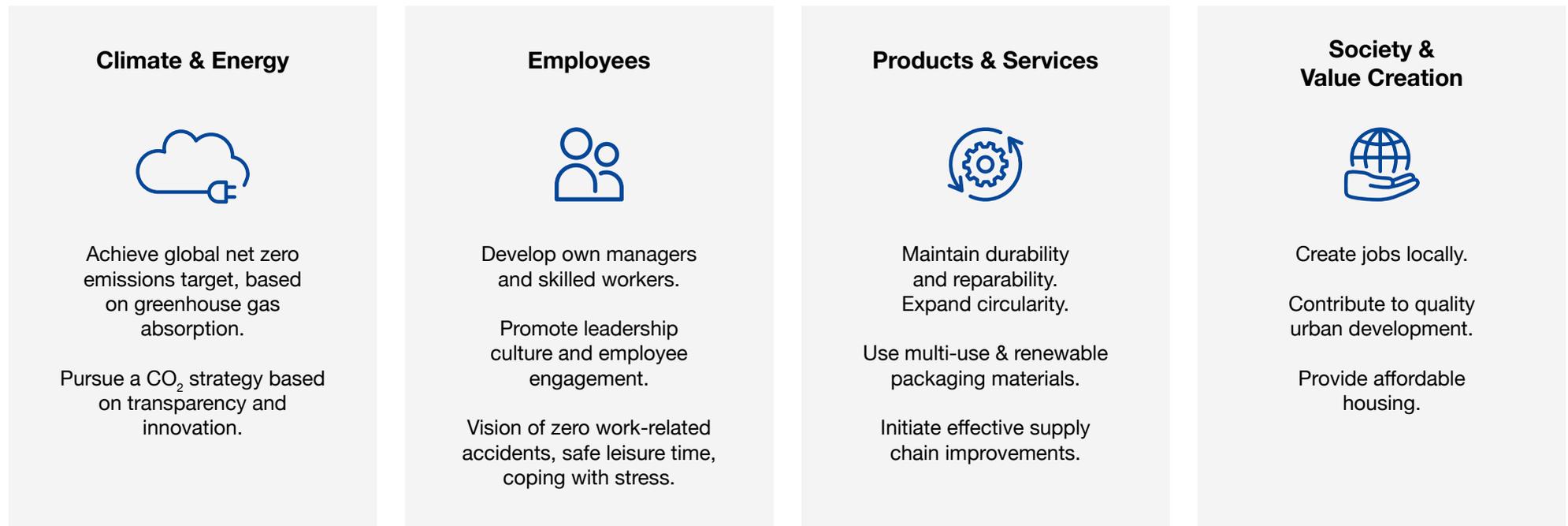


Figure 6 – MZ Corporate Sustainability Targets (Annual Report of Metall Zug 2021)

2.4 Sustainability goals



Figure 5 – Belimed Corporate Sustainability Targets



Global economic development poses a threat to the sustainable future of the environment, to business and to the long-term economy.

2.5 Global facts and figures

The following facts and figures highlight some of the problems and challenges associated with sustainability that the world is currently facing:

18 months

It takes the Earth **18 months** to regenerate what is used in **1 year**.



The world's richest 42 people possess the same wealth as the poorest 50% of the global population.

14,000 liters of water

It takes 14,000 liters of water to manufacture a new car.



14.4 billion

An estimated 14.4 billion cups of coffee are served in disposable paper cups. Enough to go round the planet **55 times**.



1 ton of recycled steel

Steel is the most recycled material on the planet. According to the Steel Recycling Institute, one ton of recycled steel saves 2,500 pounds of iron ore, 1,400 pounds of coal and 120 pounds of limestone.

1 ton of recycled paper

One ton of recycled paper saves 17 trees, 2,500 litres of oil, 2.5 cubic meters of land, 4,100 kWh of energy, and 26,000 litres of water.

1.7 planets

Humanity uses 1.7 planets to provide resources to produce goods and absorb waste.

Less than 20% of electronic waste is recycled.



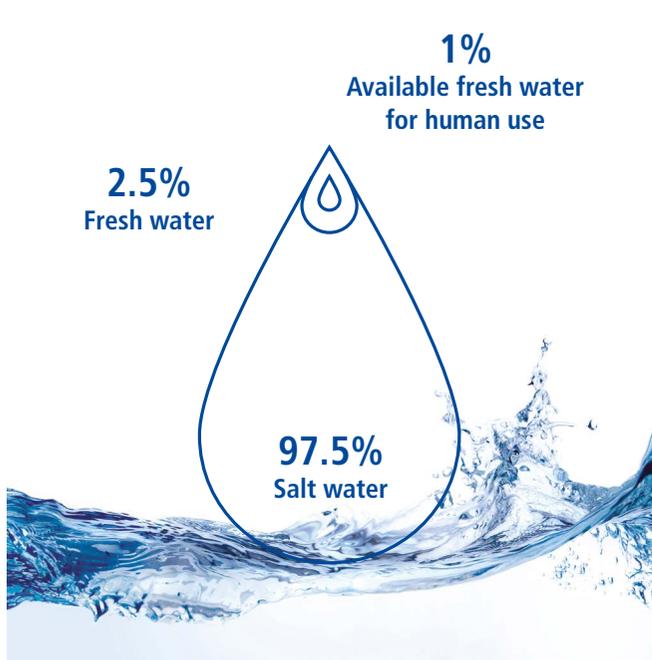
25% fewer total emissions

Recycled paper produces 25% fewer total emissions than conventional paper.



2.5 Global facts and figures

The following facts and figures highlight some of the problems and challenges associated with sustainability that the world is currently facing:



Did you know?

Hospitals are often the largest water users in the communities they serve. Even though our planet is 70% covered with water, only 2.5% of it is fresh water and only 1% is easily accessible for human consumption.

60% of global greenhouse gas emissions

Energy is the dominant contributor to climate change, accounting for around 60% of total global greenhouse gas emissions.

90% less energy

Lighting accounts for 15% of global electricity use. Switching to LEDs uses 90% less energy and lasts far longer compared to traditional incandescent lights.



70 times more

Transporting goods by road truck is over 70 times more carbon intensive than bulk shipping.

One round-trip ticket from London to New York generates more emissions than the average person produces in an entire year.

3 million years

As of 2018, the concentration of carbon dioxide (CO₂) in our atmosphere was 408 parts per million, the highest it has been in 3 million years.

7% of global CO₂ emissions

Employee travel is one of the business world's greatest contributors to carbon emissions. When the pandemic postponed commuting and travel, global CO₂ emissions dropped 7%.

3

Products and Services



3 Products and Services

Hospitals typically consume 2.5 times more energy than regular office buildings, there are therefore huge incentives to reduce operational and maintenance costs in all zones and with all equipment.



By reducing the consumption of energy, water and consumables and optimising the operation and cycle times for our machines, Belimed improves the environmental impact of our equipment for the hospital.

With over 50,000 machines installed around the world, Belimed is able to incorporate sustainable green features into all of our washing, disinfection and sterilisation machines. The latest generation of Belimed WDs and MSTs (WD 290 IQ and MST-H) make significant contributions to energy and water-savings compared with older models, and our focus on total cost of ownership (TCO) improves the lifecycle costs for central sterile services departments (CSSD) around the world.



3 Products and Services

Belimed WD 290 IQ

The latest Washer-Disinfector from Belimed provides the most cost-effective and environmentally friendly solution from planning to disposal.

The WD 290 IQ offers customers the lowest consumption of power, water and chemicals in the industry.



Belimed MST-H steriliser

Every machine is equipped with Belimed's energy-efficient process technology and a set of proven technical innovations.

The MST reduces power and water (steam) consumption and offers our customers lifecycle cost savings, through a 15 year chamber guarantee.



Water savings

-15%
WD 290

-30%
WD 290 IQ
Smart Fill

Basic
WD

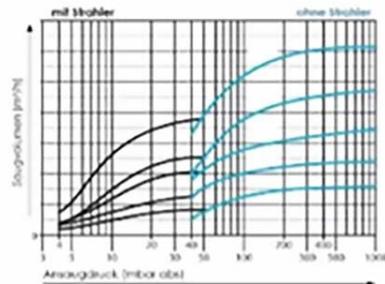
-55%
WD 290 IQ
Smart fill with
storage tank



3.1 Energy-efficient products

Belimed's 'high volume/low pressure' design concept for our washer-disinfection machines is proven to clean more effectively and more economically than other 'high pressure/low volume' methods, which rely on the mechanical force of high pressure jet sprays to 'knock off' protein soil. The design of our washer-disinfectors is based upon an Intelligent Load Management System which monitors the requirements of each and every load. Cost savings on each wash load, taken over the life of the machine, will add up to significant reductions in power and water, plus bottom-line financial savings for the hospital.

Belimed's MST range of sterilizers are renowned for their longevity, reliability and their economical use of resources. An integrated high capacity vacuum pump and energy-efficient heat exchangers help to provide water savings of 200L/h compared to traditional autoclaves. The MST-V and MST-H models are all provided with Belimed's 15 year chamber guarantee, the highest within the industry.



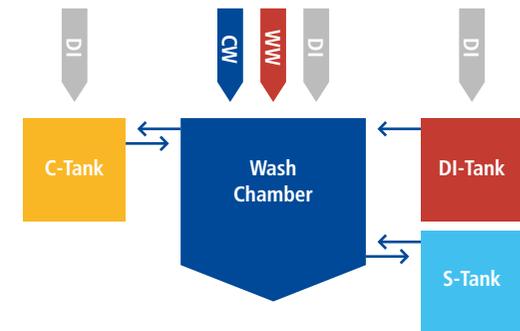
For our large washer-disinfection machines and cart washers, Belimed machines have a far lower cycle time compared to traditional machines available on the market. This provides more efficient processing and tremendous water and detergent savings, leading to hundreds of thousands in cost savings over a single year.

Our customers are able to extend the life of their instruments because our cleaning technology is so effective at removing corrosive bio burden. Instruments will stay sharper longer, shine brightly, open and close freely and last longer – another sustainable benefit. Better cleaning and sterilisation means our customers only need to reprocess their equipment once. More efficient reprocessing means faster turnaround times and lower instrument inventory (additional financial savings) – which means happy operating rooms.

Sustainable design specifications

All new Belimed product development projects are required to include new solutions to optimize consumption and reduce cycle times. As an example, our new generation of large washer-disinfectors will implement innovative water supply and storage systems, consisting of three dedicated storage tanks.

In addition to the DI tank, an S-Tank is a pure recycling tank, filled by recovering water from the wash-chamber and a revolutionary C-Tank is a pre-heating and recycling tank for wash-stages with chemical dosing. The main goal is the recycled use of chemical disinfection water, to save water, energy and chemicals. The second goal of the C-tank is to save use pre-heating to save processing time. Due to recycled chemicals from the C-tank, dosing time in the chamber is also reduced.

