

SEMINAR 'THE CITY AS A BUSINESS MODEL'

Sustainable. Circular. Inclusive.

PROGRAM

Increasing numbers of people are living in cities; only fifteen years ago, this comprised less than half of the world population. In current days, the number of city inhabitants has amply overtaken the number of rural inhabitants. It is expected that, by 2050, over 70% of the world's population will be living in cities. This unprecedented growth leads to complex problems in the urban environment related to, for example, mobility, social inclusivity, food supply, energy supply, etcetera. Many of these activities and related services must drastically change in order to secure healthy, clean, and liveable cities. The principles of sustainability, inclusivity, and circularity provide a promising starting point for addressing these existing complex urban problems and could feasibly offer the basis for urban transitions. Hence, radically new perspectives for urban development are required that integrate these three principles.

The City as a Business Model seminar is aimed at exchanging experiences and sharing knowledge on such new perspectives on urban development that are based on best practices from European frontrunner cities. The focus centers on projects that employ innovative forms of collaboration to enhance sustainability, circularity, and inclusivity in the urban environment. Particularly, collaborations and concepts that generate multiple values for various stakeholders are of interest.

The full day programme includes three keynotes and four sessions of each of the three cases, each time in parallel. For each of the sessions, the angle differs from which the challenges of integrating sustainability, circularity, and social inclusivity in the urban environment are addressed. In Session 1, the focus lies on the concept of *participation* and its role in urban development. Session 2 includes presentations that address how *new business models* can help valorise and concretise urban value creating initiatives while Session 3 is aimed at how to foster *scalability and replicability*. The final Session 4 provides insights into various approaches towards accelerating the *transition* towards sustainable and inclusive circular urban economies.

At the end of the seminar, the key lessons learned and outcomes of each of the sessions will be discussed in a plenary setting in order to ensure that the insights from the various sessions are shared with all of the participants of the seminar.

Please find below a brief description for each of the keynotes, sessions, and cases.

Opening (09:30 – 09:45) Room EOB 1.610

Words of welcome by the chair of the day Prof. Dr. Jan Jonker, Nijmegen School of Management, Faculty of Management Sciences

Words of welcome by Harriët Tiemens, Alderman of the City of Nijmegen

Words of welcome Prof. Paul Hendriks, Dean of the Faculty of Management Sciences

Part I (09:45 – 11:15) Room EOB 1.610

Keynote speech: 'Citizens on the move: How to create a sustainable city'

The European Commission awarded the City of Nijmegen with the title European Green Capital 2018. This is one of the most prestigious recognitions for sustainable cities worldwide. One of the most important factors that led to the EU's decision to award Nijmegen is the city's active involvement of

citizens with its sustainable agenda. As a result, sustainability efforts in Nijmegen have grown from numerous projects to a city-wide movement. What makes this involvement so successful, and is it reproducible in other cities?

Michiel Hustinx, Manager Sustainable City, City of Nijmegen (the Netherlands)

Keynote speech: 'The Economics and Governance of the Circular Economy in Cities'

For the Circular Economy to be realised, legal and regulatory frameworks need to be updated and, in support of innovation, policies must be aligned, and stakeholders should be informed and engaged. Human and financial resources need to be adequate; new capacities must be constructed, and progress and results monitored and evaluated. The Circular Economy requires a systemic approach that is able to overcome silos and build synergies across levels of government, stakeholders, and sectors. The OECD programme on the 'Economics and Governance of Circular Economy' aims to identify, challenges, enabling conditions and targeted responses for unlocking the potential of a circular economy in cities.

Presenter: Oriana Romano, Policy Analyst Cities, Urban Policies and Sustainable Development, OECD, Paris (France)

Coffee/ tea break (15 min), in front of EOB 1.610

Part II (11:30 – 12:45)

This part consists of two parallel sessions, Session 1 and Session 2.

Session 1 will take place in Room 1.120; Session 2 will take place in Room 1.320. The programme is designed in such a way that you can change sessions between presentations; room 1.120 and room 1.320 are in the same corridor.

SESSION 1 'Enabling city development through participatory approaches'

ROOM 1.120

In order for cities to move towards sustainable, inclusive circular economies, city-wide transition needs to be achieved. Crucial for such urban development is that all urban stakeholders and, in particular, citizens participate and co-invest. However, attaining participation remains challenging. In this session, two different examples are given that provide an insight into how citizen participation for the purpose of neighbourhood development can be organised and achieved. The closing case reveals how participation of multinationals and private companies can be utilised for the benefit of urban development.

