

# **Analysis of the City of Amsterdam's Circular Economy Strategy Using Bryson's Model**

University of Bologna  
Academic Year 2024/2025  
Professor Luca Mazzara

*Francesco Grandi, 0001071804  
Tommaso Maccaferri, 0001071630*

# **Contents**

|  |           |
|--|-----------|
| <b>INTRODUCTION</b>  | <b>3</b>  |
| <b>BRYSON'S STRATEGIC PLANNING MODEL</b>   | <b>3</b>  |
| DEFINING MISSION, VALUES AND ORGANIZATIONAL VISION                                 | 3         |
| EVALUATING EXTERNAL AND INTERNAL ENVIRONMENTS                                      | 4         |
| STRATEGIC ISSUES   | 5         |
| FORMULATING STRATEGIES   | 6         |
| REVIEWING AND ADOPTING STRATEGIES  | 7         |
| EXECUTING STRATEGIES   | 7         |
| <i>Material Passports</i>  | 7         |
| <i>Urban Reuse Hubs</i>  | 8         |
| <i>Behavioral Campaigns</i>  | 8         |
| <b>AMSTERDAM'S CIRCULAR FUTURE: FROM URBAN INNOVATION TO COMMUNITY INVOLVEMENT</b> | <b>8</b>  |
| <b>CASE STUDIES: CIRCULAR ECONOMY IN GLOBAL CITIES</b>                             | <b>9</b>  |
| COPENHAGEN: PIONEERING TECHNOLOGICAL INNOVATION                                    | 9         |
| BARCELONA: EMPOWERING COMMUNITIES THROUGH CIRCULARITY                              | 10        |
| ROTTERDAM: CIRCULARITY IN INDUSTRIAL SYSTEMS                                       | 10        |
| SHARED GOALS AND DIVERGENT STRATEGIES  | 10        |
| <b>FUTURE CHALLENGES AND STRATEGIC SOLUTIONS</b>                                   | <b>10</b> |
| FINANCING ISSUES   | 10        |
| ECONOMIC INSTABILITY   | 11        |
| BEHAVIORAL INSIGHTS  | 12        |
| <b>CONCLUSION</b>  | <b>13</b> |
| <b>REFERENCES</b>  | <b>13</b> |

## Introduction

The shift towards a circular economy has emerged as an objective for cities addressing the two challenges of resource limitations and climate change. As centers of economic and social activity, cities produce substantial amounts of waste and consume a lot of natural resources, demanding immediate reforms. Amsterdam, known for its forward-thinking urban policies, has established itself as a global leader in the movement towards sustainability. Its Circular Economy Strategy, started in 2020, sets an ambitious goal of achieving complete circularity by 2050. This strategy is in line with intermediate objectives, including a 50% reduction in raw material usage by 2030 and the implementation of innovative solutions to promote sustainable practices.

The Amsterdam plan is to shift from its conventional linear economy, characterized by extraction, consumption, and disposal, to a model prioritizing reuse, recycling, and waste minimization. A collaborative approach is essential to such a transformation, through the involvement of government agencies, private enterprises, academic institutions, and community organizations. Initiatives promoting the implementation of material passports for construction resources, urban reuse hubs such as de Ceuvel, and extensive public awareness campaigns.

This case study assesses Amsterdam's Circular Economy Strategy according to John M. Bryson's Strategic Planning Model. This model analyzes the processes of formulating, initiating, and executing public sector strategies, providing insights into the strengths and areas for improvement. By examining the city's approach, this analysis highlights practical lessons for other urban centers showing benefits and difficulties in the implementation of sustainable development in the 21st century.

## Bryson's Strategic Planning Model

John M. Bryson's Strategic Planning Model is a well-known framework designed to assist public and non-profit organizations in developing, executing, and assessing strategies to fulfill their objectives. Based on cohesive participation and adaptive learning, the model points out the importance of aligning an organization's internal possibilities with external demands to generate meaningful and sustainable outcomes. It is composed of a dozen interrelated steps that establish a guideline for organizations in the matter of strategic management, starting from initial conception to implementation and evaluation. In the following analysis, these strategic practices are introduced, defined and applied to the Amsterdam Circular Economy strategic plan.

