



## Topic and content

The central integration of sustainability is one of the greatest global challenges. Interdisciplinary cooperation is a key factor for success, as sustainable and intelligent solutions require the participation of a broad spectrum of actors. The shift from a linear to a circular economy is but one piece of the puzzle on the way to a sustainable society. Cities and municipalities are confronted with these challenges, as the following data impressively shows.

*"Despite occupying only 2 percent of the global land mass, our urban centres consume more than 75 percent of natural resources, are responsible for over 50 percent of solid waste and emit up to 60 percent of greenhouse gases, contributing to pollution, climate change and loss of biodiversity. "\**

In this context, various concepts and solutions have been developed or implemented to date. Nevertheless, we are still far from reaching an urban circulation system. To achieve this, we need both more radical ideas and innovations that work faster.

In a joint workshop (run by the Innovation Boosters [Applied Circular Sustainability](#) and [Swiss Smart Cities](#)), participants will use the Design Thinking method to develop new radical ideas to tackle challenges and problems in the field of circular economy and smart cities (problem analysis & challenge framing, 6.9.23 14:00 - 16:30 in Winterthur). Following this, you will work together in a user- and planet-centred co-creation approach to develop solutions that address the key challenges of sustainable urban development (Ideation & Solution Finding, 7.9.23 14:00 - 17:00 in Winterthur).

During the workshops, you will work in small interdisciplinary teams and be supported by Innovation Booster moderators and experts. The developed solution ideas can then be submitted to open campaigns of the participating Innovation Boosters on [innobooster.org](https://innobooster.org), with the chance of winning up to CHF 25'000 to pursue the idea further.

## Overarching questions of the workshop

- How can circular economy benefit smart cities or vice versa?
- How can digitalisation help perform the transformation to a successful circular economy?
- How can innovative solutions for real challenges related to the circular economy and smart cities be developed?
- How can radical ideas for sustainable urban development be generated to attract viable innovation?

## Topics and description of the challenges

### Logistics

To date, the traditional supply chain functions along the lines of delivery and management of the subsequent waste flows. Occasionally this is supplemented with some returns and recycling. In a circular economy, linear flows must be eliminated and various, sometimes complex, return flows must be implemented. New business models will change the type and number of actors as well as the dynamics of the flows. In this Challenge, we address what a smart, resilient logistics network of a circular city might look like and which stakeholders would be involved?

### Digitalisation

How can the integration of "smart" technologies (sensors, Internet of Things, data cloud) increase the circularity potential within cities and communities? Using the example of smart homes, we can already see how we can use technologies to create digital copies that can be used to optimise processes and make them more efficient. This challenge is about looking at the possibilities of digitalisation from the perspective of circular economy and extending them to the scope of cities. How can we better collaborate in a decentralized way?

### Energy

The current energy crisis shows how great the need for action is in the field of self-sufficient, intelligent energy supply. A clean, CO<sub>2</sub>-neutral energy supply is the basis for making all processes within a city or municipality sustainable. Buildings, production facilities, mobility—a secure and decarbonized supply of energy is necessary in all areas. In this challenge, you will develop solutions on how energy can be generated, used intelligently and efficiently, and how energy can be stored.

\* Quelle: [ellenmacarthurfoundation](https://ellenmacarthurfoundation.org)