

# New urban economies

*How can cities foster economic development and develop 'new urban economies'?*

URBACT II



## **New urban economies, URBACT II capitalisation, April 2015**

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Published by URBACT

5, Rue Pleyel, 93283 Saint Denis, France

<http://urbact.eu>

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Printing:

bialec, Nancy (France)

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URBACT II CAPITALISATION, APRIL 2015

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# **New urban economies**

*How can cities foster economic development  
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This publication is part of a bigger capitalisation initiative set by the URBACT programme for 2014–2015 with the objective to present to Europe’s cities existing urban knowledge and good practices about:

-  **New urban economies**
-  **Jobs for young people in cities**
-  **Social innovation in cities**
-  **Sustainable regeneration in urban areas**

These topics have been explored by four URBACT working groups (workstreams), composed of multidisciplinary stakeholders across Europe such as urban practitioners and experts from URBACT, representatives from European universities, European programmes and international organisations working on these fields.

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# WHAT IS THIS PUBLICATION ABOUT?

*In this publication on 'New urban economies', we search for answers and insights to a key question: how can cities foster economic development and develop 'new urban economies'. And, importantly, how can they do that:*

- ▶ *in concertation with different urban stakeholders,*
- ▶ *responding adequately to key challenges and developments beyond their control,*
- ▶ *building on the cities' own identity, industries and competences,*
- ▶ *in a sustainable way,*
- ▶ *and without compromising weaker groups.*



Source: Freepik

We take a broad perspective, but also single out four 'new urban economies': the digital economy, the green economy, the health & care economy, and the collaborative economy.

We start out by '**Setting the scene**', discussing the wider context in which European cities operate, and how it is changing. Which megatrends affect their economies? How can European policies play a role? How have cities tried to boost their economies in the last decades, and what went wrong? What new roads lie ahead?

Then, we explore the popular concepts of '**Triple and quadruple helix**', as a more indigenous and bottom-up way to develop the urban economy that has made inroads in urban and regional policies over the last decade. How to connect companies, schools, universities, and involve citizens as well? What is the role of local governments here, and what competences do city managers need? And also, what are the pitfalls and downsides? We will show a number of examples here, but triple/quadruple helix approaches show up in many other articles in this publication.

The article on '**San Sebastian's surf cluster**' explores an innovative type of 'platform'-based cluster policy (different from traditional ones built around a technology or industry). Here we see in practice how a city can 'hack' universities and seduce them to work with local companies, to the benefit of both sides.

In '**The different faces of the digital economy**' we discuss the big game changer in Europe's urban economy: digitalisation. What is exactly the digital economy about? How big is it? Which types of transformation is it provoking in urban economies? And, importantly, what can local governments do to cope with the digital transition and foster sustainable urban development? Open data is one recent novelty that comes with the digital revolution. The article



titled **'The Open Data economy: promoting digital innovation in Dublin'** shows how the Irish capital, an early mover in this scene, makes the most out of it.

What follows is a set of pieces on the health and care economy. In **'Health & care: drivers of urban growth?'**, we look at some urban economic aspects of health and care. How can cities benefit from this growing and dynamic sector, taken all the restrictions of national health systems for granted? How can they grow a strong and inclusive local 'health economy'? This piece is followed by an **'Interview with Marieke van Beurden'** (manager of 'smarter living', an innovation network for active and healthy aging). She explains how care providers in Eindhoven got out of their silos, started to work together for better and cheaper healthcare, and offer new opportunities for innovative companies in eHealth. And she has some good advice for cities with similar ambitions.

Then, we move to the green economy as promising new growth driver. In **'Urban green growth: myth or reality'**, Stefan Anderberg explores the development of green-related industries in general, and in the Swedish city of Linköping, in particular. He shows that these industries are still relatively small, but their growth potential is substantial. An **'Interview with Peter Schilken'** (Senior Project Manager at Energy Cities, the European association of local authorities in energy transition) corroborates this view and shows how energy efficiency investments in building renovation can have a high leverage in urban economies.

Emma Clarence dissects the emerging 'collaborative economy'. The title of her article asks the key question: **"The 'collaborative economy' is often presented (or even hyped) as a more bottom-up and social model of local economic development. But is it?"** Well, not always. But she has some clear hints for cities that want to nudge this growing mode of economic organisation. This paper also contains

a short **'Food for thought'** piece, discussing the new role of citizens as part-time entrepreneurs: as energy producers, as farmers, as car-renters, etc.

If every city is unique, general recipes won't work. So how can cities 'discover' their specific future growth opportunities, how do they get the right intelligence, and what does that imply for the cities' economic development staff? These questions are taken on in **'Economic intelligence for cities: strategies and pitfalls'**. It presents some tools, techniques, practices and insights for local governments in a fast changing economic playing field.

To what extent does local growth promotion lead to more employment for young people, and what can triple helix collaborations bring in this respect? To find out, we conducted an **'Interview with Alison Partridge'**, co-ordinator of the URBACT workstream 'Job generation for a jobless generation'.

The publication ends with a set of **policy responses**. Moving one step back, overseeing the bigger picture: what can cities do to promote 'new urban economies' today and in the long term? What competences do cities and city managers need to manage 'new urban economies' adequately?

*Enjoy your reading, and hopefully get inspired!*

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#### **Willem van Winden**

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'New urban economies'*

#### **Luís de Carvalho**

*Core group member of the URBACT workstream  
'New urban economies'*



# SETTING THE SCENE: ECONOMIC TRANSITIONS IN EUROPEAN CITIES

 By Willem van Winden and Luís de Carvalho\*

Source: Freepik



*In the recent 'Regional outlook', the OECD (2014) convincingly argues that cities can be the drivers of national growth and recovery: in principle, their diversity and density makes people and companies more productive and innovative. This is not only a tale of large cities: over the last decade, as recent studies demonstrate (e.g. Dijkstra, 2013) many smaller and medium-sized cities across Europe were important economic engines. But this did not happen automatically: to make that happen, 'getting cities right' is the key challenge, and action on the city level matters! As demonstrated by recent OECD data (OECD, 2014), poorly organised cities fail to reap their economic potential.*

So, how to 'get cities right'? European cities are confronted with a rapidly changing economy. The crisis has destroyed jobs across both service and manufacturing industries, and has revealed the shakiness of the financial service sector. Jobs were lost, some businesses become obsolete; yet, at the same time, new growth areas are emerging (van Winden et al., 2007), for example linked with the digital economy, health and environmental protection. In this dynamic economic landscape, what is the scope of action for local governments to steer urban economies? Should they 'sit and wait' for changes to come and affect them, or is there room for a more proactive urban policy to grasp emerging opportunities? How to act in a sustainable and integrative way? And how can economic growth also be inclusive rather than benefitting just a small group?

It has become clear that many traditional tools to boost the urban economy have become outdated or are no longer cost-effective. Recipes

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such as investing in large landmark projects (new Guggenheims, big stadiums and global events), generous fiscal incentives or smokestack chasing (blindly attracting companies and investments from outside) are not very effective, and rarely get the economy of cities right (Bartik, 2005); moreover, at the EU level, those are often a zero sum game. There is a growing acknowledgement that **cities should look for more indigenous approaches**: building on existing qualities and assets, linking related industries to one another, mobilising companies and citizens to innovate and engaging them in the discovery of promising new specialisations.

Naturally, that is easier said than done. Among others, it requires deep knowledge about a city's economic dynamics, a balanced involvement of stakeholders and the proactive monitoring of promising trends, challenges and opportunities (see article on 'urban intelligence'). These are all themes explored in this publication.

## MEGATRENDS BEHIND 'NEW URBAN ECONOMIES'

On a general level, which key megatrends can we see affecting urban economies today? In this section we sketch some of these megatrends (political, economic, social, technological and environmental). These are forces that cities can hardly control; yet, they are giving rise to new economic activities in urban areas, and to the fading out of others. They underpin the development of new modes of economic organisation, innovation and business models, gradually visible in European cities.

First, from the political side, the retrenchment of the state has been impacting the economy of many cities. In the EU, public investment by cities and regional authorities dropped nearly 14 percent during 2010–12 (CEMR, 2012). On the one hand, overall demand declined and the European macroeconomic situation is still far from stable. Public budget cuts have hit many small and medium sized companies in cities, namely the ones that relied more directly on public services and transfers. On the other hand, the withdrawal of the state is leading

to the development of new types of businesses and ventures, e.g. in the health care domain.

Second, throughout the economy we see profound changes in the way value is created. In the new economy, the knowledge and information embedded in products and services grows across all economic sectors and activities. It puts new demands on skills and specialisation, and leads companies into open innovation (e.g. companies buying and searching for innovative solutions in other companies). In this increasingly knowledge-based economy, routine activities tend to leave expensive cities for cheaper locations. Yet, this is not about 'manufacturing versus services', but about the types of activities that are prone or not to routinisation. Paradoxically, there is an emerging trend of manufacturing resurgence in some European cities known as re-shoring (i.e. formerly off-shored production returning to Europe)

and the production of small batches of specialised products (van Winden et al., 2012), for example backed up by new digital and 3D printing technologies. Some of these processes are so responsive to market needs that the time taken to ship from South East Asia is not an option.

Third, social forces like ageing have consequences for the economy's growth potential, challenging public budgets and welfare systems. The proportion of people over age 55 was 30 percent in 2010 and is expected to increase to 37 percent by 2030 (OECD/European Union, 2012).

However, ageing is also likely to have other, perhaps more positive consequences in urban economies. For example, it may stimulate higher levels of senior entrepreneurship (OECD/European Union, 2012), and can give rise to new businesses targeting the needs of the elderly and retired, linked with tourism services and **health-related businesses**. Another trend has to do with collaborative consumption (sharing of goods and services), crowdsourcing and new mixes between the 'worlds' of production and consumption (e.g. consumers becoming producers, for example of organic food and renewable energy). Altogether, both trends open opportunities for new types of economic activity in cities.

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**There is a growing acknowledgement that cities should look for more indigenous approaches: building on existing qualities and assets, linking related industries to one another, mobilising companies and citizens to innovate and engaging them in the discovery of promising new specialisations.**

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Many of the aforementioned trends are driven by fast moving developments in technology and its mass adoption, namely in Information and Communication Technologies (ICTs). The fast diffusion of smartphones, social media and the internet-of-things, allows for unprecedented connectedness and interaction between humans (and machines).

As a result, **new digital-related businesses** flourish. Moreover, the amounts of data produced in cities have been growing and are likely to continue to grow exponentially. For example, social networking platforms (such as Twitter or Facebook) enable their users to share about 1.3 billion pieces of information everyday; 90 percent of the data existing today has been created in the last two years, and its volume is now doubling every three years (Filippov, 2014). All this opens up new innovation and commercialisation opportunities in cities. However, on the flip side, the digital economy also comes with the decline of other urban industries and the re-organisation of business models: just think about the impacts of on-line commerce on shopping streets, or of the new web platforms for taxis, car sharing and accommodation. 'Innovate or die' is a harsh reality for many firms.

Last but not least, despite the economic slowdown, climate change and its environmental consequences are still important issues for European cities. The continuous pressure, namely from NGOs and other civic movements is likely to keep the climate agenda high in many cities, and the energy transition towards renewables continues. Despite the 'hype', the economic relevance of the **green economy** is likely to be substantial (e.g. ESPON and Tecnalía, 2013). Green jobs – e.g. linked with climate adaptation, new modes of mobility and energy production and efficiency, water and air quality – increased in the EU from 3 to 4.2 million between 2002 and 2011, including 20 percent during the recession years (European Commission, 2014). Many of these new jobs and businesses are in the hand of large corporations, but not always: new innovative companies and a number of co-operative and energy-sharing models are also emerging.

## EU2020, EU COHESION POLICY AND 'NEW URBAN ECONOMIES'

Not surprisingly, many of aforementioned challenges and opportunities are central to the Europe 2020 strategy (EU2020), whose overall ambition is to

promote economic growth and competitiveness, linking it to social inclusion and environmental sustainability. The EU2020 and many of its flagship initiatives – e.g. the 'Innovation Union', the European Digital Agenda, or the 'Resource-efficient Europe' – are to be largely delivered by the European Regional Cohesion

policy and its Operational Programmes, in the different Member States. These initiatives and investments may well have important impacts on city economies, but policies still mainly address regions or sectoral themes, not cities. The urban dimension of EU policy is often neither clear nor explicit in these strategies and the operational programmes. Crucially, the management of the funds normally takes place at higher levels with only a token devolution through the new article 7 of the ERDF, which will establish a floor of 5 percent of funds for integrated urban development.

Having said that, there are shifts in the thinking that underpins European regional and urban policy (McCann, 2015). It is increasingly recognised that speeding up Europe's economic development and innovation requires taking urban and regional specificities into consideration. There are no silver bullets and one-size-fits-all policies are often sub-optimal. Stemming from this idea, European regions are asked by the Commission to formulate a so-called 'Smart Specialisation Strategy' (S3) in which they find clever ways to marry economic traditions with new growth opportunities. They must do so in order to be eligible for European Regional Development Funds (ERDF).

At the core of S3 strategies is a process called 'entrepreneurial discovery'. The idea is that stakeholders in regions (companies, entrepreneurs, knowledge institutes, sub-national governments) interact to identify promising specialisations while permanently monitoring policy results. Importantly, 'smart specialisations' are often

**Social forces like ageing have consequences for the economy's growth potential, challenging public budgets and welfare systems.**



not rigid industrial sectors, but platforms or combinations of activities around a certain theme (see articles in this publication on 'health & care'; 'urban green growth' and 'new style cluster policy').

So far, national and regional governments, together with companies and universities, have primarily driven S3 strategies. However, it is clear that many smart specialisations will have an important urban dimension. The digital economy (see article in this publication) is just one example. Moreover, beyond companies and universities, there are good reasons why local governments should become more involved in S3. On the one hand, S3 strategies can affect the direction of urban economic renewal; on the other hand, many local governments in Europe have been developing systematic economic 'discovery' processes before (see articles on 'Triple Helix' and 'Urban Intelligence') that can bring important input to regional-level S3 strategies. This is a plea to find new ways to integrate economic development and innovation strategies at multiple levels, and to strengthen the economic dimension in a EU Urban Agenda (European Commission, 2011).

As said, 'getting cities right' matters for the economy at large. There is mounting evidence that well-designed economic development initiatives at the local level can have positive impacts and contribute to economic change. This is an important conclusion of a recent study of 50 ERDF-funded good practices in European cities (European Commission, 2013), with interventions ranging from the neighbourhood up to the metropolitan level. A key challenge open to European cities is how to scale up and spread lessons from those initiatives within and across urban areas, making the best out of the opportunities on offer from Cohesion Policy.

### **SUMMING UP: KEY ISSUES AND POLICY CHALLENGES**

It goes without saying that cities are economic and innovation engines in their regions. However, what is more difficult and controversial is how to get them right. How can governments do so? To what should they pay attention? There are at least two necessary, broad conditions that should underpin the action of local governments: understanding thoroughly how urban economies work and how are they changing and acting within an appropriate

governance framework at the right spatial level. Many old policy recipes to 'boost' urban economies have been found to have their limits (Van den Berg et al., 2014). Their impacts are often unsustainable and may have been producing economic benefits for a small elite with collateral damage to the rest of society. Cities need to move towards more indigenous approaches and support new economies from the bottom up. They must be based on two principles: first, they must build on specific local assets, strengths and traditions, and link them with promising new specialisations and external business-innovation networks and second, they must be developed through a partnership focused co-production made up of different and diverse types of stakeholders.

