A circular economy may have multiple positive impacts on a city. Cities are moreover prime candidates for pioneering circular and sustainable principles of production and consumption. Cities across Europe now unite in a project working towards a shared circular economy approach, aiming to identify best practice and act as examples to follow in the fast track to circularity.

# Summary: Municipality led circular economy case studies

How can cities create prosperity for a growing and a progressively consuming population while strengthening the systemic change that support waste and resource management?

How can cities achieve continued economic prosperity while preserving and reducing the resource, like building and construction material, food and energy that is fueling economic growth.

Cities across the world is looking into the circular economy agenda, as it is acknowledge around the world that Cities are the key driver of green transition and sustainable consumption. Cities echo that it is time to accelerate Reduce. Reuse. Recycle. Rethink.

The cities holds the Circular Economy promise of reconciling these seemingly opposing objectives and are ready to include circular economy as a planning tool to replace current praxis by adopting a circular, restorative approach where we no longer consider anything to be waste.

EIT Climate-KIC Orchestrated Innovation Ecosystem program are specifically looking for initiatives that help sharing of circular economy innovation between cities, regions and networks on a global basis which is the essence of the Circular City project.

The Circular City project is investigating how city district can be transforming agent and create Smart and Sustainable Neighborhoods – the business concepts of circular economy resulting is anticipated to improve how cities manage building, construction and utility waste and, through productively utilizing household and industrial waste streams, will increase the growing perception that what was once viewed as waste can now be viewed as resource streams. This publication is a case catalog showing how cities are achieving this transformation – I anticipate that cities around the world will be using these 40 cases and be inspired.

# Cities on the Fast Track to a Circular Economy

In contrast to the traditional linear economy supporting short-sighted design, conspicuous consumption and the storage or attempted destruction of the resulting waste, a circular economy is all about closing the loop with a holistic and regenerative perspective on design, production, consumption and disposal. The United Nation’s Sustainable Development Goal number 12 clearly addresses the need for a circular economy “Responsible Consumption and Production”, and the concept is high on the European Union’s political agenda, being the subject of the ambitious action plan “Closing the Loop” from 2015.

Cities and municipalities increasingly recognize the potential of the circular economy in serving as a catalyst for both efficiency and innovation, thereby providing benefits of both an operational and strategic nature. Urban areas lend themselves particularly well to a circular economy system due to the close proximity of citizens, producers, retailers and service providers. Initial research suggests that the circular economy could lead to more jobs and entrepreneurial activity within the areas of remanufacturing, repair, logistics and services.

Municipalities’ way of measuring success is well established within conventional areas, such as health care, education and transportation. Here, the applications of specific goals and indicators designed and selected to match overall strategies give them prominence in operational matters. When it comes to circularity and sustainability, however, things are not as clear cut.

This publication is the first in the Circular City series and will create a solid overview of concrete circular economic initiatives from 40 cities around the world for inspiration and replications from other cities.

# Mapping municipal cases as driers in the circular economic

The circular economy is a radical solution that advocates a fundamental change in our current economic system, reducing the environmental burden on the planet. For cities, the circular economy is a way to improve the quality of life for citizens by creating jobs and spurring innovation, while reducing the resources needs. A circular economy makes business sense by using new and emerging technology to create opportunities for innovation and the development of new products and production techniques.

This report is specific mapping municipal cases as driers in the circular economy. There are many areas of action as well as different approaches that a municipality can address and work with circular economy. This include both possible on single district - such as the public purchase.

This publication want to showcase specific circular economy hubs at a district level to explain how concrete circular economic concept has been designed and developed, including a detailed explanation for the potential CE business cases and technologies which can cascade circular business opportunities.

But what are the more concrete benefits of incorporating circular as planning instrument at city and district level and how can these, as well as potential negative effects, be assessed? What needs to be done on a municipality level to turn theory into practice, and what hurdles need to be overcome? How can current policies, alongside business and civil society initiatives, contribute to the transition? Answers to such questions will be addressed in project “Circular Cities”, which can help policymakers, investors, businesses, consumers and civil society to find the most promising transition pathways.

Charlotte Breen, senior advisor from C40 Cities is the chief principal of this publication which showcase how Circular Economy initiatives is implemented within the urban environment. This publication highlight that creating a circular city is a complex journey involving many organisations, companies, technologies and resources. A range of stakeholders need to be initiated in the transition towards a circular economy. Many cities in the world have rolled out several sustainability policies and environmental programmes, setting strong policy targets to provide support. However, the critical question for cities is: which areas within the city are ripe and relevant to begin the transition towards a circular economy? In order to become a circular economy, it is vital to identify and initiate change in areas where there is strong political and economic support. This publication identify such areas.

The C40 Cities have with this publication map out areas under the municipalities jurisdiction, where there is significant potential to embed CE principles into systems and value chains in the urban environment. Through the mapping and presenting previously successful cases –, as well as providing the context for these successes – ,we anticipate that further opportunities can be identified in urban areas.

Peter Vangsbo, EIT Climate-KIC Circular City expert

And

Charlotte Breen, C40 Cities Senior Project manager