### Defining Mission, Values and Organizational Vision

The mission, values and vision of an organization are fundamental principles that guide all strategic decisions. The early definition of these elements in the strategic planning process ensures that each step aligns with the organization's core purpose and ethical commitments. The mission defines the organization's existence and societal aims, the values represent its cultural and moral priorities and the organizational vision explicit what the organization aims to become or achieve in the future. Together, they offer guidance for decision-making and motivate stakeholders to back the organization's objectives.

Beyond guiding internal decisions, mission and values improve external communication; by communicating the organization's identity and priorities to stakeholders, it fosters trust and facilitates transparent collaborations. On the other hand, a robust vision provides direction, improves motivation, aligns efforts across departments and promotes collaboration by establishing a common goal.

By strongly setting their strategies in a well-defined mission and values framework, organizations can effectively solve complexities while preserving integrity and public confidence. A vision can instead serve as a source of motivation in challenging times when the organization's mission may seem weak, or progress appears crumbling.

Amsterdam's vision and mission in terms of sustainability are anchored to the framework established by the European Commission through the two guidelines published in 2019 and 2020. The European Green Deal is the European Union's comprehensive strategy for achieving climate neutrality by 2050. It aims to reduce greenhouse gas emissions by at least 55% by 2030, transitioning the EU to a sustainable economy. The deal integrates various policies, including clean energy, circular economic initiatives and pollution reduction. Economic aids like the Sustainable Europe Investment Plan financially support the proper implementation of these goals.

The Circular Economy Action Plan is a central element of the European Green Deal, it focuses on the separation between economic growth and resource consumption. Unlike the linear model of production and disposal, a circular economy emphasizes resource efficiency, waste reduction, and product life extension through reuse and recycling. This approach seeks to minimize environmental impacts while fostering economic growth.

As outlined in the introduction, Amsterdam's Circular Economy Strategy objective is the transition of the city's economy from a conventional linear framework to a circular model aimed at resource regeneration and waste minimization. The strategy is underpinned by two deadlines: achieving a 50% reduction in raw material consumption by 2030 and complete circularity by 2050. A fundamental aspect of Amsterdam's strategy is its emphasis on three high-impact areas: construction, food systems, and consumer goods. These sectors were selected due to their elevated contributions to waste production and resource consumption. The construction industry is of course a primary focus, given its heavy reliance on raw materials and significant generation of demolition waste. Initiatives like material passports, which are digital tools that trace the origin, composition, and recyclability of construction resources, illustrate the city's efforts to foster reuse and reduce waste. At the same time, the city is tackling inefficiencies within the food sector by investing in recovery programs that aim at redistributing surplus food and diminishing organic waste. On the consumer goods side, the strategy prioritizes the prolongation of product life through repair services and community-based reuse centers.

Amsterdam's Circular Economy Strategy is not an environmental policy; it is a comprehensive framework for systematic change that mixes ecological, economic, and social duties. By addressing critical value chains, fostering innovation, and establishing partnerships, the city is creating a path toward a more sustainable and resilient future.

## Evaluating External and Internal Environments

A deep evaluation of the external and internal environments is crucial for the comprehension of an organization's current standing and recognition of opportunities and challenges.

Bryson's model highlights the importance of using tools such as SWOT analysis to systematically assess strengths, weaknesses, opportunities, and threats. Strengths and

weaknesses are internal attributes that reflect an organization's capabilities, resources, and efficiency, whereas opportunities and threats arise from external forces influenced by broader economic, political, and social trends.

An effective evaluation process involves the collection of data from diverse sources, including stakeholder interviews, market studies, and internal audits. This kind of approach ensures that the management has a realistic understanding of the organization's capabilities and external context. Organizational plans are thus drafted with accuracy, with the aim of not only being reactive but also forward-thinking.

Amsterdam certainly conducted an analysis of the context in which to implement the reforms leading to a sustainable shift. Between internal strengths and external opportunities, Amsterdam could definitely relate with a population ready to take up such a transition, and this is testified by the foundation of forward-looking initiatives, in line with the Green Deal principles, even before the publication of it or the official implementation of a Circular Economy. Initiatives like de Ceuvel, explored in more details below, were created long ago, proving how the cultural framework was ready and unconsciously going toward this direction. On the external level, Amsterdam could count on national and international support, both in objective alignment and financial terms. Other than that, as further explained, Amsterdam had a positive stakeholder interaction, which facilitated the shift and decreased potential threats mainly composed of private firms' opposition.

