



22/5/20

Press release for publication

A Small group of students faces Big challenges in Circular Economy in Design at ECOWEEK 2020 48-Hour Online Challenge

ECOWEEK organized its first online event. Experts in the field of Circular Economy shared their expertise and work around the globe, and engaged participants - primarily, students and young professionals - in a hands-on design challenge. This ECOWEEK event, like all others, was an opportunity to meet professionals, and network with peers from around the world.

Why Circular Economy? The economies of the world are linear and designed to turn natural resources into waste. A circular economy is an economy that eliminates waste and aims towards the continual use of resources. Resources are reclaimed and reused so materials are used in cycles, without ending up as waste, filling landfills and polluting sensitive ecosystems. With global request for natural resources in the world predicted to rise threefold by 2050, due to global economic growth and the increase of the world population, a circular model is the only solution for sustainable economic growth.

Among the biggest producers of waste is the building industry. It is responsible for the use of up to 40% of the materials produced globally, about 30% of the energy produced, and produces about 35% of the world's waste. It is also responsible for the harvesting of virgin raw materials, an activity that damages human habitations and ecosystems, such as sand, for example, used in concrete, glass and other building applications. This poses a great challenge for architects and designers, because, in order to create a clean and safe living environment for future generations, a fundamental change has to be made. According to EU legislation, already by 2020, European countries are aiming to a recovery target of construction and demolition waste up to 70%. Many have succeeded in reaching this target. Others are lagging behind.

“In the current global circumstances and looking ahead to the opportunities after the COVID-19 crisis, we must be looking to balance between sustainable economy and environmental and social sustainability. Within this context ECOWEEK launched its first online event’, explains

architect Dr. Elias Messinas the founding chairman and coordinator of ECOWEEK. 'ECOWEEK bringing together professionals and students of Architecture, Design, Landscape Architecture, and other disciplines aims for a stimulating, educating and empowering challenge on Circular Economy, so that they learn the basics and tools to apply its principles in their own work,' he adds.

ECOWEEK as (an online) platform

The ECOWEEK unique platform combines an intense academic and professional experience that is anchored in the real world. It is an **ideal platform for students of architecture and design**, who are well aware of the environmental challenges of our times, and who seek an outlet for their creative ideas and a venue to actively engage in solutions. Here they explore innovation, they activate design to solve problems and learn how to use and work with reclaimed and recycled materials that eliminate waste in the process. ECOWEEK 2020 Online Challenge had more than 350 registered participants from 20 countries, and a series of professional and scientific lectures on circular economy in design that touched upon harvesting of materials, nanotechnology, robotics in the reuse of plastics, and open-source guidelines for sustainable living.

"ECOWEEK was established 15 years ago in Greece. Since then, it has reached out to 17 countries and has developed a network in 56 countries around the world,' explains Elias. 'The ECOWEEK workshops are an opportunity to try out ideas, after listening to outstanding and inspiring lectures. The design proposals, completed by enthusiastic and committed groups, are extremely impressive and bring forward ideas that we often manage to get built or further developed' he adds.

The ECOWEEK 2020 Online Challenge Workshops

The ECOWEEK 2020 workshops were based on the guiding principle of trying out new ideas and re-evaluating older projects in order to bring them to a higher level of sustainable design based on the principles of circular economy.

'This time, the online format was quite challenging,' explains Despoina Kouinoglou, ECOWEEK former participant and presently associate and coordinator of ECOWEEK. 'We tried uncharted grounds in all aspects of the event, including an organizing team that was based in five different countries, a virtual online format and a 48-hour timeframe. The result was greatly encouraging, with more than 90% satisfied participants. The workshop projects also surprised us! They were very impressive, and propose inspiring ideas and methodologies which we aim to pursue further!' she adds.

W1. SUPERUSE STUDIOS: Value System Game, an introduction to the circular design thinking. Workshop leader: Lizanne Dirx. Workshop coordinator: Margarita Kyaniidou.

The workshop tried out the Value System Game, and visualized the processes of a fictional project. The participants searched for smart connections that lead to added value. For example, processes that produce waste and how they can be turned into high-quality resources.

W2. MOR: From Passive to Net-Positive Design. Workshop leaders: Aylin Ozcan and Anna

Tsagkalou. Workshop coordinator: Vicky Panagiotidou.

The workshop re-evaluated a private house developed in ECOWEEK 2009 in Greece, and developed strategies to go beyond passive or net-zero house, and reach net positive with regard to energy, water and materials.

W3. Bioregional One Planet Living: The building of Thermokos. Workshop leader: Benjamin Gill. Workshop coordinator: Sofia Passia.

The workshop was based on a project developed in ECOWEEK in Prishtina in 2014, the building of Thermokos, an abandoned prefabricated concrete building located in the outskirts of Prishtina in a developing area, focusing on the influence of urban design in lifestyle choices.

W4. SUPERUSE STUDIOS: Designing in a Circular Pavilion: Upcycling in Design using the Harvest Map. Workshop leader and coordinator: Margarita Kyanidou.

The workshop further developed the design of a pavilion on Aristotelous Square in Thessaloniki at ECOWEEK 2015 by using the Harvest map - an open-source online materials library. The design was based on reused materials, enabling dismantling and reuse of these materials again.

W5. DEMOCRITUS RESEARCH CENTER: Materials Hunter - A virtual game 'Materials for a sustainable future'. Workshop leaders: Dr. Konstantinos Giannakopoulos and Nafsica Mouti. Workshop coordinator: Eleni Mantika.

The workshop explored the potential of materials through the *Materials Hunter* game - developed through an EU Horizon program - providing understanding of materials composition, use and improvement of recycled content, and focused on innovative design applications.

W6. ECOWEEK: Gardens that Heal, Recycle and Upcycle. Workshop leaders: Dr. Elias Messinas and Despoina Kouinoglou. Workshop consultant: Iris Givoli Faiman.

The workshop was based on four ECOWEEK projects from various locations - Copenhagen, Bucharest, and Agios Nikolaos, Crete - exploring circular design strategies, creating landscape design that heals and educates, and using recycled construction materials.

ECOWEEK 2020 took place in cooperation with: Archisearch, Radio Nowhere, GreenAgenda, Democritus Research Center, Materials Future, One Planet Living, B2Green, Semifind, PolyTexnikaNea, Kataskeves Ktirion.

Hosted by: ECOWEEK 2020 Online Challenge was hosted on YouTube and the Microsoft Teams platform. IT was coordinated by Pavlos Symianakis.

Organizing team: Dr. Elias Messinas, Founding Chairman of ECOWEEK, Despoina Kouinoglou ECOWEEK Associate, Margarita Kyanidou, Vicky Panagiotidou, Pavlos Symianakis, Sofia Passia, and Eleni Mantika.

Learn more about [ECOWEEK 2020](#)

Learn more about [ECOWEEK](#) and [here](#)

Review [catalogue of ECOWEEK workshop projects](#) in cities around the world

Read online the book [ECOWEEK Book#1: 50 Voices for Sustainability](#)

To communicate with ECOWEEK and/or to invite workshops in your school and/or city
contact: ecoweek@ecoweek.org