SHAPING OUR FUTURE

BITO STORAGE SYSTEMS

SUSTAINABLE DEVELOPMENT

Identifying goals. Creating values. Living and working together.







WWW.BITO.COM

”What we do today determines what the world will look like tomorrow.”

Marie von Ebner-Eschenbach

Green Logistics

Dear customers, partners and friends.

Today, running a business means much more than making profit. Despite the fact that many raw materials are only available in limited quantities, we are consuming nature's resources faster than ever. The effects of climate change on the environment, on society and the economy have long since become impossible to ignore.

Sustainable corporate governance means not only acting in harmony with nature, but also with the people who work for and with the company, thus assuming social responsibility for a future worth living.

While integrity, quality and respect have always been at the core of our corporate culture, BITO has been implementing a broad range of ecological sustainability practices in recent years. Sustainable development requires a new mindset that affects the entire supply chain. It requires a new approach when selecting raw materials, implementing resource saving manufacturing methods and re-organising logistics in a way to create added value for customers.

As experience shows, sustainable development and economic growth are no conflicting values. On the contrary, they promote innovative strength and performance, help to achieve a balanced price-performance ratio, promote fairness in business with staff, suppliers and customers, and create awareness for environmental and social concerns.

Acting with economical, ecological and social responsibility should not be viewed as a duty, but as a great opportunity. On the following pages, we want to give an overview of the measures already in effect at BITO and present some sustainable solutions to our customers.

Winfried Schmuck
Managing Director

We would be pleased if our ideas were an inspiration and a motivation to as many readers as possible!

Yours sincerely,

Winfried Schmuck
Managing Director

What is **sustainability?**

A frequently quoted definition can be found in the 1987 Report of the United Nations World Commission on Environment and Development:
Sustainable development is defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

Sustainability is a complex concept with closely interlinked goals: sustainable development promotes economic growth, ecological diversity, human health, social justice and societal well-being. These goals require a long-term strategy that is based on the acknowledgement that our resources are limited. This is why we need to use our resources carefully in order to secure a future worth living.

In simple terms, sustainability is about what we want the world to look like when we leave it to our children and grandchildren.

Generations in conversation - sharing and passing on knowledge

Why should we buy sustainable products?

Products can have a wide range of potential impacts on the environment and on human health, starting from damage to the ecosystem through overexploitation, soil, air and water pollution, improper waste disposal to toxic exposure of staff and residents. Negative impacts can occur at any point in the life cycle of a product: during raw material extraction, manufacturing, packaging, distribution, product use, repair, maintenance or disposal/recycling.

By choosing eco-friendly products, we contribute to the protection of the environment and health of everyone involved in the value chain.

BITO Lauterecken – Plant for plastic bins & containers

BITO Meisenheim – Headquarters and plant for steel shelving & racking

The best place to start is at the beginning.

Sustainable procurement

When selecting our raw materials and auxiliaries, we always opt for materials that are not harmful to health and that allow environmentally friendly processing. This is why we give preference to manufacturers and suppliers who comply with ecological standards. Another equally important question is how far materials need to travel to reach our plants. Keeping shipping routes short also helps to protect our environment which is why we source 90% of our materials from the EU market.

Coating powder – a thermoplastic polymer that melts in the heating process and permanently cross-links with the surface of the workpiece, thereby creating a hard finish that is tougher than conventional paint.

Product group *Shelving & Racking*

Uprights and beams of our steel shelving and racking are either galvanised or come in various colour options.

- We opted for electrostatically applied powder coating instead of conventional liquid paint which needs an evaporating solvent.
- We only use colour pigments that are ecologically safe and release a very low amount of volatile organic compounds during the coating process.
- Typically, powder coatings are cured at temperatures of 140 - 200°C. We use advanced low bake thermosetting powder that cross-links at temperatures of less than 140°C.
- Powder-coated workpieces are extremely impact-resistant and weatherproof.

The BITOBOX MB Food & Delivery has been designed for last-mile deliveries.

Product group *Bins & Containers*

Our plastic bins and containers that are intended for food contact are made from food safe material in compliance with EU law.

This is certified by our declaration of conformity for plastic consumer goods in accordance with Regulation (EU) No. 10/20112.

(End) consumers can easily identify our plastic bins & containers designed for food storage and transport by the wine glass and fork symbol which confirms legal conformity and suitability for the purpose.

