Roadshow in the Baltic Sea Region

GERMANY

SWEDEN

FINLAND

POLAND

LITHUANIA

ESTONIA

REGIONSIDERS IGN

RECONSIDERSIGN

Roadshow in the Baltic Sea Region

Reconsider Design
International Design Center Berlin

The exhibition ‘Reconsider Design’ wants to raise awareness of the role of design and the responsibility that comes with it. The environmental impact of a product is largely determined during the design phase. As a designer, taking responsibility means creating products, processes and services that are both environmentally sound and sustainable during their entire lifecycle.

Excellent examples of ecological design from across the Baltic Sea Region are showcased by ideas and products in areas as diverse as learning, social inclusiveness and mobility. The exhibition forms part of the ‘Ecodesign Roadshow’, which will be touring the Baltic Sea Region. Accompanying workshops and events will promote Ecodesign as a holistic creative approach and support the exchange of knowledge and experience.

We would like to thank our partners, first and foremost the German Environment Agency for the technical expertise provided in all matters of sustainability and closed-loop production. Many thanks also to our partner design centres from Estonia, Finland, Lithuania, Poland and Sweden for the fruitful exchange and great cooperation.

Preface
German Environment Agency

The population of our planet is still growing. Currently, in June 2017, our Earth is inhabited by more than 7.5 billion humans, a figure expected to increase up to 11 billion by the end of this century. Each one of these billions of people, their children and children's children have the right to live their lives in dignity. The increase of wealth and consumption, however, is necessarily limited: there is only one Earth and it cannot be doubled or tripled to provide the resources we would need to continue our present way of life. Hence, one major challenge we face today is the transformation of our economic system into one that makes far more efficient use of resources, that supports closed loops of materials and enables new consumption patterns. A group of researchers headed by Johan Rockström at the Stockholm Resilience Centre introduced the system of nine 'planetary boundaries', such as climate change, fresh water use, changes in land use and the integrity of our biosphere. These are the boundaries within which human society can pursue sustainable development whilst keeping the risk of undesired Earth system changes at a controllable level. Social and technical innovations with the power to transform our economy and society must therefore occur within these boundaries. Herein lies another major challenge: to think in systems.

Design has the great power to boost such innovations on the path to a more sustainable society. Most of any product's environmental impact is determined at the design stage: Which materials are chosen and in what quantities? How much packaging is needed? How durable is the product? Is it upgradeable or reparable? How much electricity is consumed during production and later during use? How much fuel will be spent transporting materials to the place of production, to bring the product to its users, to collect materials for reuse? Is it possible to reduce or even substitute those substances in the product that are harmful to health and environment? What happens at the end of the product's lifespan? Will the product be owned by a single user or will it be shared in a product service system?

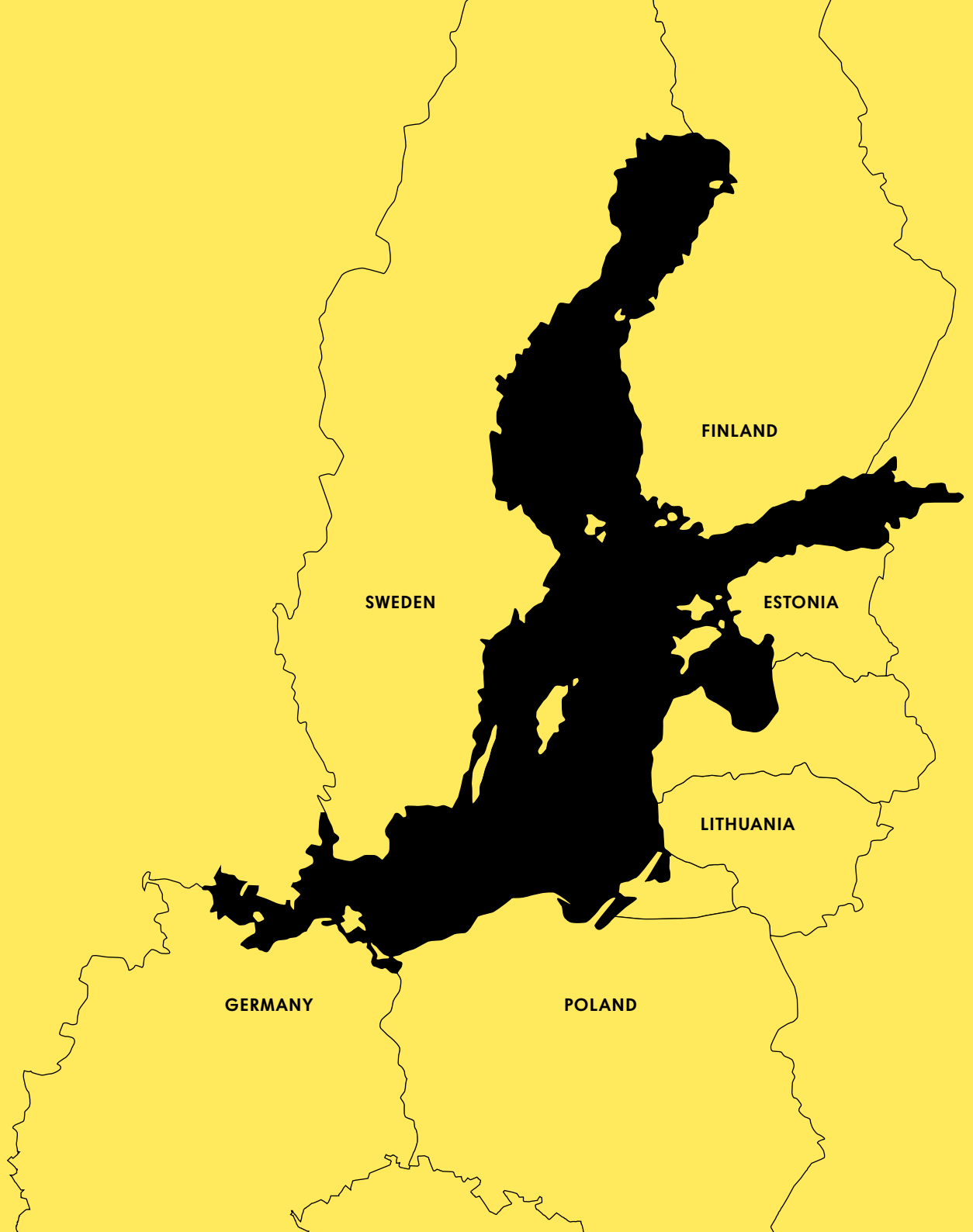
Design comprises far more than aesthetics. Designers and product developers determine a product or service's energy and material efficiency, circular flows and the mode of consumption. They influence the applied business systems and concepts. By thinking in systems, designers can therefore make a considerable contribution to ensuring society respects the planetary boundaries.The EU project 'Ecodesign as a Driver of Innovation in the Baltic Sea Region (EcoDesign Circle)' is a three-year project (2016–2019) supported by the Interreg Baltic Sea Region Programme and part funded by the European Regional Development Fund with a budget of 1.7 million EUR. The project promotes sustainable design by strengthening the competences of design centres, small and medium sized enterprises, lecturers, professional designers and engineers in the field of ecodesign. It aims to inspire by showcasing selected good cases, to overcome the hesitations entrepreneurs may have about ecodesign by demonstrating its market potential and to bridge the gap between the know-how of environmental scientists and the Ecodesign competences and awareness needed among designers. To this purpose, a 'Learning Factory for Ecodesign' is being established within the project, complemented by further learning materials such as practical films. The tools 'Ecodesign Audit and Sprint' are being developed to identify potentials for sustainable (re)design in enterprises and realise these in a design-centred process. A 'Sustainability Guide' will be a transnational web-based hub of information, inspiration and methods for ecodesign. And this 'Reconsider Design' travelling exhibition explores the meaning of Ecodesign, showcasing inspirational success stories.

