



**interseroh**  
zero waste solutions

# Your **partner** for an intelligent **circular economy**

On the way to a world without waste





# Sustainability pioneer: Interseroh in figures

We have been closing material, product and logistics loops for more than 25 years. Customers from all branches use our services to enhance their sustainability performance and process efficiency – and so improve their competitiveness. Our portfolio ranges from recycling to waste prevention, and from reuse to facility services and consulting.



# 100%

We accompany companies along the entire value chain with solutions tailored exactly to their needs: from packaging licensing and the collection and sorting of recyclable materials to the production of new resources. We use our award-winning Recycled-Resource process, for example, to produce recycled plastics to match exact customer specifications. This is also how we produce our award-winning granulate Procyclen, which is made from waste plastics and is 100% equivalent to plastics made from primary materials. Manufacturers are increasingly turning to Procyclen to sustainably expand their product ranges.

# 51.8m

By returning some 5.5 million tonnes of recyclable materials to the loop, the ALBA Group, to which Interseroh belongs, saved around 51.8 million tonnes of primary resources in 2015. Simultaneously, the international recycling specialist and resource supplier saved 5.9 million tonnes of greenhouse gas emissions. We also offer customers a further benefit in the form of annual personalised resources SAVED certificates. These document the customer's contribution to resource and climate protection, as achieved by working with Interseroh.

# 1991

Since our company was formed in 1991, we have provided over 10,000 customers with made-to-measure environmental services. To do so, we employ a workforce of over 1,600 people at 27 sites in 8 countries. As an integrated environmental services provider, we continuously expand our portfolio while setting standards in waste prevention, high-tech sorting and the development of innovative recycling solutions.

# 62.9m

We develop sophisticated multi-use pooling systems that our customers use to optimise their logistics processes, reduce costs and prevent waste. In 2016 alone, returnable transport containers completed around 62.9 million cycles within our pooling system. In real terms, this means our customers avoided buying, deploying and disposing of single-use containers by using our practical multi-use boxes for 62.9 million delivery processes.

# 0

Our 'zero waste solutions' slogan encapsulates an ambitious goal: a future without waste. To achieve this, we all need to do more than simply sort and recycle our waste. Accordingly, we are always looking for new ways to prevent waste and reuse products or materials.

# 4

Sustainability doesn't happen by chance: it is the result of years of experience, careful analysis and the skilled implementation of action plans. Our services are therefore always aligned with four clearly defined strategic goals: ReDuce (prevent waste), ReUse (reuse products and materials), ReCycle (recycle resources) and ReThink (rethink and optimise processes).

# 4,000

All over Germany, we coordinate the collection of used transport packaging. Every year, we take care of around 2 million collections for more than 4,000 customers in over 20 industries.

## WHAT WE OFFER

- environmental services throughout Germany
- innovative sorting and recycling processes
- individual advice to ensure best-in-class sustainability performance
- over 25 years of know-how in the recycling business



# Taking back and recycling of packaging by the market leader

Producer responsibility is a key principle in Europe – and therefore also resource-friendly packaging recycling. We help packaging distributors to fulfil their legal obligations with a broad-based portfolio of legally compliant and industry-specific take-back and recycling solutions.

## Interseroh's recycling system for sales packaging

For manufacturers and producers Interseroh's recycling system organises the taking back and recycling of all sales and product packaging waste generated by private households. Interseroh offers manufacturers a straightforward way to comply with the provisions of packaging legislation while also giving them a clear overview of quantities recycled.

Our customer portal gives you an up-to-date summary of contract details and lets you upload data quickly, simply and securely.

**Packaging recycling saves natural raw materials: every year, we issue our customers with individual resources **SAVED** certificates.**

In addition, Interseroh also handles the collection and recycling of sales packaging that is generated at sites comparable to private households – such as hospitals, catering for events or restaurant chains. Here, Interseroh can offer appropriate and certified industry solutions – stringent record-keeping obligations can also be met, for example.

## Nationwide recycling of transport packaging

Interseroh already offers nationwide collection and recycling of used transport packaging for over 20 industries in Germany, and is the country's market leader with its network of around 600 certified waste management partners. We guarantee the reliable pick-up and resource-friendly recycling of all packaging. This also includes containers empty of usable product – i.e. empty containers made from plastic, aluminium or other metals – even if these were used to hold hazardous goods.