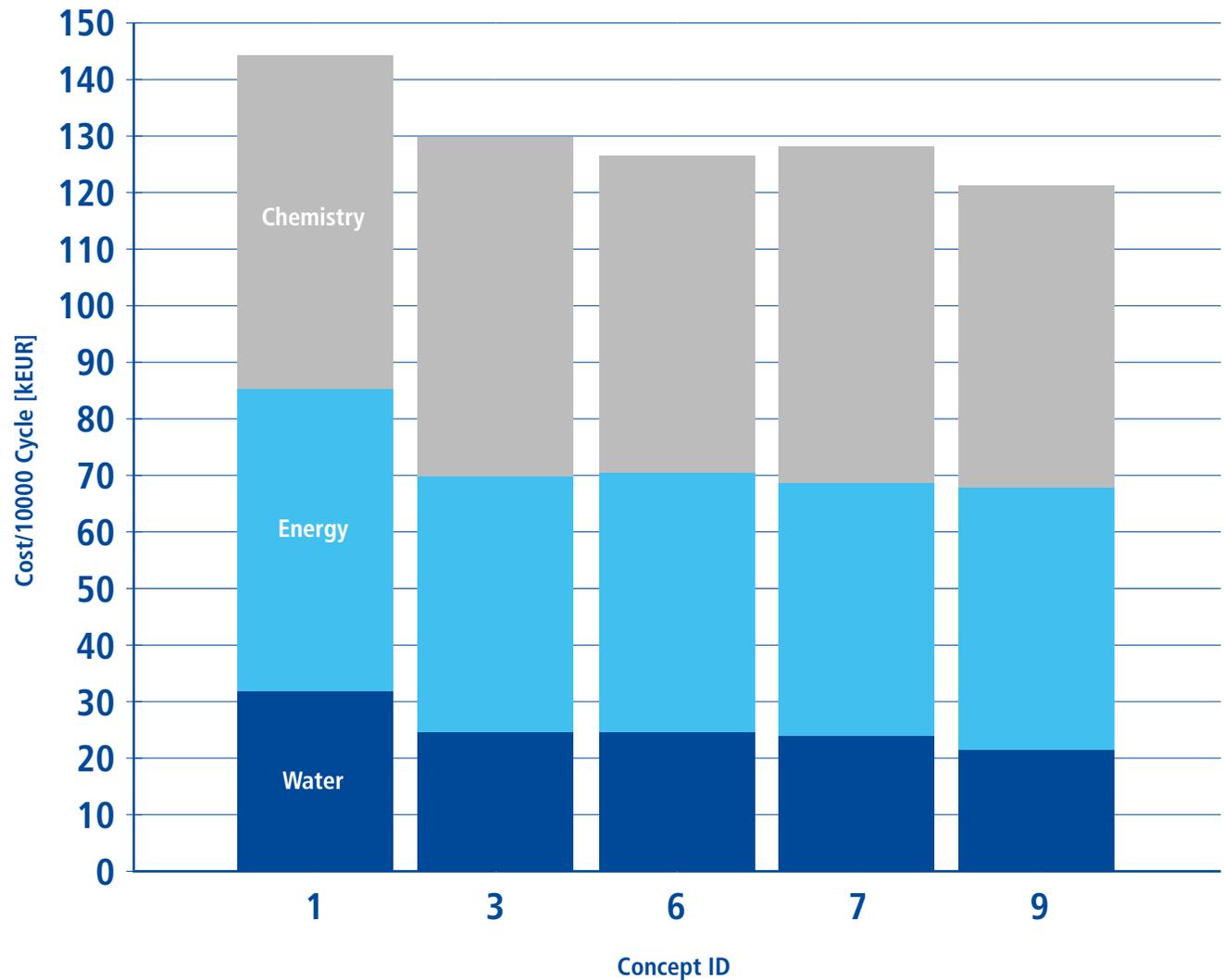


3.1 Energy-efficient products

With 24/7 operation hospitals are huge consumers of power, water and consumables.

Here are a few examples of how Belimed and our customers are investing in sustainable, eco-friendly practices to protect our planet:

- Washer-disinfectors with Smart-Fill technology and storage tanks
- Energy-efficient heat-exchangers within sterilisers to reduce water consumption
- Short cycle times with large washers and cleanstations
- Online tracking of performance data per hospital, per machine and per cycle
- Capacity analysis planning to define an optimum machine footprint for the CSSD
- Preventive and predictive maintenance over the lifecycle of the facility



3.2 Lifecycle management and TCO

Belimed AG is committed to providing high quality products and services to our customers for the effective lifecycle of their facilities.

With our global service teams, we also focus on total cost of ownership (TCO), reduced downtime, productivity improvement and the safety of CSSD employees, all of which reduce our environmental impact and improve the well-being of staff and patients. Many of our healthcare customers are now focusing on the operating costs for the lifecycle of their facilities (OPEX) as opposed to simply assessing capital expenditure (CAPEX) for new equipment. Belimed provides long-term, all-inclusive service contracts to measure equipment performance over extended periods (up to 10 years) to provide cost transparency for investment and planning decisions.

Our TCO model provides performance data (per cycle) for each machine, which can be multiplied by the estimated machine usage and the total TCO period to provide cost estimates for energy consumption, water, detergents and other consumables. This data can be extremely useful when evaluating the payback (ROI) of water-saving or heat recovery options and can also be used to provide a carbon footprint for the facility.

Belimed AG is committed to providing high quality products and services to our customers for the effective lifecycle of their facilities. Our Useful Life Guideline is used to identify and reduce risks and recommend appropriate actions to maximize the operation of all machines over the entire lifecycle.

The following guidelines are typical for Belimed sites globally:

Machine type	Model n°	Expected service life	Useful life	Economic life
Small washers	WD 150	8-10 years	10Y / 30,000 cycles	8-10Y / 25,000
	WD 200 / 250	8-10 years	10Y / 30,000 cycles	8-10Y / 25,000
	WD 290 / WD 290 IQ	10-12 years	12Y / 30,000 cycles	8-10Y / 25,000
Endo washers	WD 425 / WD 430	8-10 years	10Y / 30,000 cycles	8-9Y / 25,000
Large washers and clean stations	CS 750	8-10 years	10Y / 50,000 cycles	8-9Y / 45,000
	WD 390	8-10 years	10Y / 30,000 cycles	8-10Y / 25,000
	WD 750	10-12 years	12Y / 30,000 cycles	8-10Y / 25,000
Sterilisers	MST-V	12-14 years	14Y / 35,000 cycles	12Y / 30,000
	MST-V FO	12-14 years	14Y / 35,000 cycles	12Y / 30,000
	MST-V Vapofix	12-15 years	14Y / 35,000 cycles	12Y / 30,000
	MST-H	12-15 years	14Y / 35,000 cycles	12Y / 30,000

Our goal is to keep customers for the lifetime of their facility and to promote the benefits of technology and Total Cost of Ownership (TCO).



TOP TIPS

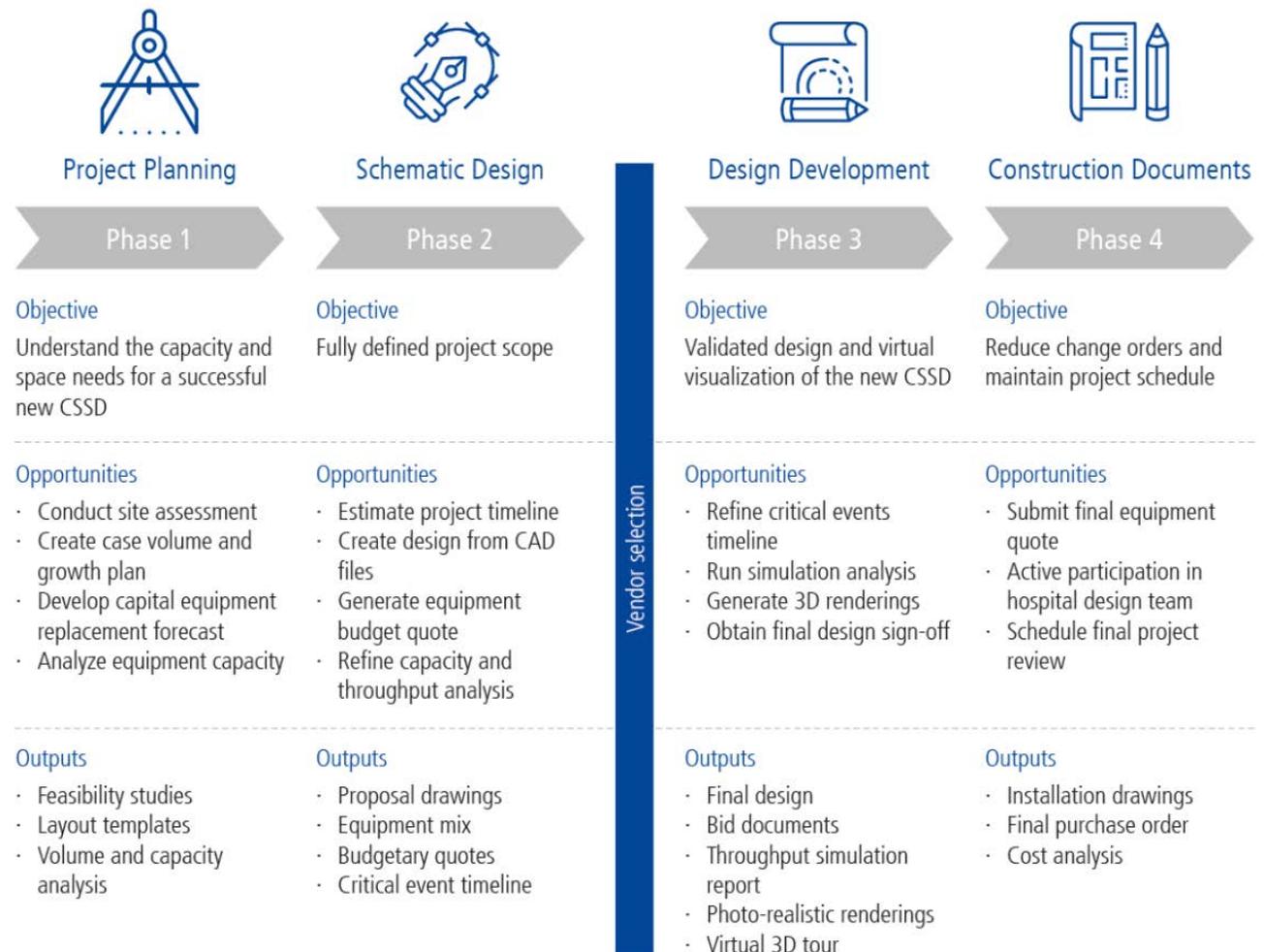
Belimed R&D endeavours to develop and engineer our equipment such that the 'useful life' target will be exceeded by 20%. Service statistics from thousands of installed machines indicate that 90% of our installations exceed these recommended values.

3.3 Planning and design

Early involvement of expert planning and design teams provides our customers with a clear picture of their capital equipment landscape for sterile processing.

An initial project assessment, combined with our proprietary capacity analysis tool, provides a detailed outline of the capital spend within a CSSD over the next 5 to 10 years – from immediate need to a long-term watch list. These design services will help to select the optimum machine footprint for the CSSD and also minimize operational risk and maximize the effect of spending within the department.

Our design process and digital design tools allow us to work with customers before the first brick is laid or the first piece of equipment is installed. These tools guide our decision making and provide insight into innovative ideas, allowing us to see the full potential of a space in great details, thus opening greater design possibilities and pointing the way to increased performance and efficiency.