The German Environment Agency (UBA) is lead partner of the project, cooperating with six design centres from Estonia, Finland, Germany, Lithuania, Poland and Sweden. The joint development and organisation of project activities by the partners is strengthening their network and endeavours in the field of sustainable design.

'EcoDesign Circle' continues UBA's efforts to promote sustainable innovation. Another example is the German Federal Ecodesign Award that it has awarded annually since 2012 together with the German Federal Ministry for the Environment, implemented by the International Design Center Berlin.

'The best designers are always change-makers', said Cameron Tonkinwise, Professor of Design at the University of New South Wales. Let yourself be inspired by the 'Reconsider Design' exhibition and join the discussion on how design and new business models can contribute to 'making the changes' for a sustainable future within our planet's boundaries.

Maria Krautzberger
President of the German Environment Agency


FINLAND
SWEDEN
ESTONIA
LITHUANIA
GERMANY
POLAND

German Environment Agency
Umweltbundesamt (UBA)

Founded in 1974, the German Environment Agency is Germany's main environmental protection agency with its headquarters in Dessau. Around 1,500 employees concern with an extremely broad spectrum of issues, including waste avoidance, climate protection, and development of criteria for Blue Angel-labelled products. The agency's work centres on gathering and analysing data concerning the state of the environment, and making projections. Based on these findings, federal bodies, such as the German Federal Ministry for the Environment, are provided with policy advice. Furthermore, the general public is provided with information and citizens' questions are answered.

UBA's overarching mission is the early detection and assessment of environmental risks, and to find viable solutions for them in a timely manner. As environmental protection is a global task today, international cooperation is an important part of the agency's work.

With respect to Ecodesign, UBA is involved in the investigation on and promotion of environmentally sound production and consumption patterns. Together with the German Federal Ministry for the Environment, the German Federal Ecodesign Award is announced. The award acknowledges environmentally and aesthetically convincing goods, services and concepts since 2012.

umweltbundesamt.de/en

Design Forum Finland

Founded in 1875, Design Forum Finland is the national design promotion organisation in Finland, maintained by the Finnish Society of Crafts and Design. Its role is to strengthen the growth and competitiveness of SMEs through the means of design and strategic design management. It offers services and information that will help SMEs to evaluate, develop and apply the competitive advantages brought by design. Design Forum Finland's aims are to increase and share information and design know-how, connect design agencies and future clients, and create new partnerships. Design Forum Finland organises a range of events, seminars, workshops and presentations. Its awards – the Fennia Prize, Kaj Franck Design Prize, Young Designer of the Year and Estlander Prize – promote and communicate the uses and benefits of design. Design Forum Finland initiates and participates in national and international research and development projects and creates competence networks. To its members, Design Forum Finland offers access to the most interesting projects and an opportunity to influence and participate in current design discourse. Throughout the years, Design Forum Finland has carried out design exhibitions and projects with a focus on Ecodesign and corporate social responsibility.

Design Forum Finland
designforum.fi/en

Estonian Design Centre

The Estonian Design Centre is a development centre founded in 2008. The centre fosters the field of design and brings its members together. The aim is to help designers, entrepreneurs, public sector representatives, policy makers and everyone else who wants to promote the growth of Estonian design find each other, and to act also as their partners. The everyday work of the design centre consists of making design visible and acknowledging design as something that adds value. Good design means user- and eco-friendly solutions that work well and pave the way for innovation, both in business and the public sector.
The design centre's services are based on two of it's main goals. First, to be a bridge in the design world, bringing together designers and clients. The second aim is to talk about design as added value and something that fosters innovation. How does design create value? This is the question the Estonian Design Centre answers with workshops and trainings, master classes, training programmes, contact events, think tanks and seminars. Its focus on good design is highlighted through its design blog, design map and design market. The best designs are rewarded at the Estonian Design Awards.

Eesti Disainikeskus
disainikeskus.ee/en

Pomeranian Science and Technology Park Gdynia Gdynia Design Centre

As a constituent part of the Pomeranian Science and Technology Park, Gdynia Design Centre supports the development of creative industries, including companies and projects operating in the fields of industrial design, applied graphic arts, multimedia, architecture and fashion. It is a place where designers, entrepreneurs, students, and others passionate about design can meet and work together to promote smart design. In its daily work, Gdynia Design Centre coordinates design-related initiatives and events, for instance by participating in international projects, running educational activities, and holding exhibitions and events to promote design, such as the Gdynia Design Days.
One of CDG's core focus areas is to act at the intersection of design and entrepreneurship by promoting strong cooperation between designers and business people – particularly by helping SMEs acquire 'design thinking'. The centre's extensive experience in this area includes leading interregional projects (such as Design EntrepreneurSHIP) with the aim of transferring knowledge, triggering innovation and developing good practices in design and design-related fields.

Pomorski Park Naukowo-Technologiczny Gdynia
Centrum Designu Gdynia (CDG)
centrumdesignu.gdynia.pl/en

International Design Center Berlin

Founded in 1968, the International Design Center Berlin is one of Germany's leading institutions for design promotion. IDZ members include more than two hundred design-oriented companies, agencies, institutions and creatives. Alongside events and formats for member networking, the IDZ organises projects and events at national and international levels in active exchange with representatives from politics, culture and science.
The field of design addresses far more than merely aesthetic issues. In the development of products, processes and services, design serves to integrate functional, emotional and social aspects that are based on people's actual needs. As a driver of innovation, design plays an important role in addressing social, environmental and economic challenges. Since its foundation, IDZ has focused on the promotion of sustainable design and has achieved great expertise in the field of Ecodesign.

