

# Fixing for future

Nordic perspectives  
on product repair

Thursday

18<sup>th</sup> Nov 2021

Presentations marked

\* are digital

09:00 – 09:30 *Informal welcome, registration with coffee and snacks*

09:30 – 09:40 Welcome from [Jukka Mähönen](#), project leader of [Futuring Nordics](#)  
and [Maja van der Velden](#), project leader [Circular Energy](#)

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09:40 – 09:45 Welcome from Vice-rector for Climate & the Environment and Cross-Disciplinarity of the University of Oslo  
[Prof. Mette Halskov Hansen](#)

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09:45 – 10:15

**Resilient repairing at the planetary scale\***

Keynote: Sarah Cornell, Stockholm Resilience Centre

The rapidly evolving world of technology is part of a rapidly changing Earth system, where socially beneficial products and innovations are deeply entangled with intensifying societal risks. Global environmental changes are already manifesting as increasingly severe local and sectoral impacts – and there is a global conversation already underway about the need to act to mitigate these risks and harms.

Seeing today's unsustainable production and consumption in terms of the resilience of a complex social-ecological system lets us understand both the urgency of the issues and the need for slower and more careful (and care-full) thought and action. I propose rethinking the predominant linear take-make-use-waste view of production and consumption as an adaptive cycle, a shift in thinking that goes well beyond materials, markets and money-making – the predominant focus today of business, even business that seeks to be sustainable.

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10:15 – 10:30

*Short break*

**Session 1**

**Social norms and practices**

***Chaired by Maja van der Velden***

10:30 – 10:45

**Experiences from white goods repair by professionals and laypeople**

Kirsi Laitala and Harald Throne-Holst (Sifo/OsloMet)

Slowing down the replacement rate of goods through repair is one of the necessary cornerstones towards reducing the total consumption volumes and related environmental impacts. We will discuss determinants for repair based on a consumer survey with 1196 participants and 5 qualitative interviews with the white goods repair businesses in Norway. A central challenge is how consumers assess the price of repair against the cost of a new product. The low willingness to pay for repairs contributes to low profitability for the repair industry. The industry also struggles with recruiting young, competent personnel which is a critical issue for scaling up the repair rates needed in the shift to a circular economy. A surprisingly high share of repairs is conducted by laypeople, but many repair attempts failed.

Based on insights from both consumers and the industry, we will give recommendations and discuss viable ways forward.

10:50 – 11:05

### **Improving Societal Acceptance of Repair: Insights from the Finnish Context\***

Korsunova-Tsaruk (University of Helsinki)

Currently, the repair industry is inflexible, costly and inconvenient. Previous studies have explored both: individual level motivations and societal level barriers to engaging in repair activities. It has been suggested that stricter reparability standards, statutory lifespan labelling and tax breaks are needed to enable repair. In this presentation, the focus is on complementary approaches for accelerating societal acceptance of repair by introducing positive repair rhetoric and new educational content. The insights from interviews with key repair industry actors and citizen repair/non-repair stories from Finland illustrate how existing barriers to repair are reinforced via discursive rhetoric and practical consciousness of citizens and repair industry actors. The results emphasize the importance of involving actors across production and consumption in the development of integrative solutions for encouraging repair as a societally important activity. These insights are part of the study by Korsunova, A., Vainio, A. & Heiskanen, E. (2021): <http://hdl.handle.net/10344/10221>

11:10 – 11:25

### **Behavioral Insights into Personal Electronics Repair in Sweden**

Mariana Davila Lopez (Lund University)

From an environmental perspective, it is instrumental to prolong the lifetime of consumer electronics, as the largest life cycle impacts are found in the extraction and production phases. Therefore stimulating repairs of electronic products is a key strategy in meeting environmental goals. Sweden has adopted or proposed several new policies to promote consumer repairs in the last couple of years. However, despite the increased interest in promoting consumer repairs, very little is known about the factors behind people's decision to repair their electronics. This is problematic given that the ultimate decision to repair rests on the consumer. This presentation will share the highlights of a recent study that uncovered the factors shaping and influencing people's decision to repair their electronics and provided specific policy recommendations to scale the repair of personal electronic devices in Sweden.



11:30 – 11:45

**Community repair in Denmark\***

Christen Monberg (Repair Café Denmark)

The Repair Cafe and Right to Repair movements are community-driven activities aimed at rescuing some of society's huge amount of electronic and textile waste, by offering free repair to everyone. Christen will present the international Repair Cafe concept and its impact on climate and resources, globally and locally.