Though, it was not all easy to settle, the municipality of the Dutch capital had to face concrete problems that, if not correctly addressed, could have vanished all the support gained. These criticalities are illustrated in the following section.

## **Strategic Issues**

Strategic issues represent the central challenges or opportunities that the organization must address to achieve its objectives. Identifying strategic issues is a crucial step in Bryson's model, emerging after tools like SWOT analyses clarify internal and external conditions. These issues form the backbone of the strategic plan, as they highlight those areas requiring focused attention and resource allocation.

Recognizing strategic issues often entails managing uncertainty and facing difficult trade-offs, as these challenges frequently involve complex, multidimensional considerations.

Prioritization is critical, and effective addressing of strategic issues requires collaborative discussions among stakeholders to establish consensus on how to tackle these priorities and create actionable plans.

The construction sector represents one of Amsterdam's largest environmental challenges due to its high material consumption and waste generation. This issue is particularly critical as the sector is responsible for approximately 30% of total waste in the Netherlands, with significant amounts coming from demolition and construction debris. Addressing this issue involves transitioning from traditional, linear construction practices to circular models emphasizing material reuse, recycling, and sustainable design. This issue has been addressed through the implementation of material passports, digital elements that track the material life-cycle, thoroughly described in the next sections.

Food waste is another significant strategic issue for Amsterdam, particularly given the environmental and social implications of inefficiencies in urban food systems. Estimates suggest that around 30% of food produced globally is wasted, and Amsterdam reflects this global trend. Within the city, food waste occurs at multiple stages of the supply chain, including production, distribution, and consumption. The issue is caused by the inadequate

redistribution systems for surplus food and limited infrastructure for composting organic waste. To tackle this challenge, Amsterdam's strategy focuses on creating a circular food system that minimizes waste and optimizes resource use, increasing efficiency in the supply chain and managing the distribution of surplus food.

A critical strategic issue for Amsterdam's Circular Economy Plan is ensuring alignment with broader policy frameworks, particularly at the national and EU levels. The European Green Deal and the Circular Economy Action Plan establish ambitious goals for sustainability and Amsterdam's local strategy must integrate them effectively into its urban and economic context. One key challenge in this alignment involves navigating the complexities of multi-level governance. EU directives provide overarching guidance but require interpretation and implementation at the national and municipal levels.

## **Formulating Strategies**

Strategy formulation represents the stage where an organization translates its comprehension of mission, values, environments and related strategic issues into actionable plans. This phase involves generating initiatives, assessing their feasibility, and selecting the most effective approaches to tackle identified challenges or opportunities. It is a mixture of creativity and analysis, necessitating input from various stakeholders to guarantee that the resulting strategies are both innovative and practical. Public organizations often encounter constraints such as limited resources, political pressures, or regulatory obligations, which must be carefully analyzed during this phase.

In Bryson's model, strategy formulation is not a uniform process, but rather a complex and never-ending process. The efficacy of formulated strategies depends upon their alignment with the organization's mission and external context. In this process, stakeholder engagement remains essential and it is underscored by Bryson's guidelines because it ensures that strategies capture diverse perspectives and gain the necessary support for execution.

Collaboration is fundamental in Amsterdam's strategy. The city acknowledges that the successful transition to a circular economy needs the involvement of a large set of stakeholders, including government entities, private enterprises, academic institutions, and local communities. Amsterdam has in fact started partnerships across the public, private, and academic sectors. The involvement of businesses has been particularly impactful, as it encourages innovation and accelerates the adoption of circular practices, while partnerships with research institutions have allowed Amsterdam to integrate innovative technologies and methodologies into its initiatives. This inclusion not only enhances the strategy's feasibility but also fosters a sense of shared ownership among stakeholders.

The formulation of strategies involves creating a detailed way of action. By considering both immediate priorities and long-term objectives, organizations can craft strategies that are adaptable, sustainable, and capable of achieving expected outcomes.

