



AN OPERATIONAL MODEL FOR THE CITY OF HELSINKI FOR
STRENGTHENING CIRCULAR ECONOMY AND FACILITATING
BUSINESS CO-OPERATION

SUMMARY OF THE RECOMMENDATION
NOVEMBER 20, 2020
RAMBOLL FINLAND OY

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FOREWORDS

The City of Helsinki participates the 6Aika (Six City Strategy) project CircVol (Utilization of high-volume by-products and land masses in cities), the main goal of which is to promote circular economy business. The Helsinki implementation of the CircVol project is coordinated by the Economic Development department of the Helsinki City Executive Office.

One part of the Helsinki implementation was the project "Facilitation of Business Cooperation and Creation of an Operational Model" carried out by Ramboll Finland, in which this recommendation for the City of Helsinki's operational model in strengthening industrial and urban symbioses of circular economy and circular bioeconomy was prepared. The project was executed in April-November 2020 by Venla Viskari (Project Manager), Mirja Mutikainen, Eero Salminen and Heini Koutonen from Ramboll. Aino Mensonen and Juho Renvall participated in the planning and facilitation of the webinars. The project was supervised by Heli Lehtinen, Project Manager from the Economic Development Department of the Helsinki City Executive Office, and by Jenna Inkinen, Project Assistant, who also participated in the work.

In order to map the operational model, the possibilities of public partnerships, the functional structure of the circular economy, related business ecosystems and the business potential of the circular economy were studied as a starting point. These were complemented by a document analysis and an electronic survey to which 13 responses were received.

The execution of the project relied heavily on interaction with key actors, taking advantage of the interactive seminars under different themes. The themes of the seminars were The City of Helsinki's approach to strengthening the symbioses of bio- and circular economy, Green City and Circular Economy, Circular economy activities requiring land areas in Helsinki, Biogases in future circular economy, Virtual tour to domestic circular economy activities and Circular Economy in Amsterdam & Helsinki - Exchanging best practices. The seminars were mainly organized as webinars and gathered altogether more than 200 participants. In addition, Ramboll's work included the evaluation of the circular economy idea competition organized by Forum Virium. The operational model recommendation was compiled on the basis of the steps described above in October-November 2020, and its draft was presented to the steering group of the CircVol project on Nov 12th 2020. The recommendation was published in both Finnish and English on the websites of the City of Helsinki and the CircVol project.

The operational model, the main result of the project, was crystallized into seven recommendations for the City of Helsinki. Recommendations 1-5 apply with a larger scope to the development of circular economy in Helsinki, including e.g. a proposal for priority areas and for objectives for the development of circular economy. Recommendations 6-7 focus on the city's approach in developing industrial symbioses and ecosystems in circular economy, and on facilitating cooperation among actors, especially companies. We recommend the city to take a stand on these recommendations, to formulate and communicate the policies and key guidelines for the development of circular economy on the basis of the recommendations, and to organize and initiate activities in accordance with the policies and guidelines.

The authors thank the participants of the seminars and other events for their good comments and discussions!

