

Building bridges. Closing circles.

EnBWIT Refurbishment

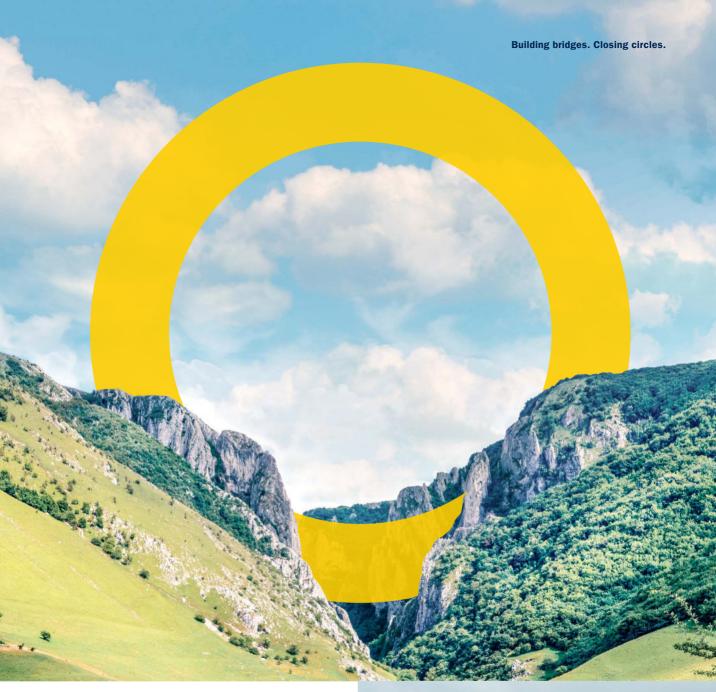
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BMW Group Waste Management

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Ritter Sport Made for Recycling

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We're shaping a future worth living. By tying up loose ends and closing circles. We develop solutions for your ideas, bring stakeholders together and build bridges between environmental protection and value creation. This benefits everybody involved – from partners and businesses to society and the environment.





We build bridges, close circles and create added value. For everyone.





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A new life for old technology

Energy company EnBW has sold its old electrical equipment and commissioned the refurbishment as part of a responsible climate strategy.

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Challenges and action

We can only do this together

BMW Group is focusing efforts on achieving climate targets. The key to it all: cooperation in the supply chain.



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Circling the square

Ritter Sport is looking at ways to achieve a working paper-based wrapper. And is going its own way to do so.

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Editorial

Dear Readers,

The past year has presented us with a series of unprecedented, enormous challenges. The effects of the pandemic continue to be felt everywhere. And Interseroh is no exception. Taking decisive action and ensuring a united front are both more important than ever.

Despite these uncertain times, we have not lost track of our vision of a world without waste. We bring people together, develop new solutions and motivate our customers. This approach allows us to close loops and bring things together that, at first glance, don't seem to have anything in common. From resource conservation and environmental protection to securing a competitive edge, the benefits for us all are very clear.

As a company, we welcome your continued support going forward. Let's work to make our future worth living and join forces as we strike out on new paths.

We hope you find our Magazine both enjoyable and inspiring.

Cologne, June 2021

The Interseroh Management Team

Markus Müller-Drexel

Melanie Freytag

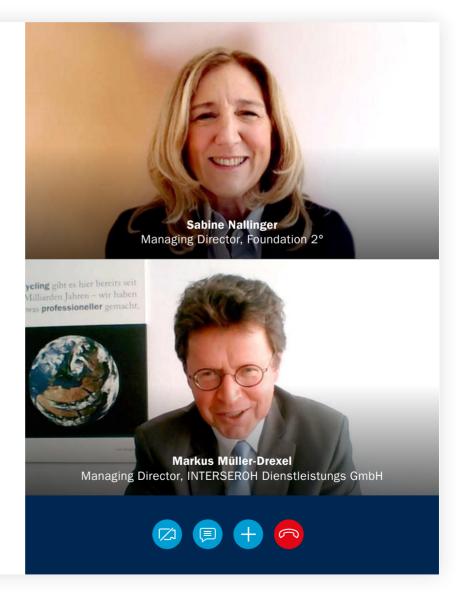
M. Co Langenen

Dr. Timo Langemann

INTERVIEW: THE GREEN DEAL

Invest now, profit later

The Green Deal is the European Union's strategy of growth towards a climateneutral economy. A major opportunity for our future – and the circular economy.



In March 2021, Sabine Nallinger and Markus Müller-Drexel held a video call to discuss the significance of the Green Deal, its potential for the circular economy and the impact of the coronavirus pandemic.

How important is the Green Deal, in your opinion? Sabine Nallinger (SN): The Green Deal represents a massive shakeup of the economy as we know it today. It brings countries together – because climate action does not stop at state borders. If we want a climate-neutral continent, we can only do this in solidarity with other nations.

Markus Müller-Drexel (MMD): The Green Deal also gives us the chance to rethink our economy, from raw material extraction to product end-of-life. It's important that businesses and policy-makers work together here, especially in terms of general frameworks and targets.

What role does the circular economy have to play? SN: By 2050, we want to have achieved net zero: but this will be possible only if we can manage our resources in the loop. I also think that the circular economy offers opportunities for business in general. Because raw materials have value.

How can this value be realised by companies?

MMD: A more climate-neutral production must offer a competitive advantage in order to succeed against conventional models, which tend to be less expensive at first. The Green Deal is offering the right incentives here.