Did you know that the annual per capita paper consumption in the European Union is higher than that of South America and Africa together?

Reusable packaging instead of disposable cardboard packaging will help reduce deforestation and its negative impact on our climate.
Our multi-trip BITOBOXES are extremely durable. During their long service life, MB distribution containers will each save more than 1 ton of cardboard!

OUR BITOBOX "ECO-CHAMPIONS"

C-item bin, CTB series

These bins are made from PP and sunflower compound, a food processing by-product.

Multi-purpose container MB

Extremely hardwearing and durable.
Clever alternative to one-way packaging.
Minimises impact on environment and resources.

MB for hazardous goods

Supplied with drop-on lid complete with metal snap locks.

Green production

The goal of sustainable production processes is to minimise negative impacts on the environment by saving resources and by using or producing regenerative energy. Energy efficiency is not only a top priority in our production plants. Buildings and products also have a carbon footprint. By using modern lighting and plumbing technologies, we are also saving resources in our offices and workshops. Modern manufacturing technologies, thermal insulation building materials and a sustainable energy concept help us reduce our CO_2 footprint.

Improving energy efficiency

By contracting another energy supplier who operates with a significantly higher share of renewable energies in their electricity portfolio, we were able to reduce CO_2 emissions by 40% in 2020 compared to 2018.

In 2006, we commissioned our first photovoltaic system to generate our own renewable electricity. We are planning to install another 2 photovoltaic facilities. Once realised, we will generate over 1 million kWh/a of "green" electricity.

With the photovoltaic panels currently in operation, we would be able to supply 88 average households (3,000 kWh/a) with electricity or drive an electric car 1.3 million km.

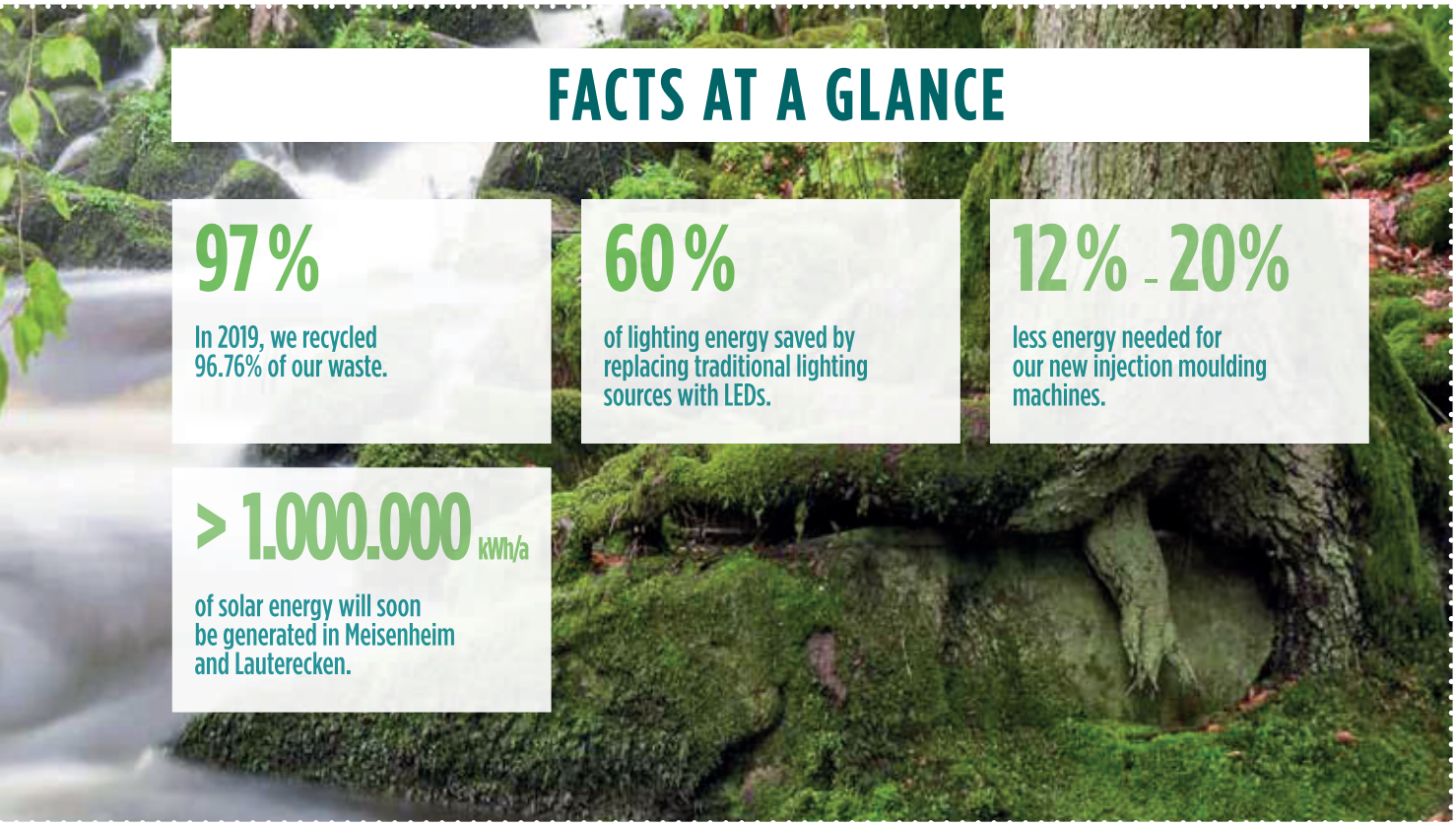
BITO Meisenheim - Photovoltaic panels on plant roof