Internationales Design Zentrum Berlin e.V. (IDZ)
idz.de/en

Lithuanian Designers' Society

Lithuanian Designers' Society is an association of professional designers of Lithuania. Established in 1987, it is a public non-profit organisation and also the only organisation in Lithuania in the field of design which has a unique legal status of art creators' organisation. LDiS represents Lithuanian design internationally, serves as a national design centre, and as a social partner for policy making institutions. Besides, LDiS constantly expands its role as a facilitator of cooperation between science, business, public and private sectors and society. Following the latest innovative tendencies, LDiS contributes to international networking and promotes the key role of design for the solution of global economic, social, environmental and other challenges. The principles of circular economy, human-centred innovation and holistic approach lie in the basis of the philosophy of LDiS. Since 2016 LDiS is the member of European Bureau of Design Associations (BEDA).

Lietuvos dizainerių sąjunga (LDiS)
ldis.eu/en

Swedish Industrial Design Foundation

The goal of the Swedish Industrial Design Foundation is to increase national awareness of design as a competitive tool and driver for sustainable development in all innovation and change processes. SVID aims to develop and deepen the understanding of design and design methodology in businesses, the public sector, research and society in general. The foundation operates cross-functionally where they can link actors, disseminate knowledge and strengthen the potential for design-driven development. To foster this development, SVID creates platforms and networks where growth and prosperity are developed and nourished.

SVID, Stiftelsen Svensk Industridesign
svid.se/en

LEARNING

PLAYING

01 **Retoy**
Lek för Hållbarhet

02 **TORP**
MFRMGR – Marta Frejda, Michał Gratkowski

03 **FLOW – Re.Use of School Furniture and Equipment**
Regine Aicher, Nina Nicolaisen

04 **UNO Parks**
Adventure Architects

05 **CO_2-Kompass**
Scholz & Volkmer GmbH

06 **KOMPLOTT Germany**
Janina Prenzing, Iven Sohmann

07 **Carbon Sink Design Studio**
Hiilinielu Design Studio, Design Forum Finland,
Lahti University of Applied Sciences,
Tampere University of Applied Sciences

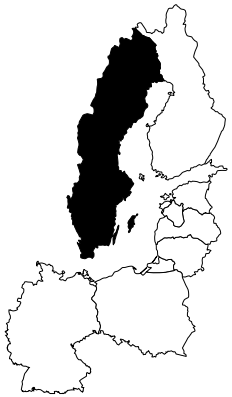
01 **Retoy**

The average five-year-old in Sweden owns more than 500 toys. At the same time, the industrialised nation of Sweden consumes the resources of approximately four Earths. Retoy wants to offer all children a sustainable relationship to consumption, while educating both them, their parents and other adult role models on children's rights. At toy swap events children exchange toys they no longer use, donate them to kids in need, or upcycle them in the Retoy Lab. Potentially harmful toys containing toxic chemicals are sorted out in the process. A total of 70,000 toys have already been exchanged since 2011, equal to 120 tons of CO_2 saved from swapping instead of buying new toys.

Lek för Hållbarhet
retoy.se

By teaching the value of swapping toys rather than buying new ones, and demonstrating how the materials in toys influence the environment, Retoy raises awareness for the environment among children and adults. At Retoy, children swap toys with each other and learn which materials are environmentally friendly and which are not. Children learn about circular consumption and how to conserve natural resources. With the focus on the future, our children, Retoy is a good example of a new inspiring sustainable service.

Swedish Industrial Design Foundation



02 **TORP**

TORP is a concept for reviving a monitoring station at the Puck Bay, the western portion of the Bay of Gdansk. Constructed as a torpedo station during World War II, the guard point has since been left to the sea. The project aims to carefully restore the historic station, and foresees the construction of office and residential spaces within the building. On the outside area, vegetables can be grown, provisions stored and rain water collected. The facility will run on renewable energy. Waste water will be collected separately and disposed of.

MFRMGR
Marta Frejda, Michał Gratkowski
mfrmgr.pl

TORP is a great example of adapting an abandoned building that still has an amazing potential for recovery. Remains of the German experimental torpedo station have become the inspiration for an innovative project. Through its outstanding design and great space management, TORP will satisfy the most diverse needs of guests. In addition, TORP will enhance the historical and ecological knowledge of the Puck Bay area.

Pomeranian Science and Technology Park Gdynia
Gdynia Design Centre

03 **FLOW**
Re.Use of School Furniture and Equipment

Every year, schools and public authorities dispose of vast quantities of inventory, such as furniture, sports equipment and teaching materials. Often, these items are fully functional and useable, but the facilities lack storage and suitable networking possibilities. Here, the FLOW brokerage and auction platform can serve as an interface. Used inventory is listed for social organisations or is made available for auction.

Regine Aicher, Nina Nicolaisen
schule-im-flow.de

With FLOW, the two Hamburg designers Regine Aicher and Nina Nicolaisen have implemented an exemplary service design project. Discarded school supplies tend to get thrown out. The social auction platform FLOW sets the tone for sustainable consumption and establishes a new recycling cycle whereby furniture and learning materials that are no longer needed are provided to social and cultural institutions. This saves resources and massively reduces the amount of waste generated.

International Design Center Berlin

04 **UNO Parks**

UNO Parks are adventure parks and children playgrounds made of natural and reusable materials. Only leased tools as well as local, certified wood are used for the construction. If installed in nature, the construction area is cleaned from industrial and organic waste beforehand. UNO Parks are easy to repair and are made according to the client's desires, landscape and brand. The company has already realised projects in China, Europe and the USA. Adventure Architects offer their customers and partners as well as students, refugees and the unemployed education programmes in the areas of Circular Economy and Ecodesign.

Adventure Architects
unoparks.eu

UNO Parks is a mini-model of a circular economy approach as well as a sustainable urban development solution with a wide variety of stakeholders involved. The adventure parks offer new ideas for leisure time and education, as well as health and wellness activities for urban residents, including people with special needs and socially marginalised groups. Furthermore, the project takes care of nature in the urban environment.

Lithuanian Designers' Society

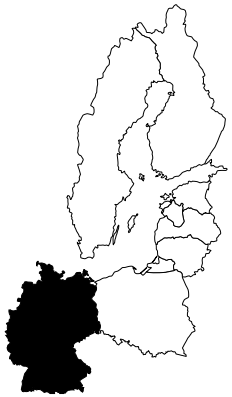
05 CO_2-Kompass

With the online game CO_2-Kompass, Deutsche Bahn – one of the largest employers in Germany – is committing to raising awareness of the efficient use of resources among employees and company members. The playfully motivating approach of CO_2-Kompass, in which users compete against each other, encourages participants to save CO_2 at home and in the office. Practical everyday tips, for example on the use of recycled paper or efficient heating, help to limit demand for CO_2 and provide a gauge for activities.