Have European efforts being influenced by the coronavirus pandemic? MMD: Climate protection is currently taking a backseat to the pandemic because of the far-reaching effects of the virus. But the economy has proven itself capable of handling this kind of a challenge.

SN: COVID-19 has also helped us to assess the resilience inherent in our society. People are aware that climate change can also have a huge impact on their lives. So climate protection is still in the headlines.



Sabine Nallinger

Managing Director, Foundation 2°

How will the circular economy develop in this kind of environment? SN: The future's looking good for the circular economy: companies are now setting climate targets and the finance industry is introducing sustainability criteria.

In one of our current projects, CEWI (cewi-projekt. de), we're also working with companies to develop flagship projects focused on implementation.

Another key aspect is global competition for raw materials. The circular economy will help promote stronger business relationships – because long-term strategies are important.

MMD: I agree. Looking at the bigger picture, the circular economy offers a robust approach to solving the problem of cutting carbon emissions. And not just in Germany and the EU, but worldwide.

Watch the full-length interview: www.interseroh.de/en/greendeal



The COVID-19 pandemic has made sweeping changes to our work and social lives, and upended many of our business processes. Interseroh was also affected by these changes last year, and helped to implement change while staying flexible at all times.

More laptops, PCs, tablets, monitors and printers

As lockdowns spread, the number of people working from home increased – as did the demand for hardware. With supply chain problems often making new stock unavailable, both companies and private households increasingly turned to repurposing their existing systems.

Rising volumes of private household waste

But not everyone is working from home: parcel carriers and distributors were more in demand than ever. This can also be seen in the volume of waste that has shifted from industry to private households as a result of more online shopping and click-and-collect meal services.

New world of work requires mobile workplaces

The safety and health of our employees is all-important in our day-to-day work – and especially so during the pandemic. Even as early as March 2020, Interseroh was already recommending working from home for anyone and everyone who could do so.

70

As a result of the coronavirus pandemic, **70 percent** of companies bought or are planning to buy new hardware such as laptops and smartphones.

The **proportion of waste** from private households rose by as much as

5.9 percent.*

45

At the end of 2020, 45 percent of the labour force in Germany was working from home at least some of the time.

Complex challenges

flexible response

Savings



Refurbishing a tablet can save

139 kg of greenhouse gas emissions
and 58 kg of resources.

Breathing life into old tech

The increase in demand can also be met by used IT equipment. This also extends the production cycles of new equipment. As a result, this not only delivers environmental benefits but also drives the growth of Interseroh's Product Cycle business unit.

Public information



The 'Waste Separation Works'
initiative from the dual systems informs the public about how to separate
waste and avoid miss-sorting.

The key: Waste separation

As volumes of private household waste rise, knowing how to separate waste properly becomes more important than ever. Along with other industry members, Interseroh is stepping up public awareness efforts here to avoid miss-sorting and enable recycling.

Award



Interseroh wins Best Practice User Group Award 2020

An outstanding and rapid response

To ensure everyone stayed connected even while working from home, Interseroh used the OneIT digitalisation project to quickly roll out modern and agile ITC infrastructure capable of serving all of its companies – and even won a prize for doing so!

^{*}Example is for glass waste. The reason for the rise is the shift in waste generated from industry to private households. Other increases in volumes: lightweight plastic packaging, metal and composite materials = 5.7 percent, cardboard and paperboard = 1.7 percent

IT REFURBISHMENT: ENBW

A new life for





Laptops, PCs, tablets and phones all now have their place in our modern digital workplaces. Interseroh refurbishes phased-out equipment – and gives it a new life in the process. Energy company EnBW recently made use of the service as part of its integrated climate action strategy.

Taking action on climate change now lies at the heart of corporate strategy for EnBW Energie Baden-Württemberg AG, both in terms of its core business as well as its internal business processes. The company's aims are ambitious, since it wants to achieve climate neutrality by 2035. To do so, 25 action plans have been drawn up, from fossil phase-out to more sustainable business trips and less use of paper. EnBW's entire workforce is now involved in integrating the individual plans to achieve truly effective climate protection.

Greater efficiency with new technologies

Getting closer to climate neutrality requires both radical change and a change in perspective. Much of this requires digitalising the world of work – an approach EnBW had pursued even before the pandemic. "For us, new technologies are the key to it all," explains Dirk Link, Head of Workplace IT at EnBW: "We use them to design more efficient processes, streamline workflows and significantly reduce our paper consumption."

To make all of this possible, the company equipped all of its staff with the latest, technically advanced equipment between 2018 and 2020. But what was to be done with the old, phased-out hardware? The last thing EnBW wanted was to see the raw materials in the old PCs, laptops and phones go to waste.

old technology





"For us, new technologies are the key to it all. We use them to design more efficient processes, streamline workflows and significantly reduce our paper consumption."



Pick-up

Interseroh picks up the used equipment once it is securely packed.



Data erasure

It meets the highest security standards.



Refurbishment

Interseroh checks the equipment and repairs defective devices or individual parts such as batteries or displays.



Sale

The equipment is then sold on through wholesalers or www.brandused.com.





Climate protection that pays its way

For this, Interseroh was the right partner. The environmental services provider picked up the old equipment as requested by EnBW and organised its transportation. This had to be particularly secure due to the value of the goods and the sensitivity of the data storage media. Data erasure was also carried out to meet stringent security requirements and guidelines from the German Federal Office for Information Security (BSI). The next step was to get the roughly 11,000 PCs and laptops, plus 15,000 monitors, back into shape and ready for resale on the company's own online shop at 'brandused.com' and via wholesalers.