Moreover, as 'new urban economies' unfold, cities must deal with 'creative destruction' and the fading out of obsolete activities. Cities have limited control over these processes, but they can harness local firms and citizens to become innovative and learn new transversal skills. Among the trends that affect the economies of Europe's cities, the digital revolution is the key game changer. It deeply impacts many sectors of the economy, it fundamentally changes how companies and people work and learn, and evokes entirely new business models.

In this dynamic environment, a key challenge for cities, as outlined in the European Commission's (2011) report 'Cities of Tomorrow', is to achieve economic growth that benefits all citizens and does not compromise the environment. A way to move in this direction is to more explicitly link local economic development initiatives with societal challenges and social innovation (see the publication of 'Social innovation in cities', URBACT II capitalisation, April 2015). A promising avenue to 'smart growth' is when cities tackle societal challenges and at the same time create new economic activities and benefits, as explored through many cases and illustrations throughout this publication. ●

#### MORE INFORMATION

**State of the Art on New urban economies:**  
<http://urbact.eu/capitalisation-and-dissemination>

# TRIPLE HELIX (3H): WHERE ARE EUROPE'S CITIES STANDING?

By Willem van Winden  
and Luís de Carvalho\*

## WHAT IS THE TRIPLE HELIX?

*The triple helix (3H) of university-industry-government relations has become one of the most popular innovation models in the last two decades. What is the relevance for cities? How can they grow their economies using triple helix approaches? What can we learn from cases across Europe and from URBACT networks that dealt with this theme?*

We speak of a triple helix **when governments and companies work together with knowledge institutions**, similar to the strings in DNA. The helix is used as an image to illustrate a complex network of relationships rather than three connections arrived at by placing the three sectors in a triangle. The thesis is that business, academia and government still fulfil their core traditional functions, but collaborate dynamically at the same time. It's not just working together on an *ad hoc* or project basis: the co-

operation is supposed to be more institutional, structured and strategic. And at times, they 'take the role of the other' by adopting new, non-traditional roles; for example, companies become educators (i.e. by training students) and the university becomes more entrepreneurial. In the triple helix model, knowledge does not only flow from university lab to the business (the traditional 'linear' model of innovation): there are multiple links, flows and backflows between multiple partners that make up a complex tissue of public, private and knowledge actors.

More recently, the term 'quadruple helix' has been used, in which the fourth helix is represented as civil society, whereby the end user (which may be the citizen, the consumer, the patient, depending on the situation) enters the equation and becomes directly involved in the innovation process as well. The quadruple helix opens up issues around the nature of demand and may also move innovation from having a narrow technological orientation towards a more societal focus.

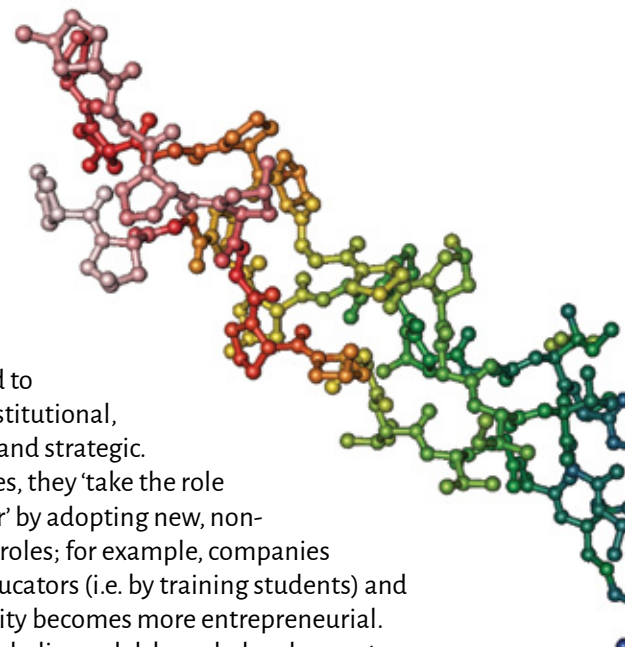
## TRIPLE HELIX HELPS TO SPEED UP INNOVATION IN THE INDUSTRY

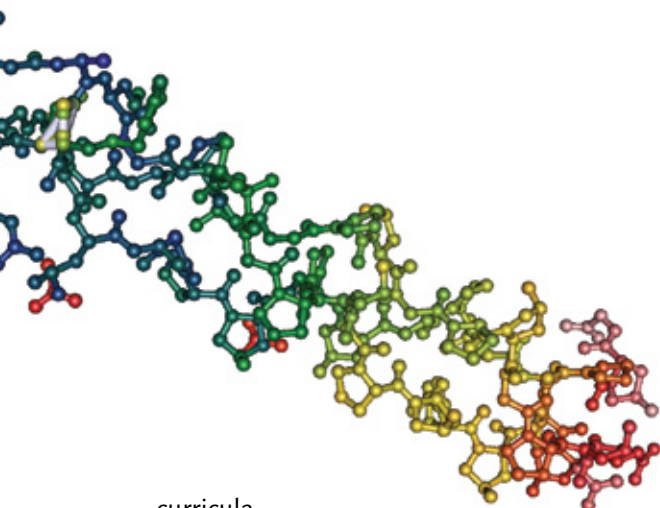
Many cities and regions have seen organising and optimising their helices as a priority. Importantly, all European regions are required to develop a Smart Specialisation strategy as part of their *ex-ante* conditionalities in their operational programme.

There are good reasons to assume that a well-organised triple helix helps to build stronger and more innovative urban and regional economies, meaning more jobs, more prosperity, and a bigger tax base<sup>1</sup>. When universities and firms join forces, knowledge flows faster, R&D is less fragmented,

\* Willem van Winden is co-ordinator and Luís de Carvalho core group member of the URBACT workstream 'New urban economies'

<sup>1</sup> Although it must be noted that there is no definitive scientific proof for this





curricula become better aligned to business needs, start-ups have higher chances of survival, and the region can develop a stronger profile. Very importantly, triple helix partnerships can help to speed up the 'commercialisation' of scientific research (van Winden et al., 2014).

A good example of the latter can be found in Heidelberg, Germany. 3H partners joined forces and founded the 'InnovationLab', back in 2011. About 100 scientists from universities and companies work on R&D projects in the field of printed and organic electronics. The research is interdisciplinary and applied. The lab supports the printing and electronics industry in the wider region, and helps participating firms to stay at the technological frontier in this competitive market. "We can deploy our resources more effectively thanks to the common infrastructure; it helps us to speed up our development time", says Bjorn Hofman, Senior Vice President at Merck, one of the participating firms; "The collaborative R&D speeds up the transfer of knowledge into commercial products, and is an ideal

basis for growth promotion"<sup>2</sup>. The InnovationLab is a joint effort of many players. The Metropole region Rhein-Neckar (of which Heidelberg is part) took the initiative to set it up; it mainly played a facilitating role, bringing the partners together, and providing spaces and permits for the buildings. The universities and the firms carry out the core work: main shareholders are big technology companies (Merck and BASF have 70% of the shares), and work together with the universities of Heidelberg and (neighbouring) Mannheim. Substantial financial support came from the region (€40 m) and the state level.

Professor Emmo Meijer, a seasoned '3H builder' as former R&D director at Unilever and DSM, sees the great value of the concept. In a recent speech, he underlined that the metropolitan region (rather than the city or the nation) is becoming the relevant level for the triple helix to operate. Regions that manage to build strong 3H networks offer an attractive research environment where the best talents love to work: "if you want to attract entrepreneurial top researchers, you need to have such innovative partnerships in place", he said<sup>3</sup>.

**One might wonder who benefits most from these types of triple helix collaborations.** At face value, isn't the triple helix just another type of state support for (big) firms? Research collaboration helps them to have expensive R&D carried out at the costs of the taxpayer, by publicly funded knowledge organisations. Should the helix enable large companies get a bigger say in setting university research agendas? These are valid points of concern. Addressing them, Loet Leydesdorp (one of the godfathers of the 3H concept) stresses that each organisation must keep its identity and stand for its own mission. But even then, the risk is certainly there, especially when companies get a big say in research programming. "Can research questions be generated and research programmes be articulated in relation to external demand? The articulation of knowledge interests implies a shift from the 'how' question of the process to 'what' and 'why'. Here 'what' and 'why' can facilitate research, whereas 'how' can easily degenerate into a procedure"<sup>4</sup>.

<sup>2</sup> <http://www.innovationlab.de/en>

<sup>3</sup> Quote from his speech in Amsterdam, 12 November 2014, during the opening of a new technology transfer organisation

<sup>4</sup> Interview with Scientometrics (2014), 99:199–202



## IS THE TRIPLE HELIX APPROACH RELEVANT FOR ALL CITIES?

The Heidelberg example above represents somehow the ‘champions league’ of Europe’s knowledge economy: multinational companies with big R&D budgets, joining up with top universities, backed by national research funds, in a region with a longstanding innovation track record. This is all fine, but is there scope for less advanced and peripheral regions to gear up their economies through helices?

**First**, in any place, 3H partnerships can help to improve the match between higher education and the needs of local firms. This is pressing in parts of Central and Southern Europe where, in general, university education is still highly theoretical, and little interaction with industry happens. A triple helix partnership might change the stalemate. An interesting case is Cluj-Napoca, in Romania. Companies in the city’s growing local IT industry were hiring, but expressed their discontent with the skills of the universities’ graduates. The local universities, led by pro-active rectors (an important factor!), were ready to change and adapt their curricula, but did not want to speak to each company individually. They asked the fragmented IT industry to speak with one voice. Hence the idea emerged to join forces in a more structured manner. Universities teamed up with the local IT industry and public organisations, to create a cluster organisation, the Cluj IT Cluster. Currently, the cluster is made up of 32 companies, three regional universities, and eight partner organisations (including the Regional Development Agency, the City Council of Cluj-Napoca and county-level institutions in Cluj). It has turned into a platform where the triple helix partners meet, discuss common challenges, and develop joint activities and projects. Internships were developed, and curricula adapted, and all sorts of joint innovation projects have started. The city played the role of facilitator and network-mediator.

**Second**, triple helix structures may benefit smaller and medium sized firms which are typically less innovative as well. Such firms have often problems to stay competitive as they lack innovation resources

and the capacity to use R&D even at the level of technology transfer. They rarely carry out any R&D and often would not know how to approach the university even if they want to. How to make the relationship work for both sides? The URBACT EUniverCities network<sup>5</sup> identified several examples. In the German city of Aachen, for example, university professors connect to SMEs through the ‘profs on tour’ initiative: professors visit SMEs in the region, discuss about their research, and actively look for

collaboration opportunities, ranging from student internships to long-term innovation projects. In the city of Tampere, also a partner of EUniverCities, the technical university organises ‘Problem Fridays’ since September 2014. SMEs are actively approached and invited to a one-hour session on a Friday afternoon, where they can bring a problem or question, to be discussed with a team of university experts. By the end of the hour, it must be clear if there is scope for some sort of collaboration, and if so the partners arrange for next steps.

“  
*The articulation of knowledge interests implies a shift from the ‘how’ question of the process to ‘what’ and ‘why’. Here ‘what’ and ‘why’ can facilitate research, whereas ‘how’ can easily degenerate into a procedure.*  
”

Loet Leydesdorf (2014)

## WHAT CAN CITIES DO WHEN IT COMES TO THE TRIPLE HELIX?

Typically, cities don’t control the university, and unlike national government, they don’t have big R&D funding leverage; and they cannot (and should not) tell companies and universities with whom to collaborate. So, much depends on the leadership and pro-active attitude of the local companies and universities, and their willingness/determination to join up.

Having said that, **cities can do a lot when it comes to the triple helix. First, cities can activate the local university and their students to contribute to the local economy.** The case study on San Sebastian in this publication provides a very practical example. Fomento<sup>6</sup>, the economic development agency of the city, challenged university students and their

5 <http://urbact.eu/eunivercities>

6 <http://www.fomentosansebastian.org/en>



supervisors to prototype new surfing products (focusing on boards and accessories), and to involve end-users in the process. It was a big success; more than 100 ideas were proposed by student teams, and the eighteen best ones were selected to be prototyped. Many of the participating teams proved to be fanatic surfers themselves, and they loved to work on this. The winners gained a support package to set up their own business, including access to start-up funds, and got the opportunity to closely work with mature companies in the field.

**Second**, cities can initiate and support ‘intermediate’ organisations that bridge the gap between business/society and education. The textbook example is Demola, in Tampere (Finland). Demola is a collaboration between the city, its universities, and a number of other local stakeholders. The Demola<sup>7</sup> organisation collects research questions and challenges from a variety of organisations in Tampere (companies, hospitals, government agencies, NGOs, etc). It publishes the assignments on a website, including the type of skills that are asked for. Students are invited to subscribe to a project. Demola then assembles student teams to address the projects, and offers a range of support and training activities for the student teams. Demola is an internationally recognised best practice programme that has been copied in several other cities. “There are about 38,000 students in universities around Tampere”, says Ville Kairamo, co-founder of Demola. “But there was no organisational structure to mobilise that young talent and help students work together. With Demola we wanted to offer concrete projects where students learn by doing”.

**Third**, municipalities can contribute **to turn the city into a ‘living lab’**. Living labs are real-life test and development settings, where researchers and/or companies can try out new technologies, products and services, in collaboration with citizens. This sounds easy but is hard: it often turns out that our heavily regulated society is not that fit for trying out new concepts in real life: loads of detailed rules and regulations may frustrate progress. This is epitomised by contemporary urban technology (or ‘smart city’)

pilots. Nevertheless, cities can support the creation of experimentation arenas or urban innovation labs<sup>8</sup>, in which new concepts are tried out with in a protected way, with an eye to give breathing space to new concepts and involve citizens in the process.

**Fourth**, cities can help to realise knowledge hotspots: science parks, campuses, or similar developments where business and academia work side by side. The URBACT REDIS network<sup>9</sup> focussed on this theme, and documented a number of good practices.

### THE TRIPLE HELIX AS LEADING PRINCIPLE FOR STRATEGY AND IMPLEMENTATION – THE CASE OF EINDHOVEN

The region of Eindhoven is an international reference when it comes to 3H as institutionalised collaboration. Its innovation strategy is not designed by the city or region but by a foundation, in which the three parts of the 3H are present: four members are Mayors from local governments in the region; four are leaders of knowledge institutes, and the remaining four are leading business people. The president is the Mayor of Eindhoven. The strategy is developed in close consultation with all the relevant actors, and after its completion, all the actors are committed to it. The current strategy is called ‘Brainport 2020’, and has four key blocks: People (labour market issues); Technology (R&D and design; five clusters are targeted); Business (general business climate), and Basics (quality of life; accessibility; internationalisation). The partners agreed on a common agenda with concrete actions. Each action is ‘adopted’ by one of the 3H partners.