By exchanging all conventional lighting sources in our offices and plants against modern LED technology, we were able to reduce our energy consumption by 60%.

This corresponds to some 700,000 kWh/a or to the electricity consumption of 233 average households. Our CO_2 emissions have reduced by 163 tons/a which equals the carbon dioxide absorption capacity of 13,000 deciduous trees.

In our plant in Lauterecken we have equipped the latest generation of our injection moulding machines with eco-drives. Their specific energy consumption (SEC) for processing one kilogram of polymer is 12-20% lower compared to conventional machines: 20% for the 1,500 ton machine, 12% for the 2,700 ton machine.

Depending on the machine, this saves approximately 60,000 kWh/a – equalling the electricity consumption of 20 average households.



FACTS AT A GLANCE

97 %

In 2019, we recycled 96.76% of our waste.

60 %

of lighting energy saved by replacing traditional lighting sources with LEDs.

12 % - 20 %

less energy needed for our new injection moulding machines.

> 1.000.000 kWh/a

of solar energy will soon be generated in Meisenheim and Lauterecken.

Saving water and heating energy

By switching to a closed-loop water system and by installing free coolers instead of cooling towers, we were able to reduce our water consumption by 60 %.

In addition to that, we installed continuous flow hot water heaters at all points of consumption in production and office areas. They heat the water as we use it and only as much water as is actually needed. With the smaller pipe length between the continuous flow heater and the wash basin, the water does not lose any heat, thereby reducing electricity usage for heating or cooling water by 65 % compared to typical electric storage tank models.

Waste heat recovery

Heat exchangers help us use the waste heat from injection moulding machines to heat workplaces.

Waste management

We only contract licensed waste disposal companies to collect waste materials. In 2019, for example, as much as 96.76 % of our waste was recycled. Only 3.24 % was reported as mixed packaging (thermal recycling).

Reducing carbon emissions

Particular attention is given to exhaust-free production processes, in the metal forming as well as in the injection moulding process.

The (energy-intensive) generation of compressed air has also been optimised. Air compressors shut off automatically after pressure has reached a certain level, which results in a 10% reduction of energy consumption and CO_2 emissions.

By increasing use of recycled materials or admixtures such as Sunflower Compound, we will be able to reduce the tonnage of very energy-intensive plastic granules (PP) in the future. This will also reduce our carbon emissions.

TÜVRheinland ZERTIFIZIERT
Corporate Carbon Footprint
www.tuv.com ID 0000073551

Our products are known for user safety, top quality, durability ...

BITO After Sales support for **Shelving & Racking:**
Rely on manufacturer competence for your annual racking inspection

Our dedicated customer service includes more than delivery, installation and start-up of your storage facility. We want your shelving or racking system to function perfectly throughout its entire service life and we want to enable you to provide a safe working environment.

Occupational safety and health regulations stipulate that employers must take all reasonable steps to ensure the health, safety and well-being of their staff. In compliance with national safety at work acts as well as the European standard DIN EN15635, operators of static steel storage systems must have their storage facility inspected at least once a year by a qualified person.