Financially, this is also worthwhile – both for EnBW and for the ultimate buyers of the used equipment. The latter include educational establishments, small businesses, students and school pupils as well as larger resellers. And of course the environment benefits as well. The 'resources SAVED' certificate issued by Interseroh documents EnBW's engagement for climate protection in black and white: the simple refurbishment of the company's old electrical equipment managed to save 2,463 tonnes of primary raw materials plus 1,870 tonnes of greenhouse gases. This calculation is based on a study authored in 2018 together with experts from Fraunhofer Institute UMSICHT on the potential savings achievable by IT refurbishment.

The 'resources SAVED' certificate issued by Interseroh documents EnBW's engagement for climate protection.

1,870

tonnes of greenhouse gases saved – equivalent to the annual positive climate benefits from around 26,200 trees.*

Simply by having old electrical equipment refurbished, EnBW saved from 2018 to 2020

2,463

tonnes of primary raw materials – the equivalent of the weight of about six jumbo jets.



Our services for used IT equipment

- Straightforward IT purchasing
- ✓ Flexible and secure pick-up
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- Preparation for reuse
- Customer-specific marketing model
- Environmentally friendly management of waste from defective components

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Your expert for IT refurbishment



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INTERSEROH MATERIAL FLOW MANAGER

What we do has no future – it is the future

To make yourself fit for the future, you need to question the industry status quo and promote innovation. Interseroh helps its customers to keep an eye on everything and think in terms of the loop. Alexander Maak, Head of Business Development & Project Management at Interseroh, explains the opportunities available to companies working in the management of resources.



Advocated by policymakers and imperative for a company's strategic focus: material loops. Loops can ensure long-term access to raw materials while also promoting their more efficient use. This offers obvious competitive advantages. Only those who fully embrace the concept will stay agile over the long term while generating significant company value. For many companies, this change initially means fear of the unknown plus additional

overheads and extra work. Alexander Maak aims to dispel these worries and has a clear message for his customers: "Companies need to focus on what's important and move from unrelated, one-off actions towards a high-level strategy that's in line with the circular economy." A coherent vision provides orientation and reveals potential. This approach ensures the company's transition to a well-designed circular system.



At least

65

percent by 2030 is the reduction in greenhouse gas emissions aimed for by the German climate law.

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An integrated approach: closed loops instead of one-way streets

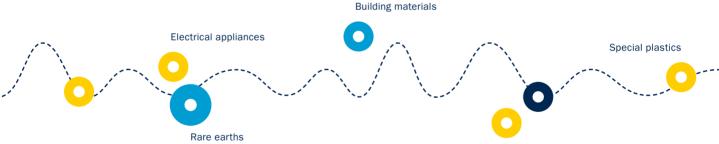
To give customers a practical example, Maak uses the idea of a 'Material Flow Manager': acting as a 'control tower', Interseroh can monitor – and interact with – all of the company's material flows and processes. "With this approach, we can start closing each material flow, step-by-step," Maak explains. One key objective is to retain all raw materials within the company's possession during the entire process.

This allows the company to access them at any time to save costs, and ensure the long-term supply of scarce and strategically important resources.

"We use closed-cycle management to secure access to strategically important raw materials – and therefore the future of our customers."

Alexander Maak

Head of Business Development & Project Management at Interseroh

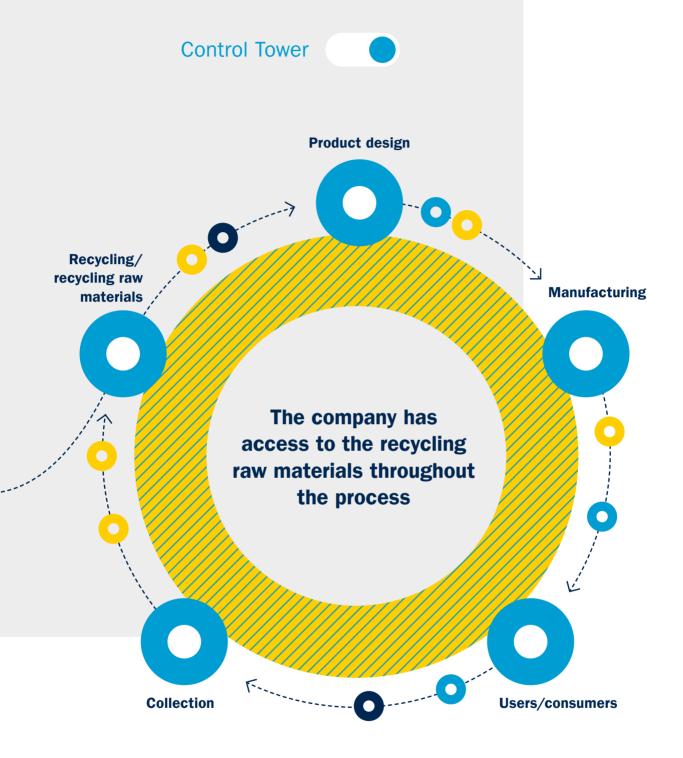


All processes are consolidated on one IT platform. The dashboard permits precise tracking of the company's raw materials: where is the material at the moment and where will it be needed again – and in what kind of format? The agility of this system is important, considering the volatility of raw material markets and capacities: "We have to stay flexible. To ensure we can, we take a dynamic approach to optimisation, adjusting the system processes and activities continuously to handle current changes in demand, capacities, logistics, technologies and, naturally, the legal state of play," says Maak.