Session chair: Naomi Montenegro Navarro, Radboud University Nijmegen

Case 1 – The City of Antwerp

New South is a new residential district in Antwerp (Belgium) in which a series of district bound experimental initiatives will be combined that will bring the circular economy into urban practice. Spreading awareness and encouraging citizens to participate in circular behaviour is the focal point. For three years, the inhabitants of New South will be intensely involved in the creation of a circular dynamic in the newest district of Antwerp. In a unique participative approach, the city and residents will test advanced technological solutions together through online and offline activities. Moreover, the project is specifically aimed at testing and developing working circular business cases – maximal preservation of material value and shifting to new circular strategies such as product-as-a-service and lifespan extension. In the presentation, Antwerp will highlight how this participation is spawned and what key lessons are learned.

Gabrielle van Zoeren, Project Coordinator Circular South and City Materials Policy, City of Antwerp (Belgium)

Case 2 – The City of Pozzuoli

In 2016, the MAC (Monterusciello Agro City) project was set up by the City of Pozzuoli (Italy). Monterusciello is a deprived and segregated neighbourhood with high unemployment, few economic opportunities, and a deteriorated urban environment. The MAC project seeks to reduce urban poverty, increase local employment and entrepreneurship, and foster urban regeneration by redeveloping abandoned lands into urban farming plots and using these for training, employment, and production purposes. The project is grounded on a cooperative approach; residents' participation is crucial. During their presentation, Pozzuoli will highlight how they achieve this participation in the urban agriculture approach and what are current remaining barriers.

Renata Lopez, Junior Project Manager Monterusciello Agro City, City of Pozzuoli (Italy)

Case 3 – Multinationals and Sustainable City Development

Creating societal value is gaining importance over efficiency thinking in urban development also in the realm of private companies. Internationally, there are increasing numbers of examples of companies that claim to create societal value at the local level in urban areas. Platform31 (a knowledge and network institute that connects policy, practice, and science) explores how multinationals in the Netherlands are involved in local development and, in particular, in creating societal value and tries to relate this to the goals established by policy makers. In their presentation, Platform31 will show their first insights on how impact-oriented business strategies are developed and what type of policy adjustments are needed to foster such private participation for sustainable city development.

Sabina Gietema, Project Manager, Mirjam Fokkema, Project Manager, Platform31 (the Hague, the Netherlands)

SESSION 2 'Concretising urban change through novel business model development'

ROOM 1.320

In order to foster liveable cities, new approaches aimed at sustainable, inclusive, and circular urban development are needed that are based on collective efforts from various configurations of urban stakeholders. Crucial for such approaches is that the stakeholders involved not only generate but also extract value from their participation. Therefore, it is important to translate urban development programmes into business models in order to concretise the value that stakeholders can create and harvest. The city cases included in Session 2 provide you with practical examples of such novel business models. The closing case elaborates on how business models for the circular economy can be achieved.

Session chair: Oriana Romano, OECD

Case 1 – The City of London

A systems level approach is required to deliver circularity in a complex city environment such as that in London. Implementation of the circular economy will be critical in providing solutions to the resource challenges that will come with a population expected to grow from 8.6m to 11.5m (by 2050). London has a number of the components necessary for system change including a vibrant innovation ecosystem, world-class universities, market leading companies, and a globally-orientated financial centre. The presentation will outline how the London Waste and Recycling Board (LWARB) is harnessing these strengths to stimulate new circular thinking, co-ordinate activity amongst stakeholders at a strategic level, and deliver practical action on the ground to inform key policy decisions. Specific case studies will be presented that demonstrate the impact of collaborative activity amongst stakeholders in the city to drive change.

Stuart Ferguson, Head of Investments, London Waste and Recycling Board (London, United Kingdom)

Case 2 – The City of Rotterdam

The City of Rotterdam (the Netherlands) is the first city worldwide to host the '7Square Endeavour' (7SE) programme. 7SE is an international cooperation and sustainability programme with the mission to make cities future-proof. At the local scale, it responds to global urbanization trends and their adverse effects and requirements such as the energy transition, air pollution, the urban heat island effect, and flooding. 7SE uses squares as testing grounds for new innovative technologies, ideas, and business models. In Rotterdam, 7SE is active in and around the Schouwburg-square. During the presentation, insights will be provided into how 7SE designs and transforms their ideas into business models that lead to the participation of a wide range of partners and achievement of multiple values; for example, increased energy efficiency and carbon reduction.