Scholz & Volkmer GmbH
for DB Mobility Networks Logistics AG
s-v.de

CO_2-Kompass is an online game that challenges you in a fun way to reduce your own CO_2 emissions. It is well designed, quick to understand and encourages participation. The application is technically state-of-the-art and is well suited to the brand. Although originally designed for employees of Deutsche Bahn, it also motivates changes in behaviour in everyday life.

International Design Center Berlin
Erik Spiekermann, Jury member of the
German Federal Ecodesign Award

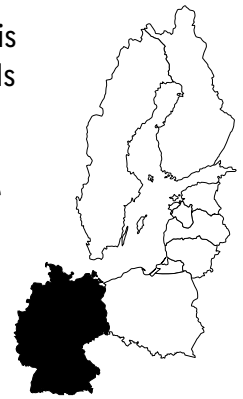


06 **KOMPLOTT**

The KOMPLOTT series of stickers appeals to everyone's ecological awareness. The images counteract everyday 'environmental sins' in an unconventional and exhilarating way, thereby helping reduce energy and resource consumption. Originally designed for the University of Applied Sciences Potsdam, usage in other facilities like public offices, medical clinics, and schools is also conceivable.

Janina Prenzing, Iven Sohmann
ivensohmann.de

Good graphic design and eco-activism that is fun – that is what the KOMPLOTT project stands for. The different motifs appeal to our environmental conscience and provide food for thought while simultaneously making us smile and think about our behaviour. Topics such as resource consumption, waste, and the throw-away mentality are very successfully depicted in a clear, simple and graphical way. **International Design Center Berlin**



07 **Carbon Sink Design Studio**

Wood draws the greenhouse gas carbon-dioxide (CO_2) from the atmosphere. The Carbon Sink Design Studio research project promotes interdisciplinary work dealing with this phenomenon: students from the fields of design and engineering cooperate with companies to jointly develop innovative prototypes that replace fossil materials with sustainable alternatives. The project aims to create ecological materials, sustainable business models, and new forms of cooperation. The project is financed by the European Social Fund (ESF).

Hiilinielu Design Studio
Design Forum Finland
Lahti University of Applied Sciences
Tampere University of Applied Sciences
hiilinieludesign.fi

The Carbon Sink Design Studio is a multi-disciplinary joint project of the Universities of Applied Sciences in Tampere and Lahti, and Design Forum Finland. Students and professionals of the forest-based biofields and creative fields join forces to create new businesses and bio-based products and design. The results will offer new sustainable and carbon neutral solutions in bio-based products. **Design Forum Finland**

CONSUMING

EATING

08 **Biotrem**

The disposable tableware Biotrem is completely biodegradable – through composting – in a mere thirty days. Wheat bran is a by-product, which forms during the milling of wheat grain. Biotrem's production process uses only pure, edible wheat bran and a very small amount of water. No chemical additives are used, giving the tableware no adverse human health effects and no negative environment impact. About one ton of wheat bran can make up to 10,000 disposable plates or bowls. The Biotrem tableware can be used for hot and cold meals, and is also suitable for oven or microwave use.

BIOTREM SP. Z O.O.
biotrem.eu

The utensils and the cutlery by Biotrem impressed us with its simple and innovative design. Thanks to the biodegradable material, the tableware can replace tons of disposable plastic plates, that pollute the environment. Food served on plates like these will always be beautifully presented.

Pomeranian Science and Technology Park Gdynia
Gdynia Design Centre

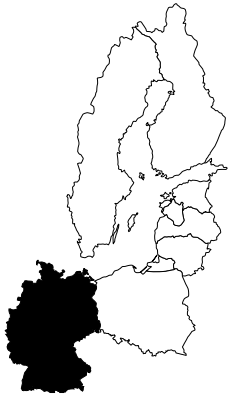
The all-too-perfect vegetables in our supermarkets come at a cost to flavour and variety, and are also synonymous with unimaginable waste. Vegetables and fruits that do not meet the desired standards are sorted out and disposed of before leaving the field. The Culinary Misfits project contributes to a healthy and fair food culture by valuing food, producers and resources. The wealth and beauty of nature are revealed in its imperfections, the misfits.

International Design Center Berlin

09 **Culinary Misfits**

Tuberous potatoes, carrots with three legs, oversized courgettes – vegetables and fruit that do not meet aesthetic standards for sale are often rejected and disposed of on a massive scale. The Culinary Misfits project intends to counteract this waste of food. Through a series of workshops, the people behind the project familiarise companies and private groups, children and adolescents with a food culture in which food can be appreciated once more. Culinary Misfits also offers a catering service. Vegetables and fruit are exclusively sourced from local organic farms.

Lea Brumsack, Tanja Krakowski
culinarymisfits.de



10 **Kaffeeform**

The tableware Kaffeeform consists of coffee waste mixed with wood shavings and biopolymers. In cooperation with a Berlin based sheltered workshop, the coffee grounds are retrieved from local restaurants and cafes, and dried, packaged and sent out. The grounds are then processed at a production facility in Baden-Württemberg, where the waste is turned into a new product. The coffee-scented tableware is light, durable and easy to clean. Kaffeeform can be ordered online or purchased from selected cafes and businesses.

Kafform UG
Julian Lechner
kaffeeform.com

After several years of experimentation, a completely new material has been developed from Julian Lechner's initial idea to create something stable and sustainable from old coffee grounds. Kaffeeform is a material made of recycled coffee grounds and renewable raw materials. It is light, durable and long-lasting. What could be more obvious than using it to make coffee cups?

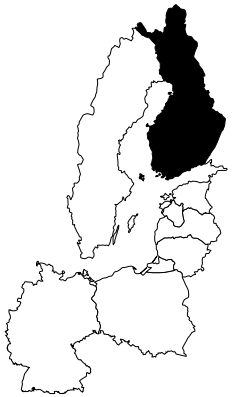
International Design Center Berlin

Online shopping increases the consumption of packaging materials. The reusable postal package RePack is a practical solution to this growing problem. What an interesting combination of a product, service and new business model! **Design Forum Finland**

11 **RePack**

RePack is a circular packaging service for online retailers and shoppers: delivery packages can be conveniently returned, and then reused. RePack users return their packaging by folding it into letter size and dropping it into a postbox anywhere in the world, free of charge. Once returned, users get an automatic refund on their deposit as a voucher, which can be redeemed at any participating store. The shipping bags can be used up to twenty times.
The circular packaging service reduces packaging waste by over 90 per cent and CO_2 by 80 per cent. The project improves the web store user experience, increases sales and avoids trash.