3.3 Planning and design

For our hospital customers, Belimed's Planning and Design teams provide site assessments, predictive modelling and capacity analysis calculations. With careful planning and the use of predictive modelling and 3D visualisation, we offer our customers the following sustainable benefits.

- Designs and 3D visualisation (walk-throughs) to ensure the safety and well-being of CSSD staff
- Selection and sizing of equipment based upon actual reprocessing demand (including phased programmes where load is expected to increase over time)
- Minimal waste and maximum reprocessing efficiency
- Options to overcome peak loading periods and ensure uptime



Figure 7 – CSSD Planning and 3D Renderings

3.4 Sustainable consumables

In the global healthcare industry, safety and security in the workplace (as well as taking care of the environmental impact) are paramount.

This is why Belimed is working with industry partners to provide new and sustainable products using plant-based, active ingredients.

In 2022 Belimed launched the world's first range of plant-based process challenge devices (PCDs). These units are used for routine verification of cleaning processes within central sterile processing departments.

We are also evaluating new detergents for pre-cleaning and manual cleaning of medical instruments, using plant-based lactic acid as the main active ingredient. Other potential applications include general floor and wall degreasing, hand washing and surface disinfectants. All these solutions will be certified to prove their microbial efficacy and performance – and they are approved and certified to kill coronavirus (SARS-CoV-2).

Organic products may also reduce the risk of hospital staff suffering skin irritations and respiratory issues after prolonged exposure to chemical-based cleaning products, whether for manual or automated reprocessing of instruments or simply for surface cleaning (beds, operating tables and work surfaces). Additional arguments can be made that the disposal of organic or eco-friendly detergents via hospital wastewater systems poses zero risk to the water based ecosystems.



3.5 Service and maintenance

The costs to maintain and repair hospital equipment can typically be broken down into three categories:

- Breakdown
- Preventive
- Predictive

The most costly form of repair is usually breakdown, as this includes emergency repairs and time and materials. For sterile processing departments, the equipment must be brought back online quickly to ensure instruments and equipment can be reprocessed and prevent facility downtime.

Preventive maintenance reduces hospital costs by scheduling maintenance at periodic intervals (i.e. by equipment cycles or seasonal schedules) so as to prevent system failures. Predictive maintenance takes prevention a step further by using digital data to identify unique characteristics of the equipment and the operation of the CSSD before problems occur, alerting operators and managers that equipment performance has changed and maintenance is needed.

One of the major differences in the technology for hospitals and healthcare today is the availability of information and data about the systems and services. Belimed Prevent™ Preventive and Predictive Maintenance Services enables customers to prevent small issues from becoming major points of failure and possible downtime by:

- Improving maintenance and equipment productivity
- Improving machine reliability
- Decreasing replacement costs and equipment downtime
- Improving patient and operator safety



3.6 Equipment reconditioning/lifecycle extension

From a business perspective, there is often a need in special cases to take back used Belimed equipment and put it back into operation for a new customer. Where such a process is requested and is deemed possible, there is a sustainable benefit as the product lifecycle is extended and the equipment can return to its original operational readiness and can be resold or rented as a pre-owned or second-hand device (reconditioned).

The reconditioning of used products is carried out by Belimed at selected Belimed service locations which have the necessary equipment and infrastructure (e.g. media connections, tools, testing equipment, access to spare parts). Evaluation of such an initiative is made on a project basis and must also consider the negative impact of physically transporting the equipment to the processing site.

Where commercially and technically feasible, the following products would be considered for return, recondition and for resale (or rental) as pre-owned or second-hand devices:

Washing and disinfection equipment (WD)

- WD 250, WD 290, WD 290 IQ, WD 425, WD 430

Steam sterilizers and steam generators

The following products are reconditioned if their removal and transport is technically possible and economically viable (check structural conditions, especially in the case of large chambers):

- MST-V, MST-H, ELD, WTD

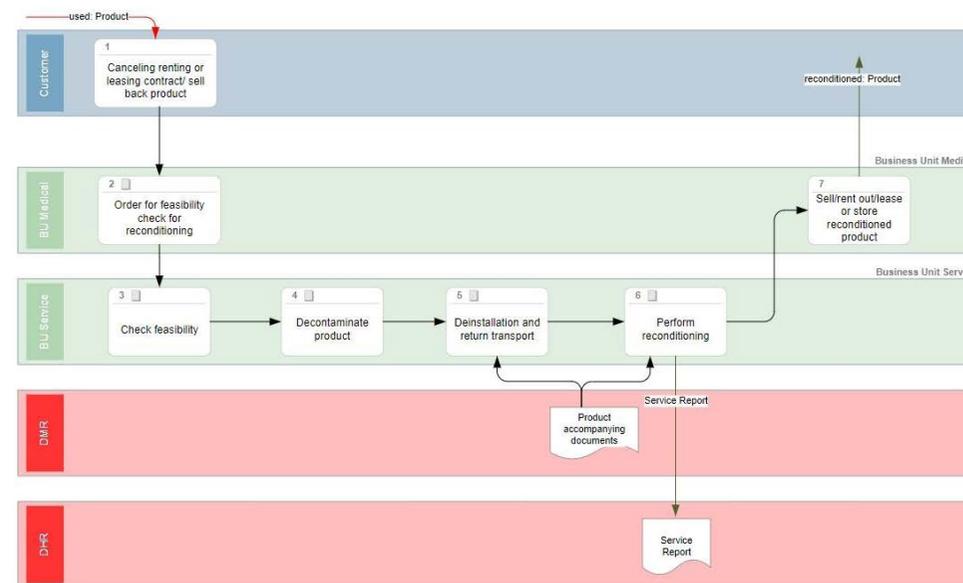


Figure 8 – Equipment Reconditioning Process

3.7 Digitalization

Digitalization has drastically changed how we work and live, and it will continue to shape the healthcare industry. We believe that a digitalized, smart hospital needs a data-driven CSSD, which allows modern and digital work processes, creates higher work efficiency and makes work in the CSSD easier and safer for everyone.

Belimed's washer-disinfectors and sterilizers produce up to two million data points per cycle, including program selection, chemical dosing quantities, temperature, water volumes, operating times and water conductivity. SmartHub is a software solution which ensures that all relevant machine data is captured in real-time from any Belimed machine.

Sustainable advantages:

- Go paperless: All documentation is digitally archived and easily accessible through SmartHub. This saves time and is more environmentally friendly.
- E-Learning and troubleshooting: Thanks to the integrated training modules, a well-trained team is at your disposal at all times. The help for troubleshooting module also provides the ability for machines to be brought back into operation without outside assistance.



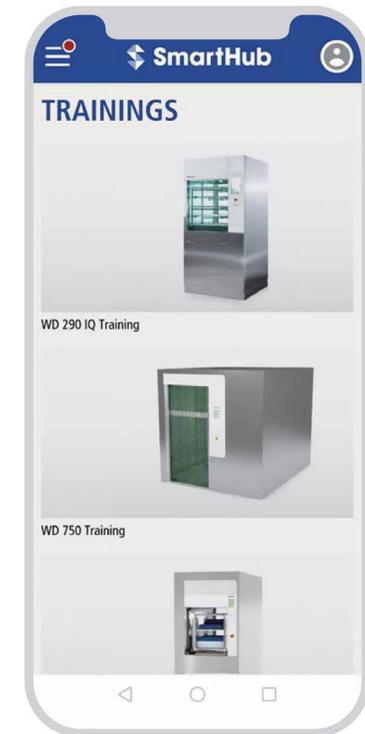
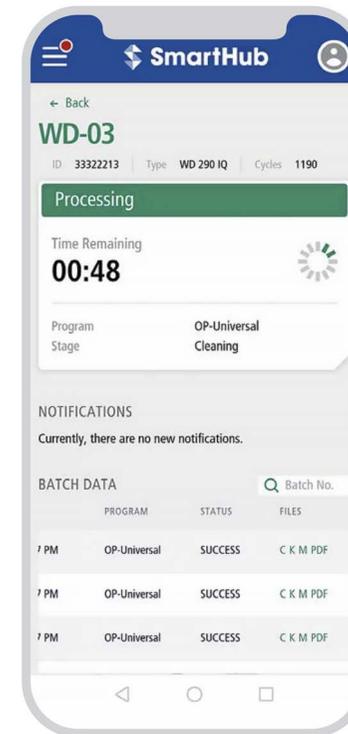
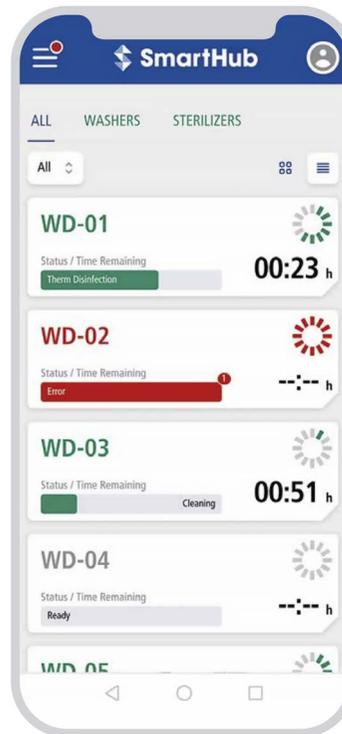
1. Simple transparency for your CSSD with machine statuses for washers and sterilizers available in real-time.



2. Stay up to date with your batch documentation and machine notifications anytime, anywhere.

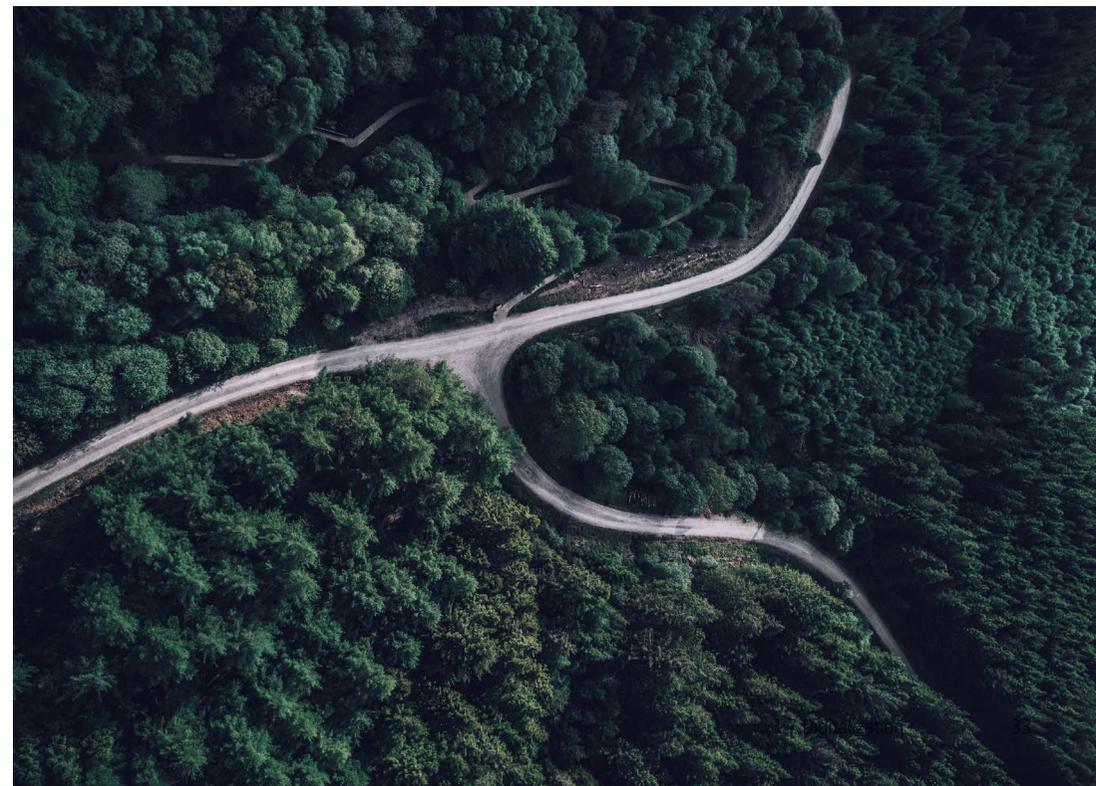


3. Ensure your team is always up to date and fully trained on the machine to ensure smooth operation.



4

Climate and Energy Initiatives



4 Climate and Energy Initiatives

A commitment to energy-efficient products alone is not enough, we need to drive efficiencies within our manufacturing, our supply-chain and our logistics.