Step by step to the bigger picture

This comprehensive overview of all processes lets Interseroh suggest detailed solutions to its customers for a properly functional and integrated closed-loop model. The environmental services provider also draws on expertise from across ALBA Group. "We optimise existing processes, either by deploying intelligent technologies or new take-back systems, or by altering products to make them more recyclable," Maak explains. Handling these tasks requires access to an extensive network. "We bring together all of the stakeholders needed to close the company's loops and we then manage these networks

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As a 'control tower', Interseroh manages all of a company's material flows. The aim is to keep all raw materials in company ownership at all times and manage them in the loop. This cuts costs while securing scarce and strategically important resources.

accordingly – from product packaging developers through to waste management and recycling experts." Companies benefit from this comprehensive, integrated service by ensuring more value is created in-house, which gives them greater market independence.

From the outset, Interseroh provides companies with all-round support. As a first step, the environmental services provider takes a closer look at the value creation cycles, to derive strategic recommendations for action and matching measures. Based on customer needs, Interseroh uses the 'control tower' approach to manage all of a company's closed-loop business.

Moving ahead - to stay ahead

The approach shows that sustainable development and corporate success are far from being mutually exclusive. "Customers who transition their entire company to the circular model and who take a leading role in this context only stand to benefit from the closed-loop approach," says Maak, summing up. Businesses are then set to enjoy huge advantages, ranging from resource security and the efficient use of materials to fulfilling growing consumer expectations about sustainability as well as straightforward cost savings. "We create a win-win situation for the economy and the environment."

Use this link to find out more: www.interseroh.de/en/materialflow



Our services for your material flows

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- Recommendations for action
- Road map implementation

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WASTE MANAGEMENT: BMW GROUP

We can only do this together

If you want to achieve climate targets, sustainability is your road map. BMW Group shows how it's done – while also focusing squarely on cooperation and collaboration in the supply chain.



Digitalisation, new trends in transport and climate change: automotive is very much a sector in transition. And so too is BMW Group. It has placed climate change and resource wastage centre stage. "Our new strategy integrates sustainability into all our processes," explains Alexander Laue, expert for environmental management and sustainability at BMW Group. Aiming to set up the most sustainable supply chain in the industry, BMW Group has now established the circular economy as a medium-term strategic focus. "In declaring our full commitment to the Paris climate targets," says Laue, "we now need a road map to get there."

Strong networks for clear goals

To achieve these climate targets, BMW Group needs to work closely with its entire supply chain. Ultimately, the aim is to cut per-vehicle carbon emissions by at least one third – right across the vehicle's lifetime. "That definitely needs teamwork," emphasises Laue.

Alongside the roadside emissions created, production is also an important step. Here, the Group aims to incorporate the use of recycled raw materials and options for reuse at the vehicle design stage. BMW's network of approved workshops is also important. BMW Group is working with Interseroh to ensure that most of the waste and used vehicles that leave these repair shops is managed in the loop: the environmental services provider organises the environmentally friendly recycling of packaging waste, fluids and car parts.

Room for improvement – not for workarounds

And that's not all. Laue is also looking to work with partners to further optimise the processes. "Our objective is to make our pick-ups even more efficient." Particularly since waste transportation is still a substantial source of carbon emissions. Simultaneously, steps are being taken to maximise the mate-



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rial recycling of vehicle waste, as is already possible in the case of used oil, PE film or starter batteries. "This requires a multi-dimensional approach that involves not only the garages but also extensions to the recorded material flows and recycling technologies." Greater transparency would be possible with database systems enabling lifetime tracking of raw materials.

Laue can count on support here from Andreas
Bachstein, Interseroh's Head of Solution Management Automotive: "Building on existing data, we are
developing collecting solutions with our waste
management network that give us a precise overview
of mono-fraction collection, which can be optimised
for the near-complete recycling of workshop waste."
Innovation is the key to both aspects here – as well
as cooperation from all stakeholders. "Everybody
must do their part to help achieve the climate
targets," sums up Laue.

"And so we now need a roadmap to achieve these climate targets."

Alexander Laue

Environmental Management and Sustainability Consultant, BMW Group

Your Interseroh experts for waste management will be happy to advise you:

www.interseroh.de/en/garages



MADE FOR RECYCLING: RITTER SPORT

Circling the square

Chocolate is always a good idea. But is plastic always a good idea for chocolate? To answer this question for its products, Ritter Sport needed to take a trip off the beaten track.

Consumer standards in relation to sustainability are becoming increasingly clear. Among other aspects, alternatives to plastic packaging are now very much in demand. Meeting these demands is another matter, however, since packaging has the job of protecting the product properly while also ensuring it retains both odour and flavour. As with chocolate from Ritter Sport, for example.

Despite these positive features, Ritter Sport is not yet satisfied with its wrapper and is hoping to optimise it further. Binder: "As part of our sustainability strategy, we are looking to design a wrapper made from sustainably produced, renewable raw materials." These materials also need to be perfectly recyclable. "We truly believe that paper is the best option for meeting all of these requirements." The paper used mostly consists of plant fibres that are sourced from forests and plantations whose management is certified as sustainable. After use, the paper becomes waste paper, a valuable recyclable raw material. To meet this goal, Ritter Sport is striking out on new paths, running tests, asking questions and learning a lot in the process.

