



# MUNICIPAL POLICY FOR THE CIRCULAR ECONOMY

Lessons learned from Amsterdam



## **An inclusive and resilient system for cities**

Cities are facing a growing number of challenges. Rapid urban expansion is putting increased pressure on the living environment, natural resources and the climate. Cities are increasingly recognising the circular economy as a means to combat these issues and become healthy and competitive places to live and work. In a circular economy, resource cycles are closed on the smallest scale possible while maintaining value for as long as possible. This leads to more local transactions of higher value products, parts and materials. As such, the circular economy reduces the environmental impact of the city and, simultaneously, strengthens the local and regional economy. Creating cities with wellbeing for all within the planetary boundaries.

## **Evaluating municipal policy in Amsterdam**

Since 2015, Amsterdam has explored the opportunities for the circular economy in the city and the metropolitan area. The municipality has implemented two programmes geared towards the circular economy, and over 70 circular projects have been completed. These efforts have been recognised and evaluated in 2018, with the findings presented in Amsterdam Circular: evaluation and action perspectives.

The circular economy is indeed realistic and profitable. However, all parties (governments and businesses) are still at the beginning of the transition. Amsterdam as a circular frontrunner now needs to make the transition to the next stage: scaling circularity and making it the standard. In order to do this, there is a need to structurally share the knowledge and experience from the first years of experimenting and to install a culturing of working together.

## **Practical action perspectives**

This report takes the lessons and recommendations from the evaluation of the first three years of Amsterdam Circular and summarises these in practical and actionable points that hold for all cities transitioning to the circular

economy. The report is structured along five municipal policy instruments: knowledge instruments, circular public procurement, legislation, spatial planning and business support. These form the most prominent public interventions to support the circular economy. For each instrument, key learnings and recommended considerations and actions are summarised. As such, this report forms a resource for urban policy makers to help harness their cities' potential and accelerate their transition to the circular economy based on the learnings from Amsterdam.

## **Municipal policy to drive innovation**

The transition to the circular economy is no easy feat. By effectively deploying the available instruments, municipalities can harness the city's agile form of governance, urban innovation power and engaged business community to lead the transition to the circular economy.

The recommendations presented in this report are based on Amsterdam Circular: Evaluation and action perspectives. The full report also includes learnings specific to the local reality of Amsterdam, and findings specific to the value chains of the five Dutch Transition Agendas.

**1** KNOWLEDGE INSTRUMENTS



**2** CIRCULAR PUBLIC PROCUREMENT



**3** LEGISLATION



**5** BUSINESS SUPPORT



**4** SPATIAL PLANNING



1

# KNOWLEDGE INSTRUMENTS

Knowledge instruments develop and disseminate insights about the circular economy through research and disseminating knowledge amongst businesses and residents of the city.

By means of knowledge instruments, the municipality can increase insights in, and awareness of, the circular economy.

*On the next page key action perspectives for municipal policy, based on the learning from amsterdam, are presented.*



## Uniform definition of circularity

There is no common understanding as to what constitutes circularity in different sectors and value chains. This results in lack of direction and agreement and hinders structural advancement of the circular economy. *Establish a uniform definition of circularity for every value chain or product group. These norms should then be translated into administrative standards in a legal framework. It is possible to build on existing norms, such as the BREEAM certification for construction.*

## Sector-specific knowledge

The circular economy takes many different forms and approaches in different sectors. *It is therefore advised to develop a more thorough understanding of the circular economy on specific topics. For example:*

- Develop knowledge on circular renovation and retrofitting in the construction sector, as a focus on new buildings alone is too narrow;
- Develop knowledge on cascading processes that enable high-value retention, as low-value reuse is the current standard in the biomass and food chain.

## Circular living labs

Amsterdam's living lab approach has proved highly successful in engaging a variety of stakeholders and practically testing and implementing circular solutions. *Adopt a living lab approach, and make sure to:*

- Engage research institutes, municipality, businesses and citizens to connect with current trends to make optimal use of the research capacity of the city;

- Set up initiatives both on the city and neighbourhood level so as to involve everybody in the transition to the circular economy.