In order to ensure that our customers do not have to worry about safety, we recommend finalizing a maintenance contract. Add to this the fact that measures carried out in good time also increase the service life of a storage installation and help to prevent expensive repairs.

Members of our After Sales Service team on an inspection visit

Our service offer:

BITO shelving & racking inspection

- One inspection per contractual year; date as agreed upon with the customer
- Visual inspection for deformations and damage to racking components (made from floor level height without using access equipment such as lifting platforms etc.)
- Functional testing of live storage racking
- Observation of load capacity signs and loadings with reference to manufacturer guidelines
- Compliance check of parts and components with current state-of-the-art requirements
- Damage analysis, full documentation of any structural defects and risk assessment report
- Marking of damaged parts and components as required
- If required, recommendations to the customer (operator) on how to prevent future damage; proposals of any action necessary
- Inspection label confirming that the annual inspection has been carried out
- Detailed rack inspection protocol
- Appointment scheduling

… and they are capable of being recycled

BITO After sales support for **Bins & Containers:**
Bins from post-consumer recycled materials (PCR)

Sustainability does not only focus on reducing emissions and complying with legal requirements. Acting sustainably also means to develop and implement a concept for the entire life cycle of a product.

Multi-trip MB ECO containers are the environmentally friendly alternative to virgin materials!

Today, our bins and containers already contain 20% recycled material. Production surplus is regranulated in our own recycling facility and returned 100% into the production cycle.
On request, almost all bin and container series can be made from regranulate (post-process plastic).

Particularly sustainability-minded customers can also opt for our MB distribution containers made from certified post-consumer plastic derived from end products that have completed their lifecycle.

Although process engineering limits colour options to black for the body of this MB box, customers still have the possibility of colour coding by fitting their MB box with lids in blue, yellow, green and red. Optional equipment such as hinged lids or stacking rails are the same as for the BITO MB standard series.

There is yet another advantage: The new MB ECO is a good alternative not only from an ecological, but also from an economic point of view, as it is somewhat cheaper to manufacture and therefore has a lower selling price than the standard MB container.

BITO MB ECO – stacks when full, nests when not in use

Our recycling offer:
BITOBOX MB ECO

Our service special: Although our products are designed for a long service life, we want to make sure they are properly handled when they are no longer in use. This is why we offer our customers to return plastic bins to us that have completed their service life. These are recycled into regranulate which is used for producing new bins and containers. Check out this clever solution!

Sustainability in business

Our products help customers and partners to embrace sustainability in all areas of business, from procurement over order processing to in-house logistics.

Create economic sustainability
with BITO shelving & racking

In a globalised world, more and more goods have to be moved, stored and distributed. Logistics costs are on the rise in almost all industries. Recognising opportunities and reducing spending is vital for the economic success of a company.

Choosing the right storage system will result in significant time and cost savings. Compact storage and a clear product presentation help reduce order throughput times and coordinate logistical processes. This avoids downtime, increases warehouse productivity and reduces storage costs.

BITO shelving & racking solutions cater for any storage requirement, taking into account building constraints as well as a customer's operational organisation. Upgrade your warehouse and save on space, time and money!

Our example products:
BITO Live storage racking

- improves order picking efficiency
- increases picking ergonomics
- improves work environment
- FIFO stock rotation is particularly useful when products must be supplied in use-by-date order
- improves picking accuracy
- fosters employee well-being, thereby reducing sick leave numbers and staff fluctuation

The pull-out front pallet position is the ideal solution for ergonomic off-pallet picking at floor level height.

Pull-out pallet position

The BITO pull-out mechanism is particularly user friendly. Operators can pull out the entire front pallet into the racking aisle. There is no need to reach deep into a bay, because the pallet can be accessed from three sides. Loads can be picked while taking a comfortable and ergonomic stance. Once the order is picked, the front pallet position is pushed back into the racking.

Create economic sustainability
with BITO bins & containers

Plastic bins help speed up any company's logistics processes, thereby raising productivity levels and saving money and natural resources.

BITO offers a large range of bins & containers: practical storage bins, open-fronted picking bins, stacking containers in European standard sizes, space-saving folding boxes, Kanban bins for small items, large-volume and heavy duty containers, as well as bins and trays for automated storage. There is the right BITOBOX for any application!

Our bins and containers have been designed for a long service life. Accordingly, you will find our 5-year warranty symbol on many products of our bin range informing you of our 5-year quality promise, over and above the legal warranty.