The strategy would not work without a powerful implementation organisation named ‘Brainport Development’, with 50 people staff. This organises a wide variety of actions: it runs business parks, it kick-starts promising projects, it provides support for funding and subsidies, it markets and promotes the region at home and abroad, and it supports the strategy-building process. Normally, it does not run projects for a longer time: the policy principle is that actors in the triple helix must develop and fund their own actions. The Brainport Development organisation is owned and funded by a large number of municipalities in the Eindhoven region, and it enjoys a high level of trust. The effect is a depoliticisation of knowledge policies, and a more long-term approach.

7 <http://www.demola.net>

8 See for example <http://socialimpact.eu/>

9 <http://urbact.eu/redis>



Source: Freepik

Naturally, just placing companies and universities together in a building or adjacent in science parks is not enough. However, there is evidence that urban hotspots backed by an entrepreneurial management team and specialised in coherent innovation streams can largely contribute to enhance triple helix type of collaborations and synergies (van Winden et al., 2012). Cities and municipalities can become active brokers and facilitators. As illustrated by the case of Cluj-Napoca (and also Heidelberg), a city government can bring actors together, initiate networks, and may provide facilities, land, arrange permits, help to organise events. The case of Dublin (explored as a case study in this publication) illustrates the role of events and matchmaking for digital innovation, with a strong involvement from the City Council.

partner for local companies and for the university? **Cities are often perceived as bureaucratic and rigid organisations.** Moreover, they have difficulties to speak other partner's 'language'. The city needs to understand how other partners

perceive it and how it can overcome weaknesses in its own organisation to become a better partner. For example by becoming more 'business friendly', by setting up arms-length intermediary agencies that look and feel more like a business, and by simply getting out and talking to businesses more.

A triple helix asks for a more **entrepreneurial orientation** of all the players involved. Do you know who the entrepreneurial 'change agents' are in the university? Can you give them a platform to realise their ambitions? The Municipality of Cantanhede, close to the city of Coimbra (Portugal) was agile enough to proactively identify leading actors in Coimbra's University to set up what has become a very successful biotechnology park, filling a void in the University's strategy.

### WHAT DOES IT TAKE? IS THE CITY PREPARED? SOME QUESTIONS

The triple helix is about institutionalised and structured co-operation between university, companies, and government. **So, here is the first question: how well does your city staff know**

**and understand the contemporary university and business world?** Do they know who is who, and which research groups conduct research that might have relevance for the urban economy? Which curricula could be connected to urban challenges?

Note that the relevance of the triple helix goes way beyond the economic realm: in any policy field, it makes sense for the city to involve higher education institutes and companies,

preferably putting the end user whether this is a citizen, a consumer, a business leader or a front line worker in the driver's seat.

Helices can only work when the constituent organisations trust each other, and are prepared to 'take each other's role' if necessary. Is the city a trusted

The case of Heidelberg shows that high-level triple helix collaborations may be triggered by higher level governments (e.g. at regional level), funding agencies, top universities, and big multinational companies. What is your city's position in that force field? Do you know what's going on and sit at the right table? For a growing number of European and national funding schemes, triple helix type of partnerships are a basic requirement. The EU's Smart Specialisation approach (underpinning the EU operational programmes) is based on it. Do you have the **competent and motivated civil officers** to set up and stimulate such partnerships?

Triple helix approaches are a fundamental pillar of the new smart specialisation approach to regional development set out in cohesion policy. Cities have a major opportunity to position themselves as a lead player in this type of helix. However, like all approaches the devil is in the detail, and successful cities have been those that have been able to bridge the institutional divides that historically have separated the three main types of actors. Calling yourself a triple helix is not enough, you have to become one! ●

**Triple helix approaches are a fundamental pillar of the new smart specialisation approach to regional development set out in cohesion policy. Cities have a major opportunity to position themselves as a lead player in this type of helix.**





# NEW STYLE CLUSTER POLICY: RIDING THE WAVES OF SAN SEBASTIAN'S EMERGING 'SURF ECONOMY'

✍ By Willem van Winden  
and Luís de Carvalho\*

*San Sebastian's surf cluster is a city-driven, new-generation type of cluster policy that connects apparently unrelated activities around a common theme: surf. By choosing a theme rather than a specific sector, the cluster initiative refrains from 'picking winners' and opens new opportunities for economic diversification that make use of specific local strengths: gastronomy, hospitality, natural-urban resources, IT-digital competences and engineering skills. This case makes clear that nurturing an economy around a theme or lifestyle requires an integrated platform approach, flexibility of intervention, and involvement of stakeholders and unusual suspects. The findings and lessons from this case are also relevant for cities that want to encourage innovation in transversal themes rather than specific sectors or technologies.*



Source: Fomento San Sebastian

## SAN SEBASTIAN: MORE THAN A SURF SPOT

The city of San Sebastian, in the Basque Country (Spain), is famous for its gastronomy, its scenic location, and its rich cultural heritage. But also, it is a great surf spot, and the city is home to many surf-related businesses. It is not just surf schools and shops: the city is also home to producers of surfboards, special clothing, accessories, and digital equipment. "We noticed that surf, overall, was a growing business in our city", said Euken Sesé, director of the city-owned development agency Fomento San Sebastian, "and we wanted to make more out of it. That's why we set up our surf cluster policy". His organisation which is 100% city-owned, has 50 employees and a total annual budget of about €25 m,

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and develops and implements the city's economic strategy. Its mission explicitly includes the support to emerging economic clusters in the city, and to forge links between firms and the knowledge institutions. However, for Fomento, 'emerging' does not mean 'from scratch': the clusters selected must have some roots in the region and potentials in the city.

Surf tourism is now the third largest tourism segment after gastronomy and conference related tourism. San Sebastian's waves themselves are good but not exceptional. What makes the local surf scene unique is the link with the city: San Sebastian is one of the few European places where it is possible to surf good waves right next to the city centre. This attracts a diverse and mixed crowd that combines shopping, clubbing, eating and surfing.

What is the surf cluster policy about, and what is it good for? For Euken Sesé, the main challenge is to **connect the dots**, and stimulate collaboration. "It was easy to see that surf was becoming a local economic driver, but the industry was very fragmented. We have a number of 'old' established players (e.g. surf shops, local board manufacturers), some new entrants (technology companies, surf schools, etc.), and some academic research groups, but there were few if any relations among them". Hence, the surf cluster was designed with the mission of creating a 'co-operation and participation space', a transversal platform for the stakeholders in the sector and beyond to develop a number of competitiveness-enhancing initiatives for its members.

### GAINING TRUST FROM THE SURF COMMUNITY

Maite Ayestaran was appointed by Fomento's director as the surf cluster manager. Her first task was to identify the players in the cluster, and engage with them. It proved difficult to gain their trust: there were doubts about Fomento's knowledge about surf as industry and lifestyle. This hurdle was partly solved by hiring an external expert to support her, but the

main change came when she started to learn to surf herself. "I gained their trust the first time they saw me on the water, then they started seeing me as one of them". Her advice to any cluster manager: make sure you are credible, engage deeply with companies, make sure you understand their business, otherwise nothing will work". But there were more hurdles. The surf cluster team had to deal with the very strong competition between players in the sector. "Some established firms thought that we were supporting new companies against them, and severely opposed the initiative; others claimed a special

status within the cluster initiative". Ayestaran spent much of her time explaining the pre-competitive approach of the initiative, the position of Fomento as a neutral entity, the value of co-operation, insisting on the equal treatment basis of the initiative, etc.

“  
[...] the surf cluster was designed with the mission of creating a 'co-operation and participation space', a transversal platform for the stakeholders in the sector and beyond to develop a number of competitiveness-enhancing initiatives for its members.  
”

Euken Sesé

### ADDED VALUE FOR THE COMPANIES

But after some time, more and more companies took part in cluster meetings, and things started to work out. The design of the surf cluster – i.e. open entry, equitable membership and mixed types of industries – helped to forge new links between seemingly unrelated firms. As the owner of a surf school explains: "the cluster meetings help us to think about new possibilities, such as teaming up with an IT company to develop an e-commerce solution or to do a project with an engineering school". One remarkable company in the cluster, Wavegarden, developed an artificial wave technology, and sells it worldwide. For them, the cluster is helpful to find new partners within the broad space of the surfing industry. "In our business – new leisure concepts linked with wave gardens – we need complementary companies that could be part of the whole package,





Source: Luís Carvalho

and we can easily meet them here”. For newcomers, the surf cluster helps to find partners. The manager of a new technology company (originally from the skiing industry now entering the surf business) explains: “we relocated here from another region, and the cluster helped to get in touch with local people and better understand the surf business and possibilities ahead”.

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### ENGAGEMENT WITH UNIVERSITIES: A CONTEST FOR SURF INNOVATION

There is a lot of innovation going on in surf-related technology: new materials, boards, apps, devices, clothes and all sorts of accessories. New knowledge and research is needed, but, as in so many other places, **there was hardly any connection between the surf business and the local universities**<sup>1</sup>. “So”, cluster manager Ayestaran explains, “it made sense to engage with universities as well, we had to find a way to make that connection work”. She got in touch with Florencio Fernandez, professor at the Polytechnic University (University of the Basque Country) and the idea was born to organise a contest for surf innovation, in partnership with three universities and higher education institutions – Mondragon, TECNUM and the University of the Basque Country. University students and their supervisors were challenged to prototype new surf products (focusing on boards and accessories), and to involve end-users

in the process. It was a big success; more than 100 ideas were proposed by student teams, and the 18 best ones were selected to be prototyped. Many of the participating teams proved to be fanatic surfers themselves, and they loved to work on this. Here are some examples of prototyped products:

- Sensors and microchips in the board for use of visually impaired people;
- A board with a built-in engine;
- New foams and glass fibre to be used in boards.

The winners gained a support package to set up their own business: privileged access to start-up funds, and the opportunity to closely work with mature companies in the field. The contest helped to open up the door for co-operation between university departments and surf companies, who never considered it in the past. In the words of Professor Fernandez: “Now we have companies coming to us, to see what we can do together; [...] moreover, we are now engaging with new people within the University for some concrete surf-related projects.”

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### TRAINING OPPORTUNITIES

Enhancing training for surf industry professionals is a key achievement of the cluster. The local University of Mondragon offers a Masters programme on ‘marketing and management in surf’, that is, in principle, very interesting for surf companies. But as the course is tailored to regular, full-time Master students, it did not suit the agendas of busy company bosses. To change that, Fomento made a deal with Mondragon to open up some of the more interesting modules of the course for professionals. Employees from companies are now able to attend these modules over 6 weekends, and 14 already did so.

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<sup>1</sup> In the article on triple and quadruple helices, earlier in this publication, several other examples are mentioned.



## THE WORLD SURF CITIES NETWORK: LEARNING AND SELLING

As part of the cluster policy, Fomento set up an international city exchange network: the World Surf Cities Network (WSCN)<sup>2</sup>, with medium-sized surf cities that also want to make more out of the surf business (cities pay a fee to become a member). They learn from each other about surf cluster practices, surf-tourism promotion and joint project development. Moreover, the network makes business sense: surf firms in the San Sebastian cluster use the contacts to gain access to new markets, and to find business partners abroad. Fomento financially supports cluster members if they travel to matchmaking events in the network. It also runs the secretariat of the network.



Source: Fomento San Sebastian

## NOT JUST THE ECONOMY: SMART, INCLUSIVE AND SUSTAINABLE

Euken Sesé, director of Fomento, is clear about his motives: the key driver to develop the surf cluster initiative is economic development and diversification of the city's economy. "With our actions, we want to enhance the competitive performance and have new jobs in the surf-related industries in San Sebastian. And it also helps to dynamise the image of the city as a place not just for rich pensionados who love good food". Yet, there is more than that: one goal is to open up the surf experience to new groups and make it more 'inclusive'. Supported by the cluster policy, firms have developed surf solutions for blind people (using sensors), children (safety solutions) and elderly people (new types of surf lessons and bundled products). Thus, surf is developing as a more inclusive sport not just for the young and energetic. Moreover, surf is associated with a healthier and more active lifestyle, and closeness to nature, and these are important values for the city. And, last but not least, there is a close relation between surfing, the carrying capacity of the city's beaches

and environmental sustainability – spreading surf and surfing products (e.g. tourism) throughout the year is key to keep the city's urban quality as well.

## COSTS AND BENEFITS

San Sebastian's surf cluster policy, as a rough estimate, costs about €250,000 per annum.

How does the Fomento leadership know that it pays off? Fomento has set no quantitative targets or results indicators, but the management team

frequently assesses the impact of their actions and the changing situation of the industry.

A first tool is the city's 'cluster observatory' that allows them to trace the dynamics of the surf industry over time (new firm and job creation, surf tourism etc.). Second, there are frequent surveys of cluster members, to assess their satisfaction with the current initiatives. And last not but least, Fomento's management team uses professional self-assessment methods to critically analyse their own actions and adapt them if needed.

*“With our actions, we want to enhance the competitive performance and have new jobs in the surf-related industries in San Sebastian. And it also helps to dynamise the image of the city as a place not just for rich pensionados who love good food”*

Euken Sesé

**A point of debate is whether companies should pay for being a cluster member.** In San Sebastian, membership is free, as long as one is in the surf business and shows willingness to participate in the cluster initiatives. But many regional development experts, in general, are in favour of a membership fees: they would signal commitment, and avoid free riding. A related discussion concerns the role of the local government: how long should it be the caretaker of a cluster, and when comes the point where the cluster organisation must stand on its own feet? This raises questions about the longer term, and whether the cluster would always be dependent on the municipality. San Sebastian goes for the public option, with bottom-up participation, no fees and open access.

<sup>2</sup> <http://www.worldsurfcitiesnetwork.com/index.php/en/>  
The network members are: Arica, San Sebastián, Durban, Ericeira, Gold Coast, Las Palmas de Gran Canaria, New Plymouth, Newcastle, Santos, and Viana do Castelo.



## LESSONS FOR OTHER CITIES?

Despite the specificity of surfing and the surf economy, this story holds at least four lessons for other cities.

**First**, framing the cluster around a broader theme (surf, in this case, but it could be applied to other domains) rather than around a sector or technology makes it more **inspiring and recognisable**, and helps to catalyse new relationships and innovation beyond industry silos. This is critical for the consolidation of new 'smart specialisations' in cities and regions.

**Second**, cluster policies can be sparked by 'hunches', but these are only a starting point. Their concrete design and operationalisation requires a much stronger **evidence base**, assessing the effective potentials for those activities in the city/region. To this, it is wise to involve old and new players in policy design. Instead of picking winners, the concrete identification of new economic growth potential should be done bottom-up, by multiple players (established companies, new entrepreneurs, universities). Local governments can create the conditions for those processes to occur (like in the surf cluster), but should refrain from deciding everything by themselves.

**Third**, and related with the previous, an important message for city officials and cluster managers is: get out of your office! Open, frequent and informal communication between the cluster manager and

cluster members is essential to design adequate policies and effective actions. Moreover, it also facilitates **distributed leadership**. Despite being the initiative taker, Fomento assigned important roles to other external players, namely to the universities, in the case of the surf innovation contest.