SMART goals, a realistic project plan, defined roles and tasks and clear reporting guidelines are required to deliver sustainable business practices and efficiencies for our customers and our business.

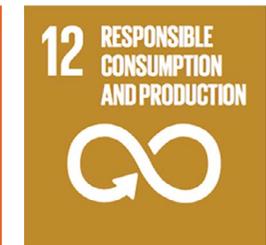
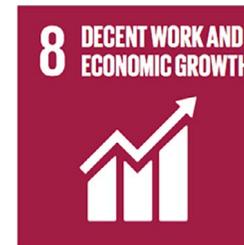
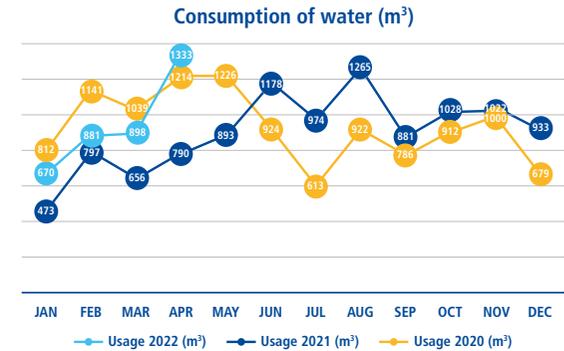
Sustainable innovation can be an attractive impact investment as our solutions address high demand and cost pressures within healthcare (environmental and social returns). By making a commitment to sustainability and driving energy-efficient and sustainable solutions, Belimed addresses the challenges of growing demand and rising costs within healthcare. In addition to regulatory compliance and cost pressures for hospital and healthcare, there is a growing awareness of sustainability topics, which are now starting to impact the choice of products and solutions from suppliers and service providers.

Fortunately for Belimed, these challenges also bring new opportunities; from the development of new and innovative equipment solutions, to retaining and attracting new talent for our workforce. The pursuit of a circular economy from the Belimed production and supply chain, through to sustainable operation and recycling will offer long-term commercial success for our customers, our business and for society as a whole.

Belimed's main production sites are powered by low-carbon power sources: In Sulgen, Switzerland we operate with renewably sourced, Swiss hydro-electric power and in Grosuplje, Slovenia the power is sourced from nuclear energy. By many definitions, nuclear energy is not 'renewable' but in terms of climate change it is considered as a low carbon fuel because its production does not release greenhouse gases.

At Belimed, we are concerned about the future of our planet and closely monitor and track our footprint. We have a rolling program to be more sustainable in our production areas and to continuously make improvements to reduce greenhouse emissions. At our manufacturing centres in Grosuplje, Slovenia and Sulgen, Switzerland, Belimed has achieved some important milestones to mitigate climate change and reduce energy consumption as well as improve the overall well-being of our employees.

In addition, Belimed maintains a rolling roadmap of sustainability tasks and initiatives, we also track the monthly usage of water, gas, electricity and waste.



4.1 Energy efficient and green solutions

Product development is another important element of Belimed's sustainability journey. Our machine designs must continuously use fewer resources whilst achieving perfect cleaning and sterilizing results: Optimized for an intelligent balance between sustainability, hygiene and affordability.

Belimed equipment is designed to use less water, less energy and less chemicals. We pay particular attention to achieving cleaning and disinfection with minimal utility consumption and cycle times. Automatic filling quantity adaptation results in only using as much water and detergent as is effectively required, depending on rack sizes or load. Due to DI water preheating, integrated high-performance drying and intelligent reuse of the exhaust air energy, we achieve optimum cycle times and a process that is as gentle on the instrument as possible.

Our adaptive 'Smart Fill' control system enables our customers in the CSSD to significantly reduce water consumption, thereby also cutting down on cleaning solutions and energy.

This innovative feature not only reduces operational costs but is also good for the environment.

We know that many customers are willing to pay more for energy-efficient and eco-friendly products, solutions and services (see below). The EU energy consumption labelling scheme undeniably has an impact on the consumer buying decision for commercial goods. Whilst there is no equivalent energy-labelling system today in the medical device industry, more and more focus is now being placed on this area.

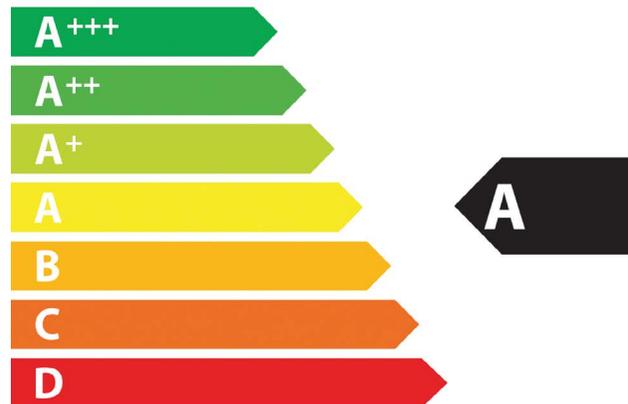
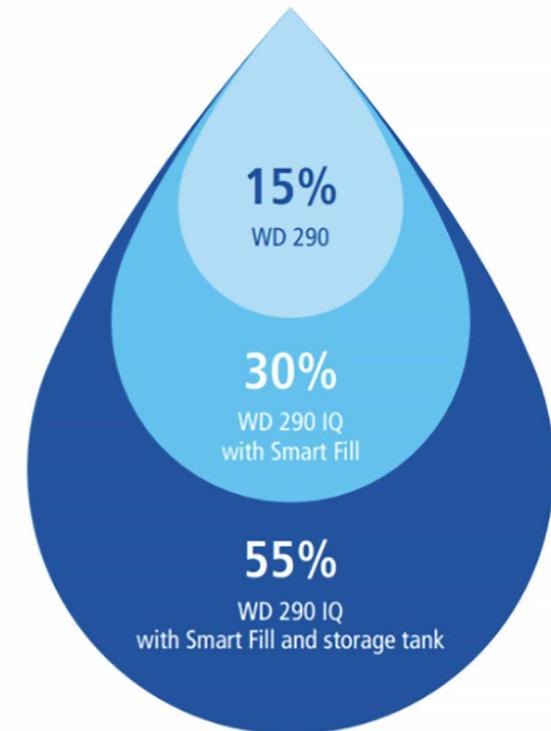


Figure 9 – European Union energy labelling scheme

Up to and including 2021, the majority of European commercial appliances had an energy efficiency rating of A or higher.

DID YOU KNOW?

Water savings



4.2 Greenhouse gas certification



Reducing CO₂ emissions is a focus of our commitment to sustainability and, in the long term, we want to become carbon neutral at our production centres in Switzerland and Slovenia, and also for the sites in Zug.

At Belimed, we routinely track the energy consumption and carbon emissions from our manufacturing sites and our key operations, and have registered for certification according to ISO 14064 – Greenhouse Gas Certification.



Note: The production sites of Metall Zug in Switzerland are included in Scope 1 (heating and operating energy, own vehicles, refrigerants), Scope 2 (electricity) and Scope 3 (business flights). CO₂ neutrality could be achieved by reducing emissions internally and offsetting them with external CO₂ reduction projects. Other international locations will also report and offset their emissions in the coming years.

4.3 Manufacturing

A commitment to energy-efficient products alone is not enough, Belimed is also driving efficiencies within our manufacturing facilities, our supply-chain and our suppliers. With optimized utilization of our infrastructure and consistent recycling of waste, Belimed contributes its share to the recycling economy.

To improve energy-efficiency in our locations we exchange equipment and infrastructure with high energy consumption with lower consumption. We monitor the consumption of the different devices and optimize their use. Finally, we minimize waste and try to re-use it whenever possible. In the near future we will

enlarge our scope of energy saving to the upstream processes including suppliers and transportation from sub-suppliers.

One example was the upgrade to LED lights instead of conventional lights at our Grosuplje manufacturing site. This gives an immediate energy reduction of up to 60% and from the worker's point of view has helped to reduce eye strain, fatigue and accidents. Poor lighting has been shown to lead to work errors, poor manufacturing quality and low productivity.

When designing the new lighting systems, we set ourselves the goal of achieving an average room illumination of at least 750 lux as needed for precision mechanical and electrical assembly. By evenly installing the new LED lamps, we achieved an average illumination range between 750 to 900 Lux. With the new lights, we will save 65,000 kWh of electricity consumption in the next five years, which equals the energy consumption of 46 metric tons of CO₂.

Simple solutions and thinking outside the box can also deliver excellent financial and environmental savings. A simple design change in the packing our medical wash racks and the replacement of PU foam for our packaging inserts with new inserts made from recycled wrapped paper is saving costs and freeing up space in the production area in Grosuplje, Slovenia. A new sustainable packaging concept for our pressure vessels in Sulgen, Switzerland is reducing waste and improving our packaging efficiency.