## REPASACK – the model solution for paper sack recycling

Operated by Interseroh, REPASACK is Germany's leading nationwide take-back system for kraft paper sacks. Whether cement, chemicals, seed and feed, sugar or flour – many industries need to dispose of kraft paper sacks. Empty sacks can also be handed in free of charge to one of our 350-odd depots and collection points located throughout Germany. By taking part in the system, producers and fillers alike protect the climate and conserve natural resources: after collection, REPASACK then processes the empty paper sacks, sorted by bulk good type, in the company's own recycling plant. The high-quality secondary raw material is then used again in the paper industry. Customers can also make use of the REPASACK-G system, which ensures the environmentally friendly disposal of paper sacks used to transport hazardous substances or dangerous goods.

## Peace of mind with pan-European packaging licensing

The licensing of packaging across European national borders is a complex and challenging business. Within the 28 EU member states, various rules apply for fulfilling the European Packaging Directive – and thus for licensing the packaging volumes. Precise knowledge of the legal rules and contractual obligations is essential for exporters placing goods on the market. As an experienced partner for licensing across Europe, we support our customers with tailor-made solutions for any export solution, which can include country-specific reports, customer-specific analyses or handling all of the operational license business.





# Added value out of the 'Yellow Bin'

High-tech recycled plastics offer two key benefits for manufacturers: they are continuously available and have a consistently high standard of product quality. At the same time, recycled materials also help ensure a positive energy and climate balance. Interseroh offers a full range of services along the plastics value chain – from collection and sorting through to recycling and product marketing.

### Recycled plastics: future-proof and tailor-made

Research from Fraunhofer UMSICHT Institute has confirmed that the use of Procyclen or Recythen instead of primary resources can cut greenhouse gas emissions by 30–50%.

With its innovative Recycled-Resource process, Interseroh has perfected the art of recycling used plastics. Our award-winning process turns packaging and production waste into high-quality recycled granulates, with one of the products made being the equally award-winning Procyclen. Just like a new material based on crude oil, Procyclen can be fine-tuned to match customer requirements – for example in terms of fluidity, stability, UV and heat stability or colouration. Using injection, extrusion or blow moulding, Procyclen is now applied to make a host of high-quality products, such as laundry detergent bottles, marker pens and returnable transport packaging.

**The regranulate Procyclen has already won multiple awards – including the German Industry Prize.**

With its rugged qualities, the regranulate Recythen – which is also manufactured using Recycled-Resource – is especially suitable for the production of cable drums, garden furniture, pipes and films. As an additional benefit, manufacturers using Recythen or Procyclen for their plastics products can apply for the 'Blue Angel' eco-label and thus acquire a key differentiator.



**TAKING RECYCLING ONE STEP FURTHER**

**Concentrated expertise in plastics recycling**

Since September 2016, Interseroh has operated a centre of competence for plastics recycling in Maribor, Slovenia. Here, experts work with the very latest lab equipment to achieve significant advances in developing high-quality recycled plastics and the Recycled-Resource process.

These include the extrusion and restabilisation of plastic waste, for example, as well as the use of additives to chemically modify the plastic material with the aim of obtaining the exact properties required.