12:00 – 13:00

*Break for Lunch*

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**Session 2**

**Laws and Labels**

*Chaired by Jukka Mähönen*

13:00 – 13:15

**Legal barriers, policy drivers and governance issues for repair**

Jessika Richter (Lund University)

There are currently many legal and policy barriers to repair, including intellectual property, consumer, contract, and chemical laws. This presentation presents barriers with examples from the EU and U.S. and discusses how changes to policies could further enable repair. Lastly, issues in governance and tensions between different stakeholder objectives will be discussed.

13:20 – 13:35

**Repair: an extended producer responsibility\***

Eléonore Maitre-Ekern (University of Oslo)

The concept of extended producer responsibility (EPR) has developed in EU law as part of policies for waste management. In a sustainable product policy, the responsibility of producers must focus on the earlier stages of the product's life cycle, and in particular to design for repair and repair activities. This presentation discusses the past, present and future of EPR in view of extending the lifespan of products through repair.

**Repair policies: what can be done at the European, national and local levels?**



13:40 – 13:55

Carl Dalhammer (Lund University)

Currently, repair policies are adopted at several levels, including by the European Union (e.g. the Ecodesign Directive), at national level (e.g. the French repair fund and Swedish VAT reductions) and local level (e.g. repair vouchers in Vienna). This presentation discusses the various policies adopted, and need for policy coordination.

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### Session 3

#### **Markets and Business Models**

*Chaired by Jukka Mähönen*

14:15 – 14:30

#### **Can designers design sustainable business models?**

Svein Gunnar Kjøde (University of Oslo)

Current sustainability issues force companies to radically rethink their operations to account for their business models' long-term ecological and social impact. In response, the proliferation of design-related approaches has increased application in realising such Sustainability Oriented Innovation(SOI).

Accordingly, an emerging field of sustainability research includes scholars investigating the opportunities within designerly approaches (i.e. Design Thinking, Systemic Design and Design for Sustainability) as catalysts for SOI. However, with growing concern, both practitioners and scholars identify a disconnect between the current methodologies and the complex, systemic nature of the societal challenges at hand. How can traditional Design-approaches remake themselves to account for the current knowledge within defining sustainability fields such as Earth-Sciences, Systems-Transition theory and Sustainable Business?

14:35 – 14:50

#### **Repair in a Nordic consumer electronics company**

Camilla Gramstad (Elkjøp)



Elkjøp runs the largest repair service within electronics in the Nordic region, with more than 700 000 repairs performed every year. With an ambition of 100% of all products Elkjøp sell to be repairable - how will that be achieved, and is it even possible?

14:55 – 15:10

**Through handling, repair and refurbishment we do circular economy in practice\***

Andreas Anderholm Pedersen (GIAB Nordics)

GIAB is an innovative growth company who work with circular economy as a core of its entire business. Our business model revolves around prolonging the life of products through re-use. By developing a circular process and data-driven system, GIAB Circular Platform™, we have modernized the traditional re-use process where our platform allows us to handle large-scale re-use in a resource-effective manner.

15:15 – 15:30

**Bergans: Towards a more circular outdoors**

Yngvill Ofstad

Bergans of Norway has been driven by dedicated and passionate outdoor enthusiasts for over a century. We invented the “self-carrying backpack” in 1908, a breakthrough innovation explorers such as Amundsen, Scott and Hillary used on their expeditions. Bergans has played a major role in Norwegian outdoor life for more than a century. As an outdoor company we depend on nature. Therefore, we have set ambitious goals for our sustainability efforts; ensuring the magnificent nature we have today will be there for the next generations to enjoy. We believe that retail players have a unique role in the green shift; positively influencing our own value chains and at the same time enabling consumers to make more sustainable choices in their everyday life.

15:45 – 16:30

**Repair and the transition to sustainable business models**

*Chaired by Svein Gunnar Kjøde*

Panelists: Svein Gunnar Kjøde (University of Oslo), Jessika Richter (Lund University), Camilla Gramstad (Elkjøp), Yngvill Ofstad (Bergans), Siv Elin Ånestad (Future in Our Hands)

Reception

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**Friday, 19th  
November**

**Design Day**

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10:00 – 16:00  
**All day event**

**Transformative Repair pop-up workshop**  
Jürgen Breiter

In a pop-up workshop, materials and objects released for disposal in the department of informatics are checked for their further usability. We will collect design ideas in a continuous process during the whole on the second day of the #fixingforfuture symposium and try to create one or the other prototype. Some upcycling design examples will be shown parallel to the workshop to inspire thoughts about resource consumption and reflect our own consumption habits in everyday life.