As presented in the previous section, Amsterdam's main focus is concentrated on three areas: construction, consumer goods and food systems. These are the industries in which law enforcement and good habits implementation are believed to be key drivers for the city's economic green shift. Both in economic magnitude and in polluting terms, these sectors are in fact the most impactful and relevant. In the next sections, three concrete examples of strategic actions are analyzed.

## **Reviewing and Adopting Strategies**

Following strategy formulation, a thorough review and adoption process is necessary to verify their practicability, alignment with organizational objectives, and approval by key stakeholders. This phase emphasizes critical evaluation, refinement, and consensus-building, acknowledging that even well-structured strategies may benefit from modifications based on stakeholder feedback or evolving circumstances. In the public sector, this stage often entails consultations with government officials, opinion leaders, and industry specialists to approve the proposed strategies and understand potential areas for improvement. Decision-makers typically assess whether the strategies adequately address the identified challenges, capitalize on the organization's strengths, and mitigate associated risks. This phase may also involve the undertaking of pilot initiatives which can be used for an initial evaluation.

By deeply reviewing and refining strategies before adoption, organizations can increase their likelihood of success. This step ensures that plans are not only theoretically working but also practically executable, thereby minimizing the risk of failure during implementation.

Stakeholders' engagement and consultations are of primary importance, but the results prospect, and pilot initiatives should be easy to measure and present to key decision-makers. In the Amsterdam strategic plan, an area for improvement lies in the strategy's monitoring and evaluation mechanisms. While Amsterdam has established key performance indicators (KPIs) to measure progress, the lack of standardized metrics across all sectors makes it difficult to assess the overall impact comprehensively. Additionally, the reliance on pilot projects, while useful for testing ideas, can slow the transition to large-scale implementation. Scaling successful initiatives requires robust systems for data collection, analysis, and reporting to ensure transparency and accountability.

## **Executing Strategies**

Executing strategies means transforming plans into actionable initiatives. During this phase, an organization collocates resources, establishes responsibilities and enacts activities in order to accomplish its objectives. This part needs a high degree of coordination, as even the best strategies can't succeed without effective execution. The key components of this section include resource allocation, stakeholder communication, and performance evaluation.

In this section are presented the most relevant initiatives put on work by Amsterdam's municipality up to now. Their critical points and predictable evolutions are also analyzed without forgetting that successful execution relies on leadership, adaptability, and perseverance. Future adjustments are necessary to tackle unforeseen challenges, and only by repeated evolution organizations can convert their strategic plans into tangible results.

### **Material Passports**

Material passports represent a crucial technological advancement within Amsterdam's Circular Economy Strategy, enabling a transformative methodology for managing construction resources. These digital instruments offer detailed information about construction materials, containing their origin, composition, and potential for reuse or recycling. By imposing transparency into the lifecycle of materials, passports empower developers, architects, and construction firms to make informed decisions, thus ensuring that resources are reused effectively rather than discarded as waste. For example, material passports have been utilized in Amsterdam's circular housing projects, where rescued materials from demolished

buildings are documented and proposed for new constructions. This approach not only minimizes waste but also reduces the necessity for raw material extraction, aligning with sustainability objectives. Additionally, the digital format of material passports enables real-time tracking, facilitating the assessment of the long-term usability of resources. By promoting circularity at a large scale, material passports illustrate how innovative tools can correspond to environmental and economic goals.

### **Urban Reuse Hubs**

Urban reuse hubs constitute another essential aspect of Amsterdam's circular economy innovation. These hubs serve as physical centers for collecting, repairing, and redistributing goods, extending consumer product lifespan and decreasing landfill waste. By promoting a culture of reuse, the hubs offer residents and businesses accessible solutions for reducing waste and advancing sustainability. For instance, community members can bring malfunctioning appliances to the hubs for repair or donate items that would, otherwise, be thrown away. The effectiveness of urban reuse hubs is well-established in their integration with local communities. These facilities are designed to be both functional and educational, providing workshops and repair classes to equip individuals with the skills necessary to maintain their belongings. Furthermore, the hubs contribute to job creation within the repair and refurbishment sectors, offering economic opportunities while promoting circular principles. Reusing hubs serves as a solid manifestation of Amsterdam's circular vision by connecting the division between consumption and sustainability.