Jeroen de Leeuw, Process Manager and Initiator, 7 Square Endeavour, Yoeri Schenau, Programme Manager, 7 Square Endeavour (City of Rotterdam, the Netherlands)

Case 3 – Circular Business Models

New approaches to urban development are required that can help manage the growing numbers of people that are living in cities. One of the approaches that is receiving increasing attention in cities in Europe is the circular economy. However, deploying the circular economy in the urban environment requires that companies and organisations in the city shift to circularity as well. In order for the business community to move towards circularity, they need to be able to translate circular economy principles into a business model. This presentation provides insights into what the key elements of circular business models are. The audience will be challenged to reflect on their own business activities and to think about how to step into a promising urban transition towards the circular economy using the highlights of the workbook 'Organising for a Circular Economy' (Jan Jonker, Ivo Kothmann, Niels Faber, and Noami Montenegro Navarro).

Gerard Berendsen, Dré Kampfraath, OCF2.0 Foundation, Doetinchem (the Netherlands)

LUNCH 12.45 - 13:45

Between 12:45 and 13:45 a walking and networking "Dutch" lunch will be served in Café C, ground-floor of EOB. It will consist of a rich variety of sandwiches with local products as well as a rich variety of vegetarian sandwiches.

Part III (14:00 – 16:15)

Keynote speech: 'Amsterdam going circular. A journey towards a circular city' Room EOB 1.610

In 2015, Amsterdam was the first city worldwide that completed an in-depth study into the potential of an urban circular economy. One of the main questions was: "What should or could be the role of local government?" Based on the outcomes of the study, the city of Amsterdam developed an integrated program and realised over 70 projects in the city from public procurement to circular tenders. At the beginning of this year, the city has conducted the first evaluation of the program and discussed the outcomes with the private sector. The evaluation is being used for making recommendations to the new city council. During this keynote, the City of Amsterdam will provide insights into how they approach the transition to the circular economy, what are the key barriers and lessons learned, and how they aim to progress.

Eveline Jonkhoff, Strategic Advisor Circular Economy, City of Amsterdam (the Netherlands)

Coffee and tea will be provided in the session rooms 1.120 and 1.320

SESSION 3 'From pilot-sized to city-wide: scaling up urban development initiatives'
ROOM 1.120

It goes without saying that achieving sustainable, inclusive, and circular urban development demands experimentation. However, many urban pilots and initiatives, particularly in the field of the circular economy, are executed on rather small scales and are not aimed at allowing replication and upscaling. Nevertheless, approaches for city-wide and replicable solutions are needed. The cases in this session provide three alternative approaches of achieving sustainability or circularity while also allowing for scale or replication to be achieved. *Session chair: Gerard Berendsen, OCF2.0 Foundation*

Case 1 – The City of Maribor

The City of Maribor (Slovenia) provides a clear example of how a sustainable vision can be translated into an actual city-wide development programme. Maribor has decided to set up an extensive waste management system in the city that aims to reuse and recycle all water, energy streams, and all (regional) material waste flows as optimally as possible within their own municipality. Maribor managed to bring together all major urban public utility companies in the city which allowed for joint and innovative large-scale solutions for flow and stream management within the city. During this presentation, Maribor will highlight the most important lessons learned and barriers experienced with the implementation of their city-wide project.

Igor Kos, WCycle Institute, City of Maribor, Slovenia

Case 2 – Six municipalities in the Capital Region of Denmark

The Capital Region of Denmark has developed the project “Partnership for Circular Cities” together with Gate 21. The project supports, develops, and demonstrates the unique role of cities in the transition to a circular economy. In particular, the project investigates the municipality’s potential to act as catalysts for the transition in key areas such as procurement, construction, and local business development. The project, which is in its infancy, will develop and test a range of strategic and practical models for municipalities to cooperate with partners along the value chain in order to accelerate a transition to a circular economy. Six cases (Copenhagen, Bornholm, Albertslund, Hoersholm, Rudersdal, and Roedovre) form the core of the project, and they are connected through common learning activities that ensure capacity building and exchange of experiences across the six cases. This approach allows for immediate dispersion of knowledge beyond one city’s border and facilitates easier replication of the best practices after finalisation.

Pernille Kern Kernel, Special Consultant on Environment, Resource Use & Circular Economy, Capital Region of Denmark, Denmark

Case 3 – A spatial approach to the circular city

Metabolic (a Dutch consulting and venture building firm) is working to accelerate the transition to inclusive, regenerative, and circular cities by creating a knowledge community wherein cities can access joint research trajectories, a network of peers and partners, and a growing library of data, tools, and best practices. Many cities are leading the way in setting goals to transition towards a circular model; however, a successful future relies on translating these goals into practical action. Advanced spatial planning and data modelling tools can help cities to implement circular interventions at a neighbourhood level. Thus, this allows for city-wide deployment of sustainability measures while appreciating local, neighbourhood differences. The approach recognizes that cities are complex living systems and, therefore, policy and implementations must be applied locally. It also addresses the fact that a spatial analysis can be resource intensive, requiring new tools and collaborations.