### No. 1 in sorting services for lightweight packaging

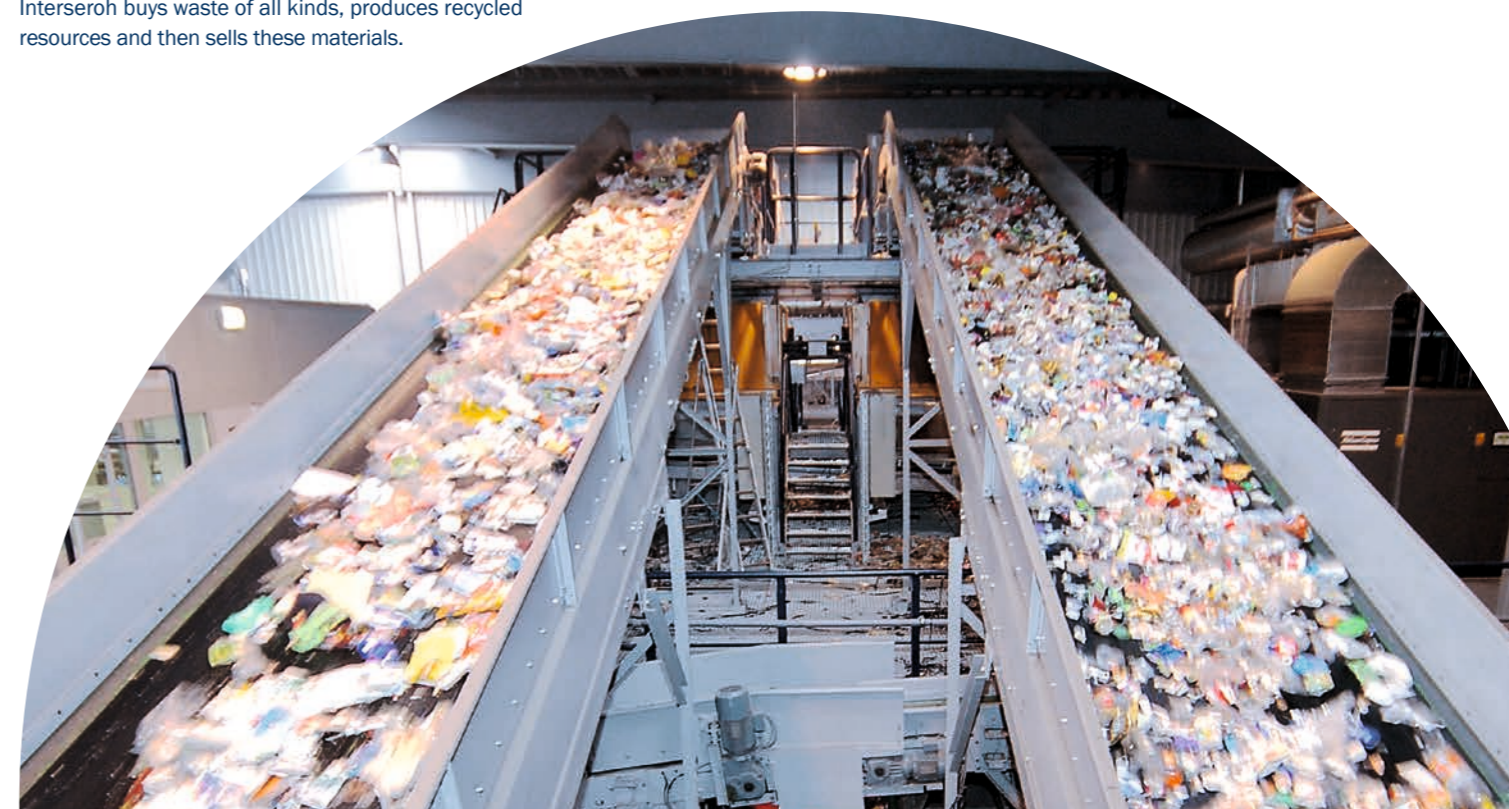
Interseroh is not only the market leader for lightweight packaging (LWP) sorting services in Europe but also a global leader in sorting technologies. Always tailored to customer needs, the plants process LWP waste from Interseroh's 'Dual System' (and others). Our sorting technology is enhanced and refined continuously to achieve the purest material fractions possible.

### Recyclable material marketing: purchase, sale and recycling

As a certified specialist waste management company, Interseroh buys waste of all kinds, produces recycled resources and then sells these materials.

The environmental services provider therefore plays a key role in supplying manufacturers with high-quality starting materials for new products. One key source of resources for plastics, aluminium and tinplate is offered by collections from private households. In addition, Interseroh also buys and markets paper and cardboard waste and industrial films. As an expert for high-quality closed-loop systems, Interseroh offers recyclable materials marketing that meets the most demanding standards.

Our four sorting facilities, whose total sorting capacity is 600,000 tonnes a year, sort around 25% of the lightweight packaging waste generated in Germany.





# Act responsibly – convince consumers

Non-returnables, waste electrical equipment, bulbs and batteries: for all waste streams, Interseroh develops take-back and recycling solutions tailored exactly to customer needs. With consumer-focused recycling services, our customers strengthen their sustainability performance and competitiveness.

## Easy waste electrical equipment taking back

Take-back obligations for waste electrical equipment affect bricks-and-mortar and mail order retailers equally. Interseroh has established a unique network of over 1,500 collection points for mail order retailers throughout Germany. Instead of complicated returns via a parcel service, end consumers can hand in small or large used electrical items here as-is and free of charge. Convenient for distributors and good for the environment: all equipment collected is picked up by certified waste management companies and forwarded for professional recycling.