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09:30 – 10:00

**Repair Across the Multi-level Sustainability Innovation Framework\***  
Keynote: Idil Gaziulusoy (Aalto University)

This keynote talk will discuss how repair relates to the six levels of multi-level innovation framework for sustainable design.

**Session 4**

**Design and Materials**  
*Chaired by Maja van der Velden*

10:15 – 10:35

**Design for Repair / The Collection of Tomorrow**  
Johannes Flem



What do we have to do to close the circle? And what are the consequences for function, materials, and design? What happens when we dare to challenge the very way we own products? The story of how Bergans and Finnish fibre innovation startup Spinnova took the consequences and involved the consumers in an open experiment on the cutting edge of circular textile products.

10:40 – 10:55

**Activating the full potential of the Ecodesign Directive to support repair– the role of market surveillance\***

Anja Marie Bundgaard (Aalborg University)

The Ecodesign Directive is assigned a key role in the transition towards a circular economy; as a policy tool which can ensure circular design of products entering the European Market. Ecodesign regulations are in place supporting prolonging product lifetime by setting requirements to durability, availability of firmware, easy disassembly, spare part availability and access to repair and maintenance information. Furthermore, standards have been developed to support future requirements targeting product repair. However, studies have shown that 10–20% of the products on the European Market are non-compliant with the Ecodesign requirements. Test procedures and methods are in place for the already adopted Ecodesign requirements. However, the practical experiences and the resources allocated for these control measures are limited. It is therefore key to strengthen the Nordic and European collaboration on market surveillance to activate the full potential of the Ecodesign Directive and ensure repairable products.

11:00 – 11:15

**Fixing While Fika: Design-Led Repair Projects from Sweden**

Nazli Terzioglu-Ozkan (Brunel University London)

Repair is frequently associated with mundanity, making do and lack of resources, whereas design is associated with innovation, technology, and trends. However, the repairer needs to make new design decisions during the repair process as he/she works on an already designed product with damaged parts. In this talk, Nazli will talk about some design projects focused on repair and Swedish culture. Fika is a concept, a ritual inherent to the Swedish culture that means a relaxing coffee and cake break. It also means making time for friends and family and in this talk, making time for your clothes and products to fix them through a design-led method. Then, we will discuss what design-led repair is, how design changes repair, and how repair changes design.



11:20 – 11:35

**Transformative Repair**  
Jürgen Breiter

11:45 – 12:00

Closing notes from Beate Sjøfjell and Maja van der Velden

### About the speakers

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Siv Elin Ånestad

Siv Elin Ånestad works in the Norwegian environmental NGO Future in our Hands on degrowth, circular economy, repair and the environmental costs of overconsumption of textiles and electronics.

Andreas Anderholm  
Pedersen

Andreas Anderholm Pedersen is Sustainability Manager at GIAB Nordic AB.

Jürgen Breiter

Jürgen Breiter, graduate engineer in architecture with Berlin background, is a passionate upcycling-designer, DIY handyman and urban gardener, trying out with his family what one could call life in the post-growth-economy. In a wide-ranging self-experiment, Jürgen tries and practices how far the abundance of materials in today's consumer society can be used to break out of habitual consumption patterns and actively participate in a circular society.

Anja Marie  
Bundgaard

Anja Marie Bundgaard is an Associate Professor in Circular Economy from the Department of Planning at Aalborg University and holds a PhD in Ecodesign and Circular Economy. More specifically, she has studied how to design and regulate products to improve their circularity. During, her research on circular design she has worked in collaboration with companies on how they can work with environmental aspects and circular economy in their design processes. Her research on regulation has focused on the European environmental product policies covering electrical and electronic equipment. Her latest research has focus on how the European Ecodesign regulation and standardization can support material efficiency and circularity.