**Fourth**, the case of San Sebastian shows that the value of local products and services can become closely linked with the quality of urban assets, such as the natural and built environment (seaside, beaches, and urban atmospheres). This is a plea to consider more integrated cluster policies that link economic development with urban and environmental planning in the city. ●



Source: Fomento San Sebastian



Source: Andrzej Pobiedziski

# THE DIFFERENT FACES OF THE URBAN DIGITAL ECONOMY

By Luís de Carvalho  
and Willem van Winden\*

*What will a shopping street look like in 2025, when online shopping continues to show double-digit growth? And what will 3D printing do to factories and logistic companies, when we can 'print' more and more products at home or around the corner?*

*The digital economy is one of the most pervasive game changers in cities. It creates and destroys, and affects the way cities function in many ways. But what is exactly the digital economy about? How big is it? Which types of transformation is it provoking in urban economies? And, importantly, what can local governments do to cope with the digital transition and foster sustainable urban development?*

## THE DIGITAL ECONOMY: LARGE BY ANY ACCOUNT

The digital economy results from the diffusion of a wide range of information and telecommunication technologies (IT) across the economy and society.

In a narrow definition, the digital economy equals the ICT and new media industries (software and app development, producers of equipment, digital media, IT infrastructures, etc.). However, over



Source: Freepik

the last decade, it became evident that digital technologies were transforming entire industries such as transportation, health, media, retail and manufacturing. Everywhere, the digital revolution entails new business and innovation models (e.g. European Commission, 2014). Moreover, it is changing our behaviour: the way we work, how we communicate with friends, the way we shop and book holidays, how we listen to music, watch films and TV, how we do our banking, and so on. The list is long.

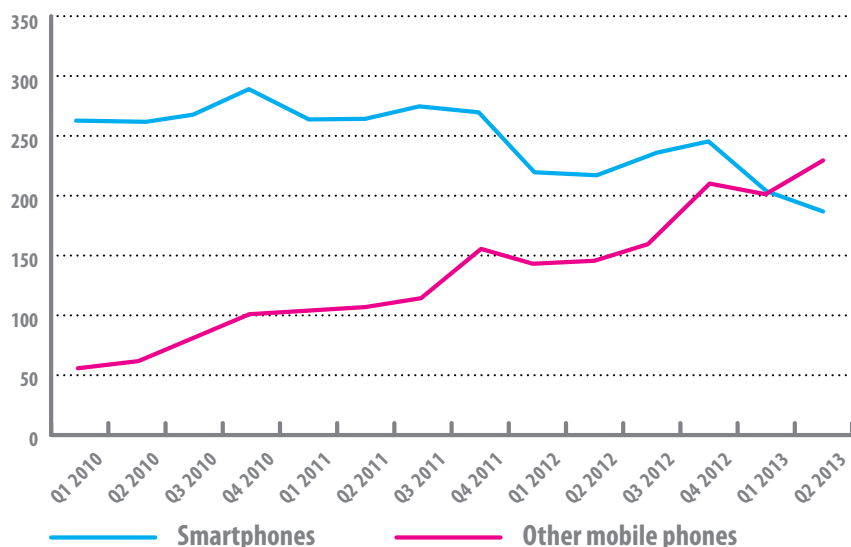
The key trigger, according to OECD (2014), is the mobile broadband revolution. Through smart phones the internet was democratised. Three out of four OECD inhabitants have now access to mobile wireless broadband through smartphones or tablets, and growth has been stellar (Figure 1). Those devices are increasingly powerful and inexpensive, and the costs of data storage decreased sharply.

Because it is so pervasive, measuring the digital economy is hard, but some numbers give an indication of its size. The European Commission

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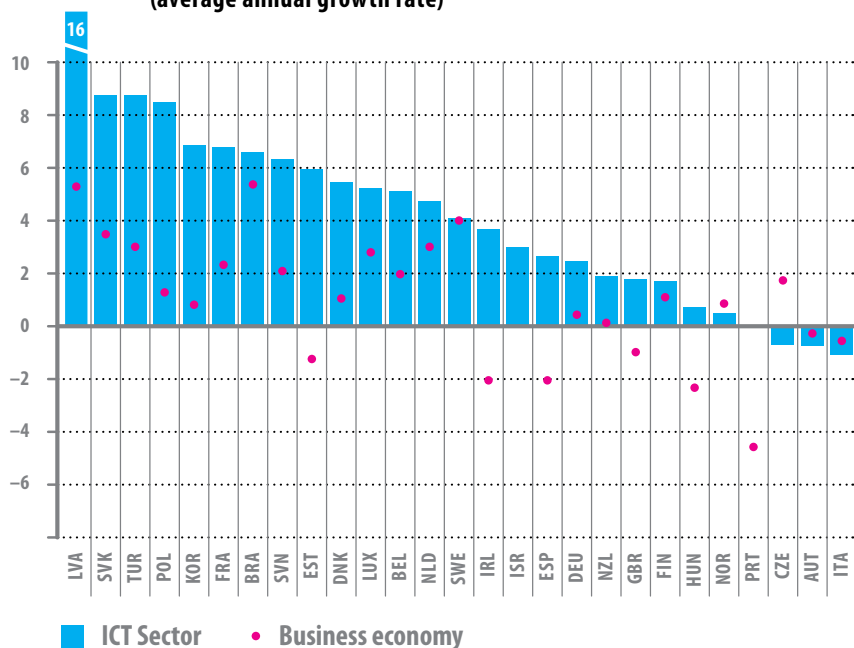


**Figure 1. The progress of smartphones, 2010–2013, OECD**



Source: adapted from OECD (2014), based on quarterly global shipping trends

**Figure 2. Net business population growth between 2009–12 (average annual growth rate)**



Source: adapted from OECD (2014)

(2010) estimated that **the IT sector (narrowly speaking) represents almost 5% of the total European economy and 25% of total business R&D expenditure.** A recent study hints that the European ‘app economy’ has more than a 10 billion in revenues per annum and supports about 800,000 jobs EU-wide (European Commission, 2014). Moreover, the digital

economy has been particularly resilient to the crisis in most countries (Figure 2). European app developers have an important market share worldwide, raising more than 40% of the global revenues in the industry (Mulligan and Card, 2014).

**URBAN IMPACTS OF THE DIGITAL ECONOMY**

The digital economy is large and growing, but what does it mean for cities?

First of all, the digital economy is a cradle of new entrepreneurship, and much of it is taking place in cities. Places like Stockholm, Berlin, London, Dublin, Warsaw and Barcelona are buzzing with young people creating new digital businesses – often starting with little more than a laptop, a mobile phone and a good idea. Yet, it’s not only big and capital cities that benefit: many medium-sized cities have thriving start-up scenes as well. Cities with a technical university are attracting and developing ‘tech talent’ and embedding digital solutions in older industries. For example, the Italian city of Turin has developed an edge in geo-location digital technologies for car-related industries, even if the lion’s share of FIAT production has long since moved overseas.

Digitalisation is also helping to revive urban manufacturing in some design-intensive niches.

There are many start-ups that design and produce small batches of physical products (clothing, furniture, tools, etc.). These are collaboratively shaped through CAD software, often involving users and front line staff and prototyped through 3D printing devices. They are blending traditional crafts with art and ICT, and adopt informal and collaborative styles



of working. This is known as the ‘maker movement’. In fact, as put by Chris Anderson, one of the movement’s leading voices, “physical products are increasingly just digital information put in physical form by robotic devices [...]; products are becoming little more than intellectual property embodied in commodity materials” (Anderson, 2012, pp. 72).

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**Demand for ‘traditional’ retail space will decrease in many retail segments, while new online and temporary models (combining physical and web presence) are emerging.**

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The digital economy is a source of innovation, but also poses challenges to many traditional companies and businesses in cities. Early victims were video rental firms and travel agencies, outcompeted by online business models; online banking replaced the bank offices around the corner. More recently, hotels and taxi businesses have felt the heat of peer-to-peer platforms such as Uber and Airbnb. Major changes

are underway in the retail business – a very important and visible segment of any urban economy. Online sales are showing double-digit growth figures, even in times of recession (in 2013, online retailing in Europe grew by a weighted average of 21%<sup>1</sup>), with deep impacts for shopping streets and malls in every city in Europe: **demand for ‘traditional’ retail space will decrease in many retail segments, while new online and temporary models (combining physical and web presence) are emerging.**

In addition, the digital economy is deepening a number of divides in cities. Clearly, not all citizens are benefiting equally. The elderly and the less educated face the highest risks of further exclusion (OECD, 2014). Moreover, employment in the digital economy is quite gender specific; for example, in one study only 9% of EU app developers were female (Mulligan and Card, 2014). At the same time, university graduates often lack the competence to combine knowledge of the technology and programming with arts, design and managerial skills.

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## WHAT HAVE CITIES BEEN DOING?

Local IT-tech communities rarely look for local government support: they are largely self-organised and thrive on informal networks (Carvalho et al., 2014). These communities often have high levels of usage of local cafés, bars, and clubs. The social dimension of the networks is all part of the scene. All this means that in general, local governments have little control on the digital economy: it evolves, whether we like it or not. So, what type of intervention from the city’s side makes sense? Here we explore three options: **the support to city app contests and open data policies, the development of digital and creative quarters and the set up of digital brokers and intermediaries.**

An increasingly popular strategy is to engage with the local tech scene (IT companies, tech enthusiasts) to address urban problems and challenges using new digital technologies. For example, cities organise app contests and ‘hackathons’, events in which software developers and others collaborate intensively. Some cities open up access to municipal datasets, and line up researchers, users, city departments and entrepreneurs to do something useful with it – see the story on Dublin in this publication. A European reference in this field is Helsinki<sup>2</sup>. Here, the city Council established a ‘default’ open data policy, making every bit of information produced by the City Council freely released (unless stated otherwise). The city does this to increase transparency but also to encourage entrepreneurs to solve urban problems through digital solutions. Some examples are related with health and ageing, such as apps to make it easier for the elderly or disabled to walk through the city. To this effect, the City Council teams up with Forum Virium, an arm’s length organisation that establishes a bridge with companies and entrepreneurs.

Another popular dish on the policy menu is to create hotspots and incubators for new digital firms, where they may receive all sorts of support – financial, administrative, business networks – to set and scale up their venture. Some of these spaces are endowed with so-called FabLabs – fabrication laboratories where entrepreneurs can physically test and prototype new digitally designed products. Some cities go beyond the building, and develop an entire urban quarter as a hotbed of digital entrepreneurship (van Winden et al., 2012). A good example is the ‘IT

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1 <http://www.retailresearch.org/onlineretailing.php>

2 <http://www.hri.fi/en/>





City Katrinebjerg'. This neighbourhood in Aarhus, partner in the URBACT REDIS network<sup>3</sup>, is located close to the university and is home to several IT research institutes, leading IT firms and an incubator. Supported by the city council, the stakeholders are developing and branding the area as an innovation district for IT and digital activity. Naturally, many digital hotspots emerge organically without much policy intervention (e.g. due to accidental contingencies and low rents), like London's 'Silicon Roundabout'. But even here local governments

can have important roles – such as by jointly marketing the encouraging diversity in land uses.

Some cities made the choice to put the development of digital skills more central in their approach. Triple helix partners in the Slovakian city of Košice, partner in the URBACT CREATIVE SPIN<sup>4</sup> network, founded 'IT VALLEY', an organisation with the primary objective to improve IT and digital skills, which are critical to sustain the development of these growing industries in the city. It set up an IT academy (with

### BOX 1. MANCHESTER'S DIGITAL STRATEGY: SOME ILLUSTRATIVE INITIATIVES

#### Rolling out super-fast broadband and digital test-bedding

'The corridor' project involves installing high-capacity, open access Wi-Fi infrastructure along Oxford Street – an area that concentrates many Higher Education and R&D institutions, medical facilities, companies, etc. The aim is to provide a digital backbone that supports the test bedding of new businesses and digital solutions, e.g. through the deployment of living labs, data exchange among citizens, etc.

#### Digital skills and training

In partnership with schools, education institutions and private parties, a 'digital skills strategy' is being defined that supports different educational pathways, apprentice opportunities, etc. Among others, there is a partnership between the City Council and the city's universities for the organisation of the 'Digital Skills Summit' – a forum for digital and graduate hiring and training workshops. Another initiative is the GO ON Manchester, which intends to teach digital skills to the population at large using voluntary 'digital champions' as tutors. It is a follow-up of a similar national initiative and of the IT-inclusion work championed by Manchester Digital Development Agency (MDDA) over the past years. It has been carried out together with the Regeneration unit at the City Council, libraries and other external parties from the community-voluntary sector.

#### Empowering local tech and digital communities

The 'Mad Lab' provides working space for community groups interested in diverse types of digital innovations, or as put by the organisers, a place for "geeks, artists, designers, illustrators, hackers, innovators and idle dreamers". It opened up in 2009, in Manchester's Northern Quarter, with the support of a small start-up grant from the UK Government. By that time, MDDA was one of the official supporters officially recommending and 'legitimizing' Mad Lab so that it could formally apply for the tender.

As explained by one of its managers, "[...] in the beginning it was very much about geeky and male groups [e.g. Sci-Fi group; Google groups] but now there are more diverse ones such as woman programmer groups [...]. Some groups are diversifying into more cross-sector platforms, bringing people with related interests together, from different backgrounds". One of such groups that started in Mad Lab was the Manchester Open Data Group. Mad Lab provided room for experimentation and for the prototyping of solutions. The first open data 'hackathons' took place there, with the support of the City Council and MDDA. As an MDDA representative puts it, "[the Mad Lab] is not the place that many city officials would come in the first place".

<sup>3</sup> <http://urbact.eu/redis>

<sup>4</sup> <http://urbact.eu/creative-spin>



the support of the German company T-systems), to develop new education programmes, curricula, job fairs, internships and dual education concepts, to make sure that the labour supply can fit the growing industry demands over time. It works on all levels (university, secondary and even grammar school).

Moreover, as the urban digital economy is a multi-faceted challenge, some cities have been developing comprehensive digital agendas and have set up unconventional, intermediary organisations that are better able to do the job in an integrated way. Manchester (UK) is a reference in this field and created the Manchester Digital Development Agency (MDDA), a publicly owned organisation that coordinates and enthusiastically champions the city's wide-ranging Digital Strategy. It aims to put in place super-fast broadband in some city areas (to facilitate new digital businesses and experimentation), increase city-wide IT literacy and enhance connections between several local stakeholders and communities in this field (see Box 1, with some concrete examples).

## CHALLENGES AHEAD

The different faces of the urban digital economy are becoming increasingly evident in cities, and local government should keep exploring ways to deal with it. In our workstream, we identified three broad types of challenges for local governments in this field: **planning, regulation and intelligence**.

**First**, from the **planning** side, cities should consider how to plan and develop new co-working spaces (beyond conventional incubators) that effectively fit the changing needs of digital entrepreneurs – e.g. new types of soft services and facilities, synergy management tools, etc. Moreover, urban planners will have to think about how to develop more resilient spaces to cope with the changing nature of the digital economy – which, as suggested, is having implications on the demand for commercial business space. One problem is that as run down areas of the city start to become cool creative quarters, the resulting gentrification of the housing market starts to eliminate the land use diversity and economic vitality that were the original attraction. Cities need to protect the mixed use economic diversity of these areas using their planning powers in new ways. Second, the digital economy is putting pressure on

**regulatory** frameworks. New collaborative platforms such as Uber and Airbnb challenge current legislation in transport and hospitality industries. Cities need to make sure that the public interest is taken care of, without blocking digital innovation and change.