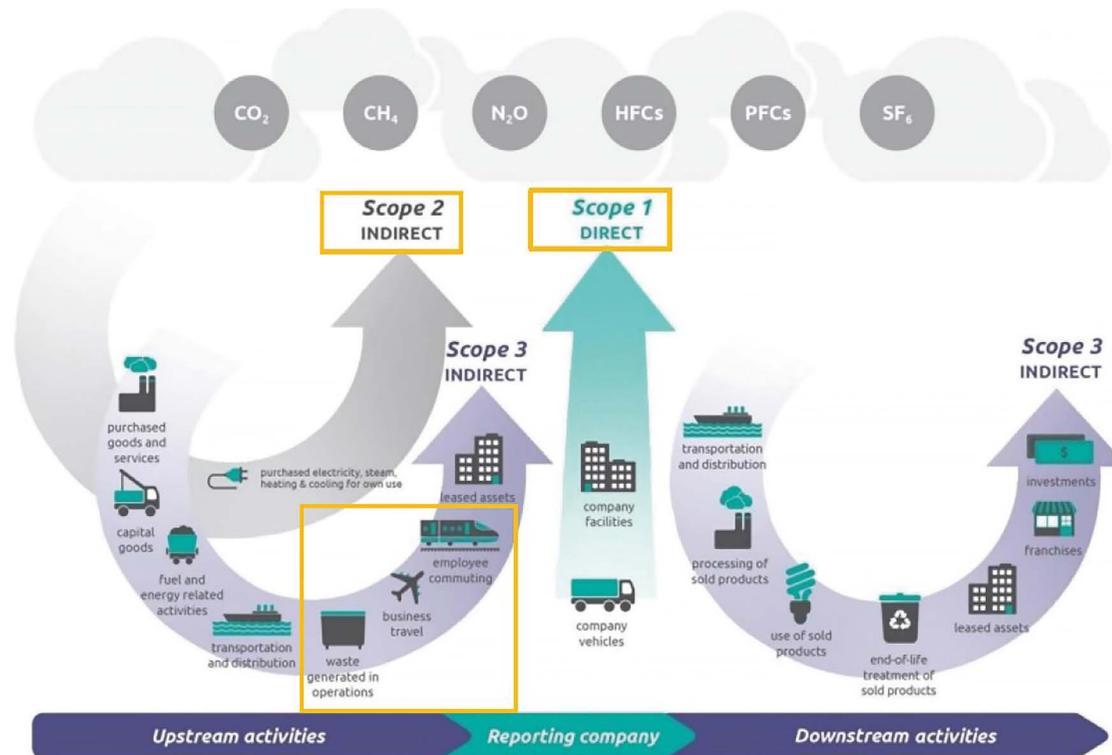


Figure 10 – Direct and indirect emissions (GHG protocol)

4.4 Recycling initiatives

Where possible, any waste product which cannot be recycled is systematically being replaced by material that can be. Small torn pieces of cardboard used for separation of metal parts are now replaced with reusable foam pads.

Belimed uses 100% FSC (Forest Stewardship Council) certified sawn wood and wood chips within our equipment packaging. We also use 100% recycled paper, which is produced with 60% less energy than paper from fresh wood pulp. This allows us to save 1 to 1.7 trees by using 100kg of recycled paper.



In 2021 we introduced an 'ECO-sticker' concept, this was developed to promote the re-use and recycling of cardboard boxes for Belimed spare parts. This simple yet effective program is reducing the quantity of packaging (and associated costs) and the associated carbon footprint.



Other initiatives include the use of padded envelopes for small parts (reducing freight costs and CO² emissions), dedicated recycling stations and the use of shock-absorbing paper-padding.



4.5 Supply chain and purchasing

Belimed has an active program to bundle transportation routes and involves major suppliers in sustainability programs to reduce the CO₂ emissions wherever possible. Examples include the bundling of equipment and spare parts deliveries to the same address per day in Switzerland, NL and Austria. The resulting reduction in weight and volume has a direct reduction in CO₂.

Belimed only works with sustainable logistics partners for our shipments, spare parts and chemistry warehousing. DHL, for example, tracks all Belimed shipments and measures our carbon footprint annually, and by product categories to ISO 14064 – Greenhouse Gas Certification.

In 2021, Belimed US made a consolidation of the warehousing at our US offices in Charleston, South Carolina. The new setup will result in less carbon emissions (and less travel between facilities) with an expected saving of 2,000kg of CO₂ per year. In addition, the relocation of our consumables warehouse in the USA in 2022 will reduce transportation costs by \$100k per year and will result in an annual saving of 30,000 kg of CO₂.

Other initiatives started in 2022 include a new hybrid supply air and sea freight model, to optimize CO₂ value per tonne and a system to manage equipment flow and container sizes between production sites, warehouses and our customers. Even the packaging and deliveries of small parts has been revised, with new padded bags now used as standard, replacing cartons and boxes.

MISSION 2050
ZERO EMISSIONS
GOGREEN



Customer Carbon Footprint Report

Customer Name: Belimed	DHL Express Contact: Gogreenservices.Express@dhl.com	
Reporting Period: 2021 - January to 2021 - December	Creation Date: 19 January 2022	

Summary of Customer Carbon Footprint at DHL Express

CO₂e Emissions by Source

Source	TtW [in t]	TtW [in %]	WtW [in t]
 Air Transport	130.44	76%	159.26
 Road Transport	5.35	3%	6.68
 Pickup & Delivery	31.55	18%	38.55
 Facilities	4.19	2%	4.80
Total Emissions	171.53	100%	209.29
Emissions Offset	0.03	0%	0.04



TOTAL CARBON FOOTPRINT AT DHL EXPRESS

DHL Express Managed	171.53 tonnes CO ₂ e TtW
Overall Footprint:	209.29 tonnes CO ₂ e WtW
Emissions Offset:	0.04 tonnes CO ₂ e WtW

DHL Express Product Group Overview

Product Group	Nr. of Shipments	Weight [in t]	Distance [in km]	TonneKilometre [in tkm]	CO ₂ e TtW [in t]	Share of CO ₂ e TtW	CO ₂ e WtW [in t]	Energy TtW [in MJ]	Energy WtW [in MJ]
TDI	10'509	78.34	20'878'694	204'986	161.09	94%	196.56	2'266'066	2'803'778
TDD	2'750	22.70	272'962	1'926	8.91	5%	10.86	125'834	162'914
DDI	163	2.89	185'388	3'395	1.53	1%	1.87	21'762	28'469
Customer Total	13'422	103.93	21'337'044	210'306	171.53	100%	209.29	2'413'662	2'995'161

Results are calculated according to the EN 10259:2012 standard. Please consult Gogreenservices.Express@dhl.com to obtain supporting data and information. Please refer to the Glossary tab for terms and abbreviations used here.

Belimed only works with sustainable logistics partners for our shipments, spare parts and chemistry warehousing.



5

People and Employees



5 People and Employees

Our focus is to instill living, breathing confidence in our customers; empowering them to advance medical care and protect the lives and well-being of patients and staff.

This is supported by Belimed's 60 year history of delivering high quality, highly reliable cleaning, disinfection and sterilization solutions in the CSSDs.

As engineers of confidence, we build trust and value by precisely identifying and resolving customer challenges and optimizing requirements to improve their overall work environment. Our complete spectrum of sterile workflow solutions includes planning and design, market-leading equipment, consumables, servicing, data connectivity, education and training.

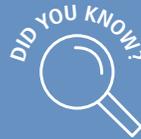


5.1 Education and training

In an increasingly competitive global business environment, companies are doing their best to attract elite talent. We are well aware that today's top talent looks for employers that enable them to learn and grow professionally. We are aware that if we want to continue to attract the best staff, we must also follow the trends in the future of work and employee expectations.

The largest companies in the world have already realized that Generation Z (born between 1996 and 2010) is an extremely large group of future employees. This demographic has unique values, priorities and work perspectives compared to its parents (Generation Y). The challenge is how companies like ours can hire Generation Z representatives (predicted to represent 75% of the workforce by 2030) and how to motivate them to stay. Studies show that members of Generation Z care deeply about our society and the planet we live in. They want to leave their mark and improve on what previous generations have failed to do.

A whopping 94% of young people in the Generation Z believe that companies should tackle social and environmental issues.



To be able to follow the growth of customers and at the same time develop new business solutions, we pay a lot of attention

to human capital, where we pursue the goal of placing the right people in the right job. As a socially responsible company, we are giving people the opportunity to constantly grow professionally and as individuals. We invest in continuing professional development and the training of interns and apprentices.

In 2021 we initiated a global leadership training over 3 working days to further empower our leaders in building up and maintaining winning teams. More than 90 managers were trained:

- Module 1: Self-awareness, Belimed leadership framework direction, alignment and commitment
- Module 2: Influence tactics
- Module 3: Light and heavy feedback
- Module 4: Coaching for performance
- Module 5: Building winning teams
- Module 6: Leading change

At Belimed, we aim to promote at least 25% of our employees internally, whilst maintaining gender equality. Potential successors and future talents are identified and assessed twice each year, based upon the Belimed Succession and Talent review process. This includes the assessment of business critical functions as well as risk management and surveys to prevent key employees from leaving.

For every single employee, Belimed implements an individual personal development plan which are a fixed part of the annual appraisal reviews. Our employees can also profit from modern, mobile and flexible working solutions, with the aim of supporting our promise of being Engineers of Confidence.

Our new Innovation Management Process (BIMP) encourages commitment, creativity and innovation amongst the existing workforce and aims to reward teams who deliver new ideas, whether for business improvement, energy-efficient technology or new process improvements.

Belimed academy

Belimed constantly invests in the education and training of our employees and our Belimed Academy has been operating for many years. This learning platform offers a wide range of training and career modules, including application know-how, technical product courses, good working practices, regulatory training and leadership skills, using a combination of physical classroom training and online training sessions. In 2021, Belimed invested 580 hours in E-Learning activities as well as 4,560 hours in physical classroom training at our training center in Zug and at locations around the world.

5.1 Education and training

The screenshot shows a web interface for a training catalog. At the top, there is a navigation bar with links for COURSES, KNOWLEDGE POOL, ADMINISTRATION, DASHBOARD, INFO, and HELP. The user is logged in as DANNY CUMMINS. The main header is 'TRAINING CATALOG'. Below this, there is a search bar with the text 'code of' and a search icon. To the left of the search bar, there are filters for Categories, Type, Training activities, and Language. The search results are displayed in a list format. The first result is 'Code of Conduct Classroom Training', which is a classroom training session on the topic of Metall Zug Code of Conduct. The second result is 'Metall Zug Code of Conduct CN', which is a classroom training session in Chinese. The third result is 'Metall Zug Code of Conduct EN', which is an e-learning session in English. Each result includes a small thumbnail image and a brief description.

Remove filter

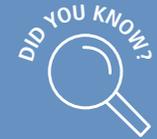
Sorting: Title ascending

code of

Search results for "code of"

- Code of Conduct Classroom Training**
Classroom training on the topic of Metall Zug Code of Conduct. For everyone not able to take the corresponding e-learning or group refresher courses.
- Metall Zug Code of Conduct CN**
通过短期线上学习，我们通读了行为准则。首先我们讨论了关于合规及其重要性。然后，我们将介绍我们的行为准则中的商业原则，以及如何做出合乎道德的商业决策。最后，你会发现一个知识检查来修改你今天所学的内容。电子学习是所有员工的必修课。
- Metall Zug Code of Conduct EN**
In this e-learning you will get to know the Code of Conduct of Metall Zug Group and how to use it for guidance when encountering ethical dilemmas at work. First we will talk about compliance and why it is important. Then we will cover business principles in our code of conduct and how you can make ethical business decisions. At the end you will find a knowledge check to revise what you have learned. E-learning is obligatory for all employees.

In 2021, Belimed employees completed over 5,000 training sessions across all of our business areas.



In 2022 new EasyLearn and e-Learning training programs are being developed for Belimed staff and customers, which highlight case studies and testimonials showing where equipment and solutions contributes to economic, social and environmental issues.

As a standard routine, all new employees will conduct e-Learning to be trained on mandatory topics including our Code of Conduct and information communication technology (ICT) Policy.