Sarah Cornell

Sarah Cornell is Associate Professor in sustainability science at Stockholm University, where she works as a Principal Researcher in the Stockholm Resilience Centre, an internationally influential research centre that seeks to advance the scientific understanding of the complex, dynamic interactions of people and nature in the biosphere. Her research background is originally in global biogeochemistry (PhD 1996, University of East Anglia), extending over the years to also address the study of human dimensions of global environmental change. She has been involved in research and application of the Planetary Boundaries framework for a decade, engaging with policymakers, business and communities that are striving for sustainability transformations.

Carl Dalhammar

Carl Dalhammar is associate professor at Lund University. He has over 20 years' experience of research related to law and policy for energy and resource efficiency. He is a board member of the Swedish strategic innovation program Re:Source. Carl currently leads the program "Creating the repair society-policies, networks and people", and leads the policy project in the Mistra program "Resource-efficient and effective solutions" which looks at circular economy solutions in the manufacturing industry.

Johannes Flem

Johannes Flem works as a Designer in Bergans of Norway and Team Leader at bergans.future.labs, Bergans' innovation lab. He is notoriously impatient and is always looking for better solutions. Bergans of Norway has been driven by dedicated and passionate outdoor enthusiasts for over a century. They invented the "self-carrying backpack" in 1908, a breakthrough innovation explorers such as Amundsen, Scott and Hillary used on their expeditions. Bergans has played a major role in Norwegian outdoor life for more than a century. As an outdoor company we depend on nature. Therefore, Bergans has set ambitious goals for our sustainability efforts; ensuring the magnificent nature we have today will be there for the next generations to enjoy. The company believes that retail players have a unique role in the green shift; positively influencing value chains and at the same time enabling consumers to make more sustainable choices in their everyday life.

İdil Gaziulusoy

Dr. İdil Gaziulusoy is Assistant Professor of Sustainable Design and leader of NODUS Sustainable Design Research Group at Aalto University. İdil's research is situated at the intersection of sustainability science and design research. She undertakes both discovery-based as well as solution-oriented and interventionist research to understand the roles and agencies of design in sustainability transformations, to develop new methods and tools to activate design agency in transformation processes and to help stakeholders in co-creating visions of desirable futures and taking part in collective action to achieve these visions. Her empirical work deals with transformative sustainability



innovation in urban and business contexts. She advocates adopting beyond-sustainability-as-usual approaches to innovation and policy making to be able to address the urgency of multi-fold sustainability crises that are unfolding. Her recent publications have contributed into research areas on design for sustainability transitions, design futures, parenting and climate change, system innovations and companies, multispecies design and transdisciplinary research. She has research, teaching and consulting experience in Turkey, New Zealand, Australia and Finland.

Camilla Gramstad

Camilla Gramstad is head of sustainability in Elkjøp Nordic, the largest electronics retailer in the Nordic region. Elkjøp has an ambitious sustainability strategy and is moving towards a circular economy.

Mette Halskov  
Hansen

Mette Halskov Hansen, is Vice Rector for climate, environment and cross-disciplinarity and Professor of China Studies, University of Oslo.

Svein Gunnar Kjøde

Having practiced design in the industry for 16 years, Svein is currently a PhD candidate at the Sustainability Lab, UiO researching the role of design as a catalyst for the transformation of businesses and societies to more sustainable futures. This includes systems perspectives when facilitating for complex, multi-stakeholder strategic processes, but also rethinking of business models and mental models.

Angelina Korsunova

Dr. Angelina Korsunova is a Research Fellow at Helsinki Institute of Sustainability Science, University of Helsinki. At the moment she is leading an international project on Circular Citizens in Finland and Russia, exploring personal transformations of citizens who implement Zero Waste lifestyles. The project aims to generate learnings on circularity that transcend the local contexts (<https://www.circular-citizens.com/>). Angelina Korsunova's research interests are at the intersection of sustainable consumption and new alternative economic models, engaging citizens and other stakeholders to support sustainability transitions. Dr. Angelina Korsunova is developing approaches for bringing sustainability science closer to youth (HELSUS Youth initiative).

Kirsi Laitala

Kirsi Laitala is a senior researcher at Consumption Research Norway (SIFO) at Oslo Metropolitan University. Her main research area is sustainable consumption with a focus on product lifespans and clothing. She uses interdisciplinary research methods based on her educational background in textile engineering (MSc), PhD in Product Design and long experience working with social science research methods. She currently leads the international research project "Lasting: Sustainable prosperity through product durability".