**Third**, cities can use their own purchasing power to stimulate the digital economy. But the new techniques of coproduction, hackathons, etc. raise particular issues in the complex regulatory world of procurement. Here, cities need to find new ways to allow experimentation and innovation prior to committing to final purchases, and without giving privileged advantage to particular companies (see also the story on Dublinked in this publication). This will be important to facilitate the development and scaling up of new IT-digital solutions in cities and to support new start-ups in this space.

**Fourth**, to make the right choices, cities and local governments will be in need of ever more **intelligence** (see article on 'economic intelligence for cities' in this publication). Because of the proliferation of digital content and data production by individuals and organisations in cities (e.g. through sensors, mobile phones, electricity meters and transport journeys), local governments have to find new ways to make sense and deal with (big) data which is increasingly available in real time. Moreover, micro businesses and informal communities will become increasingly relevant for innovation and new business development, which are not as easy to spot as large companies or R&D institutes (Carvalho, 2014). And what will happen to city marketing and branding as social feeds about a city grow exponentially without control of local governments? The URBACT CITYLOGO<sup>5</sup> network has been conducting exploratory work on these issues, focusing on branding for both inward investment and tourism through social media.

All in all, the new 'digital skin' of cities (Rabari and Storper, 2014) brings considerable opportunities and challenges to cities and local governments. It will permeate cities of very different sizes and economic specialisations. Businesses, planning models and regulations will change, opening a whole new playing field for local governments. Likewise, this means that civil servants need to become also much more digital-oriented than in the past. ●

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5 <http://urbact.eu/citylogo>



# THE OPEN DATA ECONOMY: PROMOTING DIGITAL INNOVATION IN DUBLIN

 By Luís de Carvalho and Willem van Winden\*

*Consider what could be the link between these three facts: One: Cities are increasingly 'producing' all sorts of data, both the data sets on their own activities that they have collected since the computer age began and new sources of data churned out by sensors that are embedded in buildings, roads, grids, buses, cameras and other devices. Two: most citizens now have a smartphone. Three: citizens ask for better services, and a more transparent and accountable government.*

The link is open data. In recent years, many cities have been launching open data initiatives: online platforms where urban data is made available and can be freely accessed by everybody. A key challenge here is to turn raw data (such as planning application data, transport movements, water flows) into useful applications that improve efficiency, quality and transparency of urban services. In the past city governments were not very good at this: data management and innovation is not their core business. So why not engage with citizens, universities and companies that are?

With this in mind, the city of Dublin set up Dublinked<sup>1</sup>. Through the Dublinked initiative, the city opens up data about public provisions,

promoting data-driven innovation and encourages new collaborations (between city departments, IT companies, research institutes). The aim is to design better services, solve different sorts of urban challenges, and, importantly, create new businesses along the way.

## Dublinked™

Compared with other open data initiatives, Dublinked has at least two specificities that make it distinctive. First, it explicitly combines a regular datastore with the promotion of an *innovation network*, involving businesses, researchers, governments and citizens and; second, it combines the release of conventional and 'easy' datasets with more complex (and potentially more valuable) data streams and live feeds. Moreover, Dublinked showcases new ways to involve large IT companies in open data projects while sticking to the initiative's principles of equal access.

### PLANNING DUBLINKED

Dublinked was launched in October 2011, in the midst of the economic and financial crisis. But the first ideas emerged in 2008, when Dublin City Council

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<sup>1</sup> <http://www.dublinked.ie>



(DCC) was actively considering new initiatives that could, as put by the former city manager, “contribute to an innovation-driven recovery while countering the grim mood in the city”. Around that time, many global IT companies were flocking to the city and showed interest in urban data solutions and analytics. One of them was IBM, a well-known North-American IT corporation. As explained by Dublin’s former City Manager, “IBM was considering to develop a smart city lab in Dublin and was particularly interested in having data on water, energy and transport [...]; this alerted us [DCC] for the potential behind our data, not only for IBM but for many other smaller businesses and researchers”.

Yet, the idea of bilaterally sharing data between DCC and IBM was soon abandoned because it would give privileged treatment to the company and go against a fundamental principle of open data – that of equal access. However, full outsourcing of an open data platform would also not be a solution. That would entail delays and complications due to procurement rules, and limit joint learning possibilities. Therefore, a more collaborative solution was chosen: an

**An innovation partnership was set up between DCC, IBM, three other local authorities in Greater Dublin Region (South Dublin, Fingal and Dún Laoghaire Rathdown), and the National University of Ireland Maynooth (NUIM). That was the start of Dublinked.**

innovation partnership was set up between DCC, IBM, three other local authorities in Greater Dublin Region (South Dublin, Fingal and Dún Laoghaire Rathdown), and the National University of Ireland Maynooth (NUIM). That was the start of Dublinked.

The participation of NUIM was crucial, with its strong track record in data analytics and innovation eco-systems. It also positioned Dublinked as something ‘in-between’ in the triple helix, outside the bureaucratic boundaries of the city councils yet not just serving the interests of a single firm. NUIM hosted the staff and received most of the total cash budget of Dublinked –

about €100,000 per year. This budget paid for data hosting, curation and event organisation – and NUIM also assumed its overall coordination. IBM took the backseat, supporting the back-office operations of Dublinked and solving data-related technical issues (through providing free consulting time). In this sense, on the one hand, IBM could learn from DCC

and NUIM in a pre-competitive, open innovation fashion; on the other hand, DCC and NUIM benefited from IBM’s technical knowledge and their input as well as helping to identify the most valuable datasets, to the benefit of Dublinked as a whole.

## STEPPING OUTSIDE THE COMFORT ZONE

It soon became clear that collecting and releasing data for Dublinked involved several technical, legal and cultural issues. As put by a former Assistant City Manager, “there was a significant can’t do feeling [...]; all the lawyers advised us to give up. For example, nobody knew who would become liable if we hosted data that could endanger privacy or reveal business secrets, let’s say, the amount of water flowing to Guinness’s brewery district”. Moreover, there was also resistance from data-owners. The former Dublinked Manager: “Some city department felt that opening the data could embarrass them, and that other people would pick up the holes”. And there were also multiple vested interests behind data ownership, “as owning data [was] still seen as having power”.

Different actions were implemented to tackle these challenges. First, Dublinked started with the low hanging fruit, that is, less ‘problematic’ datasets owned by the city council, preventing technical and legal hurdles (e.g. traffic volumes, air pollution, land use, drainage areas). Second, in order to release a higher and more relevant number of datasets, Dublinked covered the entire metropolitan area, releasing data from the greater Dublin region. In this way, Dublinked could simultaneously learn and show the benefits of open data that had been released by Fingal – a neighbouring municipality with an open data initiative that was already up and running. It also opened the possibility for users to access data beyond the municipal boundaries, which can be especially relevant for health, transport, planning, employment and economic data.

In 2011, a new ‘design-thinking’ unit within DCC – named ‘The Studio’ – was tasked to manage Dublinked, directly reporting to the City Manager. It was set up as a mixed team of librarians, planners, architects and designers, seasoned in user involvement methods. Supported by agile routines and strong communication skills, The Studio was able to establish co-operation with other units and speak to external data providers and users. The Studio was



important for the project's early implementation (e.g. collecting and preparing data), namely because open data was new to DCC, requiring a combination of knowledge management with a customer-oriented view and a risk-taking mind-set. In 2014, following a change of governance and organisational structures within DCC, The Studio as such was dissolved and Dublinked was reintegrated into the core Planning and Development functions of the city. The virtues of the new organisation model are yet to be seen, but The Studio was very important in the start-up years.

## USER INVOLVEMENT

Beyond releasing data and waiting for innovations, a central feature of Dublinked is user involvement. Who would use the data and in which ways? How can data collection and release be improved? What do entrepreneurs need to turn data into business and meaningful services? To get answers to these questions and promote new co-operation networks around open data, Dublinked organises events where data users and providers meet.

One example is the so-called 'Dubmeets', with talks from experts, users and feedback discussions about the quality and uses of the data and new challenges. Most participants come from SMEs (30%) and the public sector (36%). Fifteen events have been organised since October 2011, with over 850 participants in total. Some events are thematic such as the tourism sector event held with the support of Dún Laoghaire Rathdown County Council's Enterprise & Tourism department. It explored the potential of data sharing for the



Transport Dubmeet 13.03.2013. Source: Dublinked



Open Data Hackathon 23.03.13. Source: Dublinked

tourism sector and discussed how to encourage data driven innovation, connecting participants from private industry, public bodies, and academia.

Dublinked also organises very practical, hands-on events, such as 'hack days', app development and data visualisation contests. During those events, teams of IT developers (together with designers and marketers) are invited to use the available data to develop applications and solutions to specific urban challenges for a prize. Such events are popular in Dublin's tech scene. Beyond the technical dimension, these events are also networking catalysts and contribute to create open data advocacy. To organise them, Dublinked had been actively collaborating with the National Digital Research Centre and Dublin's Science Gallery.

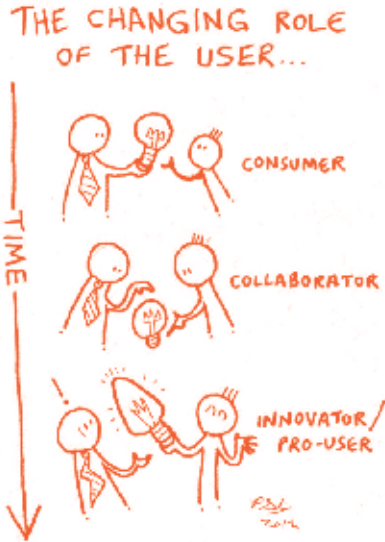
## EARLY RESULTS AND CHALLENGES AHEAD

Open data should not be seen as a quick win to boost digital innovation and new jobs. It involves considerable cultural change, a lot of experimentation and its direct and indirect impacts are hard to quantify. Having said that, it is already possible to identify a number of achievements associated with Dublinked.



The most obvious ones involve the development of software applications by new start-ups. One example is the already popular 'mypp.ie', an application using planning data for the Dublin region that allows identifying on the map where particular types of developments (roads, buildings, infrastructure, etc.) are being planned. Mypp.ie provides the information in a more interactive and integrated way (than in a municipal website) and notifies users of new

developments, among other services available for a monthly fee. Mypp.ie has been recently scaled up in the United States as 'Buildingeye.com', keeping its ownership while expanding its services in California and Oregon.



The changing role of the user

Other examples are parking apps and road quality maps based on citizen reports and real time monitoring, but there are many more. Moreover, over the last three years, the participants in innovation events increased substantially and so did the range and number

of datasets published by Dublinlinked; at the time of this writing, more than 300 from 16 different organisations were online, including 18 research datasets and six dynamic data feeds. Currently, open data strategies gained considerable momentum and advocacy in several national strategies.

Dublinlinked is now moving into a new development stage, and its proponents have clear ideas about the ways forward. One issue is to communicate better its profile of innovation-enhancer rather than a simple datastore, namely by fostering new types of events and community engagement. Another is to focus collaboration more on solving concrete urban challenges. To make it happen, Dublinlinked partners have secured a joint budget for a permanent working group to deal with data curation, management, education and data visualisation. Finally, the progress of open data and new digital business development relies also on making sure that new procurement contracts in the city include agreements on open data releases.

## THE LESSONS FOR OTHER CITIES?

The context of Dublin – e.g. the presence of a dynamic ecosystem of IT companies and strong leadership – largely facilitated the emergence of Dublinlinked, and are rather city-specific. Yet, on a more concrete level, there are at least three important takeaways and lessons that can be generalised to other cities.

**First**, business and innovation-driven open data initiatives should move beyond building a datastore and proactively involve end-users (and potential entrepreneurs) in a process of co-production through community building initiatives and other events (e.g. hackathons, challenges and competitions). Moreover, there are advantages in involving private companies in the design and piloting of open data initiatives, as they can bring relevant expertise, resources and signal the most valuable datasets. However, local authorities should ensure that data is accessible on a neutral and equitable basis in order to reach a broader number of innovators.

**Second**, releasing city data requires cultural change and moving outside the comfort zone of city administrations – there is substantial uncertainty and risk of failure. Therefore, it requires strong political commitment (e.g. of city managers), social innovation and the establishment of agile units that can foster change in the organisation, nudge new routines and challenge vested interests (e.g. of data owners).

**Third**, there are – and will always be – important issues around privacy and data protection that will need to be addressed. Moreover, open data challenges traditional models of public procurement. This can be complex to navigate for public administrations where co-creation and ongoing maintenance of software and data are required. New regulations may be needed to better embed open data routines in the local administration and society. ●

### 📖 MORE INFORMATION

- **Analytical template on Dublinlinked:** <http://urbact.eu/capitalisation-and-dissemination>
- **Datastore:** <http://www.dublinlinked.ie/datastore/datastore.php>
- **Inspirational uses:** <http://www.dublinlinked.com/?q=apps>
- **Weblog:** <https://dublinlinked.wordpress.com>



# HEALTH & CARE: DRIVERS OF URBAN GROWTH?

✍ By Willem van Winden and Luís de Carvalho\*

*Here is something that all Europeans find of prime importance: affordable access to good health care; high quality elderly care; being able to live independently, even if you are handicapped or chronically ill.*

For most governments in Europe, healthcare is a growing (and therefore worrying) cost category. Health inflation rises faster than retail price indices and the demands on the service from an ageing population are growing. Add to this the growth in types of interventions and the increasing costs of breakthrough drugs and you have a sector that is bound to grow. Europe's population is ageing, life expectancy is higher and the elderly are more 'heavy users' of health and care services. Moreover, the industry, often in partnership with knowledge institutes and patients, produces a lot of innovation: new treatments, medicines and medical equipment, but also all sorts of eHealth applications, prevention concepts etc.

**From a city perspective, one can also look at the opportunity side:** it is a big and growing industry, which is very important for citizens, with a lot of scope for improvement (if we organise things more smartly), it offers new business opportunities for tech entrepreneurs and jobs for those with middle to low qualifications. New organisational models of care provision are emerging (partly driven by austerity measures) particularly around how to link health with social care. In this new space there are a range of social enterprise and new public-private delivery models emerging (albeit with large variations between countries).