A fresh look for an old favourite

Ritter Sport is well known and the shape and packaging of its chocolate squares is instantly recognisable. "Our current plastic wrapper made from polypropylene is already a very good solution," explains Katja Binder, Head of Packaging Development at Ritter Sport. The material is fully recyclable, and also provides optimum protection to the chocolate with minimal weight and use of material.

"We want to develop a wrapper made from renewable raw materials that can be managed in a closed loop."

Katja Binder

Head of Packaging Development at Ritter Sport

Many partners, one goal

In 2018, Katja Binder set out with her team to take the first steps towards achieving this goal. First of all, they took a much closer look at the current wrapper design. With this step complete, the packaging development team then started to identify, develop and test a series of more environmentally friendly alternatives. Central to this process was a close-knit expert network of partners and suppliers. Binder: "We maintain very good relationships with our suppliers right along the supply chain."

Interseroh also provided support to Ritter Sport for this ambitious project. "We liaise regularly with paper manufacturers and talk to them about the development and optimisation of special papers - and especially in terms of their recyclability," reports Julian Thielen, Head of 'Made for Recycling' at Interseroh. "To ensure that this chocolate product is properly protected, a special type of coated paper will be necessary." And this is exactly where the challenge lies: coated paper introduces problems when it comes to recycling. As an expert in the field of packaging solutions, Interseroh knows what the options are. "Small changes can make all the difference here." Interseroh not only confirmed that the paper was recyclable as a waste paper fraction, but also provided help in later stages as a sounding board and a source of inspiration.



THREE QUESTIONS for Katja Binder

Why did you decide to start this project?

Our goal is a wrapper design made from renewable raw materials that is fit for purpose, environmentally friendly and manageable within a closed loop. We believe that paper is the best option for meeting all of these requirements.

What have you found out?

Paper does meet a lot of our criteria. But we still haven't homed in on the perfect solution. Maybe it doesn't exist, after all. What is important is to take things step by step, ask questions, keep trying out new things and make adjustments where necessary.

What would be your advice for other companies?

Be bold! And don't be afraid to try out new approaches – even if they seem strange at first. When communicating with your stakeholders, try to keep everyone on the same page. And pick reliable partners. Working together on these problems is more efficient and satisfying for everyone concerned.

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- Recommendations for action
- Certificate of recyclability
- ✓ Use of the 'Made for Recycling' seal

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A book is also judged by its cover

In the process of developing an alternative wrapper, the main priority is product protection and safety. Yet this isn't quite so easy to achieve for high-fat foods like chocolate. The paper also had to be capable of easy processing by packaging machinery.

In January 2020, Ritter Sport reached its first milestone: testing the first prototype designed with paper. Binder: "We wanted to ensure that our approach was also relevant for our fans, so we involved them from the outset and took them with us on our journey." Constructive feedback from customers provided useful input for the road ahead. One such aspect was Ritter Sport working to improve the usability of its 'KnickPack' – the famous way of opening any Ritter Sport chocolate bar.

The prototype was then sent off for a real-world test in Austrian stores. "At this stage, we ramped up production quantities to check for feasibility on the machine and our standard logistic operations for paper packaging."

Not yet perfect – but headed in the right direction

The paper wrapper also passed this real-world test of its design and capabilities. Binder: "But there is still room for improvement, especially in terms of processing the wrapper in the machine." So a few steps are still necessary until a paper-based version of the chocolate wrapper is ready for the big time. So the journey continues – until the perfect solution can be found.

21



At the annual Future Resources event, experts from retail, manufacturing and the recycling industry get together to discuss the future of packaging. The industry event is organised jointly by environmental services provider Interseroh and the German Packaging Institute.

Future Resources on 9 Nove<mark>mber 2021 –</mark> get all the latest news!

www.future-resources.de



SENSOR-CONTROLLED WASTE BINS

A smart idea for waste

Digitalisation is increasingly finding its way into the waste management industry – its possibilities are numerous: for the environment, the closed-loop economy and for each and every one of us. An example from the city of Rijeka in Croatia.

These days, it is almost impossible to imagine our lives without digital tools. Whether it is the professional context or in private: they support us in our daily life and reduce human error. And it goes without saying that we have also felt the impact of digitalisation due to the coronavirus pandemic. "With our technological solutions, we can continue with our work as if nothing has changed," explains Zoran Ćurković. The Sales Representative at Interseroh in Croatia works on new waste management solutions with a variety of partners – digitally, of course.

For the interface between man and machine, Interseroh works closely with A1 Telekom. "The cloud-based platform from A1 allows the fill level to be checked remotely at any time," explains Ćurković. This enables the intelligent management of the waste, unnecessary trips through the city therefore become a thing of the past.

Waste bins that think for themselves

Strolling through the streets of the Croatian

port city of Rijeka, you notice them immediately: the brightly-coloured waste bins. Their arty

design isn't their only special attribute, though.

"These waste bins think for themselves," explains

Ćurković. A sensor in the PEL smart waste system

is able to determine the fill level - and sends

a message to the municipal waste management

company as soon as the container needs to be

emptied. "We therefore know how things look

on the inside from the outside."

But that's not all: the PEL is equipped with an automatic press. "This means it can hold ten times as much waste as a conventional container," explains Ćurković. The solar systems on the waste bins mean they work independently of the power grid. With these technological advancements, PEL is making a significant contribution — to greater efficiency, climate protection and clean air in the city.