Sturdy and versatile, with many ergonomic features, available in a wide range of standard versions or built to individual standards: BITO-BOXES guarantee maximum protection as well as easy, cost efficient and environmentally friendly handling.

Perfectly safe for shipping pharmaceuticals: MB container with an integrated thermal insulation set

Our example product:
BITO Distribution containers MB

BITO MBs are the ideal answer to the demands of sustainable development throughout the entire value chain. They support manufacturers, logistics providers and end consumers alike in achieving their sustainability goals. MB containers come in European standard sizes and are an excellent alternative to disposable packaging. Compared to one-way cardboard packaging, our MBs have a lot of benefits:

- sturdy and hardwearing for a long service life
- suited for storage, order picking and shipping
- no packaging waste
- environmentally friendly and resource conserving
- empty container nesting on return trips saves up to 75% of freight and storage costs

Standard MB containers can be complemented with a wide range of useful accessories. Combined with a snap-lockable drop-on lid and security seals, MB containers are ideal for shipping valuables as well as hazardous substances (compare page 7).

Sustainability and digitalisation

Two conflicting goals? Not necessarily so! It all depends on how we use modern technology. It is true that digitalisation is coupled with an increase in energy consumption. However, this disadvantage can be compensated for by user behaviour. For example, by making online appointments and by video conferencing instead of travelling. Or by organising virtual trade fairs with online interviews.

In industrial production, digitalisation and automation have become key to business success. At BITO, most manufacturing processes have been automated.

Sensor-controlled production and plant monitoring lead to an increase in production rates and to greater control and consistency of product quality through eliminating human error. Operators benefit from improved ergonomics in the workplace as physically demanding and dangerous tasks are taken over by machines, thus reducing the risk of accidents. Often enough, energy and resource saving manufacturing processes are not possible without automation.

BITO provides an easy-to-implement solution for customers who are looking for a cost efficient way to move materials between their goods-in area, processing lines and shipping department or from one process to another.

Our example product:
LEO Locative

- LEO Locative is an automated guided vehicle (AGV) designed for transporting bins and cartons with a weight of up to 20 kg.
- Following coded tracks and markers on the floor, LEO moves between workstations, delivering and picking up bins without the need for an external power source or a costly pneumatic system.
- Easy set-up, user friendly configuration, ready for basic operation in just a few hours.
- Decentralised route monitoring: job details are entered via tablet or scanner at the station terminal.

Managing customer returns in e-commerce logistics with LEO Locative. As a rule, around 70% of the costs in e-commerce logistics are due to processing and re-stocking returned goods. Replacing the human element with LEO Locative vehicles for repetitive in-house transport tasks allows operations to become safer, more productive and accurate.
www.leo-locative.com

Social responsibility

In 2002, at the UN World Summit on Sustainable Development, sustainability was defined as a concept based on three equally important pillars: ecological, economic and social responsibility. Ecological and economic goals cannot be achieved without creating a balance between economic growth and social welfare.

We would not be what we are without our staff. Promoting employees in their professional and personal development is therefore one of our most important tasks.
Our BITO Academy offers a variety of vocational and personal training courses. While ongoing vocational training improves overall work performance, developing attitudes like self-esteem, motivation and creativity also plays a major role in doing a job better than before.

At our headquarters young people can apply for some 20 vocational careers from an apprenticeship to a university degree – opportunities that make BITO an attractive employer for bright minds in our region.

The BITO Campus is fully equipped to provide a stimulating environment for start-ups.

Shaping a society worth living in

Business enterprises are a part of society. They should therefore make a contribution that benefits society as a whole.

This is why BITO is a long time sponsor of local cultural activities, youth promotion schemes, sports and special events that are organised in close cooperation with clubs and welfare institutions. We are convinced that community commitment is one of the pillars of corporate social responsibility.

With the establishment of the Bittmann Foundation we have made a clear commitment to support others and improve the state of the community and the world we live in.

Every year, BITO offers a variety of attractive vocational qualification opportunities. We also sponsor sports to promote physical activity among children and young people.

ACT SUSTAINABLY.

PROTECT THE ENVIRONMENT.

CREATE VALUES.

SHAPE THE FUTURE.

BITO STORAGE SYSTEMS MIDDLE EAST

UAE - KSA - Oman - Qatar

sales@me.bito.com
www.bito.com