RePack
originalrepack.com



12 **soulbottles**

soulbottles are refillable glass bottles with stoppers made from stainless steel, ceramic and natural rubber. By not using plastic, drinks remain free from pollutants and softening agents. The bottles are produced in Germany, under fair conditions and in a climate-neutral manner. The various designs on the bottles were created by designers from all over the world. The project also supports drinking water initiatives: for every bottle sold, one Euro goes to the Hamburg based organisation Viva con Agua St. Pauli.

Soulproducts GmbH
soulbottles.de

soulbottles demonstrate how sustainability can be embraced in everyday life. The locally produced bottles are beautifully designed and represent a real alternative to plastic bottles. Refilling them with tap water not only avoids unnecessary plastic and transportation, but also saves money.

International Design Center Berlin

13 **Original Unverpackt**

Almost half a ton of household waste is generated per capita in Germany annually – not least as a result of food packaged in plastic. The Original Unverpackt supermarket offers an alternative to this problem: No disposable packaging is used, and the goods can be packaged at packing stations instead – from beans to liquids to grain. Along with the specific avoidance of waste, the project informs about topics like recycling and 'zero waste'. Original Unverpackt also offers an online course, in which participants learn how to launch a package free supermarket on their own. There is currently a supermarket in Berlin as well as an online shop.

Original Unverpackt GmbH
original-unverpackt.de

Generally speaking, a purchase in a conventional supermarket usually involves a large amount of packaging waste. Not only does the plastic in which the food is wrapped harm our environment, the plasticisers it contains also damage our health. Original Unverpackt, the first supermarket chain in Germany that has completely dispensed with disposable packaging, shows that there is another way. **International Design Center Berlin**

14 **GIRIA**

GIRIA is a homeware collection made from leaves and the bark dust of ash-, oak- and pine trees. The used materials give it a unique texture, varying in colour and roughness of the surface. The tableware is shaped by hand, oiled and dried over a span of weeks. Every item is one-of-a-kind and changes over time, depending on use. As a material study the project enhances natural waste by turning it into precious items.

Evelina Kudabaitė
evelinakudabaite.com

GIRIA's aesthetics and production process hark back to the roots of Lithuanian culture, when human's instinctive connection with nature was an important part of everyday life. **Lithuanian Designers' Society**

ENABLING

MOVING

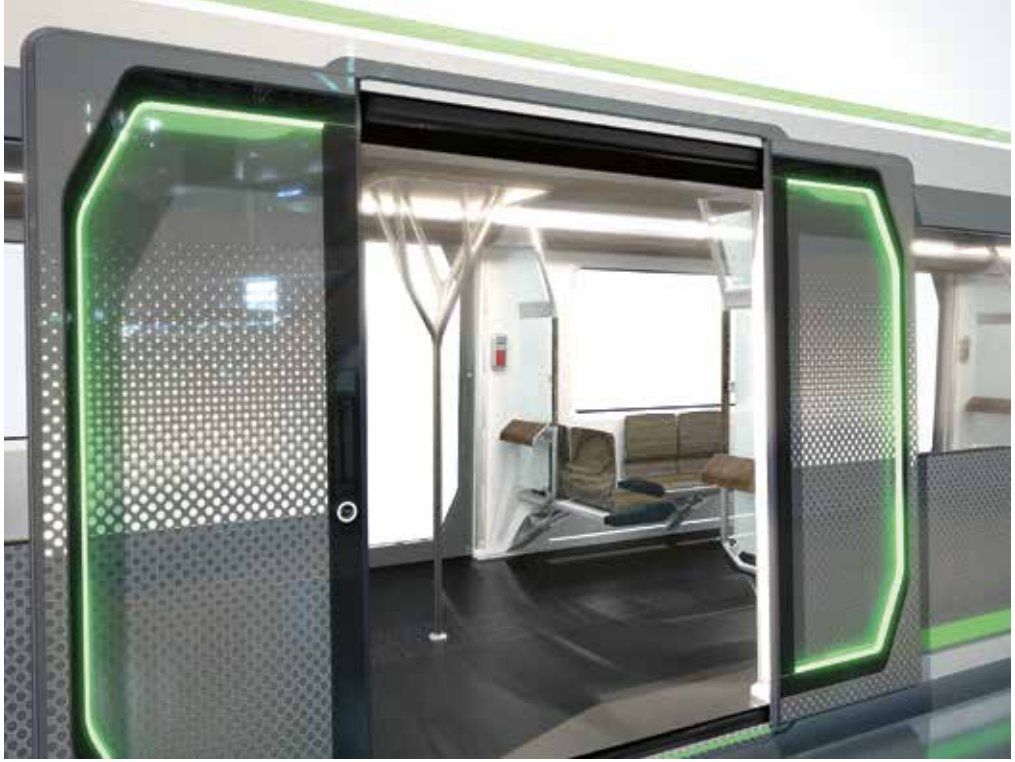
15 **SollinEr**

The SollinEr yacht is powered by solar panels fitted on top of an automatically retractable roof. The boat can accelerate to 12 km/h. It runs silently and even on a cloudy day. When fully charged, it can cruise at night for 18 hours. Thanks to its aerodynamic hull, the water resistance is especially low. Light materials also reduce the weight of the yacht. The boating experience is thus improved and resource consumption is reduced.

Green Dream Boats
greendreamboats.com

The pleasure of sailing will become even greater with this marvellous project. This boat's carbon dioxide emissions are practically zero and only natural sources of energy are used. The modern 5hp electrical engine allows for a silent and comfortable voyage. In addition, SollinEr is very stylish – made in a modernist, minimalist style. This is definitely the boat for an ecological future.

Pomeranian Science and Technology Park Gdynia
Gdynia Design Centre



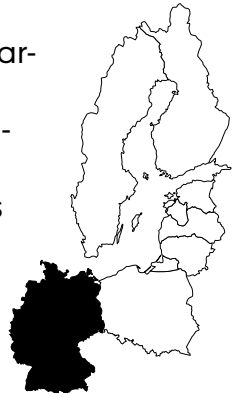
16 **Inspiro**

The focal elements in the development of the Inspiro metro platform were energy efficiency and environmental acceptability – all the way from production up to daily operation, as well as almost complete recyclability. The weight of a six-train has been reduced by around 18 tonnes through lightweight construction and a weight-optimised chassis. Due to the pleasant interior design, passengers enjoy their travel time and use the metro more frequently.

Siemens AG
Design: BMW Group DesignworksUSA
siemens.com

The metro platform for public transport is characterised by reduced material- and energy consumption and good recyclability. Particular added value is generated by increased passenger comfort. Public transport vehicles undergo an upgrade which is promoting a shift from private to public transport.

