If we want to keep the earth liveable, the next ten years are crucial.

We Finns consume four times more energy and natural resources than is sustainable. To reach sustainability, the next ten years will have to look completely different—but can still be appealing.

In September 2019, the Designs for a Cooler Planet exhibitions will introduce solutions to support more sustainable lifestyles. Aalto University’s Otaniemi galleries showcase eleven multidisciplinary exhibitions, from future homeware to a carbon-free city district.

Change concerns all of us: consumers, companies, education and governments. We have no time to lose.


5 to 26 September

Designs for a Cooler Planet—
Today’s cool choices and tomorrow’s concepts in Otaniemi

Designs for a Cooler Planet exhibition presents a wide selection of experimental climate-friendly products and individual choices that you can do already now.

We need to rethink our individual lifestyles: what we eat, how we live and how we move. The 1.5 Degree Lifestyles study calculated the climate impact of 30 choices. What will be your contribution?

The prototypes of Future Home will give a glimpse of new material research. What if all our belongings were reusable and recyclable, non-toxic and long-lasting?

Some of the carbon fibre-reinforced plastics may be replaced by nanocellulose.

Design: Tiina Härkäsaari, Tuomas Pärnänen & Kim-Niklas Antin

Image: Eeva Saurolahti
The cruise business is booming, and a huge number of expedition cruisers take passengers to the most remote locations on Earth. Europe’s largest lake district with pure water and the natural beauty of the world’s largest archipelago are still missing from the cruise maps. Therefore, the Archilux takes its guests on an adventure to the sensitive nature in Finland. Environmental friendliness has been taken into consideration in every detail, from power production and lightweight structures to everything that happens onboard.

The ship concept was originally designed for Finland’s 100th anniversary.

Cities are critical intervention points to address climate change, and there is an urgent need to transform how we live in cities and how cities support our needs. The Urban Transitions and Futures course focuses on developing transitions to sustainable post-carbon cities by using design-led future-focused thinking. Students develop visions for sustainable urban futures and strategies of experimentation to achieve these visions. In 2019, the course focused on the Malminkartano neighbourhood in Helsinki.

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In Finland, more than one third of construction and demolition waste is wood. The implementation of Design for Disassembly (DfD) principles in constructions might increase the reuse of wood products.

CircWood aims at modelling the effect that recirculating wood materials within the built environment has on the sustainability of wood use. The exhibition shows how recirculating wood waste is both a technical issue and a creativity challenge.

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There is an urgent need for sustainable alternatives to oil-based packaging materials such as styrofoam. Emerging interdisciplinary practices in material research aim to develop novel wood-based biomaterials with similar or better properties to replace non-renewable and environmentally problematic plastics.

The exhibition features three sustainable packaging projects: CoCeA, Fold and Sustain and Pack-Age.

The CoCeA project combined design thinking with scientific research process to obtain unique material solutions by foam forming. This production technology uses wood-based cellulose fibres and enables production of lightweight biomaterials that are renewable, biodegradable and recyclable, using a minimum amount of water. CoCeA (Complex Cellulose Structures or Consumer Applications) is part of the FinnCERES, a joint research programme between Aalto University and VTT.

The Fold and Sustain project investigates patterns and folded structures which can be implemented in packaging design to replace plastic materials, concentrating especially on creating transformable, stable and protective structures.

Pack-Age is Aalto University’s innovative packaging design course that combines visual communication, design, business, and engineering thinking with sustainability and project-based learning. Students from different programmes work in interdisciplinary teams with actual projects from the industry. The exhibition showcases sustainable package ideas designed by student groups.
The aim of CHEMARTS is to inspire designers and material researchers to explore bio-based materials for novel material solutions and their innovative applications. The CHEMARTS philosophy is based on sustainability, with the focus being on renewable raw materials, utilisation of side streams and waste, and creation of biodegradable and/or recyclable materials.

Traces from the Anthropocene. Working with Soil is a multidisciplinary research project that addresses the ecological consequences of human footprint through ceramic art. The project took place before and during the Research Pavilion in the context of the Venice Biennale 2019, the world’s best-known contemporary art event. As ceramists traditionally work with local earth, the research is situated in the local environment of the Biennale, the Venice lagoon area.

During the process, local soil was gathered and then analysed for anthropogenic contaminants. Local brick clay was used to create large ceramic forms, and finally, the contaminated soil was used to paint the ceramic vessels. In this project, craft making is understood as a philosophical space to think through the ethical and ecological concerns related to the stage of the environment.

This project has been a collaboration between the Aalto University School of Arts, Design and Architecture, School of Chemical Engineering and the Finnish Environmental Institute SYKE.

The interdisciplinary CHEMARTS Summer School has been organised since 2012. This year, the overall theme of the Summer School was ‘Value from plant residues’. Some students worked within the theme, some decided to take other approaches. This exhibition showcases the students’ ideas, processes and the most interesting experiments.

CHEMARTS, established in 2012, is a strategic collaboration in education and research between the School of Arts, Design and Architecture and the School of Chemical Engineering.

Urban Façades

High quality architecture is sustainable. When thoughtfully designed and well maintained, it can last forever. As architects, it is important to ask ourselves what defines architectural “quality”. Besides structural and functional aspects, we must also consider the properties of architectural aesthetics. In this respect, it is of great importance to gain an understanding of how building façades make use of material, colours, joints, forms, proportions and depth to determine the qualities of urban spaces. The students were given the main task of producing their own designs for an urban site in the city. The aim of this exercise was to produce a proposal which would establish a language that is formally consistent and sustainable.
Designs for a Cooler Planet is one of Helsinki Design Week 2019’s main events. Eleven art galleries in Otaniemi showcase a wide variety of Aalto University’s projects ranging from sustainable product and service concepts to new material experiments.

Learn more http://bit.ly/acoolerplanet