*In this article, we look at the potential of health and care for the urban economy. How can cities make the most of this, taken all the restrictions of national health systems for granted? What can cities do to stimulate a strong and inclusive local 'health economy'?*

Source: Freepik

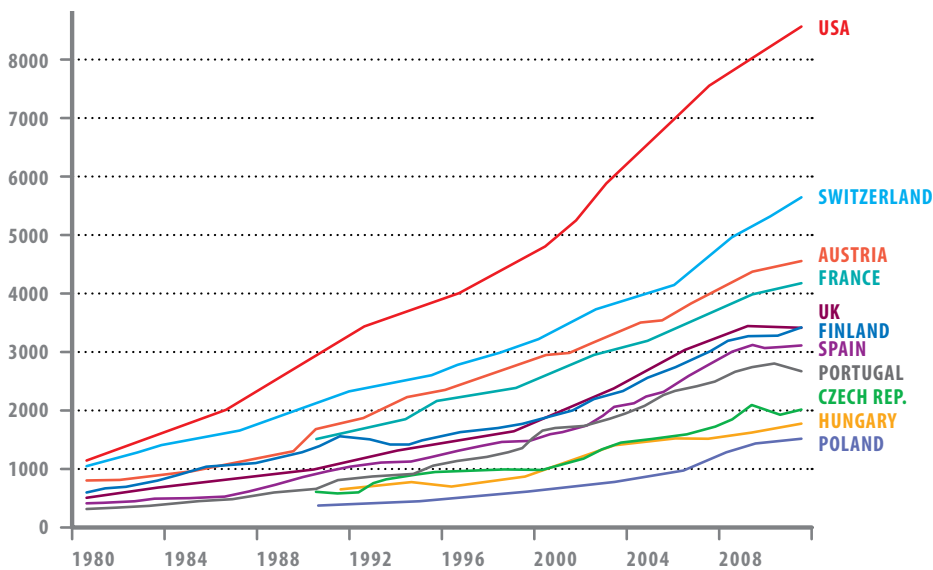
## SOME FACTS AND FIGURES

The health & care economy can be subdivided into three main categories, namely:

- The care sector (hospitals, other types of care and support for elderly, people with disabilities, young people at risk, retirement houses, social and proximity services, etc.);
- Medical technology/equipment industry, including, e.g., scanning machinery, medical devices (e.g. precision tools, advanced textiles), diagnosis kits and assistive technologies (e.g. visual, walking and hearing disability aids, wheelchairs, emergency response systems, prosthesis, home automation, eHealth applications);
- Pharmaceutical and biotech industry: drugs and medicine production, sales and development.

On top of that, there is a large industry growing around health prevention and personal health management, fuelled by new possibilities of

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**Figure 1. Total expenditure on health per capita, 1980–2011, US\$ purchasing power parity**

Source: OECD Health Data 2013<sup>1</sup>

smart phones and software. Many start-ups have emerged in recent years, and giants like Google, IBM and Apple have also become active in this market. Finally, a wider definition of the health & care economy also includes all sorts of alternative treatments outside the regular medical circuit, spas and wellness concepts. And the latter should not be underestimated: they make up for important shares of many smaller cities' economies, namely in southern Europe and Eastern Europe.

Over the last three decades, spending on health has steadily increased in most countries across Europe (see Figure 1). Despite the recent slowdown (and even decline) in the public health budgets of some EU countries – namely the ones most severely hit by austerity measures – it is fair to say that health care spending will remain one of the most relevant categories of public spending in EU. Deloitte (2014) expects annual average growth in health care spending of about 2 percent during 2013–2017, still a strong figure in the light of on-going economic woes and subsequent cost-cutting measures in many countries.

### Health is clearly an urban industry.

Cities typically provide health services for a much wider catchment area, and most R&D, equipment, hospital facilities and care providers are located in cities. For example, the City of Berlin calculated that an astonishing 313,700 people are employed in the Gesundheitswirtschaft ('health economy'), generating a total annual turnover of €19,1 bn<sup>2</sup>. Namely, personal homecare is also an important economic segment in cities, and one in which job routinisation is not yet in sight, although with a downside that many of the jobs are low paid.

There are naturally many caveats related with growth in health &

care sector. For example, it has been widely observed that the growth in United States health expenditure (Figure 1) is unsustainable in the long term, namely as the rates of chronic and expensive conditions such as obesity and diabetes spiral out of control. And after all, a lot of health spending represents an 'end-of-pipe' solution to societal problems that would be more cheaply dealt with if approached through earlier interventions and prevention.

All in all, health spending has to be made more sustainable, and new approaches to deal with health-related challenges are needed. Across the health industry, digital technologies are having a big impact, making health access, management and delivery more efficient. This offers much scope for newcomers to develop new solutions. Several EU programmes support start-ups in health; a recent one is called 'The Future Internet CHallenge eHealth' (FICHe) accelerator<sup>3</sup> for smaller European eHealth firms. Successful applicants win up to €217,000 per team, but also access to business mentors, coaching, PR and other support. Moreover, beyond technology, other solutions – and economic opportunities – involve change in lifestyles. This is the case with the

1 Adapted from data available at: <http://mercatus.org/publication/us-health-care-spending-more-twice-average-developed-countries>

2 <http://www.healthcapital.de/gesundheitsregion-b-bb/daten-fakten/>

3 <http://ec.europa.eu/digital-agenda/en/news/future-internet-challenge-ehealth-smes-and-startups-across-europe>





well-being segment. Cities with relevant natural resources – e.g. thermal waters, clean air and healthy lifestyle activities such as walking or yoga – are active fostering links between tourism and the health/wellbeing economy. The size of the global ‘wellness industry’ was estimated to be approximately \$2 trillion in 2010 (Global Wellness Institute, 2014).

## OPTIONS FOR INTERVENTION

In the light of this, what can cities do to capture the opportunities offered by the dynamic health and care economy? A number of options are open.

**Empower medical cluster organisations** Cities with strengths in medical technologies or biotech may develop and support cluster organisations that bring together the partners in a triple helix, support start-ups, and facilitate access to external knowledge and funding. Copenhagen and Malmo’s ‘Medical Valley’ are the textbook examples of public-private initiative to boost the region’s biotech and med-tech industries, but also Cantanhede, a small city in Portugal, managed to harness the research competences and international networks of the University of Coimbra to spearhead the first biotech park in the country which has been very successful.

### It is not just about business and technology.

Mireia Sanabria, Lead Expert of URBACT 4D CITIES network<sup>4</sup>, stresses the growing social dimension of health innovation. The network focused on new types of health innovation in cities that are more patient-centred: “Health innovation will not be limited to technological or biomedical innovation fields anymore: the personal and social situation of the patient is key for their condition and thus must enter the equation”. This also implies that **companies in health business must change, and learn to be more ‘social’**. Sanabria explains: “Tools such as living labs, hospital simulators, scenarios for experiential designs, etc. help revealing the real needs of people, and increase the effectiveness of organisations and treatments”. The cities that can create these new

collaborative and user-centred environments will become important test centres for future services and technologies.

**Line up stakeholders to develop new care concepts and solutions** Cities may support or initiate new care concepts, for example eHealth solutions that enable elderly or less mobile people to get counselling or medical checks from home. For this to happen, stakeholders in the health sector must come out of their silos. Coalitions are needed between care providers, technology firms, housing companies and, importantly, end-users. Cities are well placed to play the role of network broker and catalyst. Marieke van Beurden explains how the region of Eindhoven managed to create a ‘healthy coalition’ between many partners, with significant economic spin-offs in her interview following this article.

According to Sanabria, **new care concepts offer plenty of business opportunities for SMEs**, particularly in the ICT field (related to eHealth technological devices, software for data collection, patients medical records, etc.). But these firms need some attention: they are flexible and innovative but work in a risk-prone and complex environment. The regulations in health are necessarily more rigorous and complex than in any other business sector. Sanabria thinks that “to make them successful, they need coaching and support, and cities must organise that”.

**Build an ‘innovation district’ around the (academic) hospital** Hospitals are potential engines of urban growth; they may become ‘anchor institutions’ in urban innovation districts, with spillover effects on adjacent neighbourhoods. But this does not happen without intervention: the challenge lies in connecting the dots, bringing stakeholders together, and see how the area can be made stronger as a joint effort. The North-American City of Memphis (TN), in partnership with many stakeholders, is seeking to create an Innovation District in and around the Memphis Medical Center, located within two miles of downtown<sup>5</sup>. The area concentrates a number of life science institutions and related jobs in a small geographic area. There are six hospitals, several schools, two junior colleges, a biotech incubator, and about 60 life science firms. In total, they employ approx. 11,000 people and attract some 450,000 visitors annually. The plan is to build on these assets, and develop the existing, underutilised yet eclectic ‘Edge’ neighbourhood that lies between

<sup>4</sup> <http://urbact.eu/4d-cities>

<sup>5</sup> <http://uli.org/research/centers-initiatives/daniel-rose-center-for-public-leadership-in-land-use/fellowship/fellowship-cities/memphis-tn/>



the Medical District and downtown, where there is land available, as well as appropriate zoning for mixed-use development. Moreover, the area is connected to downtown via a trolley bus. The goal is to leverage the area's human capital, facilities and existing activity to create, attract and nurture research, development and technology commercialisation in a reinvigorated mixed-use urban neighbourhood.

A European example is the 'Oncopole'<sup>6</sup>, a health cluster that is being developed in Toulouse (France) as part of a regeneration scheme of an industrial area at the southern edge of the city. This €1 billion development includes a hospital and a number of research institutes, focused on cancer treatment and research (European Commission, 2013). It also includes facilities for services and recreation. About 4,000 people work in the area, and it has become a powerhouse of cancer research. But it also has economic spin-offs in adjacent distressed neighbourhoods. Training and job creation for people living in the area have been included in the early stages of the plan, supported by local NGOs, the public employment services, and coordinated through the Integrated Urban Programme of Toulouse Metropolitan Council. The 'Neighbourhood growth booster' started in 2009; its aim was to facilitate staff recruitment among neighbourhood job seekers and to adapt the local training supply accordingly (nursing, care, transport, security, gardening, etc.). But due to the crisis, results had been modest at the time of writing the case study (European Commission, 2013).

#### Develop urban tourism around health and wellness concepts

Health tourism and wellness tourism are important growth industries with significant opportunities for cities across Europe. An estimated 1.6 million US residents travelled abroad in 2012 for medical care, according to Deloitte (2009). In recent years, Hungary, Poland and the Czech Republic are becoming popular destinations for US and Canadian citizens, offering well-equipped medical facilities and low prices.

This type of tourism brings various returns to the region. It might reduce existing capacity surpluses in

the health sector; moreover, it may entail an incentive to improve the quality of the health service provision that ultimately benefits the local population as well; and, it creates substantial spin-offs to other sectors (tourism, cultural industries). In order to nudge these industries, an entrepreneurial and professional approach is a precondition. **Foreign clients not only ask for health care, but for a high quality 'package'.** Such a package includes smooth logistics (for instance transportation to and from the hospitals), the provision of hotel accommodation for family and relatives, a well-organised transition from hospital to after-hospital treatment, revalidation etc. In short, what is needed is the creation of demand-oriented new combinations, not only within the health sector, but also with actors in other sectors such as tourism. This asks for high levels of 'organising capacity'. In many cities, the health sector is far from ready to create such packages; it is too much supply oriented and lacks incentives to behave entrepreneurial.

### CHALLENGES FOR CITIES

Many cities are only now starting to explore the relations between the growing relevance of health & care activities and the development of 'new urban economies'. When one looks beyond pharmaceutical and medical technologies, a large number of new urban opportunities emerge in the health and care economy, and in many more cities of all sizes.

When it comes to health and care economies, **the challenge for local action is mainly organisational, not technological.** The involvement of users in the development of new solutions is central key aspect of health innovation. Local governments can do a lot to facilitate and mediate these interactions. This can include working with local housing companies, developing living labs and other types of intermediaries. Moreover, health can be linked with other types of activities in cities, such as tourism. This will require better coordination between different departments in cities, such as housing, social and economic development units and overall a more integrated approach not just between departments under the control of the city but also with other national and regional agencies and health bodies as well as with the private and social economy sector. Keeping the user-focus at the centre of complex stakeholder partnerships will be a critical factor for competitiveness. ●

<sup>6</sup> The Oncopole Toulouse was analysed in the report 'Good practice in urban development: projects and approaches supported by the ERDF during the 2007–2013 programming period', see [http://www.aeidl.eu/images/stories/50bestpractices/fr\\_toulouse\\_analytical-fiche.pdf](http://www.aeidl.eu/images/stories/50bestpractices/fr_toulouse_analytical-fiche.pdf)



# STEERING EFFECTIVE CO-OPERATION FOR HEALTH INNOVATION IN CITIES



Interview with [Marieke van Beurden](#)  
Programme manager of Slimmer Leven 2020 (Smarter Living),  
an innovation network for active and healthy ageing  
in Eindhoven region

 Interviewed by Willem van Winden

Co-ordinator of the URBACT  
workstream 'New urban economies'

*The health and care sectors offer enormous potential for innovation to be developed at local level in both service delivery and the application of new technologies. Sometimes these may be combined through the use of smart phones to ensure much earlier and more coordinated interventions.*

New technologies can improve health. But to reap the full potential, it takes effective collaboration between many players in the regional health system and beyond. In Eindhoven, partners have learned how to do it. In 2011, key actors in the region set up Slimmer Leven 2020, a co-operative with more than 70 members (elderly homes, hospitals, health and care providers, health insurers, housing companies, and public bodies). They jointly develop solutions for distance care, home automation, apps for 'self-management', enabling elderly or chronically ill people to live independently at home. The aim is to improve the life of people, and make the health care model efficient and cost sustainable. The predict is that at least 2% of savings can be achieved through these types of approaches and perhaps considerably more.

The collaboration also helps innovative companies to develop, test and sell new solutions on a larger scale by offering the population a willing test bed for new ways of organising. Marieke van Beurden was from the beginning involved, as project leader in the initiative, and was also involved in the URBACT 4D cities network<sup>1</sup>.

*How do you manage to get all these organisations in the same boat?*

Well, we did not start from scratch. Eindhoven has a long tradition of projects in the field of health and technology, but the innovation network enables us to work more systematically, act faster, and obtain all sorts of funding for our projects. One successful project is called 'care circles'. Its partners worked together to provide a higher quality of care and extra security during the night and weekends for people in need of (unplanned) care. Before the project, each of the participating care providers had its own-costly- night emergency service. Now, we have shared night teams who provide care for every citizen in a specific area during the night irrespective of which care-organisation a specific person is a customer. When somebody has fallen or is wondering

<sup>1</sup> <http://urbact.eu/4d-cities>



around (in case of dementia), electronic devices transmit a signal to a call centre, where a dispatcher assesses the situation and sends an assistant or an emergency service to address the question, based on proximity and competencies. Emergency calls are now addressed better and faster, and there are substantial cost savings (an estimated €3 m per year). It seems so obvious now, but the hardest part was, in the very beginning to convince the care providers to collaborate. They were not immediately prepared to leave their own silos and give away some control; we had a hard time convincing them of the benefits it would bring. But we got them on board, and now the success speaks for itself. This project inspired the participants to join forces in a more strategic way, hence the creation of the Smarter Living co-operative.

#### *Did you manage to scale up the project?*

Yes. Last year, fifteen regional care institutions launched a shared service centre in which they bundle their IT services for distance communication and control. This generates substantial cost savings for the participating organisations (economies of scale in procurement and IT management), but the centre also helps to roll out innovations faster: new technology solutions (like new type of alarm alerts) can be implemented faster, and on a larger scale.