### **Behavioral Campaigns**

Encouraging behavioral change is a vital element of Amsterdam's Circular Economy Strategy, and innovative campaigns have been crafted to motivate residents and businesses to embrace sustainable practices. These campaigns utilize a mixture of digital divulgation, public events, and incentive programs to shift perceptions regarding consumption and waste. For example, Amsterdam has initiated several citywide campaigns to inform residents about the benefits of recycling and repair, employing relatable messaging to render circular practices both accessible and achievable. In addition to raising awareness, these campaigns tackle practical obstacles to involvement. By providing workshops and demonstrations, the city equips individuals with the skills required to incorporate circularity into their everyday routines. Through consistent engagement, Amsterdam's behavioral campaigns attempt to transition circular practices from niche activities into common norms, ensuring that the strategy's objectives resonate across diverse demographics.

## **Amsterdam's Circular Future: From Urban Innovation to Community Involvement**

De Ceuvel and Circular Amsterdam Week are two notable initiatives in Amsterdam that showcase the city's commitment to promoting the principles of the circular economy. While De Ceuvel, a circular office park, serves as a physical model of sustainable urban development, Circular Amsterdam Week focuses on community engagement and education to inspire citywide adoption of circular practices. These activities not only showcase the potential of circularity in urban settings but also demonstrate how education, innovation, and community collaboration can drive a meaningful transition to a more sustainable future.

De Ceuvel, located on a repurposed industrial site, embodies the circular economy by integrating resource efficiency, renewable energy, and community involvement. This project has transformed a former shipyard into a vibrant space where offices, workshops, and public areas coexist, all constructed from reclaimed materials. The park employs modular and demountable construction, enabling the reuse of components and significantly reducing waste. Notably, De Ceuvel uses material passports to document the origins, composition, and recyclability of construction materials, ensuring transparency in resource tracking and facilitating future reuse. The site also integrates renewable energy technologies, such as solar panels and bio-digesters, and treats wastewater on-site through constructed wetlands.

In addition to its physical infrastructure, De Ceuvel is an educational hub that organizes regular workshops and public events to raise awareness of circular economy principles. The businesses within the park, including those offering eco-friendly design and green consultancy services, contribute to the ongoing dialogue on sustainability. This combination of innovation, community involvement, and environmental sustainability highlights how circular practices can revitalize underutilized urban spaces and create economically feasible, sustainable development models.

Circular Amsterdam Week, on the other hand, is an annual event that brings together residents, businesses, and policymakers to promote sustainable practices and the circular economy. This week-long event showcases practical solutions through workshops, exhibitions, and panel discussions. A key highlight is the Repair Café, where individuals can bring items such as electronics or furniture for skilled volunteers to repair, reducing waste and promoting the longevity of possessions. The Circular Business Fair also provides a platform for local businesses and startups adopting circular principles, fostering collaboration and encouraging sustainable entrepreneurship. Educational sessions are tailored to different age groups, with interactive games for children and seminars for adults on topics such as circular design and resource conservation. The event also promotes community-driven initiatives, like waste reduction competitions, to inspire collective action and encourage widespread participation. According to surveys, 80% of attendees felt more confident in adopting circular practices in their daily lives after the 2023 event.

## Case Studies: Circular Economy in Global Cities

Copenhagen, Barcelona, Rotterdam, and Amsterdam showcase varying strategies for implementing circular economy principles, with each city addressing specific priorities. While all four share goals of waste reduction, resource efficiency, and sustainable development, Amsterdam's strategy serves as a useful point of comparison.

### Copenhagen: Pioneering Technological Innovation

Copenhagen is celebrated for its ambitious goal of achieving carbon neutrality by 2025, where circular practices are central. Waste-to-energy technologies play a dominant role, transforming non-recyclable waste into electricity and significantly reducing landfill dependency. The city also incorporates circular principles in urban planning, with certifications that incentivize the reuse of building materials.

A key distinction between Copenhagen and Amsterdam lies in Copenhagen's emphasis on waste-to-energy incineration, while Amsterdam focuses more on technological innovation, such as material passports to track and reuse resources, prioritizing waste reduction through

education and public engagement rather than incineration. Amsterdam's broader approach also integrates circularity into governance, encouraging cross-sector collaboration, which sets it apart from Copenhagen's more technology-focused model.