A photograph of three people hiking on a mountain ridge at sunset. The sun is low on the horizon, creating a warm, golden glow and silhouetting the hikers and the mountain peaks. The sky is filled with soft, wispy clouds. The hikers are walking away from the camera, and the landscape is a vast, hazy mountain range.

As a socially responsible company, we are giving people the opportunity to constantly grow professionally and as individuals. We invest in continuing professional development and the training of interns and apprentices.

5.2 Engaged and satisfied employees

The feedback of our employees is very important to us. The commitment and satisfaction of our employees is managed and benchmarked regularly as well as in a holistic approach. In 2021 we measured and benchmarked the commitment and satisfaction of our employees together with other divisions of the Metall Zug Group.

Our goal was to have a high response rate from our employees, so that we could take further steps to ensure the working environment is tailored to employee needs. The response rate was 85% and the engagement rate was 71%. We also received 1,858 direct comments which is now helping us to better understand our strengths and weaknesses, and to develop further ideas for improvement.

We also actively manage social media platforms including LinkedIn and Facebook and we have a standardized exit-feedback process for all employees voluntarily leaving Belimed.

Another key element of our sustainability strategy is to keep our employees up to date with everything that is going on within the company. Our value-based internal communication is supported by regular Town Hall meetings in all Belimed locations, video-blogs and newsletters. We also provide our staff sports activities, external social events and gatherings¹²

THEME	TEXT
Team	I am satisfied with my work team
Purpose	The work that I do at Belimed is meaningful to me
Role	My role is an excellent fit with my strengths
Manager	I would recommend my manager to others
Feedback	My manager provides me with feedback that helps me improve my performance
Distress Empowerment	I feel empowered to make decisions regarding my work
Work-Life Balance	I am able to successfully balance my work and personal life
Belonging	I feel a sense of belonging at Belimed
Recognition	I feel satisfied with the recognition or praise I receive for my work
Distress Resources	I have the resources I need to do my job
Leadership	I have confidence in the leadership team
Prospects	I am excited about Belimed's future
Growth	I have good opportunities to learn and grow at Belimed
Sustainability	Belimed is committed to sustainability
Collaboration	Teams at Belimed collaborate effectively to get things done
Strategy	I understand how Belimed plans to achieve its goals
Culture	Belimed has a great culture
Action Taking	I believe meaningful action will be taken as a result of this survey
Communication	Belimed does a good job of communicating with employees
Career	I have good career opportunities at Belimed
Decision Making	Overall, I am satisfied with how decisions are made at Belimed

Response Rate Belimed

85%

Responses 802
MZ 82%
Glint Benchmark 80%

Engagement Belimed

71

Comments 1.858
MZ 71
Glint Benchmark 75

5.3 Safety and well-being

Our most important assets are our workforce. By promoting physical well-being amongst our employees, we are supporting all aspects of physical health. We also pay attention to mental well-being, creating an environment where people feel positive, build resilience and achieve good work-life balance and a strong sense of community

All health and safety incidents are logged and assessed to understand root causes and make changes to prevent re-occurrence. Dedicated health and safety managers are appointed in all Belimed entities with the goal of avoiding or minimizing the number of work-related safety incidents. We also set targets to reduce the number of non-work-related accidents to 10% below the actual average. As of 2022 every entity will have to implement at least one initiative to support this target.

For every Belimed project, all service incidents, errors, defects or breakdowns are logged and reported. Any incidents which have the potential to result in injury or health issues are reported with the highest priority (hazard to human) and addressed immediately.

Health is the most important human asset and an essential basis for performance and well-being. In 2022, Belimed Germany has implemented a wellness program for staff including:

- Spiroergometry: short and compact determination of important vital health parameters
- Online lectures on 'positive psychology' and 'the way to a strong immune system'
- 'Healthy in the team' - training for team building/team development at a summer seminar



5.4 Diversity

As an international Swiss-based company, it is in our DNA to engage employees from a broad range of cultural backgrounds. We strongly believe that diversity among our employees is not only a key sustainable criteria but also an important strategic success factor. As an engineering-based company, the total number of female employees across our organisation (currently at 18%) is still below our expectations. However, this is probably linked to the limited number of females in what is traditionally a male-dominant industry. However, the gender diversity is already at high level within our finance and IT teams (70%) and in sales and marketing (31%).

Our Code of Conduct requires Belimed to promote a diverse atmosphere where all employees, partners and suppliers are treated with respect. We have a commitment to equality and equal opportunity for all individuals, regardless of nationality, religion, race, age, gender, ethnicity, disability or sexual orientation. Belimed commits to a strong focus on diversity in recruitment of new colleagues every day.



5.5 Modern slavery

Belimed AG (including all of its subsidiaries) will never condone or accept forced labor, including human trafficking and other forms of modern slavery. Belimed has production facilities in Switzerland and Slovenia, where there are no issues or risks of slavery and human trafficking in place.

Belimed also has a zero-tolerance policy to forced labor, slavery and human trafficking in any form towards its business partners and suppliers. Major Belimed suppliers are evaluated regularly by the global sourcing and purchasing teams. These suppliers are obliged to comply with all applicable laws and regulations including but not limited to:

- a. Laws and regulations relating to working conditions
- b. Health and safety laws and regulations
- c. Laws and regulations prohibiting child labor
- d. Import and export restrictions
- e. Antitrust prohibitions and competition law restrictions
- f. Laws and regulations to prevent corruption and bribery
- g. Internationally recognized compliance standards (in particular, the principles of the UN Global Compact and principles of 'UN Convention on the Rights of the Child').



Figure 11 – UN Convention on the Rights of the Child

6

Governance and Society



6 Governance and Society

The Code of Conduct of the Metall Zug Group comprises our basic values and key principles according to how we act and do business and which help us to pursue high ethical, professional and legal standards.

Metall Zug Code of Conduct

The Code of Conduct applies to all employees and board members of the Metall Zug Group entities worldwide. We expect all employees to know and follow our Code of Conduct. Failure to do so may lead to disciplinary consequences, including termination of employment. All of our employees are required to acknowledge that they have received a copy of this Code of Conduct and that they have read, understood and agreed to be bound by its provisions. All Belimed employees receive regular training on the Metall Zug Code of Conduct via our Belimed Academy platform.

To date, 661 Belimed employees have successfully completed the Metall Zug Code of Conduct e-Learning program.



Belimed acts with a long-term view in order to create sustainable success for all our stakeholders, including our customers, employees and shareholders. We recognize long-term value over short-term profit. We maintain a culture of responsibility and reliability. We understand corporate responsibility as ensuring a future for our business beyond the next generation by addressing social, governance and environmental issues.



6.1 Carbon offset/internal CO₂ fund

Lowering CO₂ emissions is another key element of the sustainability strategy of Belimed and Metall Zug, who pursue a midterm Net-Zero-Emissions target. Initially, CO₂ neutrality is to be achieved for production operations at the Zug site and for the entire technology cluster in Zug. The Metall Zug Group's producing Swiss companies have signed an agreement on objectives with the EnAW (Energy Agency of the Swiss Private Sector) committing to continually reduce CO₂ emissions by means of business measures.

To additionally motivate Belimed and other business units to take sustainable business decisions, the main production companies signed up to a contractually agreed internal CO₂ levy. At CHF 120 per tonne of carbon dioxide, the Group's own levy corresponds to the maximum rate set by the Swiss Parliament in the CO₂ Act.

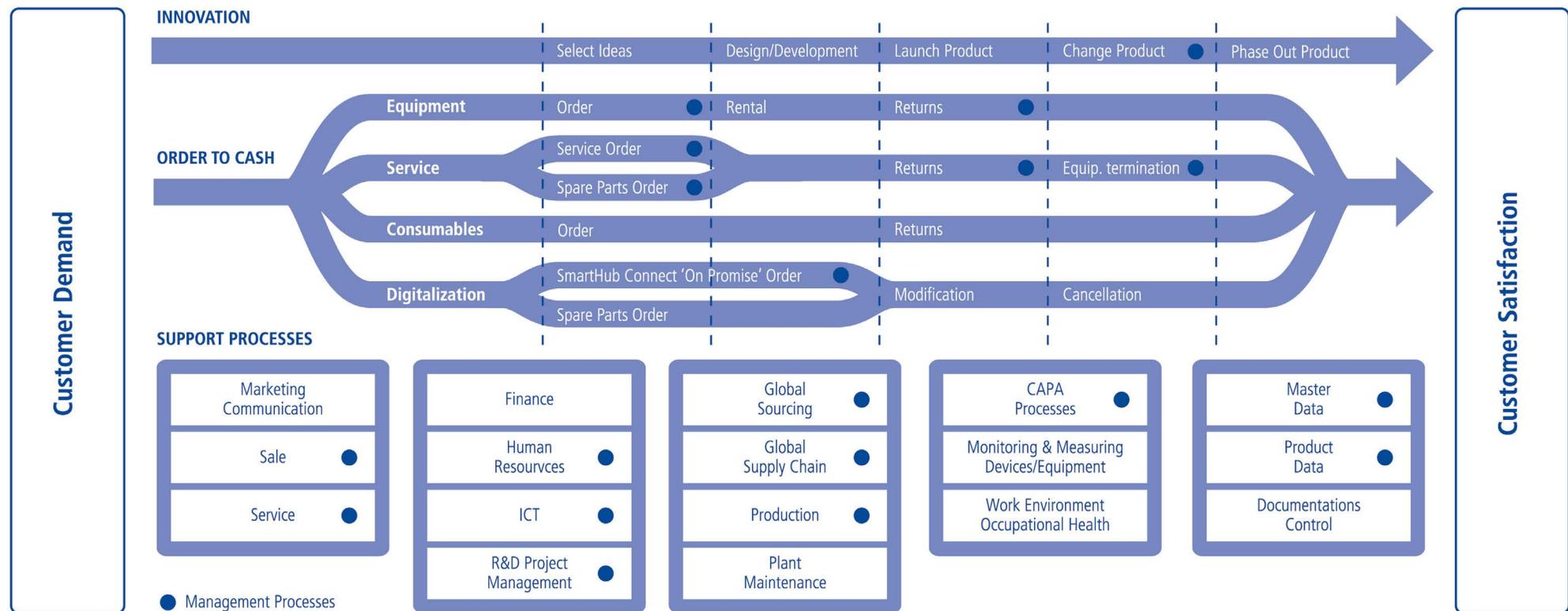
The proceeds from the CO₂ levy flow into a common fund and are earmarked for investment in additional climate protection measures that are as local and closely aligned with the company's intentions as possible. Since the introduction of the internal levy effective 2018, the business units have paid around CHF 2.0 million into the fund in a gradually expanding scope.



6.2 Lean and efficient processes

To be competitive and more sustainable, leaner business strategies are an important lever to achieve positive business results. With our integrated management system (IMS) we aim to avoid errors and reduce unnecessary process steps, with the principle goal of maximizing value for our customers. With lean

processes we encourage small, incremental changes in our business operations to improve quality and efficiency, optimizing resources and creating an uninterrupted workflow based on near real-time customer demands.