#### *What are the economic benefits?*

In any project we do, our first concern is the patient or citizen: does he or she benefit from the innovation. And we always involve people in the development of a new service (quadruple helix!). And, as I said, projects generate costs savings. But also, in a way, we 'organise the market' for technology suppliers (and we have many of them in our region). Now they can test and eventually sell new solutions to a large number of providers at once. Our regional economic development organisation, Brainport Development, is always looking for new businesses and ideas, and is very helpful on the business side.

#### *What would be your advice to cities that might want to create similar projects?*

Start small, build practical projects, with just a few forward-looking partners with clear common ground. If you go too big from scratch and invite too many stakeholders around the table, you might end up with endless discussions but little action. Especially when your aim is not clear. And if small projects are successful, parties will build a trustful relation, and you might extend the collaboration and scale up. At least, that is what we experienced. The city, as neutral partner, is well placed to take the initiative and connect the dots. Also, try to learn from other cities! It helps to get inspiration. Our partners in the URBACT 4D cities network gave us many good ideas on how to involve citizens in developing health innovations. We used that to set up a small-scale living lab in a local community here. ●



Source: Monique Frencke

#### MORE INFORMATION

- <http://www.slimmerleven2020.org/>
- [http://ec.europa.eu/research/innovation-union/pdf/active-healthy-ageing/partners\\_conf\\_slimmer\\_leven.pdf](http://ec.europa.eu/research/innovation-union/pdf/active-healthy-ageing/partners_conf_slimmer_leven.pdf)



# URBAN GREEN GROWTH: MYTH OR REALITY?

✍ By Stefan Anderberg\*



*'To create the most resource-efficient region in the world'. This is the vision of Tekniska verken, the municipality-*

*owned infrastructural company in Linköping, Sweden. It reflects the city's long-standing ambitions to be a 'forerunner in climate and environmental initiatives' and to support 'business-driven' environmental development, actively stimulating the development of a green economic sector. Linköping and the surrounding county of Östergötland are here used for discussing the development of the green economy in cities and regions.*

## THE GREEN ECONOMY: THE SOLUTION TO BOTH GLOBAL AND LOCAL PROBLEMS

Transformation to a 'green economy' has been launched internationally as a response to both the economic and the environmental crises (Bowen et al., 2009; UNEP, 2011). After the financial crisis, policy makers increasingly see that a shift to a resource-efficient low-carbon society could be a source of renewed growth, qualified jobs, and increasing social welfare as well as reducing environmental impacts and overexploitation of resources (Richardson, 2013; Gibbs and O'Neill, 2014).

Developing the green economy has often been presented as an opportunity for cities (Puppim de Oliveira et al., 2013). In Europe, the economic potentials of green technologies have been actively pursued since the 1990s via policies linking environmental policy to national and regional development strategies. Environmental investments, alternative energy and other sustainability projects have not only been introduced for improving the urban environment, but also for stimulating economic growth and competitiveness by developing competitive green technology sector and making cities and regions more attractive to citizens, tourists, and investors (Anderberg and Clark, 2013).

On all continents, cities have in recent decades introduced sustainability initiatives. In connection with recognised sustainable city forerunners such as Curitiba, Freiburg, Copenhagen, Portland, and Melbourne, it is often claimed that their efforts have had significant economic spin-offs. Despite this, there is surprisingly limited understanding of why some cities and regions appear more successful in developing the green economy, and creating green growth (Gibbs and O'Neill, 2014). Comparative analyses of green sector developments in different cities and their regional effects are lacking.

There is strong evidence that competitive green sectors are most developed where governments have integrated environmental and innovation policies, and successfully involved both public and private actors (Hamdouch and Depret, 2010). In Sweden, sustainable urban development and environmental technology have long been a strong focus for governmental environmental and innovation policies. Some Swedish cities e.g. Stockholm, Malmö and Växjö are internationally recognised as

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forerunners. Most major cities in Sweden can show similar developments, but only few can claim to be important environmental technology and innovation centres. Linköping is one of these few cities.

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## WHAT DO WE KNOW ABOUT THE DEVELOPMENT OF THE GREEN ECONOMY?

The current green economy agenda focuses on the development of green or clean sectors in the economy: renewable energy, sustainable transportation, green design and construction, ecological agriculture, and green water and waste management (Richardson, 2013). Such subsectors or developments in different sectors have traditionally not been covered by official statistics. However, there have been important developments during the last 15 years. Statistics Sweden (SCB) presents continuous environmental sector statistics since 2003<sup>1</sup>, and the EU has also introduced statistics for 'the environmental goods and services sector'. The output of this sector increased in the EU by 83% for 2003–2012, and employment grew by 41%, from 3.0 million to 4.1 million, which corresponded to 1.8% of the total employment in the EU. A survey of the 'clean economy'<sup>2</sup> in the USA 2010 (Muro et al., 2011) concluded that 84% of the green jobs were located in metropolitan areas, which gives some support for the view of cities as key locations for the green economy.

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## GREEN DEVELOPMENT STRATEGIES IN LINKÖPING

Linköping is the fifth largest municipality in Sweden (151,000 inhabitants) and the capital of the county of Östergötland (438,000 inhabitants), and forms together with Norrköping (135,000 inhabitants) the fourth largest metropolitan area in the country. The city has a university with strong technological

and environmental research, a knowledge intense industry and is one of the most important IT centres in the country. Linköping has grown continuously for decades and perceives itself as a dynamic and innovative city with a young highly educated population that expects the city to provide efficient services, and to be environmentally conscious. City development strategies build on the image of an innovative city, and focus on continued growth and providing good services, while being a sustainability forerunner.

While other cities often have introduced eco-city projects for renewing their image, sustainability initiatives in Linköping have been motivated by citizens' expectations, and the opportunity for the city to show its innovativeness and technical expertise. Resource-efficiency, business development, public participation and green procurement have been emphasised more than in other Swedish cities.

Governmental support, particularly via co-funding from the national investment programmes<sup>3</sup> during 1998–2012, has been essential for sustainability efforts in Swedish municipalities. Linköping used these opportunities selectively for established priority areas, and the projects were fewer, but more continuous, than in other cities. These projects included:

- Decreasing greenhouse gas emissions and use of fossil fuels (1999–2012)
- Launch and increase the use biogas as an alternative vehicle fuel (1999–2012)
- Sustainable transport, biking and public transport (1999–2004)
- Sustainable building, increasing energy efficiency (1999–2012)
- Cleaner urban waters (1999–2004)
- Nature conservation (1999–2004)
- 'Climate smart' lifestyles (2008–2012)

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1 The green economy consists in Swedish statistics of 13 sectors: air pollution control; wastewater management; waste management; soil and groundwater; noise and vibration; environmental consultants; education, research and monitoring; recycled materials; renewable energy; heat and energy saving; sustainable agriculture/fishery; sustainable forestry; and other resource management.

2 Defined as agricultural and natural resources conservation; education and compliance; energy and resource efficiency; greenhouse gas (GHG) reduction, environmental management and recycling; and renewable energy.

3 In 1998, 'The Green People's Home' programme was launched. It added environmental goals to the traditional welfare goals, and introduced investment programmes that offered co-funding for environmental investments in the municipalities. Two rounds of local investments programmes (LIP, 1998–2004), were followed by two rounds of climate investment programmes (KLIMP, 2004–2012).



Municipality-owned companies such as Tekniska verken and the housing company Stångåstaden have been important carriers of the green ambitions of Linköping. These companies were never privatised as happened in many other cities. Tekniska verken has played a role as system builder in connection with e.g. the regional biogas development (Fallde and Eklund, 2014). This started in 1994 as an experiment for solving problems of slaughterhouse waste and pollution from buses in the city. Today, all city buses in the county are biogas-driven using methane produced in bio-digesters that draw on several waste streams (Figure 1). This development has had spin-offs in terms of new companies, technology exports and the national biogas research center.

Many Swedish cities have long used their green profiles for marketing. Linköping has been more hesitant, but gradually the city has become more active in this respect. The marketing of the city's sustainability achievements particularly stresses the biogas development and the city as a hub for environmental technology and system development which is going to be shown at the planned Vallastaden eco-city expo in 2017.

Linköping and Norrköping work together to drive collaboration for strengthening the region. In the 1960s, they took initiatives for establishing the university, which today is an essential partner in regional sustainable development activities. In 2002, the regional development platform Ötsam was established by the 13 municipalities in the county for coordinating initiatives and developing the regional external relations. It has been crucial for joint sustainability initiatives and seeking EU funding. Cleantech Östergötland, the regional platform for environmental technology, is another important regional platform.

## THE GREEN ECONOMY IN LINKÖPING AND ÖSTERGÖTLAND

Östergötland markets itself as an environmental forerunner and a clean-tech center of national importance. This regional image is confirmed by

**Figure 1. Biogas plant in the Kallerstad area<sup>4</sup> (Linköping)**



Source: Tekniska verken

the statistics. In 2012, Östergötland had in relative terms 42% more employment and 70% more exports in the environmental sector than the national average. The employment in this sector increased 2003–2012 by 33% compared to the national average of 14%. Östergötland with only 4.5% of the Swedish population, contributed with a 1/7 of net national green job increase, and 10% of the increases of turnover and exports. During this period, the number of environmental sector workplaces in the region increased by 353 (54%), and the number of employees grew by 1,327 (42%). More than twice as many green jobs were added in Östergötland than in the five times more populous county of Stockholm.

Only the industrial service sector has in recent years experienced faster growth than the environmental sector. Despite this growth, the green sector is only responsible for 2.3% of the total regional employment. Waste management, renewable energy, recycled materials constitute the most important parts of the sector, followed by environmental consulting, and education, research, and monitoring. There are many small companies (>1,000 workplaces) in the region, but municipal companies are responsible for 60% of the employment, which is dominated by the big cities, particularly Linköping. In relative terms, the sector is most important in medium-sized city municipalities, and least important in the most rural municipalities. The work force is very male-dominated, relatively old and the

<sup>4</sup> The biogas plant in the Kallerstad area in Linköping produces biogas from food and slaughterhouse waste. It also upgrades biogas from digesters at the city wastewater plant to vehicle gas. Nutrient-rich bio fertilizer that replaces chemical fertilizers in agriculture is received as a by-product.



educational level is rather low, despite the importance of consulting and education and research in the region.

Despite the strong development of the green sector in Östergötland, its future seems rather uncertain. The visions of green growth and increasing environmental exports have been only partially realised. The markets have expanded nationally and internationally, but the development of the green sector is still much more dependent on the region, and on national regulations, investments, subsidies, and export promotion than other industrial sectors. Uncertainties concerning regulations have in recent years negatively influenced the development of renewable energy and recycling.

## CONCLUSIONS

Great hopes are connected to the 'green economy'. Transformation to a 'green economy' is not only expected to solve urgent environmental problems, decrease dependency of scarce resources, and mitigate climate change, but also to create a new dynamic sector of the economy that substantially can contribute to renewed economic growth and qualified jobs in cities and regions.

It is difficult to systematically analyse the green economy since the concept is both diffuse and dynamic, and statistics are still not fully stable and reliable. There is no doubt, however, that the green sector in many parts of the world is growing as a result of important investments in renewable energy, waste management and pollution control. Even if its influence on regional economies is not restricted to the sector itself, the importance of the green sector is, however, still fairly limited in Europe, and a real transformation to a green economy seems distant also in regions with a strong and dynamic green sector.

Linköping and Östergötland exemplify a successful regional development of a dynamic green sector in a country that has long supported development of the

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**Great hopes are connected to the 'green economy'. Transformation to a 'green economy' is not only expected to solve urgent environmental problems, decrease dependency of scarce resources, and mitigate climate change, but also to create a new dynamic sector of the economy that substantially can contribute to renewed economic growth and qualified jobs in cities and regions.**

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'green economy'. The region can both show significant resource-efficiency increases and related economic development. As a wealthy high education, research and technology center, Linköping had advantageous preconditions for developing environmental technology but without a stable focus and strategy building on the city's particular assets and experiences, patience and regional mobilisation of committed regional actors, the development of such a strong green sector would hardly have taken place.

However, this example also raises questions about the realism of the visions of green transformation and growth, and the future

potentials of the green sector. Despite successful development of the green sector, contributions to regional growth, and particularly to employment still seem fairly limited. The educational level in the environmental sector is also surprisingly low, considering the significant consulting and research in the region. Despite impressive growth of exports, the green sector is still dependent on its home region as major market, and its future seems still dependent on national support in terms of investments, subsidies and promotion of exports.

If expectations are more modest, the Linköping case can be interpreted more optimistically. Cities may have very different and less advantageous preconditions, but they still have potentials of developing a green economy that contributes positively if they use and build further on their particular assets. The Linköping experience also suggests that medium-sized cities and regions may have advantages in terms of mobilisation, creating networks and build systems for creating favourable conditions for green business development. It also shows that a consistent strategy focusing on selected areas, where cities and regions are strongly involved and can make long-term commitments, is essential for the development of the green economy. ●





# WILL ON-GOING ENERGY TRANSITIONS LEAD TO NEW URBAN ECONOMIES?



Interview with [Peter Schilken](#)  
Senior Project Manager at Energy Cities,  
the European association of local  
authorities in energy transition.

 Interviewed by [Luís de Carvalho](#)

Core group member of the URBACT  
workstream 'New urban economies'

*Despite the common wisdom, energy issues are not only in the hands of national governments and transnational utility companies. Local governments can do a lot, and stimulate new economic activity in the process. To explain how, we spoke with Peter Schilken, Senior Project Manager at Energy Cities, the European association of local authorities in energy transition.*

*How can on-going energy transitions create new economic activity in cities?*

There are a lot of activities that can be created at the local level. One way is through the decentralisation of the energy production. There is a big market for local energy companies (if national laws allow for that). They could be private companies, co-operatives or mixed public-private structures, but, importantly, they would use local and regional energy sources: renewables, but also waste heat, and all done in a more efficient way, e.g. through the use of co-generation. Monopolists will not like these new businesses but I think time is in favour of these changes. I see this in Germany, with an impressive increase in the number of energy co-operatives by citizens who produce energy from renewables, and are also engaged in energy saving activities in schools and in other buildings.

Another market is certainly energy efficiency activities and building renovation. It already creates lots of activities on the local level. Craftsmen will not come from hundreds of kilometres away; insulation materials or the boilers may come from elsewhere but there is always the work that has to be done on-site and that will create jobs. For example, the city of Hannover in Germany has a funding programme for building renovation, construction of passive houses, renewable production, etc., and what was amazing was that the most effective part of the programme was precisely about building renovation, namely because of the high leverage effects. It has been estimated that each euro invested in the programme generated €18, and the average of the whole programme was €12. Another observation from this case was that most of the money stays in the city and region, and this will be similar for other cities in Europe.