## **Barcelona: Empowering Communities Through Circularity**

Barcelona's circular economy strategy emphasizes social inclusion and community-driven initiatives. The city's composting program minimizes food waste while improving urban soil, and it supports small businesses dedicated to sustainability.

Unlike Amsterdam, which blends community involvement with advanced tools like digital material tracking, Barcelona's efforts focus more on people-powered actions. While Amsterdam's strategy aligns social, economic, and environmental goals within a unified governance framework, Barcelona's initiatives remain more localized and fragmented. Additionally, Amsterdam sets long-term targets such as the 2050 circular economy goal, which contrasts with Barcelona's less structured approach.

## **Rotterdam: Circularity in Industrial Systems**

Rotterdam exemplifies how circular principles can be applied in industrial settings, leveraging its position as Europe's largest port. The Port of Rotterdam Authority has developed closed-loop systems, such as converting food waste into biogas to fuel local industries. Rotterdam also focuses on circular construction by encouraging the use of recycled materials.

Rotterdam and Amsterdam differ in their focal points: while Amsterdam emphasizes citywide sustainability, Rotterdam concentrates on industrial applications. Amsterdam's model, which integrates technology and social innovations, aims for a comprehensive transition to a circular economy, whereas Rotterdam's efforts remain more industry-specific. Amsterdam's governance framework fosters collaboration across sectors, offering a more inclusive strategy compared to Rotterdam's industrial focus.

## **Shared Goals and Divergent Strategies**

These case studies highlight the varying approaches cities take to circular economy challenges. Copenhagen emphasizes technological innovation, Barcelona focuses on grassroots community action, and Rotterdam leads in industrial circularity. Amsterdam, by integrating technology, community involvement, and governance into one comprehensive framework, offers a distinctive model. By analyzing these diverse strategies, other cities can adopt tailored solutions to foster inclusive and sustainable circular economy transitions.

## **Future Challenges and Strategic Solutions**

### **Financing Issues**

One of the primary issues in Amsterdam is the high upfront cost of implementing circular initiatives. Creating facilities such as urban reuse hubs, implementing material passports, and adapting existing systems to advocate circular practices require substantial financial investment. These costs increase due to the necessity for technological integration, which

embraces the development and maintenance of digital platforms, data tracking systems, and other innovations essential to the strategy.

Financial rewards such as reduced waste management fees for households that recycle or tax incentives for businesses adopting sustainable practices, have been effective in motivating individuals and organizations. Such measures are especially important in overcoming resistance from those who view circularity as inconvenient yet they ask for public funds, worsening the budgets allocated for the implementation of the strategic plan. The financial burden of these initiatives often badly impacts public budgets, obliging Amsterdam to explore alternative funding avenues to sustain its initiatives.

To tackle these financial hurdles, Amsterdam has embraced innovative funding solutions including public-private partnerships and the utilization of European Union grants. Public-private partnerships have been essential in distributing costs and risks, with private enterprises investing in initiatives that align with their sustainability objectives. These collaborations have proven especially beneficial in sectors such as construction and consumer goods, where businesses can harvest savings and enhance their reputation. Cost savings through resource efficiency are in fact one of the most concrete economic benefits that these companies can achieve, and they are expected to increase as circular approaches are more deeply integrated in the culture of the city. In addition to these partnerships, Amsterdam has successfully obtained funding from the European Union through programs like Horizon Europe and the Green Deal, which provide financial assistance for projects contributing to regional sustainability objectives. By leveraging these external resources, Amsterdam has alleviated some of the financial challenges associated with its ambitious circular economic objectives.

Another significant economic benefit of the circular economy is its ability to create jobs. The transition to circular systems fosters employment opportunities in emerging fields such as recycling, repair, refurbishment, and green technology. Urban reuse hubs, for example, not only extend the lifespan of consumer goods but also generate jobs within repair services and workshop facilitation. Similarly, the digital framework underpinning material passports necessitates skilled personnel to develop, manage, and optimize these systems. By promoting growth in these sectors, Amsterdam's strategy fosters a more inclusive and resilient economy, particularly for individuals who may encounter barriers to employment in conventional industries