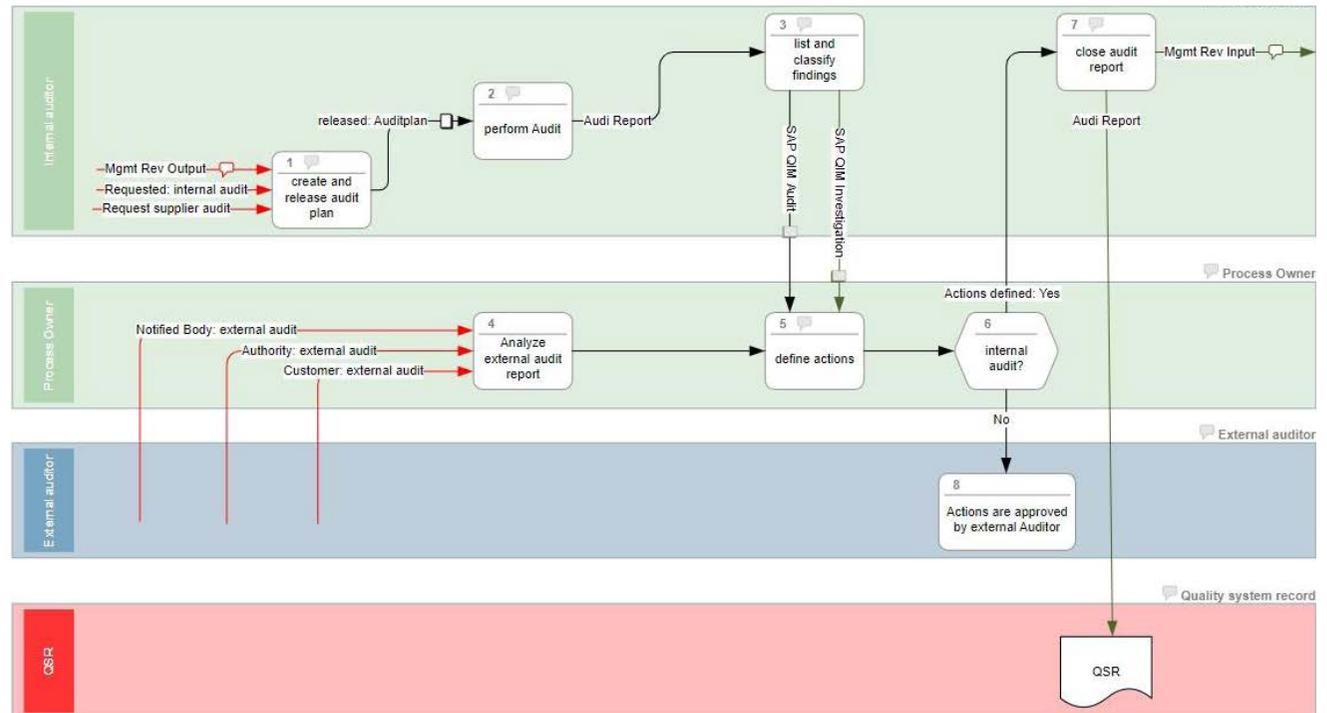
6.2 Lean and efficient processes

In 2021, Belimed conducted 33 internal audits and was re-certified according to EN ISO 13485:2016 by the Notified Body.

DID YOU KNOW?



If there are any issues or non-conformities detected, these findings are rated according to their criticality and by their impact on our customers and the business. All Belimed audits are documented in a structured audit report and all measures are implemented and tracked.



530 PI Audit

6.3 Risk management at Belimed

Belimed conducts annual risk assessments and, where required, makes regular updates of our policies and procedures, including ongoing training and awareness programs. A comprehensive risk survey (in line with the MZ Risk Policy) is implemented and a risk report is updated annually by the Belimed Management Team. All main risks for the business are systematically identified and continually monitored. All identified risks are assessed according to their probability of occurrence and impact. The Belimed Risk Report contains the following sections:

PESTLE analysis:

A compilation of political, economic, sociological, technological, legal and environmental macro-environment factors

Internal analysis:

Compilation of internal factors that influence the risk profile of the Belimed Group.

High risk summary:

Prioritized list of potential risks weighted by probability and impact

Opportunities:

Business opportunities for Belimed

Risk mitigation plan:

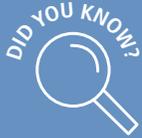
Detailed analysis of each risk, with scenarios (cause/effect) and actions or contingency plans. Belimed defines risks as events that could impact our business, our staff and employees, our partners and most importantly our customers. Whilst unlikely, we also evaluate potential for loss of life (hazard to human or HTH) and incidents which could result in environmental harm or pollution, which would also have a reputational or financial impact.



6.4 Cyber security

When speaking about governance and society, most organizations focus on the environmental and social justice topics, while topics such as cybersecurity are often managed by regulatory or financial (insurance) teams. However in today's data-dependent world, cybersecurity is a very real risk to the sustainable future of industry and of businesses, hence Belimed considers cyber risk as a key part of our environmental, social and corporate governance strategy (ESG).

Cybersecurity is often managed with insurance rather than good governance.



The value of 'non-physical assets', such as machine and project data, personal data, financial information or security data, are increasing. As cyber-crime increases, we must ensure that the value of our data and data from our customers is not lost, or in the worst case any loss is minimized.

Digital transactions, whether for consumer goods, banking or industrial and business transactions, are commonplace today – more than 70% of attacks were financially motivated. Cyber-attacks on companies around the globe have become more and more common. Where a digital transaction covers financial and insurance services, healthcare and utilities, this creates increased cybersecurity risk.

The major threats within the recent years were:

- Infected e-mails are the reasons of 90% plus of all direct and indirect attacks
- Breaches from smartphones or laptops (endpoints)
- Social engineering

Note: Hackers increasingly targeted healthcare data, which has an impact on the quality of patient care and also local communities

At Belimed, we implement and run a defensible, risk-based cyber security program. The Cyber Security Strategy is reviewed on a yearly basis and documents are updated accordingly. Cyber Security at Belimed companies is described in three document categories

for (1) management, (2) employees/users (3) IT departments and teams.

Cyber Security Strategy

- Primary addresses the senior management levels
- Establishes cyber security guidelines, objectives and mandate

Belimed Policies Guidelines for Employees

- Addresses all users of IT equipment and applications
- Is part of the awareness program
- Guidelines are mandatory for all users

Cyber Security Principles for ICT Infrastructure

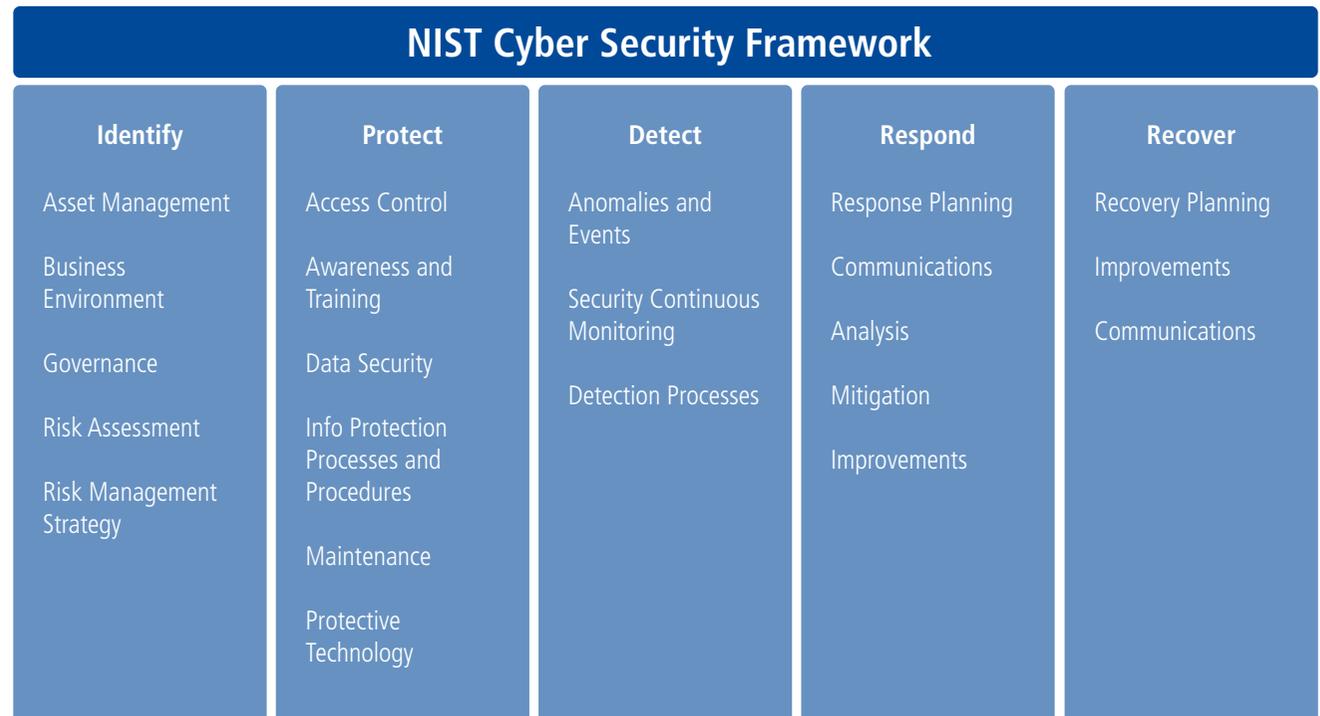
(Business applications, IT specialists and IT providers and partners)

- Sets controls on all levels (standard operating procedures, technical specifications)
- Documents to define how cyber security is implemented
- Focus areas are projects and operations, with guidelines in case of incidents

6.4 Cyber security

For the implementation of common principles and a security operation model, the Belimed Group organizations use the NIST Cyber Security Framework with its components and objectives. It is a standard-based reference model with all necessary components and objectives. It serves as a guideline for the specific implementation of the Belimed Group organizations' security concept.

At Belimed we have a list of 16 policy guidelines including Governance and Compliance, Security Awareness and Training, Physical Security, Security Incident and Problem Management, and Business Continuity Management and Disaster Recovery policy.



Lowering CO₂ emissions is another key element of the sustainability strategy of Belimed and Metall Zug, whose long-term vision is carbon-neutral production.



7 Communication



7 Communication

Communication is important at Belimed. A greater understanding of business, environmental and social requirements is proven to motivate employees.



Communication creates value for customers within the industrial B2B area where Belimed operates today, and also creates value for employees, partners and investors¹³. All the above challenges have been intensified in the past 2 years due to the COVID-19 pandemic. For many

of our customers, the pandemic situation has highlighted the importance of sustainable business planning, sustainable supply chains and the scarcity of resources.

A further challenge for 2022 is how to prioritise new sustainable initiatives for our customers against a global shortage of raw materials, price increases and the need to drive revenue and profitability.

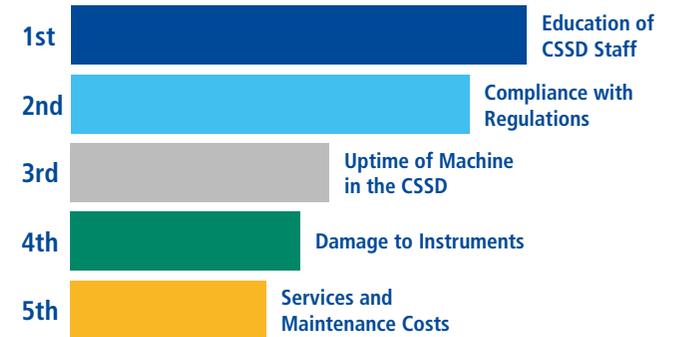
At Belimed, we realise the importance of making a clear commitment to environmental and social issues, which in turn requires a consistent message to deliver on our planned sustainability initiatives.