## Data

The data platform of Amsterdam offers open access to a wide range of data, which citizens, businesses and research organisations can employ in implementing circular solutions. *Collect and manage data on the circular achievements of the city. Make it publically available and actively engage with relevant institutions to set up collaborations so as to produce the most useful data for the circular economy.*

## Independent connector

The municipality can play an invaluable role as an independent connecting party to overcome split incentives and bring businesses together in a pre-competitive environment. *Act as an independent connecting party by establishing networks. These allow for structural knowledge exchange, both within the city and with other municipalities and can resolve fragmentation in the value chain. Make sure to formulate and delineate clear goals for networks to operate effectively.*

## Professional learning organisation

The transition to the circular economy requires a *change in mentality and processes* across the municipal organisation. *Establish the municipality as a professional learning organisation by means of managing, monitoring and measuring to increase professionalism in and support for circular initiatives.*



Cirkelstad is a network of public and private parties that are committed to a city without waste and believe that their collaboration is necessary to transition to a circular economy. The network meets every two months. Every meeting leads to the exchange of knowledge, new insights and new opportunities for cooperation. Partners have indicated to jointly focus on the implementation of their knowledge.

# 2

## CIRCULAR PUBLIC PROCUREMENT

Circular public procurement is the process of acquiring products or services with a view to optimally (re-)use products, parts and materials during and at the end of their lifetime.

By means of circular procurement, the municipality can use its purchasing power to influence the market and so stimulate the production of circular products and delivery of circular services.

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## Demand for circular products and services

Businesses in Amsterdam have expressed interest in and readiness for circular production or service provision, but often lack (large scale) demand for them. *Create demand for circular products and services by means of public procurement.*

## Circular criteria

Amsterdam has successfully employed public procurement as a powerful instrument that leverages the purchasing power of the municipality to create a market for circularity. Circular procurement, however, is a complex process which requires (organisational) learning. The Amsterdam experience has shown to focus on a limited amount of circular criteria. *Assess bids on:*

- *Fair price*, including Total Cost of Ownership and potential negative externalities;
- *Functional specifications*, rather than technical specifications;
- *Process criteria*, to find a match with an intrinsically motivated private sector possible;
- *Entire life cycles*, including end-of-life, by for example asking for demolition and disassembly plans for construction projects.

## Adequate municipal organisation

Circular public procurement projects often covers maintenance and end-of-life of products, creates long-term relationships and employs new business models in order to make circular bids competitive with non-circular ones. Split budgets, fragmented

project management and working in silos structurally hinders circular public procurement. *Ensure adequate internal organisation of the municipality to successfully implement circular public procurement:*

- Establish an *interdisciplinary team* including an internal client, a budget holder, a policy maker, a legal advisor and an end user. The lead buyer is an impartial connecting party between all disciplines;
- *Lead buyers* should take a coordinating role in the procurement process in order to keep track of progress, formulated ambitions and contract management;
- Arrange *budget and contract management* to optimise expenditure, as a circular tender will often cover both realisation and multi-year maintenance;
- Draw up circular procurement *schedules and plans* for product groups.

## Ownership across municipality

For circular public procurement to succeed, all municipal departments should cooperate and strive towards circular tendering. *Develop ownership across the municipal organisation:*

- Make department heads responsible for *shared optimal result* during the period of product or service usage;
- Organise *internal training* on circular procurement for all relevant stakeholders, preferably on the basis of self-initiated pilots.

### Case study

## Procurement of circular office furniture

Through circular procurement, it was agreed that no new furniture would be supplied if existing furniture was still satisfactory. When new furniture was purchased, the supplier would take back the old furniture and assess, based on predefined criteria, if the furniture was still suitable for reuse, could be refurbished or had reached the end of its life cycle. Products that no longer met the criteria, were disassembled and parts would be reused for making new products.

# 3 LEGISLATION

Legislative instruments are obligations that the municipality can formally impose on itself, the market and consumers in the form of, for example, product standards or bans.

By means of legislation, the municipality can use its legal authority to require or prohibit more or less circular practices.

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## Building on national legislation

The legislative authority of municipalities is limited in comparison to that of the national government. *Develop a legislative framework so as to structurally support the national one to reinforce its effect on the circular economy:*

- Initiate *small changes* across the board of the municipal legal mandate (see, for example, the case of Amsterdam's Yes-Yes stickers below) and develop ownership for the municipality's circular ambitions in all departments;
- Strengthen the *conversation with national legislators* where legal barriers emerge (for example, address the adaptation of national laws to enable high-value reuse of organic residual flows).