International Design Center Berlin
Prof. Günter Horntrich, Jury member of the German Federal Ecodesign Award



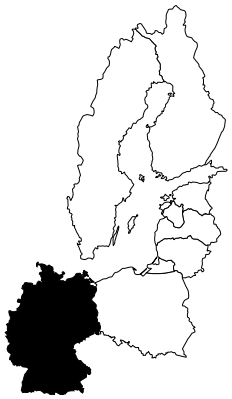
17 **StreetScooter**

StreetScooter has developed an electric mobility concept especially for Deutsche Post. The eco-friendly E-utility vehicle was developed with the requirements of the delivery of letters and parcels in mind, reducing the physical strain for the carrier. The lightweight construction keeps production costs low, while the modular system enables the production of different versions of the vehicle.

StreetScooter GmbH
streetscooter.eu

This concept for an environmentally friendly delivery vehicle impresses above all with its functional design that is tailored to the needs of riders and drivers. The eschewal of a combustion engine creates entirely new possibilities for vehicle design. This aspect has been tackled in an innovative way. The electric drive and lightweight construction are combined with a successful design approach, with clear benefits for environmental protection. A boost for electric mobility!

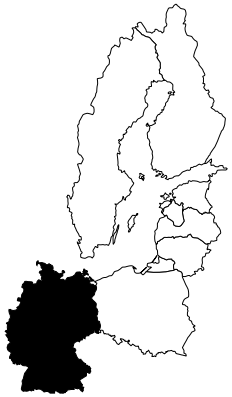
International Design Center Berlin
Rita Schwarzelühr-Sutter, Jury member of the
German Federal Ecodesign Award



18 **CoremanNet**

CoremanNet enables a circular economy with a smart IT solution and an international logistic network. One example for the circular economy approach is the remanufacturing of used parts within the automotive industry. Used parts are collected, identified, evaluated, and sorted before being returned to a defined destination for future processing. During the remanufacturing process, the components are dismantled, cleaned and replaced. The remanufactured parts, all of equal quality, are more affordable than new components and protect the environment by saving CO_2, energy, and raw material.

Circular Economy Solutions GmbH
coremannet.com



CoremanNet has established an international system for the collection, reconditioning and redeployment of used car parts. What convinced me about the service was how it closes material cycles and significantly saves resources. What is more, it is transferable to other sectors.

International Design Center Berlin
Dr. Dietlinde Quack, Jury member of the
German Federal Ecodesign Award

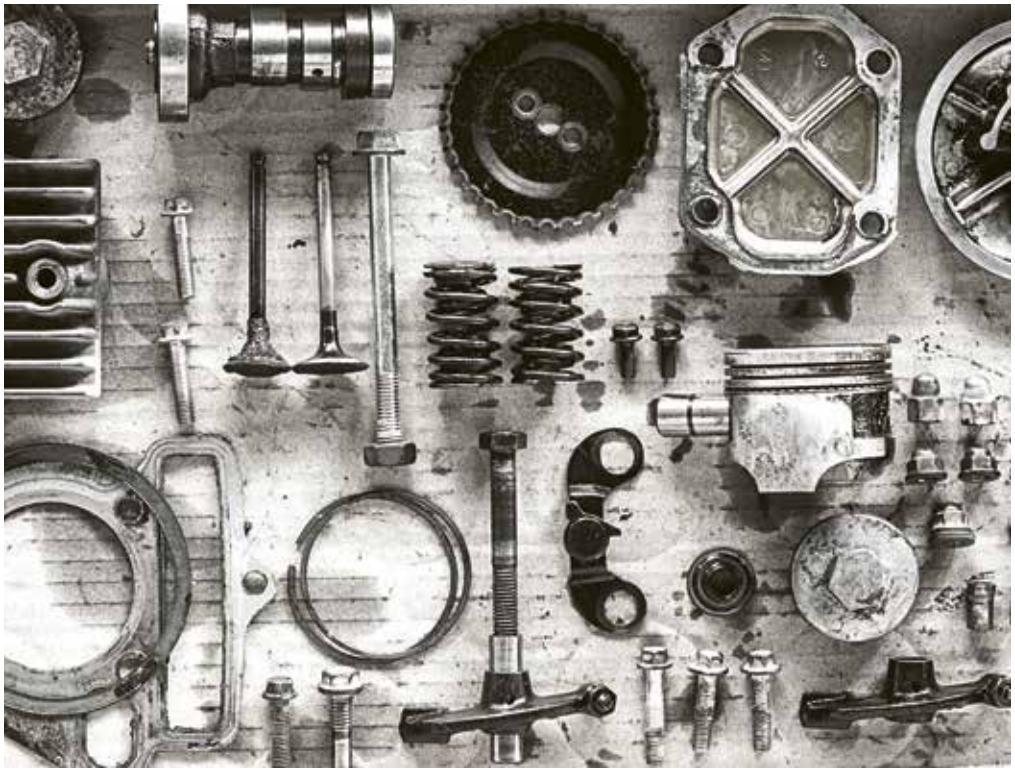


Foto: Athanop

19 **Recycling and Upcycling of Used Vehicles**

The non-profit organisation Tevo namai is engaged in the re-socialisation of former prisoners. By offering training programs that focus on the former inmates' skills, the organisation initiates new business opportunities. One of these training programs focuses in particular on the recycling and upcycling of used vehicles: the former convicts are recruited for car service companies, where they remove damaged car parts in order to repair and to refurbish them for reuse or sale. By doing so, the project facilitates the circulation of otherwise dismissed materials into the production chain, and enables the return of former prisoners into business and society. The foundation is also engaged in pollution control: together with a partner, the project produces and distributes biological probiotics that are used for the cleaning of sewage and polluted waters.

Tevo namai
tevonamai.lt

Repairing, remanufacturing and bringing old vehicles back to the market as well as upcycling them is a part of circular economy models. What is new about this project is that it reintegrates ex-prisoners into society through education and training programmes.

Lithuanian Designers' Society

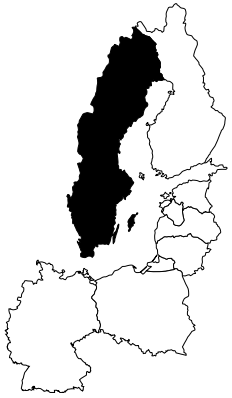
20 **Peepoo**

In 2015, close to 2.5 billion people lacked access to basic sanitation worldwide. Lack of sanitation is a major contributor to diseases like diarrhoea and cholera, killing over a million children every year. Peepoo is a personal, single-use toilet that sanitises human excreta shortly after use, thereby preventing faeces from contaminating the immediate environment as well as the surrounding ecosystem. Ergonomically designed and using the minimum amount of material necessary to provide maximum hygienic sanitation, Peepoo is cost-efficient to produce. Since Peepoo is affordable for those with the weakest purchasing power, it offers a sanitation choice that benefits both individuals and society as a whole.