"Thanks to the smart waste system, we know how things look on the inside from the outside."

Zoran Ćurković

Sales Representative at Interseroh Croatia









Waste management? No problem with Bin-e

Interseroh Croatia also has the appropriate intelligent waste container for your office space: the Bin-e automatically recognises the different types of waste on the basis of artificial intelligence.

The system then sorts the waste into the four fractions: paper, plastic, glass and residual waste – thereby supporting recycling and an efficient closed-loop economy.





An open-air exhibition: citizens of Rijeka designed the innovative waste bins with their creative patterns as part of a competition.





And there's more: data for the city of tomorrow

"Our smart systems demonstrate that new technologies are of elementary importance for the further development of waste management," summarises Ćurković. And he can see even more potential with the use of digital solutions: "Equipped with specialist sensors, we can collect other key data, on air or noise, for example. And on this basis, we can further improve the quality of life in our towns and cities." In the future, A1 Telekom and Interseroh also want to distribute the digital systems beyond Croatia – for optimised waste management throughout the country.

Your experts for smart waste bins at Interseroh Croatia: www.interseroh.hr/en/contact-hr



LICENSING MADE SIMPLE: WICKELKINDER GMBH

One platform for many countries

Anyone who, like Wickelkinder GmbH, places packaging on the market in Germany must also be involved in its waste management and recycling. But what regulations apply in other European countries? With its LIZENZERO.EU platform, Interseroh is simplifying what is often a complex legal situation.

In 2020, e-commerce recorded sales of EUR 83 billion, some 15 percent higher than the previous year. Alongside greater use of logistics for shipping, this has also resulted in larger volumes of packaging. In Germany, the German Packaging Act is very clear about how this is to be handled: anyone placing packaging on the market must bear the cost of licensing these volumes with a dual system. The fees collected for this service are then used to finance the collection, sorting and recycling of this packaging – with the aim of closing the material loop and reducing the consumption of resources.

Sounds simple enough at first. But what needs to happen if goods are shipped to other European countries? Each country has its own set of rules and processes that govern the waste management and recycling of packaging materials. So this presents a challenge to companies such as Wickelkinder GmbH: this supplier of manducabranded baby carriers and carry wraps ships its products to almost anywhere in Europe.

"In France, Italy, Spain and the UK in particular, our products are very popular and we often get repeat customers," explains Frank Leukel, Head of Logistics at Wickelkinder. The company keeps track of all the various legal frameworks by using the LIZENZERO.EU platform.

Managing packaging waste: for the closed-loop economy

To ensure that the packaging can be managed in the loop, the corresponding volumes need to be registered. After all, a well-functioning circular economy also needs to be properly financed. Accordingly, it's important that everyone who distributes packaging is also involved in its waste management and recycling – and in each and every country to which this packaging is shipped out. Leukel: "In this way, we can be absolutely sure that the waste management and recycling of our packaging is properly handled in exactly these countries."

83

billion euros in turnover were recorded by e-commerce sales in 2020 – an increase of around 15 percent from the previous year.

"We have to be up-to-date on the regulations in our target countries."

Frank Leukel

Head of Logistics, Wickelkinder GmbH

Eco-friendly packaging

The sustainable approach adopted by the Wickelkinder team doesn't stop at its products but also continues with its product packaging. Leukel: "Our goal is to make sure that our packaging and shipping materials are easily recyclable, and can be easily managed as part of a closed loop." A large portion of the packaging is therefore made from cardboard – and the company uses no filling material at all. Wickelkinder has even picked a sustainable solution for its adhesive tape. "We want it to be as simple as possible for our customers to sort our packaging," explains Leukel. For this is the only way a correct disposal can take place, which in turn is a prerequisite for a functioning recycling.

Mixed messages: packaging licensing at the European level

Huge volumes of packaging waste are created by the continuing online shopping boom. Andreas Arlt, CEO of the Händlerbund e-commerce network, explains the challenges and opportunities in relation to packaging licensing.



Why is packaging licensing necessary? Protecting the environment is a priority for us all, and packaging licensing encourages retailers to pack wisely – which means avoiding the kinds of materials that are more expensive to license, such as plastics. So a packaging licensing system does make a lot of sense.

So why is shipping to European countries so challenging?

Packaging legislation is not uniform across the European Union: instead, each member state has set up its own rules and procedures. In addition, there are only a few places where retailers can find out about the situation in the target country in their own language. Nor have there been any digital solutions to date for tackling this challenge.

What do you think needs improving in terms of packaging licensing regulations? There is still a lot of red tape, which needs to be cut back in order to simplify packaging licensing. There should be incentives for retailers who can prove that they are reusing used packaging. And as one basic change, a set of uniform packaging licensing legislation for Europe as a whole would be a hugely positive development for the Single Market.



"Protecting the environment is a priority for us all."

Andreas Arlt
CEO, Händlerbund
e-commerce network



Shipping volumes in Germany have doubled since 2018.

27

A simple solution for complex requirements

But what packaging regulations apply in which country? Leukel: "If we want to distribute packaging throughout Europe, then we need to know exactly which packaging legislation applies in each target country." This is where the LIZENZERO.EU information platform can help out.

"As a small business, we've decided to handle licensing in these various European countries ourselves," says Leukel. The detailed guidelines for the various export countries provided by LIZENZERO.EU are very useful, and help to minimise the time required for this process. "With just a few clicks, this inexpensive service helps us to find out whether there are any obligations to license packaging in our target countries, as well as associated costs – based on our reported volumes – and the steps needed to complete this licensing."