Helsinki, November 26, 2020

Authors

THE IMPORTANCE OF
CIRCULAR ECONOMY
FOR HELSINKI
THE ADDED VALUE OF
DEVELOPING CIRCULAR
ECONOMY AS AN
EXAMPLE

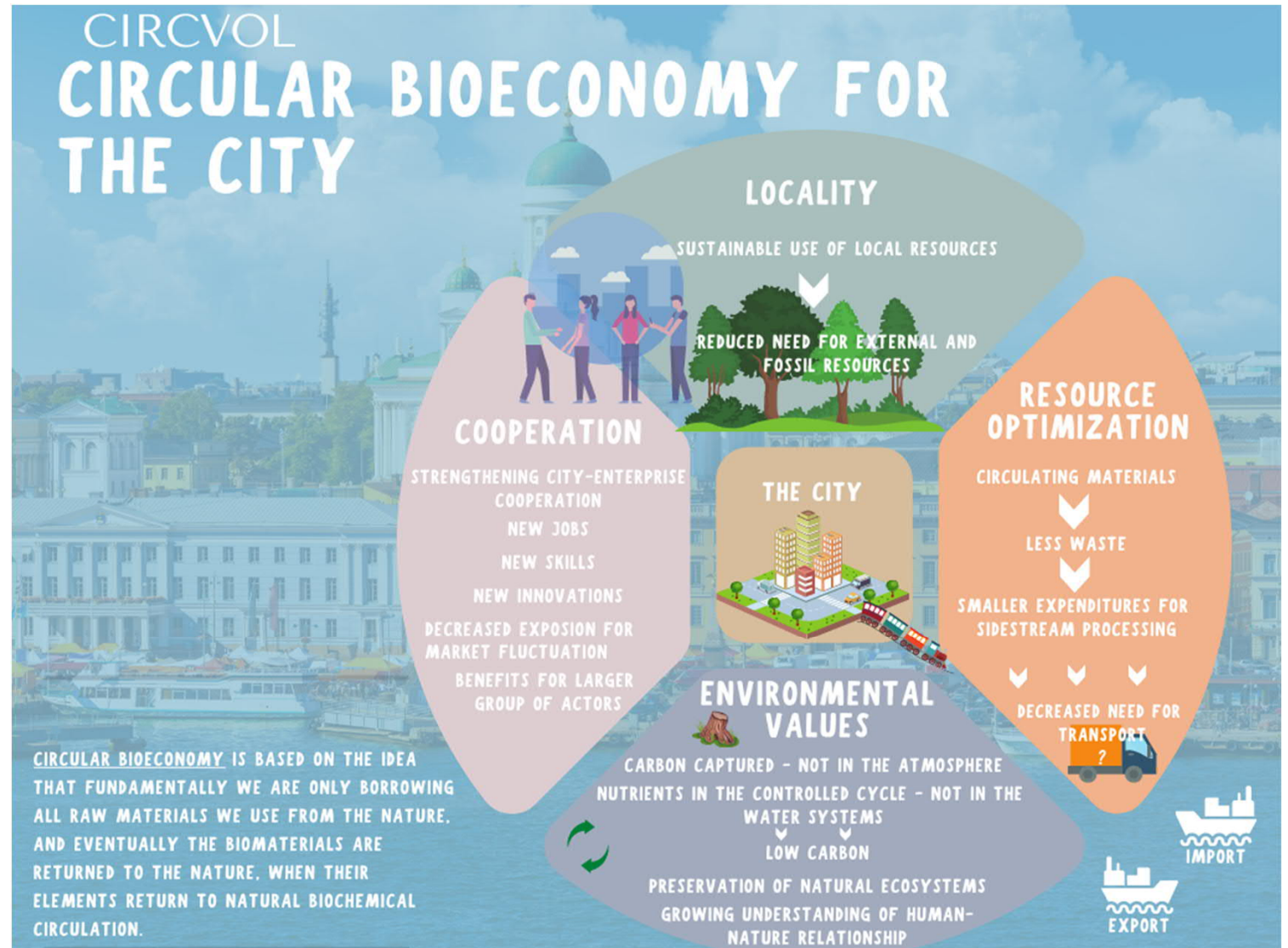


Image: The Helsinki City Executive Office, based on the presentation of Murat Mirata (University of Linköping)



SEVEN RECOMMENDATIONS TO THE CITY OF HELSINKI FOR STRENGTHENING SYMBIOSIS AND FACILITATING BUSINESS COOPERATION IN CIRCULAR ECONOMY

1. Recommended priority areas for the City of Helsinki
2. The optimal role of the City of Helsinki
3. The main objectives of the operational model (anticipated results)
4. The main tasks of the operational model
5. The roles of various actors in implementing the tasks of the operational model
6. The landscape of actors to be involved in the facilitation of symbiosis and business cooperation
7. The operating modes of facilitation

Recommendations 1-5 apply extensively to the development of circular economy in Helsinki. Recommendations 6-7 focus on the city's approach to developing industrial symbioses and ecosystems and facilitating business cooperation.

The task of the city is to take a stand on these recommendations, to form and communicate the policies and key guidelines for the development of circular economy on the basis of the recommendations, and to organize and initiate activities in accordance with the policies and guidelines.

RECOMMENDATION 1: PRIORITY AREAS IN DEVELOPING CIRCULAR ECONOMY

FIVE PRIORITIES OF THE CITY OF HELSINKI



RECOMMENDATION 2: THE OPTIMAL ROLE OF THE CITY IN DEVELOPING CIRCULAR ECONOMY CRYSTALLIZATION INTO THREE MAIN TASKS

The role includes e.g.:

- Enabling the circular economy in business parks
- Facilitation of ecosystems
 - Cooperation between educational and research institutes
- Dissemination of information to actors
- Open data implementations



The role includes e.g.:

- Utilization of public procurement
- Land use and construction management, permitting process
- Corporate governance for city-owned companies
- Digitalization of public processes

The role includes e.g.:

- Goal setting and roadmaps
- Acting as an example and pioneer
- Domestic and international cooperation networks, learning from them