Peepoople
peepoople.com

‘Can design change the world?’ – Peepoo is one of the projects that answers this question with a resounding yes. What a simple but ingenious solution to deal with one of mankind’s most urgent problems! At first sight, it is ‘just’ a biodegradable bag. In reality though, it is a high-tech toilet system that requires no water, kills germs, produces fertiliser, is mass-produced, and can be used everywhere – even in slums, favelas and disaster areas.

International Design Center Berlin

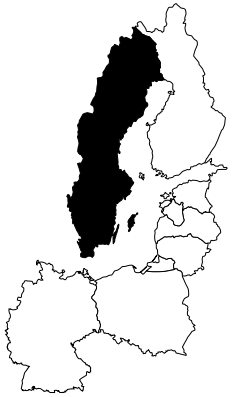


Better Shelter develops homes that save lives and contribute to a sustainable reconstruction of communities affected by natural disasters and conflicts. With sensitivity to the needs of the user and using rational design, production and logistics, Better Shelter creates affordable shelter – in the short and long term. In order to move towards sustainable development, we need to create and support measures and strategies that remove obstacles that undermine the ability of people to meet their basic human needs. Like a roof, Better Shelter provides warmth and security in a crisis situation. Good social and physical conditions are a prerequisite for sustainable development. **Swedish Industrial Design Foundation**

21 **Better Shelter**

Better Shelter is designed to help the millions of people worldwide who have fled armed conflicts, persecution or natural disasters. It is a temporary one room post-emergency shelter with semi-hard, opaque walls. Better Shelter has four windows, a lockable door and a high ceiling, enabling users to stand upright inside. Its modular design makes it adaptable for different uses and locations. The shelter can be anchored to the ground and will withstand rain, snow and strong winds. It can easily be dismantled, moved and reassembled. Components of the Better Shelter units can be replaced individually, the roof and wall panels are recyclable. A solar powered lamp provides light during the hours of darkness. The shelter is designed to provide residents with a higher level of safety, security and dignity than a tent.

Better Shelter
bettershelter.org



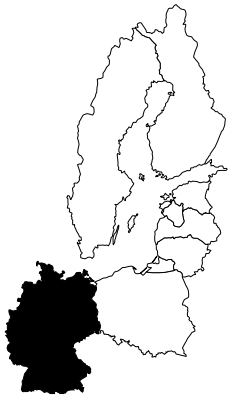
22 **SOLARKIOSK**

SOLARKIOSK provides clean and affordable energy to regions that previously relied on costly, polluting energy. It operates as an independent energy source for the rural population in off-grid communities. Solar panels and batteries generate solar energy independently from the power grid. The kiosk can run for three days after only five hours of sunshine, either to charge mobile phones or to cool medication. SOLARKIOSK also offers an inclusive business model cooperating directly with local people and developing their community. The electrical components are manufactured in Germany, and local materials are used for the remaining parts. SOLARKIOSK can thus be assembled anywhere, thanks to its modular building structure designed by GRAFT.

SOLARKIOSK AG
founded by GRAFT GmbH
and Andreas Spiess
solarkiosk.eu

SOLARKIOSK convinces as an overall concept and in its creative realisation. It gives the local population access to energy via a solar energy-based power supply. Furthermore, it provides a business foundation for small local companies and serves as a social meeting point.

International Design Center Berlin
Dr. Dietlinde Quack, Jury member of the
German Federal Ecodesign Award



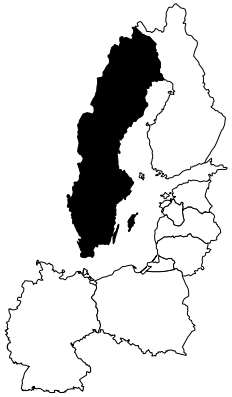
23 **RagBag**

RagBag facilitates complication-free donation of clothing. Folded inside-out, the shopping bag turns into a pre-stamped shipping bag. The clothing donation must only be placed into the shipping bag and put in the post. Consumers thus support aid organisations and extend the life cycle of the used clothing. The project was initiated by the sustainable fashion brand Uniforms for the Dedicated.

DDB
theragbag.se

RagBag helps us change our behaviour and reminds us about our clothing's life-cycle. It is an obvious and simple product that encourages recycling and reuse. We hope that other industries are inspired by RagBag, and we hope to get more people to work with innovative design that helps us move towards more sustainable and conscious consumption behaviours.

Swedish Industrial Design Foundation

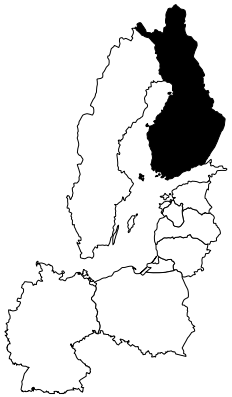


24 **PuzzlePhone**

PuzzlePhone is a long-lasting smartphone with three easy-to-change modules: the critical electronics, the display and the battery. This makes the PuzzlePhone easy to upgrade, easy to customize, and easy to repair. In addition, the PuzzleLab provides companies and brands who wish to join the project with a ready-made standard: the PuzzlePhone Open Standard ensures that both firmware and hardware of accessories as well as upgrades are fully compatible and interchangeable. PuzzlePhone is currently under development. It is designed, engineered, manufactured and assembled in Europe.

Circular Devices Oy
puzzlephone.com

PuzzlePhone's design philosophy is rooted in usability, sustainability and beauty as well as in the optimal use of available resources, materials and functional forms. The phone consists of three repairable or replaceable modules. If you break or need to upgrade one module, you can repair or replace only that module. To minimise the shipping, PuzzlePhone's sustainable business ecosystem may be cut and pasted anywhere in the world. Sustainable, upgradeable and smart design made in Europe. **Design Forum Finland**



DRESSING

WEARING

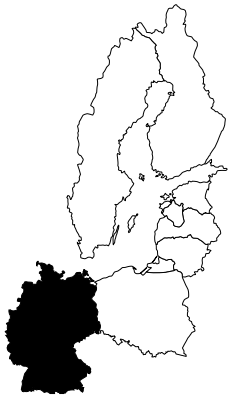
25 **Sustainability and Other Stories**

Can Circular Economy reconcile the paradox of fast fashion and sustainability? Sustainability and Other Stories is both a case study and fashion collection. The pieces in the collection were designed for circularity using different techniques to close the loop. The project aims to reinforce the political role of design and explore the link between consumption and social behaviour in a globalised world.