## Circular agenda and strategy

In the transition to the circular economy, there is a need for a common vision, which is operationalised in a strategy with ambitions, stakeholders, scenarios and roadmaps. *Compile a coherent agenda and strategy with a clear focus and ambitious goals for the most prominent circular value chains in the city:*

- Involve government organisations, research institutes and businesses who are active in the relevant value chains and make them the *owners of the agenda*;

- For the biomass and food value chain, include the different required geographical scales in a *joint logistical strategy* as a part of the agenda. Weigh the residual value of the resource flows against the necessary logistical effort, paying special attention to the diversity of residual flows and how to keep these separated (for pure materials) or merged (for sufficient volume).

## Administrative standards

There is a need to integrate a *common understanding of circularity* into administrative standards to guide policy decisions. Develop a clear and unambiguous standard for sectors, value chains and/or products and services. *Include basic requirements (in order to make traditional organisations reach higher) and give space to frontrunners (to enable them to create innovative projects).*

### Case study

## Yes-Yes stickers



As of January 1st 2018, the municipality of Amsterdam introduced a system of mailbox stickers. It is now only allowed to deliver unaddressed mail or newspapers if a mailbox carries a yes-yes sticker, rather than in the absence of a no-no sticker. This cuts back 34 kg of paper waste per household per year.

# 4

## SPATIAL PLANNING

Spatial planning instruments influence the physical environment by determining the amount and function of space, what materials are used as well as its physical character.

By means of spatial planning, the municipality can divide and classify the physical environment in a way that promotes circular resource management.

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## Structural attention for circular principles

Everything that is built today will determine the boundary conditions of the built environment for the coming decades. It is of the utmost importance to avoid an unsustainable lock-in. Therefore, retain structural attention for circular principles in all spatial planning. *Make sure to:*

- Set *area specific priorities* and involve residents and users to ensure their long-term interest is guaranteed;
- Provide *clarity* on which stakeholder is responsible for achieving which ambitions;
- Build in *flexibility* of area functions and make sure buildings are flexible, in order to make areas and buildings adaptable to future demand, whether this is commercial, residential or mixed space;
- Allow *ample time* to realise circular ambitions, this might require longer than usual timeframes.

## Space for circularity

The need for physical space to test circular solutions and close resource loops has emerged in Amsterdam. Considering the urban fabric, these physical spaces should be embedded in the urban development strategy. *Provide physical spaces on a neighbourhood level to enable high-value reuse of products, energy and water.*

### Case study

## Circular development Port-City area

The Port-City project in Amsterdam aims to realise 40.000 to 70.000 new living units by 2040 in the area. The development strategy ensures that all these homes, as well as the public space, will be developed in a circular way, with a focus on circular material use and adaptability. These circular principles are then translated into the spatial plan of the different neighbourhoods in the Port-City area.



## 5

# BUSINESS SUPPORT

Business support instruments support companies with financial and non-financial resources such as grants, guarantees and technical advice.

By means of business support, the municipality can support (small- and medium-sized) businesses that have limited internal capacity and resources to launch circular products or services or those that need high-risk investment.

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## New (temporary) financing instruments

Current risk calculations are often based on a linear way of doing business, and result in high-risk profiles for entrepreneurs with a circular business model. Develop new (temporary) financing instruments to support these entrepreneurs. Financial support is particularly relevant for the biomass and *food chain*, where circular initiatives are often not competitive (yet) because of low-value resource flows.

## Impact finance

To implement circular business, collaboration between the municipality and the private sector must be flexible. This allows for support that is responsive to changing market conditions. *Focus business support on impact; (unnecessary) process based requirements may become obstacles.*