RECOMMENDATION 3: THE MAIN OBJECTIVES OF THE CITY OF HELSINKI IN ENHANCING CIRCULAR ECONOMY

THE OBJECTIVES STATED AS ANTICIPATED RESULTS

SUCCESSFUL CREATION OF FAVOURABLE CIRCUMSTANCES AND AN EFFECTIVE DEVELOPMENT PLATFORM, HAVING LEAD TO MARKET-DRIVEN URBAN AND INDUSTRIAL SYMBIOSIS IN CIRCULAR ECONOMY AND CIRCULAR BIOECONOMY

THE CITY ORGANIZATION ITSELF ACTIVE IN ENHANCING CIRCULAR ECONOMY AND SYMBIOSIS

BUSINESS PARKS DEVELOPED TO ACT AS PHYSICAL PLATFORMS FOR CIRCULAR ECONOMY

OPEN DATA AND DIGITALIZATION SOLUTIONS ENABLING SYMBIOTIC BUSINESSES

NEW MARKET-DRIVEN BUSINESSES BASED ON SYMBIOSIS AND ECOSYSTEMS IN CIRCULAR ECONOMY

CONTINUOUS AND VISIBLE DEVELOPMENT WORK BY THE CITY ("KEEPING MOMENTUM")

Key objective: to bring new market-driven circular economy activities to Helsinki

RECOMMENDATION 4: THE MAIN TASKS OF THE CITY OF HELSINKI AND ITS PUBLIC PARTNERS IN THE DEVELOPMENT OF THE CIRCULAR ECONOMY

Active leadership to implement the operational model and required multi-stakeholder cooperation

Target setting and formulation of strategic guidelines

Monitoring of achievements and deliverables , impact assessment

Enabling circular economy in business parks

Promoting open data and digitalisation in circular economy

Development of market-driven circular economy businesses - facilitation of cooperation among various players

Communications, marketing, PR work, lobbying

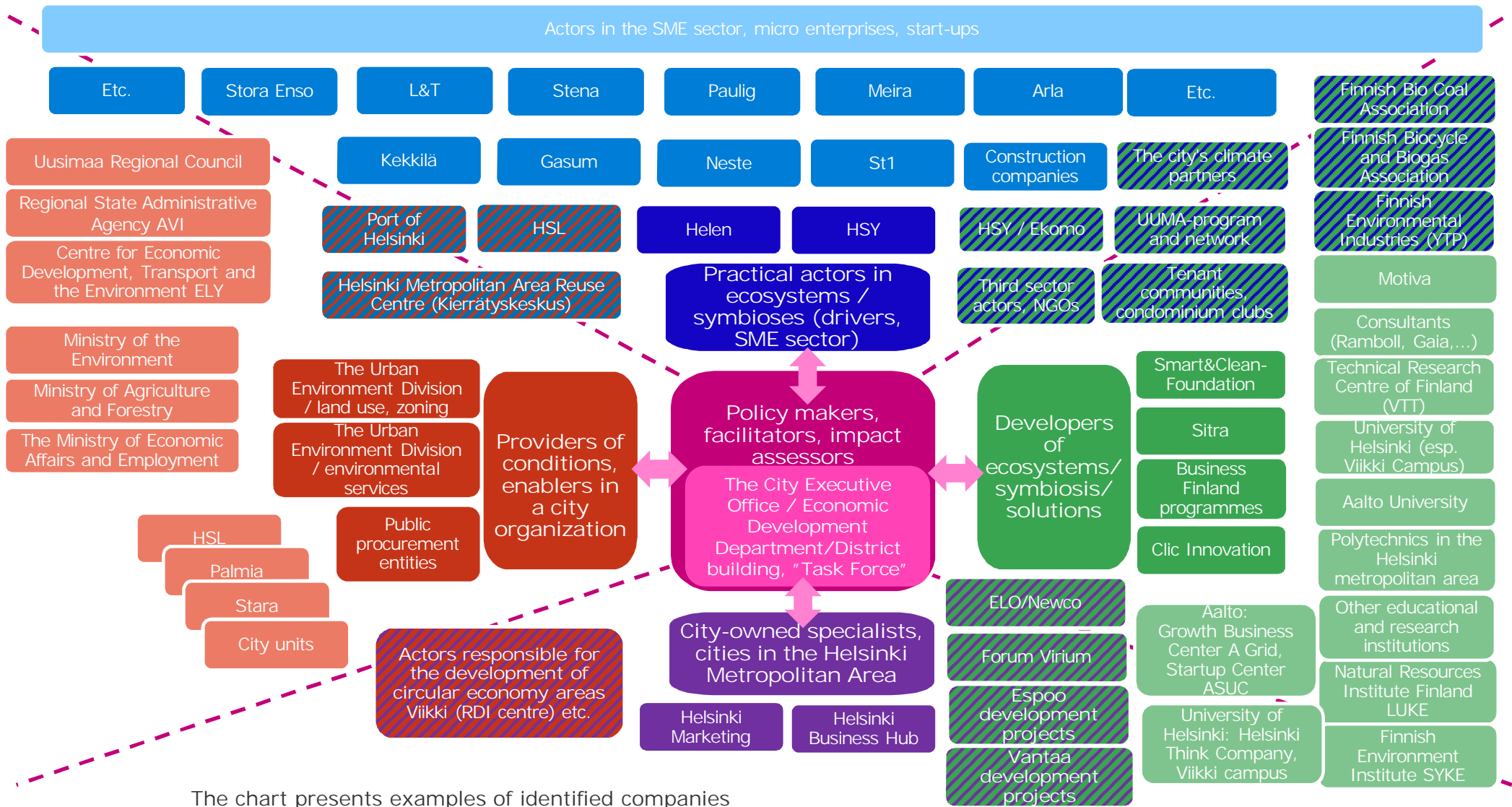
Informing and encouraging various actors and city residents