Tamara Streefland, Cities Program Lead, Metabolic (Amsterdam, the Netherlands)

SESSION 4 'Alternative approaches to facilitate urban transitions'

ROOM 1.320

It is clear that cities need to transition to sustainable, inclusive, and circular societies in which all urban functions such as housing, recreation, and working are still provided at both sufficient and accessible levels. Accelerating and managing such transitions is thus an immense task that requires a wide range of actors to invest and participate. This means many different approaches have to be combined and deployed simultaneously. This session provides two examples of such approaches that accelerate transition. One is based on the 'all-inclusive' neighbourhoods and one on the data potential of cities. The closing case provides a generic approach on how to organise and accelerate transition in the urban environment through the concept of urban business models.

Session chair: Jan Jonker, Radboud University Nijmegen

Case 1 – The All-Inclusive Neighbourhood

The All-Inclusive Neighbourhood is a concept that approaches a neighbourhood as an organism that is managed as a collective using community owned structures to organise daily life. The concept of the All-Inclusive Neighbourhood has already been introduced in several cities in the Netherlands such as Nijmegen, Arnhem, Wageningen, Zutphen, and Zwolle. Seeing a neighbourhood as one household with an infrastructure that facilitates food, healthcare, work, energy, maintenance, and more to the benefit of all increases opportunities to create sustainable, circular, and inclusive neighbourhoods. Unused capacities such as skills or competences are activated, extraction of talents and assets from outside the system get contained, and an enormous amount of materials, energy, CO₂, and also money can be saved due to local organization that is much more efficient and coordinated.

Patricia van de Haak (Concept developer) and Carla Onderdelinden (Network builder), Transitiehuizen (Arnhem, the Netherlands)

Case 2 – The City as a Data Mine

Rapidly increasing levels of urbanisation pose many challenges for cities, for example, related to mobility and pollution but also the security of the citizens, ICT infrastructures, and data protection. Transforming cities to 'smart cities' that are ready to face these challenges creates numerous new opportunities that are each pursuing the same objective: creating value for citizens and local authorities. The backbone of the transition to 'smart cities' is the data architecture. This allows for processing, saving, and delivering data as well as making data available for the entire urban ecosystem in order to deliver new products and services for the city. Being part of a network of Belgian smart city applications, this presentation by Koalect (a Belgian digital platform) will address some of the key ingredients to facilitate this transition.

Maxime Bouckaert, Co-founder and CEO Koalect (Genval, Belgium)

Case 3 – Urban business models as a tool to foster urban transition

Increasing numbers of people live in cities, and this growth is expected to continue. This leads to complex problems related to, for example, mobility, social inclusivity, food supply, etcetera. Many of these activities and services must drastically change in order to secure healthy and liveable cities. This is why new perspectives on urban development are needed that integrate sustainability, inclusivity, and circularity. Urban development trajectories centred on these three terms can lead to collective and multiple value creation. For cities, this integrated approach provides a promising starting point for urban transition. The key premises is that cities foster a whole range of capacities and competences that can be deployed to create value. Using these competences allows for new approaches to collective

value creation and solutions between parties and leads to the development of the concept of Urban Business Models.

Naomi Montenegro Navarro, Research Assistant, and Prof. Dr. Jonker, Radboud University Nijmegen (the Netherlands)

Closure (16:30 – 17:10) ROOM 1.160

The day will be closed with a plenary session in which Prof. Dr. Jan Jonker will provide a recap of the sessions, provide guidance on the key lessons learned, and facilitate the final plenary discussion and Q&A.

Drinks (17:00 – 18:00), the Yard Café

Join us for a drink and networking opportunity as we close off the day in a informal setting. The café is located at the far end of the corridor on the first floor.

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WORD OF THANKS

Organising and realising a seminar is unavoidably a large and collective task for which the inputs of many different people are required. We would like to express our gratitude to everyone that has helped make this seminar possible, particularly the representatives of the various cities and projects that travelled all the way to Nijmegen to share their knowledge and experiences.

In addition, organising such a conference costs money. We would like to thank the sponsors who have demonstrated confidence and understanding on the relevance and necessity of this seminar and have hence contributed to making it a reality. These sponsors include the Province of Gelderland, the City of Nijmegen (European Green Capital 2018) and 'Platform 31', OCF 2.0 Foundation, and the University of Nijmegen.