## Packaging optimisation needs expertise

Manufacturers and retailers know that packaging recycling starts with the design. This is where our packaging optimisation service can help: Interseroh works with its customers to analyse the packaging lifecycle – from production to waste management and recycling. The ultimate goal is to improve the ability of packaging to be recycled. Packaging optimisation preserves natural resources and the climate, and attracts environmentally-aware consumers.

## One-way deposit solutions for take-back firms and distributors

Interseroh supports beverage makers and retailers throughout Germany with integrated services focused on non-returnable containers. The portfolio comprises both legally compliant registration with the German DPG Deposit Scheme including collection, counting and waste management of containers, plus the reliable clearing of deposit duties.

## Collection systems for energy-saving bulbs and fluorescent tubes

The recycling of used bulbs doesn't need to be difficult. Interseroh offers retailers practical collection boxes in various sizes for their sales premises. Apart from the cost of the box, there are no further expenses. Interseroh not only handles both pick-up and recycling but also issues recycling certificates. The model is also very convenient for consumers, since they can simply drop off their old energy-saving bulbs in-store.

Nationwide, Interseroh runs 10 stationary counting centres for non-returnable containers and is the no. 1 in the German market.

The amended Waste Electrical and Electronic Equipment Directive requires all retailers with sale or storage space exceeding 400 m<sup>2</sup> to take back waste electronic and electrical equipment. Interseroh reliably handles all related activities for a fixed price.



## TAKING RECYCLING ONE STEP FURTHER

### Mobile Counting Centre

The Mobile Counting Centre (MCC) means retailers avoid the time-consuming return of empty non-returnable containers to stationary counting centres. Instead, the MCC comes to where the containers are produced: the distribution centre, transit point or major event. Up to 100 containers a minute are counted in the MCC using the

very latest counting and communication systems, before being crushed. The holding tank can take up to 120,000 non-returnable bottles.

This not only cuts transportation costs for retailers but also reduces road traffic while demonstrably avoiding air pollution emissions.



# Less waste, thanks to optimised delivery processes

Well-organised and clear-cut logistics flows are a key factor for ensuring cost effectiveness. For manufacturing and retail customers, Interseroh runs a closed-loop system for returnable transport containers – completely waste-free. Customers have full inventory control and can optimise their supply chain for sustainability.

## Pooling of returnable transport packaging

In its checking depots, Interseroh uses state-of-the-art laser and camera technology to immediately identify any defects in the returnable containers.

'Pooling' refers to a centrally organised and optimised system of reusing returnable transport packaging (RTP), which is suitable for transporting any kind of merchandise – from food to building materials and pharmaceutical products. Importantly, the pallets or folding crates are registered, identified and repaired or recycled as necessary in Interseroh's own depots after completing each cycle. The number of RTP boxes in the system is always kept as low as possible.



As one example, Interseroh worked with a discounter to set up the pooling of returnable folding crates nationwide in Germany, successfully replacing the single-use cardboard boxes previously used for food transportation and in-store presentation.

## A building materials pallet solution

As a returnable pooling specialist, we also use standardised processes to manage wooden pallets in a closed-loop system – from pick-up and inspection to delivery and administration. Here, Interseroh makes good use of its nationwide depot and transportation network. Where required, we can also provide quality-inspected pallets.

## TAKING WASTE PREVENTION ONE STEP FURTHER

**ENCORY**

a joint venture of BMW Group and ALBA Group.

### Modern vehicle parts management

Together with BMW Group, ALBA Group – to which Interseroh belongs – organises the international take-back and reconditioning of vehicle spare parts. In 2016, this work produced a joint venture: Encory GmbH.

Under the Encory brand, new solutions are being developed for sustainable vehicle parts management. Interseroh played a leading role in the establishment of this joint project.

## Waste prevention is never off-the-peg: Interseroh develops made-to-measure solutions

Multi-way pooling cuts unit and kilometre costs while giving full control to customers as they can track boxes and pallets in real time, and check and optimise both inventories and coverage. Container reuse also makes a major contribution to waste prevention while conserving natural resources, especially where recycled materials are used.