MAYYA SALIBA
design & sustainability
mayyasaliba.com

Most people take pleasure in fashion and enjoy dressing well, and notable events are often celebrated with new clothes. The collection is indeed intended for a short lifespan, but is entirely recyclable. This student work is of a very high standard, and takes a comprehensive approach to the complex issues of sustainability.

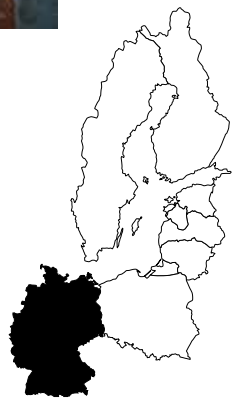
International Design Center Berlin
Prof. Anna Berkenbusch, Jury member of the German Federal Ecodesign Award



26 **PYUA**
Ecorrect Outerwear

The functional clothing brand PYUA manufactures winter sports clothing from previously recycled or recyclable materials in the so-called Closed-Loop Recycling System. This system avoids resource waste and reduces CO_2 emissions. The fluorocarbon-free fittings set a high standard: the polyester laminate Climaloop, which is developed specially for impregnation, is pollutant-free. The accompanying repair service contributes to prolonging the service life.

Sportsman's Delight GmbH
pyua.de



This outerwear features consistently environmentally conscious and intelligent product development, most notably in the fluorocarbon-free fittings, the use of recycled fibres and the recyclability, including a take-back system. Style-conscious, functionally mature, strong colours and with cult status for connoisseurs. The makers know their product and their production chain, and the end result is credible and innovative ecodesign. Respect!

International Design Center Berlin
Prof. Friederike von Wedel-Parlow,
Jury member of the German Federal Ecodesign Award

27 **Pure Waste Textiles**

Pure Waste Textiles makes 100 per cent recycled yarns, fabrics, and ready-made garments. The raw material for the textiles is collected from two main sources – cutting clips from 'cut, make and trim' – factories and yarn waste from spinning and weaving mills. Sorted by colour and quality, the textiles are mechanically opened back into fibres. Depending on the final use of the fabric, the cotton waste can then be mixed with chemically recycled polyester or viscose fibres and spun into yarns. Knitted or woven, the yarns undergo a finishing process and are cut into the final product. No harmful chemicals are used during the recycling process. Each Pure Waste T-shirt saves up to 2,700 litres of water in comparison to a T-shirt made of virgin materials. 90 per cent of the energy used for in the recycling process comes from renewable energy.

Pure Waste Textiles LTD.
purewastetextiles.com

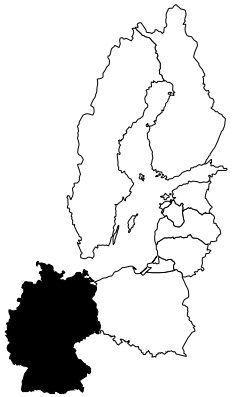
No water wasted and made of 100 per cent recycled cotton. This is the business idea of Pure Textiles, a company specialised in producing clothes and accessories in an eco-friendly and sustainable way. Only leftover materials from the textile industry that would otherwise go to waste are used. The fabric is re-fibred and spun into new yarn. Sorting the raw material by colour means that no dyeing process is needed. **Design Forum Finland**

Kleiderei is an alternative to our throw-away society – 'use rather than own', share, exchange, and loan. If we stop constantly shopping and accumulating possessions, we can save resources and simultaneously strengthen our community spirit. **International Design Center Berlin**

28 **Kleiderei**

Kleiderei is a lending service for clothing. For a fixed amount, subscribers receive a monthly package with four pieces of clothing to their home. The clothing is customised to suit subscribers' respective taste, to which end a questionnaire has to be filled out during registration. The products consist of (young) design brands, selected vintage pieces, and donated clothes. The project facilitates a diverse wardrobe and the sampling of new styles – avoiding fast fashion or excess. Clothing can also be loaned 'offline' at the Kleiderei store in Cologne.

Kleiderei Hamburg GmbH
kleiderei.com

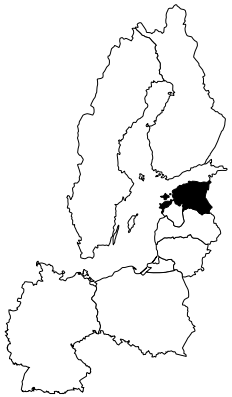


The textile industry has one of the biggest environmental footprints in the world. The Upmade method, developed by Reet Aus in order to tackle the problem, is used by small and large industries across the world, which makes its impact far-reaching. With its three years of activity, Upmade has saved over 128,700,000 litres of water and 8,250 kg of textiles that didn't end up in landfills. Upmade was nominated the circular economy award 'The Circulars' at the World Economic Forum, proving that it is extremely important and that the problem of textile waste is acknowledged in the highest levels. **Estonian Design Centre**

29 **Upmade**

Traditional clothing manufacturing creates an average of up to 18 per cent textile leftovers. Upmade closes the loop by applying upcycling on an industrial scale and reducing the amount of textile left-overs. With the help of the Upmade software, excess materials are turned into garments. Waste is therefore brought back into the consumption chain. Upmade reduces production costs and CO_2 emissions, while saving energy and water. The project provides a profitable and scalable solution to the problem of textile leftovers for any size of a brand. Brands and manufacturers can obtain a certification.

Aus Design Llc.
upmade.org

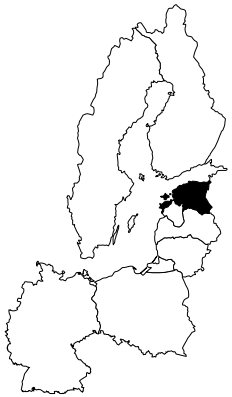


Reet Aus is a visionary designer who is very active and productive both in the academic and scientific field, developing for example the Upmade certificate and doing research in upcycling. Reet Aus is running her own brand, for which she designs and produces collections of upcycled clothings. She is a true revolutionary spirit whose aim is to get rid of all the textile waste in the world, and she is taking serious steps towards it every day. She keeps proving that clever design can salvage mountains of unused textiles and the natural resources spent to produce them. **Estonian Design Centre**

30 **Reet Aus**

The designer Reet Aus is dedicated to Slow Fashion. Her upcycled collection is made entirely from post-production leftovers. For her collections she uses the Upmade method (see project 29), an industrial upcycling method that she has developed. The method involves a complete lifecycle analysis of the garments and enables the circulation of leftover materials back into the production chain. The 'Reet Aus' collection is therefore very efficient. For example, each Up-shirt saves on average 91 per cent water, 87 per cent energy and creates 80 per cent less CO_2 in comparison to a conventionally produced T-shirt.

Aus Design Llc.
reetaus.com



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It’s not about the world of design, but the design of the world.

BRUCE MAU