Protecting the environment – and saving money

Frank Leukel has no problem with the packaging legislation introduced by EU countries, and sees it as a sensible approach to protecting the environment. But the current systems do present a major challenge to small businesses and sole traders. "As a basic principle, I'd recommend reducing packaging to the absolute minimum," he says, summing up. While this can be sometimes tricky to achieve, it can be done. Wickelkinder makes sure to consider packaging as part of its logistics processes, so that packaged goods can be transported as efficiently as possible. This reduces the volumes of packaging needing to be registered and associated costs, as well as reducing the impact on our environment.

Our services for your shipping in the EU

- Digital profile for export countries
- Guidelines for your export countries
- Licensing checklist
- Personal information platform

REQUEST AN OFFER TODAY

Your expert for shipping within the EU



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MANAGING TRANSPORT PACKAGING WASTE: STEICO

Thrown out,

Every day, numerous shipments of wood fibre insulation materials from STEICO arrive safely at building sites and dealers. Having done its job of keeping the products safe, the transport packaging waste now needs to be properly managed and kept in the loop. Interseroh keeps this process running smoothly.

From wooden pallets to plastic films or cardboard: packaging is essential to move goods for sale to manufacturers, retailers or tradespersons. And this packaging needs to meet many requirements – ranging from protecting goods to making them easier to store or load. But what happens with used packaging once the products have reached their destination?

Like all companies who place packaging on the market, STEICO is obliged by law to take the packaging back again afterwards and organise its recycling or reuse. But this presents STEICO with something of a problem, since it supplies its environmentally-friendly insulating materials to retail partners, the building trade and manufacturers throughout Germany. So this involves a complex set of logistical challenges.

Maximising protection with minimal use of materials

Transport packaging is an important part of STEICO's business: after leaving its premises in a perfect, factory-tested condition, the products should arrive at the customer in the same state. So the insulating materials need to be properly protected for the whole journey, including any loading and unloading. To meet these tough requirements, the STEICO team works continuously on designing packaging to be even more environmentally friendly and to reduce volumes if possible – such as by adjusting product pack sizes.

Apart from cardboard, paperboard and plastic film, most of STEICO's transport packaging is made from wood in the form of pallets, which can be used to stack a lot of products at one time. Even here, the company thinks in loops: STEICO makes the pallets itself from its own production scrap. Which makes it even more important that these pallets can be reused or recycled once they have transported the goods safe and sound to the customer.



Every year, STEICO saves more than

600

tonnes of greenhouse gases by recycling the transport packaging that it uses. Interseroh's all-inclusive service lets the company focus on its core business.

"We focus on providing an efficient, reliable and customer-friendly pick-up service for transport packaging."

Frank Kurrat

Head of Recycling Solutions

picked up

Out of the way ... and into the loop

Interseroh handles the complex process of ensuring that transport packaging waste can be easily managed (and ideally, recycled) while meeting environmental regulations. Working together with its nationwide network of waste management partners, the environmental services provider picks up used packaging materials directly at the sites operated by STEICO's customers.

For Interseroh, it's important that customers can organise the professional management of their packaging waste both quickly and easily, so it handles the complex logistic processes for STEICO as a single point of contact. "We aim to provide an efficient, reliable and customerfriendly pick-up service for transport packaging," says Frank Kurrat, Head of Recycling Solutions. Wherever possible, Interseroh works to ensure that materials can be reused or sent for recycling, With the aim of closing the loop.



Straightforward pick-up and environmentally friendly management of transport packaging waste: Interseroh's nationwide service for all of STEICO's customers.



Watch our video to find out more about Interseroh's service for your transport packaging.

With the help of our network, we organise the pick-up and recycling of over 360,000 tonnes of packaging for

about

4,000

business premises in manufacturing

in more than

20

industry sectors

at ovei

100,000

commercial places of occurrence of waste

with around

600

waste management companies

and with more than

300

Our services for your transport packaging

- Pick-up and environmentally friendly recycling
- Nationwide network of certified waste management partners
- Full compliance with the German Packaging Act
- User-friendly customer portal

REQUEST AN OFFER TODAY

Your expert for transport packaging



Frank Kurrat
Head of Recycling Solutions

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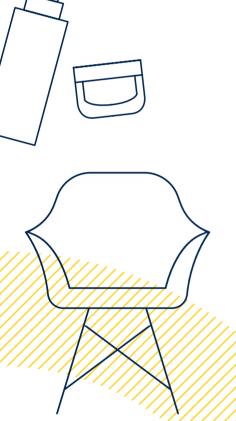
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INNOVATIVE PLASTIC RECOMPOUNDS

Plastic for future?

Why should companies opt for used materials when they can also use new ones? Dr Manica Ulcnik-Krump, Head of Business Unit Recycled-Resource at INTERSEROH Dienstleistungs GmbH, describes opportunities and current trends for recycled plastics – and ventures a look into the future.



What sets Interseroh apart in terms of recycled plastics?

Dr Manica Ulcnik-Krump (MUK):

All of our recompounding activities are consolidated in our centre of competence in Maribor, Slovenia, where we develop new and high-quality materials from post-consumer plastic packaging tailored exactly to our customers' specific requirements.