# Taking benefit from reuse

Companies significantly reduce their impact on the environment if they give their products a 'second life' rather than simply disposing of them. Computer equipment and printer cartridges are good candidates for being given a second lease on life. Interseroh offers made-to-measure reuse services.



## TAKING REUSE ONE STEP FURTHER

**kilenda**

### The sharing – and caring – economy

One special project where we support product reuse is our work with Kilenda, a brand owned by Interseroh subsidiary Relenda. By renting out children's clothing online, this start-up helps to reduce the resource-intensive production of new clothes. Producing just one new t-shirt requires around 6,300 litres of water plus about 3.1 kg of CO<sub>2</sub>, for example. Thanks to the loan and reuse of children's clothing, Kilenda was able to save a total of 114 million litres of water and 57 tonnes of CO<sub>2</sub> in 2015.

## IT and communication equipment: Buying, data destruction, remarketing

Interseroh buys up IT and communication equipment that companies no longer have a use for – whether PCs, network equipment or phones – and prepares it for a suitable second useful life. Research conducted by Fraunhofer UMSICHT shows that the reconditioning of just a single PC can save 387 kg of primary raw materials and avoid up to 229 kg of harmful greenhouse gas emissions. The researchers calculated these values based on the assumption that equipment would be used for 3.5 years during both its first and second useful lives. Our customers themselves decide how reconditioned equipment should be marketed. The security of customer data is also guaranteed at

all times: we erase data according to the quality and security standards published by the German Federal Office for Information Security. Destruction of storage media is also possible.

## Practical collection systems for printer cartridges

Empty but reusable printer drums and cartridges are too valuable to be thrown away. This is why we provide offices and public institutions with a variety of collection systems and boxes. Interseroh buys all collected and remarketable drums and cartridges, and organises their pick-up, sorting, marketing and disposal; the entire service is free of charge for our customers. The collecting companies can then use the proceeds to support charitable organisations or public institutions such as schools and kindergartens.

The various collection systems offer cash payments or bonus points for cartridges that can be easily reused. Interseroh organises professional disposal for all other cartridges.





# Fully integrated: waste management and logistics

Nationwide, we take responsibility for the tasks associated with waste management logistics: from tour planning to order processing and pick-up of a wide range of cargo units.

### Tailor-made waste management solutions in six steps

Whether construction, catering, retail, manufacturing or healthcare/nursing: we develop systematic waste management and reverse logistics solutions for any waste generated at any location and in any industry. In doing so, we utilise our tried-and-tested six-step strategy: 1. Site visit, 2. Data analysis, 3. Documentation, 4. Drafting of practical proposals, 5. Optimisation, 6. Support. The aim is always to close material loops efficiently and sustainably.

## Environmentally friendly waste management and individual services go hand-in-hand at Interseroh.

Waste Management solutions are drawn up in close collaboration with the customer and by working with over 600 certified companies in the waste management and recycling industries. Our comprehensive logistics network enables us to handle any category of waste throughout Germany while meeting the highest standards of quality.

### Pushing forward with reverse logistics

Reverse logistics is the perfect waste management solution for companies that have limited storage space and also produce a wide range of non-standard waste. Interseroh handles the pick-up, transportation and disposal of (e.g.) used electrical equipment, packaging or paper and cardboard. Practical logistics solutions are available for all materials and cargo units – even right down to the very

smallest kinds of containers.

By arrangement, Interseroh can also transport hazardous waste and batteries or undertake the waste management at construction sites.

### Carelean sets hygiene standards

Improving waste hygiene in nursing and the care of the elderly is the goal of Interseroh's Carelean brand. Here, Carelean is a competent partner who can offer its customers services for the safe and hygienic waste management of healthcare waste.

Modern equipment solutions offer the space-saving compacting of healthcare waste and the safe containment of waste as well as its professional waste management. This improves room air and hygiene standards while relieving nursing staff workloads. Carelean is setting new standards here in waste management for healthcare and geriatric nursing facilities.

### TAKING DISPOSAL ONE STEP FURTHER

## ecoservice 24

### A skip with a click

Choose the waste type, order the skip. That's how easy Ecoservice24.de, Interseroh's nationwide container service, works. The service is particularly handy for small businesses, who book the right container for their material flow, such as building waste or bulky items, and enjoy inexpensive, environmentally friendly waste disposal.