## Economic Instability

Economic instability poses a further risk to the strategy's success. The global economy is subject to fluctuations that can affect resource availability, market demand, and funding for sustainability initiatives. For example, disruptions caused by the COVID-19 pandemic highlighted the vulnerability of supply chains and the need for localized, resilient systems. Resilience is in fact another vital economic advantage of the circular economy, and economic instability can be seen an opportunity rather than a threat. Traditional linear economic frameworks are susceptible to disruptions in global supply chains but, in contrast, circular systems prioritize local resource utilization, lowering dependence on international markets and cultivating self-sufficient communities. For Amsterdam, this translates to enhanced stability during economic uncertainties, as the city can depend on its circular infrastructure to maintain essential services and sustain economic activities. Additionally, circular practices

protect businesses from price fluctuations in raw materials, offering a competitive advantage in unpredictable markets.

Even though Amsterdam's circular economy aims to address these vulnerabilities, its reliance on public and private funding still makes it susceptible to economic downturns and shifts in political priorities.

## **Behavioral Insights**

Resistance from industries reliant on linear economic models also represents a barrier. Some sectors, particularly those heavily invested in traditional production and disposal practices, may view the circular economy as a threat to their business models. This resistance can manifest itself in activities like lobbying against regulations or reluctance to adopt new practices. Overcoming such opposition requires careful negotiation, incentives, and clear communication about the long-term benefits of circularity, as well as targeted incentives to promote adoption. For instance, businesses that commit to circular practices could benefit from tax incentives or access to subsidized programs that help mitigate initial expenditures. Such measures not only diminish resistance but also facilitate the transition by demonstrating the concrete advantages of circular systems.

Public engagement is another critical component in ensuring the economic success of Amsterdam's Circular Economy Strategy. Dealing with the lack of awareness and comprehension regarding circular economic principles among residents and businesses should be perceived as a mandatory obligation towards society. Many individuals are limited to basic waste management practices and in the absence of a clear understanding of how their actions contribute to sustainability objectives, they are less likely to embrace these behaviors.

To address this, Amsterdam has initiated comprehensive public awareness campaigns designed to simplify and normalize circular practices. These campaigns employ a combination of traditional media, digital platforms, and community events to effectively engage diverse audiences. For instance, social media campaigns provide practical, relatable tips on extending the lifespan of household items through repair or repurposing.

Education represents another essential element in promoting behavioral change. Amsterdam has formed partnerships with schools and universities to weave circular economy concepts into their curricula, ensuring that future generations acquire the knowledge and skills necessary for sustainable living. Workshops and training sessions for residents further reinforce these principles, offering hands-on demonstrations of circular practices such as composting, clothing repair, and waste sorting. By integrating circularity into both formal and informal educational contexts, the city is cultivating a sustainability culture that encompasses all demographics.

Community engagement constitutes another behavioral approach employed by Amsterdam to develop collective responsibility for sustainability. Events such as the annual "Circular Economy Week" unite residents, businesses, and policymakers to celebrate progress, share insights, and inspire ongoing action. By showing success stories and tangible results, these events foster a shared purpose, demonstrate the viability of circular living and raise a sense of shared community. Moreover, programs that provide financial benefits or that address disparities through targeted subsidized programs can encourage individuals to adopt sustainable behaviors while eliminating socio-economic disparities affecting individuals' ability to engage in circular practices.

## Conclusion

From the perspective of Bryson's Strategic Planning Model, Amsterdam's strategy largely aligns with his framework. The plan demonstrates a clear vision, involves multiple stakeholders, and considers both internal and external challenges. However, it lacks a detailed exploration of alternative strategies or contingency plans, which is a crucial aspect of Bryson's model. The plan acknowledges potential challenges such as financial barriers and behavioral change but does not provide an extensive tactical roadmap or risk management strategies to address these issues. Additionally, the absence of clear metrics for success and a formal process for measuring progress somewhat limits the strategy's alignment with Bryson's model. While Amsterdam's strategy is of high quality, with a strong focus on innovation and inclusion, enhancing it with more strategic depth, particularly in terms of risk management and success indicators, would make it a more comprehensive fit with Bryson's approach.

The city's absolute commitment to sustainability, innovation, and collaboration positions it as a leader in the global movement toward circularity. By continuously refining its approach, addressing challenges, and engaging all stakeholders, Amsterdam can solidify its position as a global leader in circular economy practices, ensuring a prosperous and sustainable future for generations to come.