- Mariana López Dávila** As a research assistant at the IIIIE in Lund University, Mariana has developed a deep interest in understanding how to normalize sustainable lifestyles. In her research, she aims to understand behaviour patterns and social practices to develop tailored solutions that will keep average mean temperatures below 1.5°C. She has an academic background in psychology and environmental studies along with five years of consulting and project management experience in performance management and program evaluation.
- Jessika Luth Richter** Jessika Luth Richter is a postdoctoral researcher at the International Institute for Industrial Environmental Economics at Lund University in Sweden. She researches policies and initiatives enabling a circular economy, including extended producer responsibility (EPR) policies, ecodesign policies, green procurement, circular business practices and circular city initiatives. Jessika is currently researching how different values can be retained in closing loops for electronics products through EPR policies and how policies can support upscaling repair of these products. She is also involved in teaching, including the design and running of a massive open online course on the topic of circular economy. Jessika is also active in outreach and volunteer activities with local organisations like Repair Cafe Malmö and Circle Centre Lund, a library of goods.
- Eléonore Maitre-Ekern** Eléonore Maitre-Ekern is a postdoctoral researcher at the Faculty of Law, University of Oslo. She is part of the 'Futuring Nordics' project as well as the Thematic Research Group 'Circular Energy'. Her postdoctoral research aims to explore the sustainability of the circular economy and to develop the policy and legal framework to enable and promote sustainable circular business models in the Nordic countries. One of the main models that the research focuses on is repair.
- Christen Monberg** As a retired electronic engineer, Christen is an activist into circular economy and climate and environment activities. He is the VP of Repair Cafe Denmark, with the motto 'Reuse rather than Recycle', which has about 60 member communities, totalling 2000 volunteers throughout Denmark.
- Yngvill Ofstad** Yngvill Ofstad is Sustainability Manager in Bergans of Norway. She works with due diligence in the supply chain and with developing the circular services in Bergans. She has a Master in sociology from the University of Oslo, and has previously worked with sustainability in IKEA Norway.

Nazlı Terzioğlu

Nazlı Terzioğlu is a research fellow at Brunel University London. Her expertise areas are visible repair, user perspectives, circular economy, and sustainable product design. Previously, she was a post-doc researcher at Linköping University in Sweden. She completed her practice-based PhD at Royal College of Art, London in 2017 funded by the Ministry of Economy of the Republic of Turkey. During her PhD, she visibly repaired 100 objects by using new technologies such as 3D printing and traditional repair methods. Through workshops, designing objects, and writing, Nazlı investigates the ways to inspire and encourage people to change the current throw-away mentality.

Harald Throne-Holst

Harald Throne-Holst is a senior researcher at Consumption Research Norway (SIFO) at Oslo Metropolitan University. He holds a Master's degree in Chemical engineering from the Norwegian Institute for Technology, and a PhD in governance studies from the University in Twente. Throne-Holst was leader for a project that studied the role of consumers, not only through their own views but also from actors in the repair industry and their experiences with customers, and has co-authored a Nordic Report on Circular Business models in the Mobil phone industry.

## Hosts



### **Maja van der Velden**

Maja is the Sustainability Lab director. Her research interest is the design and use of digitalisation technologies and the practices and impacts they help shape. Informed by systems thinking and regenerative thinking, she investigates topics such as repair, energy, and digitalisation. She leads the Circular Energy project and is deputy-leader of the Futuring Sustainable Nordic Business Models project.



### **Jukka Mähönen**

Jukka Mähönen has been a Professor of Law at the University of Oslo from 2015. Jukka is deputy head of Research Group Companies, Markets and Sustainability and leader of UiO:Nordic research project Futuring Sustainable Nordic Business Models.

**Beate Sjøfjell**

Beate Sjøfjell is Professor of Law at the University of Oslo, Faculty of Law, and holds a fractional appointment as Adjunct Professor at the Norwegian University of Science and Technology (NTNU), Faculty of Economics and Management. She is also a Visiting Professor at College of Europe, European Legal Studies Department. Professor Sjøfjell is founder and head of the Oslo Faculty's Research Group Companies, Markets and Sustainability (the Company Law Group), which is now in its second period (2017-2022), as well as of several international networks and projects.

**Eleanor Johnson*****Event producer***

Eleanor is a communications specialist, sustainability researcher and writer with a focus in digital anthropology. Her research and journalism interests include, broadly, civil disobedience and climate activist movements, community values around and understandings of energy transitions, urban planning and the politics of (social) media and digital consumption.