Our online portal for reverse logistics and its matching app gives our customers a straightforward system for placing, monitoring and archiving their orders.

# A safe pair of hands for your property

Facility services from the specialists: For customers with commercial and residential properties throughout Germany, Interseroh organises reliable, feature-rich end-to-end facility solutions with 24/7 availability.

### Your strong partner in facility management

From apartments, houses or office blocks to entire estates: the variety and individuality of properties and grounds is matched by their maintenance and renovation requirements. Interseroh provides all facility services itself and tailors them to meet the exact requirements of the customer. As your strong facility management partner, we can provide support for the infrastructural and technical needs of any kind of property, plus full-service waste management.

Our experienced technicians resolve defects or damage quickly and effectively, provide support for conversion work and minimise disruption to building services, thereby ensuring the reliable operation and optimum management of any property. If required, we can also handle building operations – which naturally also includes an appropriate service model. Alongside flexibility and efficiency, we prioritise customer focus. We ensure this not only with our Service Centre, which is available to handle complaints, faults or emergencies 24 hours a day, 365 days a year, but also with the help of a specialised IT solution that customers can use to track their order status in real time and with full access to relevant details.

### Property management: peace of mind for businesses and investors

With a ten-year record of success in the market, we manage property assets of any value and any age nationwide, from traditional office buildings and industrial estates to mixed-use real estate and special-purpose properties. Our services include rental and building work insurance contracts, tenant support, vacant property management, maintenance and repairs planning, and budgeting. Providing comprehensive commercial and technical property management services, our experts ensure that every property portfolio achieves its best possible performance.





# Good advice – positive results

Interseroh is a safe bet for companies looking for targeted ways to increase their sustainability performance while complying in full with legal requirements. From waste volumes and material flows to logistical and infrastructural processes, our expert consultants take a customer-specific, holistic approach to analysing, appraising and optimising your processes.

## Optimize and recycle

In facility management, cost savings of up to 20% are possible. In disposal management, Interseroh achieves overall recycling rates of up to 99%.

We apply our 'optimise and recycle' approach to companies needing to optimise their facility management and increase their recycling rates. Alongside reduced waste management costs, the effects include simplified processes and greater transparency. Interseroh first analyses the current situation at the customer and sets feasible targets before looking at optimisation potential and drafting action plans. If required, recycling coordinators or estate managers assist in implementation on-site.

## Our recommendations are based on a systematic, standardised status quo analysis conducted on your premises.

### EU Chemicals Regulation (REACH): see the bigger picture

The REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals) Regulation applies to any business and any chemical – and not just the chemicals used in industrial processes, but also the kinds of substances found in everyday products.

Anyone who produces, imports or uses chemicals must satisfy the stringent provisions of the EU Chemicals Regulation (REACH). These include duties of reporting, providing information and registration for products containing chemicals, such as packaging, clothing or appliances. In cooperation with Dr. Knoell Consult, a consulting services company specialising in REACH, Interseroh offers wide-ranging support for achieving compliance with REACH obligations – for example in the form of training or impact analyses. If required, we can provide assistance to our customers all year round, informing them of legislative changes and new substances added to the REACH Regulation.

## Green Office: a model for the future

The aim of the 'Green Office' consulting service is to design office workspaces to be climate- and resource-friendly. Interseroh draws here on its many years of experience in the property sector and the recycling industry. Our experts analyse the current office situation, highlight intelligent options for the separate collection of recyclables, train staff and offer practical support during implementation. With our optional certification as a 'Green Office', customers can also set an example for sustainability in the workplace – while also impressing both stakeholders and potential employees.

## The clear-cut way to clearing

The deposit scheme for non-returnable beverage packaging creates a network of financial receivables and payables between affected parties such as distributors and retailers. 'Clearing' refers to the settlement of these recurring claims. Interseroh advises manufacturers and retailers on all aspects of one-way deposit clearing and couponing, and develops tailor-made clearing solutions. This enables all stakeholders in the deposit scheme to settle costs both rapidly and securely.

## Lithium-ion battery recycling

As an expert for battery recycling, Interseroh develops tailor-made solutions for the recycling and transportation of end-of-life (EOL) lithium-ion batteries – even across Germany's borders. Interseroh's solutions observe all national and international laws and safety regulations, and the company also offers individual consulting services.





**Contact us  
to speak to one  
of our consultants  
today!**

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