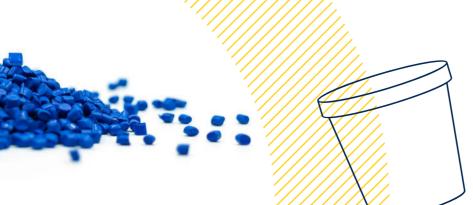
Since obtaining international accreditation in accordance with ISO/IEC 17025:2017 in March 2020, the Centre is currently the only recognised EU research institution that specialises in the development and analysis of recycled plastics.

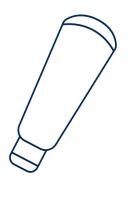
How has the pandemic affected

the market? MUK: In some business areas that were impacted by lockdown, the use of recycled plastics has declined. But despite the pandemic, we saw an overall increase in 2020 – especially in custom-made products. Demand currently outstrips availability.

Where do you see the reason for the increase? MUK: Both busi-

nesses and the general public are now much more willing to accept recycled materials. And securing raw materials is also becoming increasingly important for companies. Plus, recycled plastics can now be used in a wide variety of applications such as packaging, household





Using Procyclen instead of primary plastic saved an average of 1,002 kg of greenhouse gases per tonne in 2020, a 56 percent reduction in climate-damaging emissions.*

Consumption of primary energy also fell by an average of 21,199 kilowatt hours per tonne – the equivalent of



14,133

loads of laundry.

products, designer furniture or sports and leisure products. Just recently, we developed a new formulation that makes the use of recompounds feasible for the packaging of decorative cosmetics as well.

How will the use of recycled plastics develop? MUK: In my view, there is currently no other market that is developing so dynamically.

This is due to new legislation, an awareness of sustainability among end consumers, the scarcity of raw materials – and increased technological and chemical know-how.

This development is of significant importance. It is clear: using recycled plastics saves up to 60 percent of climate-damaging emissions per tonne compared to new, crude oil based raw materials. This fact speaks for itself.

technologies meet the very latest technical standards. All results are based on one tonne of granulate in each case. The calculation is based on the life cycle assessment standards ISO 14040 and 14044. The reference \mathbb{B}

Our services for your recycled plastics

- Material analysis
- Assessment of the quality of plastic materials
- Advice on the use of new materials
- Development of customised recycled plasticse
- Certified, reproducible material quality
- Documentation of all material data

REQUEST AN OFFER TODAY

Your expert for innovative recycled plastics



Dr Manica Ulcnik-Krump

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We have big plans – for you. Every business can benefit from a well-functioning circular economy: fewer resources needed, new business models, more value. We'll get you started. Real value from zero waste.

Do good and talk about it

We want to help shape a future worth living. And the way to achieve that is clear. The circular economy is an effective solution for mitigating the effects of climate change. Closing the loop also offers plenty of potential – both for the environment and our society as well as for business in general.

Together with our customers, we work to develop new models for more sustainability and recycling. From recycling-friendly designs or the taking back and recycling of packaging and products to the processing of raw materials. We also focus on efficient ways of handling disposal and waste management as well as made-to-measure logistics systems: our wide range of services reflects the wealth of opportunities that are available.

Bringing together what moves us forward

Achieving our vision means taking action wherever needed: whatever the size of the problem, we'll always find a solution that fits the bill. With an innovative new development, for example, or by networking the relevant partners. We come up with ideas, question the status quo and always keep moving forward – until we achieve our goals. Increasingly,

our work here now has an international focus. And we use key technologies to help us set up a functional closed-loop economy. Using intelligent systems, we optimise our business processes, respond quickly to our dynamic environment and work on developing new services. All of this helps us support our customers in the responsible handling of resources and material flows.

Saving resources, creating value

Our solutions - and the circular economy as a whole – are not a threat to conventional business interests. Quite the opposite: a well-designed approach here can measurably improve company value. If raw materials are reprocessed and reused several times, this allows companies to design production to be more efficient while ensuring resource security. We help businesses to be both environmentally friendly and efficient, while keeping customers satisfied and ensuring compliance with the law. The COVID-19 pandemic has again shown us the level of risk to which international supply chains are exposed in particular. The use of recycled raw materials and local reclamation can help to reduce these supply chain dependencies. And ensure that our supply chains are more resilient in the future.

"We help our customers to improve their sustainability practices. To do so, we develop tailor-made solutions and utilise the advantages of digitalisation."

Melanie Freytag

Managing Director, INTERSEROH Dienstleistungs GmbH





"We use closed loops to boost growth potential and make our customers more competitive in their markets."

Dr. Timo LangemannManaging Director, INTERSEROH Pool-System GmbH

"Our vision is a world without waste. And we are confident of achieving this objective. Together, with commitment and expertise. There's a will – and there's a way."



PROGRESS REPORT

We want to put an end to waste. The simplicity of this vision also forms part of our sustainability strategy: our four action areas are each assigned a

More on our sustainability strategy at www.interseroh.de/en/sustainabilitystrategy

publish full details of

we also

Every year,

of

clear

No waste of resources

Each and every day, we work on finding new ways to close material loops – and companies courageous enough to make this vision a reality.

No waste of ideas

We want to break free of the linear economy straitjacket – and to make this transformation as straightforward as possible for our customers.



We work to bring customers and climate protection together, sharing our experience and expertise throughout a wide range of initiatives.

No waste of **knowledge**

Our employees are the experts that make Interseroh what it is. During the pandemic, ensuring their safety has been more important than ever.

No waste of **talent**

Publication details

Published by

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Cover: Igepa Circle Offset Premium White,

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FSC® Recycled Credit, 140 g/m²



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