Enhancing circular economy and circular bioeconomy internally in the core activities of the city organizations and among actors influenced by the city

RECOMMENDATION 5: THE ROLES OF VARIOUS ACTORS IN IMPLEMENTING THE TASKS OF THE OPERATIONAL MODEL

Decision of priorities, setting goals and guidelines	The Helsinki City Executive Office / Economic Development Department (EDD) (preparation for decision making, done partly in this work) Political decision makers and senior officials
Active leadership to implement the operational model and the necessary multi-stakeholder cooperation (including regional cooperation)	A new coordination task for e.g. The Helsinki City Executive Office / EDD or a "Development Task Force" to be founded.
Communications, marketing, PR work, informing and activating actors and residents	The Helsinki City Executive Office / EDD, Communications division, Helsinki Marketing
Public procurement modes that promote circular economy	Economy division / Procurement officials (recommendations, guidelines) Public procurement network KEINO Purchasers of large volumes (Stara, Palmia, HSL, ...) All public procurement entities in the city organization
Land use and zoning that enhances circular economy activities	Urban Environment Division (KYMP): land use planning, zoning, construction management, plots and infrastructure
Profiling and marketing circular economy business parks for companies	City Executive Office / EDD (CircVol project includes an own suggestion for profiling) Helsinki Business Hub
Appropriate and efficient permitting processes of circular economy activities and monitoring of environmental impacts	Urban Environment Division (KYMP) / Environmental services
Promoting open data and digitalisation in circular economy	HSY (central data source) Urban Environment Division KYMP (GIS, 3D team) Forum Virium (project launching, GIS-based platforms)
Development of circular economy business solutions, facilitation of symbioses and ecosystems	The City Executive Office / EDD, Local district construction, Newco; new "Task Force" Helsinki Business Hub (search for foreign actors for Invest-In and ppartnerships) Other orchestrators (Smart & Clean Foundation, Sitra,...) Educational and research institutions, Financiers
Practical implementation of circular economy activities as ecosystems and symbioses	HSY and HELEN as driver companies of the city concern; Private driver companies SMEs, micro-enterprises, start-ups Third sector / NGOs, communities; residents

RECOMMENDATION 6: THE LANDSCAPE OF ACTORS TO BE INCLUDED IN THE FACILITATION OF THE DEVELOPMENT OF SYMBIOSES IS A FOUR-SECTOR DIALOGUE



The chart presents examples of identified companies

RECOMMENDATION 7: OPERATION MODES FOR THE CITY OF HELSINKI AND ITS PARTNERS, FOR FACILITATING BUSINESS COOPERATION AND STRENGTHENING SYMBIOSIS / ECOSYSTEMS

Operation modes	Prioritization of the role of the city in terms of suitability and effectiveness (I-III)	
1. Active communication of companies' needs to the various activities of the city organization	I	<p>Modes 1 to 4 are suitable for priority areas at all stages of development, but especially during the development phase.</p> <p>Modes 5-6 are particularly suitable for ecosystems in their initial phases.</p> <p>Modes 7-8 are suitable to be used as a transitional solution for strategic ecosystems already at the beginning of commercial activities. In the long run, the goal should be market-driven operations.</p>
2. Organizing events and matchmaking activities	I	
3. Conducting surveys and benchmarking studies, information sharing in networks of actors	II	
4. Organizing exhibitions, fairs and study tours in Finland and internationally	II	
5. Actively facilitating ecosystem development (with a significant time contribution)	I	
6. Organizing financial subsidies and incentives to initiate business activities of ecosystems	I	
7. Management and execution of platform activities (e.g. business parks and their services)	III	
8. Partnerships / joint ventures (the city taking a business role in the ecosystem)	III	

THE SUCCESS FACTORS AND CHALLENGES OF THE RECOMMENDED OPERATIONAL MODEL



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