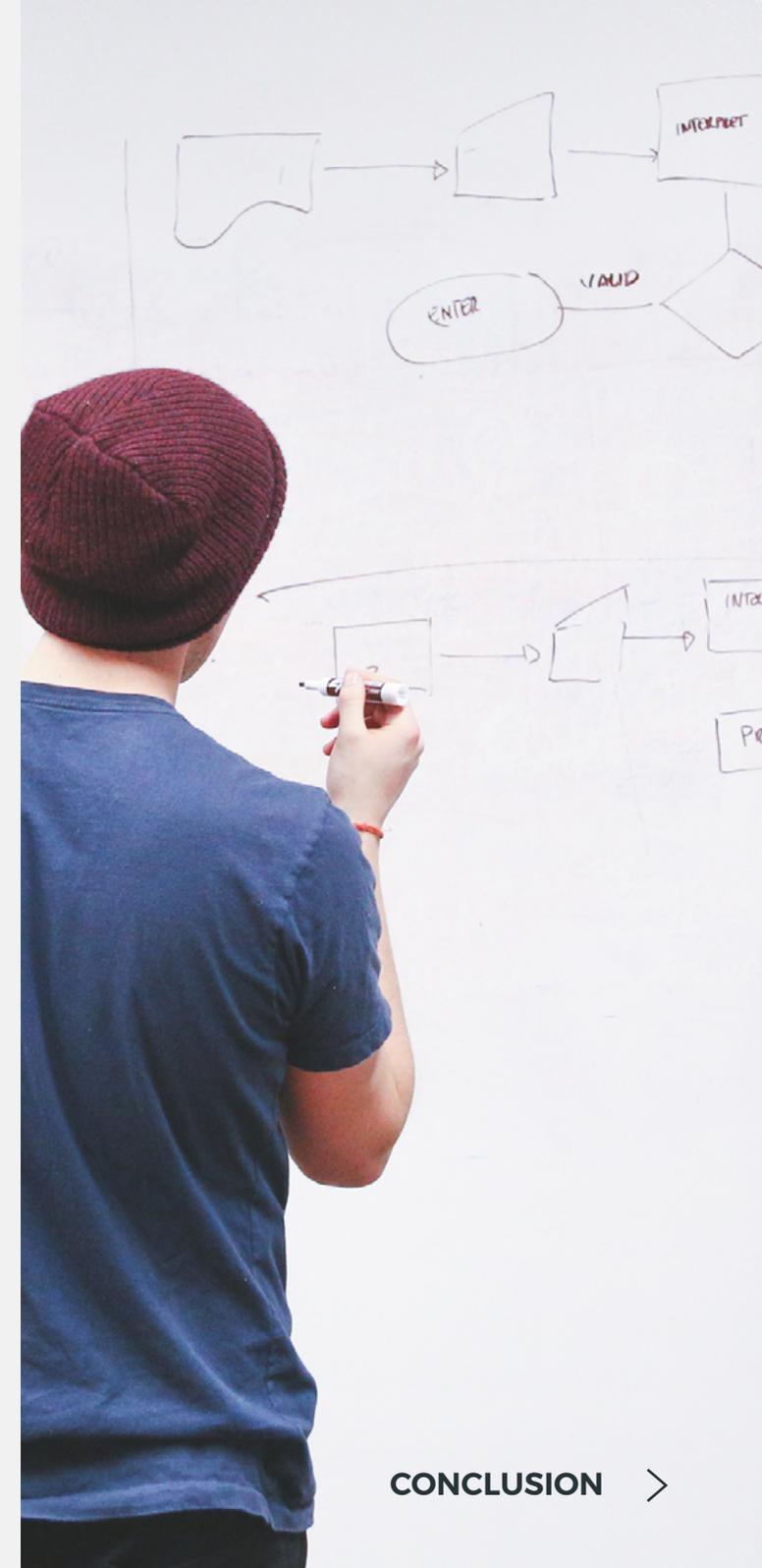
## In-kind support

Training and courses focused on specific challenges in certain sectors help entrepreneurs take their first steps in circularity. Next to financial assistance, support entrepreneurs in *studies* for the improvement of circular business models and processes as well as in the training of employees and partners in the value chain on the circular economy.



### Case study Amsterdam Circular Challenge

During the Amsterdam Circular Challenge, students and young professionals turn residual flows from companies into products. In the previous edition, one of the teams became a successful startup, Planq. The concept of the challenge is now replicated in other Dutch cities. The financial support provided by businesses, the municipality and Netherlands Circular was crucial to make the partnership succeed.



As the size of cities continues to grow throughout the world, so too does the size of their challenges; intensified by the growing pressures on environmental systems as a result of rapid urban expansion. The circular economy reduces the environmental impact of the city and, simultaneously, strengthens the local economy. Circular economy activity in Amsterdam has shown that the circular economy is indeed realistic and profitable. However, all parties are still at the beginning of the transition.

Amsterdam's commitment towards the circular economy over the past three years has shown the important role of local policy to accelerate practical circular economy activity throughout a city. Indeed, policy can provide the foundational support that circular projects need to transform theory into practice, or scale-up a best-practice to a standard.

This report has summarised the key lessons learned in Amsterdam after three years of circular economy policy. It distinguishes takeaways for five prominent policy instruments that governments can use to support the circular economy. The focus lies on practical action points to implement and improve future circular economy policy, which makes this report a practical reference for urban policymakers that want to support the circular economy in their city.

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