## References

Bryson, J. M.-George B. (2024). "Strategic planning for public and nonprofit organizations: A guide to strengthening and sustaining organizational achievement". John Wiley & Sons.

Bryson, John (2014). "Symposium Introduction". <https://doi.org/10.1111/puar.12238>.

Bryson, John, and Bert George (2020). "Strategic Management in Public Administration". [https://www.researchgate.net/publication/337472823\\_Strategic\\_Management\\_in\\_Public\\_Administration](https://www.researchgate.net/publication/337472823_Strategic_Management_in_Public_Administration) .

Thisdell, K. (2023, June 12). "From polluted shipyards to a green district: 10 years of circularity in Amsterdam Noord". Metabolic. <https://metabolic.nl/news/from-polluted-shipyards-to-a-green-district-10-years-of-circularity-in-amsterdam-noord/>

Amsterdam Institute for Advanced Metropolitan Solutions, A. (2019, February). *Urban Living Labs – Amsterdam*. <https://www.ams-institute.org/> . [https://www.ams-institute.org/documents/28/AMS\\_Living\\_Lab\\_Way\\_of\\_Working-ed4.pdf](https://www.ams-institute.org/documents/28/AMS_Living_Lab_Way_of_Working-ed4.pdf)

Åbo Mortensen, Jonas. "Circular Copenhagen." State of Green, 10 Aug. 2022, [www.stateofgreen.com/en/solutions/circular-copenhagen/](http://www.stateofgreen.com/en/solutions/circular-copenhagen/) .

"Amsterdam's Circular Economy Roadmap: Lessons Learned and Tools for Upscaling." C40 Cities, Nov. 1AD, [www.c40.org/case-studies/amsterdam-s-circular-economy-roadmap-lessons-learned-and-tools-for-upscaling/](http://www.c40.org/case-studies/amsterdam-s-circular-economy-roadmap-lessons-learned-and-tools-for-upscaling/).

Friant, Martin Callisto. “*Sustainable Circular Cities? Analyzing Urban Circular Economy Policies in Amsterdam, Glasgow, and Copenhagen* | Knowledge Hub | Circle Economy Foundation.” *Circle-Economy.com*, 3 July 2023, <https://knowledge-hub.circle-economy.com/article/24595?n=Sustainable-circular-cities-Analysing-urban-circular-economy-policies-in-Amsterdam%2C-Glasgow%2C-and-Copenhagen->

Gerard Roemers. “*Designing de Ceuvel: From Polluted Land to a Cleantech Playground*.” *Metabolic*, [www.metabolic.nl/projects/de-ceuvel/](http://www.metabolic.nl/projects/de-ceuvel/).

“*Amsterdam Circular Strategy 2020-2025*”. Gemeente Amsterdam. (2020, April 8) [https://api.amsterdamsmartcity.com/storage/media/76/c\\_70071\\_7006807c-e9b1-47c6-985c-ee1f132d0f4f.pdf](https://api.amsterdamsmartcity.com/storage/media/76/c_70071_7006807c-e9b1-47c6-985c-ee1f132d0f4f.pdf)

“*Delivering the European Green Deal*”. European Commission. (2021, July 14). [https://climate.ec.europa.eu/news-your-voice/news/delivering-european-green-deal-2021-07-14\\_en](https://climate.ec.europa.eu/news-your-voice/news/delivering-european-green-deal-2021-07-14_en)

“*The European Green Deal*”. European Commission. (2019, December 11). [https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal\\_en](https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal_en)

“*Barcelona zero waste plan 2021-2027*”. Barcelona City Council. (2021, April 1). <https://ajuntament.barcelona.cat/neteja-i-residus/en/presentation/waste/zero-waste-plan>

“*Circular road map municipality of Rotterdam*”. PIANOo. (2017, June). <https://www.pianoo.nl/sites/default/files/documents/documents/rebusfactsheet37-gemeenterotterdam-engels-juni2017-1.pdf>

“*A new Circular Economy Action Plan For a cleaner and more competitive Europe*”- COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS, Brussels 11.3.2020 <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2020%3A98%3AFIN>

“*The European Green Deal*”- COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE EUROPEAN COUNCIL, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS, Brussels 11.12.2019 <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2019%3A640%3AFIN>