Today, sustainability is integrated into the Belimed business strategy, a top-to-bottom commitment to deliver sustainable equipment and processes and energy-efficient solutions.

Smarter hospitals

With our equipment and innovative technologies, we are paving ways to smart CSSDs – more energy efficient, more sustainable, easier to manage. We make improvements together with our customers.

At the WFHSS Global Sterilisation Congress in The Hague in 2019 and in Geneva in 2021, Belimed asked participants to prioritize the values most important for hospitals and specifically the CSSD. Unsurprisingly, education of staff was endorsed as the most important driver for success. For this purpose, Belimed integrated training modules as e-learning for the SmartHub Orbit Cloud application. The help for troubleshooting module also provides the ability for machines to be brought back into operation without outside assistance. This has allowed us to address the wishes of our clients based on the results of the 2019 survey, which were further endorsed at the 2021 event in Geneva.



7.1 Social media

Social media is now a critical part of the way people in most walks of life communicate and can be a key part of how daily work gets done. Social media allows us to interact with our customers and share information in real time, which we strongly believe strengthens our brand as Engineers of Confidence. Social and electronic media allows us to exchange ideas and improve the way we do business, whether this is by publishing a case study or a new technology, or simply by networking of technical workgroups and project teams.

Job-networking sites such as LinkedIn allow us access to recruit new staff and also to inform the public about what we do. With social media we can connect with existing and new audiences in deeper ways, bring attention to important issues – from manufacturing and new products, to sustainable and lifecycle case studies. Through our actions we can inspire others to follow our footsteps in the field of innovation, digitalization and total cost of ownership.

Social media is also a tool to help our clients. Our blog allow readers to read or see videos about complex issues in a user-friendly and simplified manner. Facebook enables us to maintain collaboration with industry professionals and key opinion leaders within the medical device and healthcare industry. We offer YouTube video tutorials to our customers and CSSD management teams to share tips and tricks for both applications and troubleshooting.



Belimed
Infection Control

Belimed
286 likes · 3 following

Posts About Photos Videos

Intro
Belimed is a global supplier of medical and surgical instrument sterilization, disinfection, and cle

Page · Product/Service
belimed.com

Belimed
5 hrs · 🌐

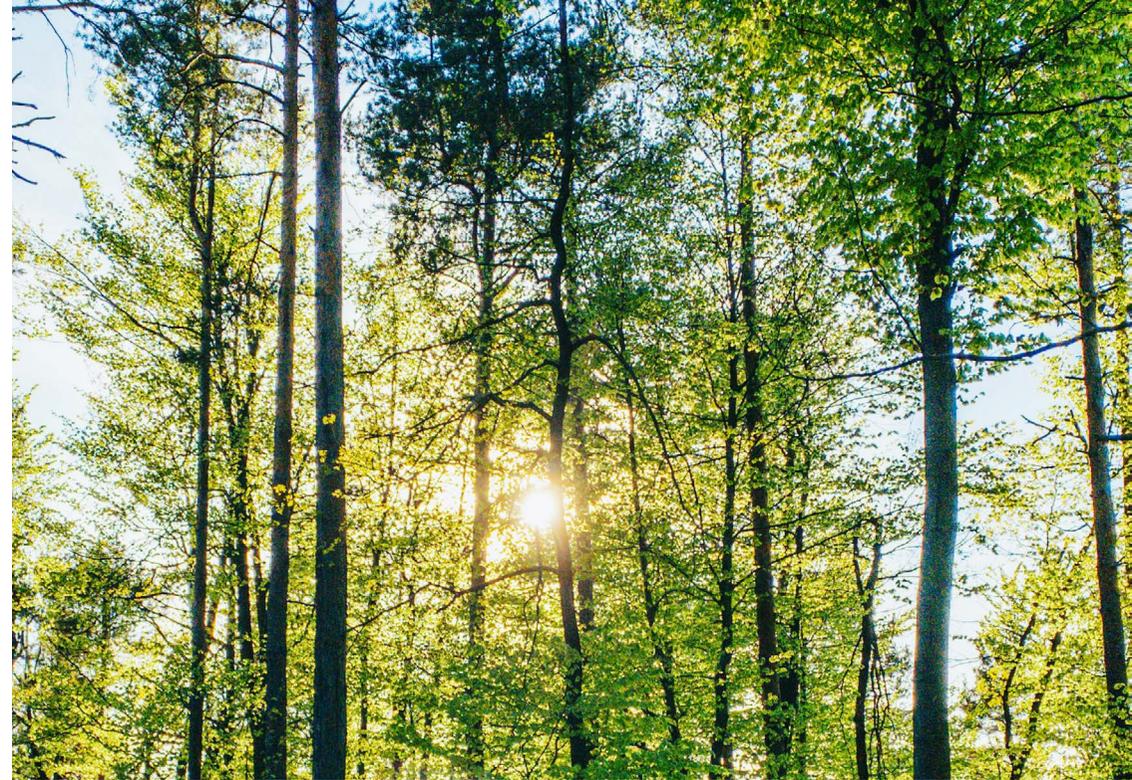
You know those bulky and heavy folders in your CSSD? With SmartHub Orbit they are finally a thing of the past. All machine information – functions, options and help – can be found in the respective operating manual in SmartHub. Digitalization leads the way to a fully smart CSSD. See our new video:



Social and electronic media allows us to exchange ideas and improve the way we do business, whether this is by publishing a case study or a new technology or simply by networking of technical workgroups and project teams.



8 Summary



8 Summary

Humanity is currently living far beyond the planet's means, consuming the Earth's resources at an unsustainable rate¹⁴. The set-up of global International standards, including the Paris Agreement on climate change, the UN Sustainable Development Goals (SDGs) and the European Commission's New Green Deal (carbon neutrality by 2050), have provided a sustainable global agenda for businesses and society to follow. Unfortunately, the world's economic policies have failed to deliver sustainable economic growth and the commitments made for sustainable development have not been delivered.

The world's leading climate experts have confirmed that human activities are contributing to global warming. Despite numerous warnings from scientists, greenhouse gas emissions are still rising. There is also enormous disparity between the world's richest and poorest people¹⁵: The richest 10% of people in the world earn 57% of global income, and the excessive consumption of this wealthiest 10%, equates to 50% of global carbon emissions.

However, the rising global challenges of climate change, financial crises, global pandemics and commodity price increases may (at last) be forcing governments, finance and the global business community to rethink their strategies for environmental, social, and economic issues.

At Belimed, we are concerned about the future of our planet and closely monitor and track our footprint. We have a rolling program to be more sustainable in our production areas and to continuously make improvements to reduce greenhouse

emissions at all of our locations. At our manufacturing centres in Grosuplje, Slovenia and Sulgen, Switzerland, we have achieved some important milestones in mitigating climate change and reducing energy consumption as well as improving the overall well-being of our employees. Belimed is also driving efficiencies within our supply-chain and targets consistent recycling of waste as part of the recycling economy.

Whilst the COVID-19 pandemic has affected the operation and finances of all hospitals globally, it will hopefully have highlighted the importance of sustainable business planning, the scarcity of resources and the need for sustainable suppliers and business partners. Belimed, one of the leading medical equipment manufacturers, is aware of its social and environmental responsibility and sees its mission to deliver innovative, energy-efficient and sustainable solutions to meet the growing demand and rising costs within healthcare and infection control.

Making progress on sustainability over the next decade will require the creativity and determination of business, government and finance leaders all working together¹⁶.



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10 References and Citations

1. Steffen et al. (2015), The Trajectory of the Anthropocene: The Great Acceleration. [PDF] The trajectory of the Anthropocene: The Great Acceleration | Scinapse
2. Lodesni, C. Medecins Sans Frontières (2020), COVID-19 pandemic brings new challenges to well-developed healthcare systems. <https://www.msf.org/new-approach-public-health-big-change-needed-fight-covid-19>
3. IPCC, (2021), Climate change 2021, The physical science basis. <https://www.ipcc.ch/>
4. Haanaes, Prof. K (2016), IMD Lausanne, Why all businesses should embrace sustainability Why all businesses must embrace sustainability and lead the way (imd.org)
5. World Health Organization (WHO) (February 2018), Fact Sheet 'Ageing and Health'. <https://www.who.int/news-room/fact-sheets/detail/ageing-and-health>
6. Healthcare without harm (2019), Health care's climate footprint HealthCaresClimateFootprint_092319.pdf (noharm-global.org)
7. Brown, L.H.; Buettner, P.G.; Canyon, D.V. (Rev. 2012). The energy burden and environmental impact of health services. The Energy Burden and Environmental Impact of Health Services - PMC (nih.gov)
8. Matthew J. Eckelman, Kaixin Huang, Robert Lagasse, Emily Senay, Robert Dubrow and Jodi D. Sherman, (2020) Health Care Pollution And Public Health Damage In The United States: An Update, Health Care Pollution And Public Health Damage In The United States: An Update | Health Affairs
9. Cornejo, C.; WEGO Health.(2018), Patient Empowerment: The Path to Better-Informed Health Decisions? Viewed 22.Feb. 2020. <https://wp.wegohealth.com/2018/10/30/patient-empowerment/>
10. Practice Greenhealth, (2017). Environmental Performance Among Leading Hospitals. <https://finance.yahoo.com/news/practice-greenhealths-sustainability-benchmark-report-170000072.html>
11. Gopfert, A. The Health Foundation.(March 2019), Improving the health and wellbeing of 1.6m NHS employees <https://www.health.org.uk/news-and-comment/newsletter-features/improving-the-health-and-wellbeing-of-1.5m-nhs-employees>
12. Balch, O. (2014, July 7) Unleash employee creativity to deliver on sustainability. The Guardian. <https://www.theguardian.com/sustainable-business/unleashing-employee-creativity-deliver-sustainability>
13. J.P. Morgan Perspectives (2019). ESG Investing 2019: Climate Changes Everything. Investment firms must report the impact of sustainability issues on financial returns
14. As measured by humanity's global ecological footprint. See the Global Footprint Network website: <http://www.footprintnetwork.org>
15. S. Chakravarty et al (2009) 'Sharing global CO₂ emission reductions among one billion high emitters', Proceedings of the National Academy of Sciences, Vol 106, No. 29. July 2009.
16. Rewiring the Economy, (CISL, 2015). <https://www.cisl.cam.ac.uk/resources/publication-pdfs/rewiring-the-economy-report.pdf>

Belimed, one of the leading medical equipment manufacturers, is aware of its social and environmental responsibility and sees its mission to deliver innovative, energy-efficient and sustainable solutions to meet the growing demand and rising costs within healthcare and infection control.





Engineers of Confidence.



Belimed is headquartered in Zug, Switzerland. With 10 Belimed companies throughout Europe, North America and China and many authorized partners, Belimed is represented worldwide by a strong network in over 80 countries.

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