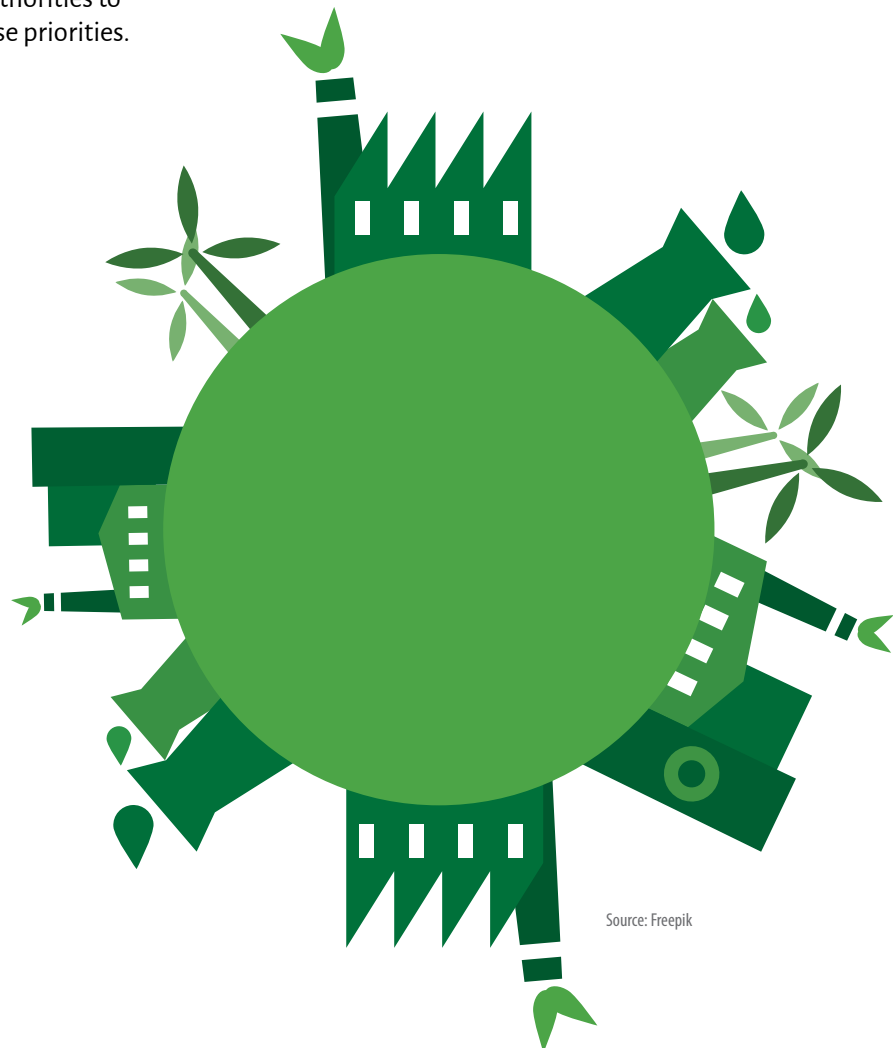


*What can local governments concretely do to support that process? Which kinds of initiatives and actions are in their hands?*

They can stimulate the market. One example is through the renovation of their own buildings. The European Energy Efficiency Directive is requesting governments to act as models for citizens and the society as a whole. But they also encourage local energy production. Local governments can organise round tables on these issues, they can bring together local actors, they can take shares in co-operatives, etc. What is more problematic is to show that this is the way forward. Budget restraints, fuel poverty and social cohesion are high priorities in most cities, however they often don't realise that as soon as you can provide 'good houses' with reasonable rents and lower energy costs the better it is, and the energy renovation of buildings is key here. So you can foster social cohesion and at the same time create jobs at the local level through renovation activities. The 2014–2020 Structural Funds will allow local and regional authorities to spend money on these priorities.

*Can you see big differences across European cities in linking energy transitions with economic activity?*

Absolutely, I see big differences. It is sometimes frustrating to see the small capacity of some cities to deal with the situation, especially in the countries that are most affected by the economic crisis. Local governments tend to have very tight budgets and no money to stimulate energy renovation activities, or the staff to coordinate these initiatives. It will be an important challenge for the Structural Funds to provide local authorities with enough money to stimulate the local economy through renovation and decentralised energy production. If this remains in the hands of few (multi)national companies it will have no effect on the local economy. ●



Source: Freepik



# THE 'COLLABORATIVE ECONOMY' IS OFTEN PRESENTED (OR EVEN HYPED) AS A MORE BOTTOM-UP AND SOCIAL MODEL OF LOCAL ECONOMIC DEVELOPMENT. BUT IS IT?

 By Emma Clarence\*



*Sharing. It is something people and communities have been doing for millennia. And it is currently capturing the attention of*

*policy makers. Enthusiastic, sometimes spilling into hyperbolic, claims have been made about what the sharing or collaborative economy can do for local communities and economies. In particular, there has been an emphasis on the way in which the collaborative economy can create a more inclusive, bottom-up approach to local economic development. **However, it should also be recognised that there are less positive potential directions for the collaborative economy to take.** Examining what the collaborative economy is, and some of the claims made for it, can help cities understand what it means for them and how it can be supported to create stronger, more inclusive, communities.*

## WHAT DO WE MEAN BY COLLABORATIVE ECONOMY?

There are many different terms currently in use for what is currently happening – including 'sharing economy', 'collaborative economy', 'access economy' – the list goes on. Understanding what is meant is important. But it isn't necessarily straightforward as there is no uniformly shared meaning. At the same time, the collaborative economy is still very much in its infancy. What we understand today, and the types of companies and organisation we identify as being part of this phenomenon may not be the same in a few years time.

Central to the idea of the collaborative economy is that of connecting people (physically or virtually) to make better use of goods or skills. It's about unlocking the value of 'idle', or underused, assets. Examples of such assets include:

- space (an empty garage or a spare bedroom)
- items we have accumulated (clothes, toys, tools, books, etc.)
- transport (a spare seat in a car on a particular journey, or an entire car not being used)
- finance (peer-to-peer lending, crowd-funding, complementary currencies)
- knowledge and skills.

\* Emma Clarence is co-author of Nesta's report (2014), 'Making sense of the UK collaborative economy', available at <http://www.nesta.org.uk/publications/making-sense-uk-collaborative-economy>



Source: Freepik

The internet has driven the development of the collaborative economy by enabling the value of assets to be unlocked amongst a wider group of people. No longer do you need to know someone in New York with a spare room to stay in on holidays, Airbnb (or some other platform) can help you find one. The internet can help you find something locally, with apps like Peerby matching people who need to borrow something, such as tools, with someone in their neighbourhood who has it. It can link people together who want to swap their skills or connect people who want to design or produce goods together.

What the collaborative economy emphasises is having access to something rather than owning it. In this vision the term 'sharing economy' can be confusing. Sharing doesn't necessarily expect much in return. **If I ask: 'do you want to share my sandwich?', I'm not expecting you to pay for it.** Sharing has ideas of reciprocity but it generally doesn't include a financial transaction. And many of the activities that are identified as part of this phenomenon involve financial transactions – from renting a bike in London, to finding a car-ride in France – money will change hands. It is for reasons like these that terms such as 'collaborative consumption' and 'collaborative economy' have been adopted by some commentators – with the idea of including assets shared through non-monetised transactions.

Whatever the term used, at its most basic the key characteristics of the collaborative economy centre on the role of the Internet in linking people to idle

assets. Accompanying this, have been wider ideas as to what the collaborative economy can do, such as build and maintain trust between people, and create more inclusive communities. However, it is important not to see these as the goals and aspirations of all collaborative economy companies and organisations. It is clear that the label collaborative economy is a very broad one, applied to a range of different types of activities – from international for-profit companies to small-scale community organisations.

Nor is it only 'upstarts', such as Airbnb (founded in 2008 and in late 2014 valued at USD13 billion), and start-ups that are seeking to be disruptive in this space. There is growing interest from 'traditional' companies eager to access the markets developing as part of the collaborative economy. For example, car rental company Avis bought the car share club Zipcar in 2013 as it was seen to be complementary to its traditional business activities. BMW has launched a car club, DriveNow, in partnership with Sixt car rental firm in cities in Europe and North America.

Such diversity highlights some of the challenges faced by cities and governments when thinking about how to support the collaborative economy. It shouldn't be presumed that all collaborative economy companies and organisations have the same reasons for operating in the space. Some may see it as a new business opportunity, whilst others may focus on the environmental benefits or building stronger communities. This is why the idea of a single collaborative economy can be unhelpful when it involves putting international, for-profit companies like Airbnb and locally based not-for-profit organisations into the same categories. For cities keen to explore how the collaborative economy can be supported, and regulated, it will be important to recognise the plurality of motivations and goals, and not to take a one-size-fits-all approach.

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## WHAT CAN THE COLLABORATIVE ECONOMY DO?

There have been a lot of claims made as to what the collaborative economy can do for individuals, communities and cities. Environmental gains, increased jobs, higher levels of entrepreneurship, empowered individuals, more inclusive economies and stronger



communities are some of the claims that have been made. But these should be viewed as possible rather than assured. **The collaborative economy is not a solution in itself to the challenges cities confront.** It might be part of the way in which those challenges are addressed, but it is not a quick-fix. At the same time, it is important that the negative potentialities of the collaborative economy are not overlooked.

Environmental gains have long been claimed as a positive outcome of the collaborative economy. Reducing ownership in favour of access, and selling or giving away no-longer wanted goods, has the potential to reduce waste. For example, the growth of car clubs is already showing positive evidence for a reduction in car usage. In the UK, Croydon Council replaced their fleet of cars with exclusive access to car sharing vehicles that were then made available to local residents outside of working hours. Carbon dioxide emissions declined, as did costs – highlighting a double benefit for the Council and its residents. In the US, it has been estimated that each car-sharing vehicle reduces by between 9 and 13 the number of cars on the road.

In the current labour market climate, it is unsurprising that any area with job creation potential is heralded. And the potential of collaborative economy companies and organisations to create opportunities for people, either as employees or micro-entrepreneurs, should not be ignored. There are already platforms offering task-based employment opportunities for individuals, and the collaborative economy more generally is creating jobs in a range of different sectors. But it is not a short-term solution. There is job growth potential but it is not at the scale, or speed, needed to address the levels of unemployment currently seen in many parts of Europe.

And we also need to question the types of jobs, and labour market conditions, that can be created within the collaborative economy. The ability for people to become micro-entrepreneurs with the flexibility they want in their employment, has been one of the positive claims made for the collaborative economy. But it also has a potential negative outcome. Flexibility could easily become precarious employment and low wages a feature as people compete for work. At the same time, protections such as health and safety and pensions may be unavailable to micro-entrepreneurs. Limiting such possibilities

will be important if the collaborative economy is to provide decent employment opportunities.

The presentation of the collaborative economy as providing additional income to those who need it most, such as low-income individuals and families, raises some difficult questions about decent pay. Whilst this subsidising role might be true – it obfuscates wider debates about the need for wages that provide enough for people to live on. Ideas of empowered individuals and bottom-up, more social, local economic development seem a long way from this scenario.

**At the centre of the collaborative economy is the idea of ‘sweating’ extra value from idle assets. But what if you don’t own assets?** If the collaborative economy enables those with assets to increase their income, whilst those with fewer assets are left behind then the idea of stronger, more inclusive communities created by the collaborative economy will be little more than an aspiration. Will the collaborative economy simply replicate long-standing inequalities? This isn’t just about the impact on individuals and families; the negative impact of income inequality on long-term economic growth has been highlighted by the OECD. Thinking through wider assets that exist within communities, and the way in which they could be used to benefit people, is one way of seeking to reduce the replication of inequalities.

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## WHAT CAN CITIES DO?

Cities cannot ignore the collaborative economy. But there does need to be a conversation within cities as to what type of collaborative economy is wanted and how cities can help it develop and become sustainable. Many cities are already engaging with collaborative economy. From agreements with individual companies to a wider commitment to becoming a ‘Shareable City’, cities are seeking ways to support – and regulate – the collaborative economy appropriately, and harness its positive potential.

In Amsterdam, the City Council and Airbnb have come to an agreement about the way in which short-term holiday lets take place. Only primary residences can be listed and Airbnb will collect and remit tourist tax. Such agreements lend support to the idea of the collaborative economy, clarifying responsibilities whilst also promoting the benefits of participation.



But it isn't just through agreements with companies that cities can act. Cities themselves have a wide-range of opportunities to support the development of the collaborative economy.

Support can come in many forms. Assessing how current regulations and licensing impact on collaborative economy activities, using planning to promote car sharing through the provision of parking spaces, providing information to the public on the collaborative economy and opportunities within their area to participate, are all important steps. But if cities want to support the collaborative economy to create inclusive economies then they will

need to participate directly. By linking public assets into the collaborative economy cities are also offering those with fewer assets opportunities to benefit.

**Cities will also need to think small.** The big companies and organisations are important, but so are locally based not-for-profit organisations. 'Social Streets', which started in Bologna (Italy), brings people on the same street together to share what they need. These sorts of activities aren't going to necessarily create jobs, but they are going to build the inclusive, resilient communities that are so crucial to successful cities. If the focus of cities is only on the direct local economic potential of the collaborative

## FOOD FOR THOUGHT: CITIZENS AS 'PART-TIME' ENTREPRENEURS

 **By Willem van Winden**

*Co-ordinator of the URBACT  
workstream 'New urban economies'*

**In a growing number of economic branches, citizens are becoming more active, as part-time producers, service providers, suppliers or even entrepreneurs. They compete with traditional companies, but often operate through new business models.**

Here is a list of industries where citizens have become more active, and some examples:

- **BANKING:** Crowdfunding and peer-to-peer lending has grown very fast in recent years. Banks are by-passed by sophisticated online platforms that enable anyone to do so.
- **CAB DRIVING:** Through uberPOP, any citizen with a driving licence may become a cab driver and earn some extra money (unless the judge decides otherwise...).
- **CAR RENTING:** By joining SnappCar platform (or similar ones) anyone who owns a car can rent it out when it is not being used and earn some extra money.

- **HOTEL & ACCOMMODATION:** Airbnb makes it very easy for anyone with a spare room, an apartment or house to rent it out.
- **MANUFACTURING:** In many cities, 'community maker spaces' have opened, where citizens can design and make products, fuelled by the maker movement, the culture of hacking and Do-It-Yourself (DIY). In the FabCafe<sup>1</sup> (Barcelona) for example, citizens can use machines and 3D printers to make products, and there are all sorts of training courses, seminars and events to connect 'maker enthusiasts'. In Holland, repair shops have opened to repair household electrical goods as an alternative to throwing them away.
- **FARMING:** Urban farming has become a trend in the last years. Most citizens that do urban farming produce only small quantities for their own or community use, others sell their surpluses.
- **RESTAURATION:** Homecooks can sell their meals to neighbours using online platforms<sup>2</sup>. Pop-up restaurants exist for short periods based anywhere from homes to car parks.
- **ENERGY:** An increasing number of European citizens are in the energy business: they have solar panels on their roofs, and sell the surplus back to the network (which itself, in more and more cases, belongs to the community). In Germany, a frontrunner in this field, there were 888 registered renewable energy co-operatives by the end of 2013, and 90% of their members were individual citizens (Julian, 2014).
- **RETAIL:** Citizens buy and sell to each other using online platforms: on ebay and craigslist, but also national sites like Subito (IT), Marktplaats



economy, much of the important, longer-term developments such as strengthened social capital that underpin what makes cities prosper will be missed.

The collaborative economy is young and it's still developing. Traditional ways of doing business are being disrupted by collaborative economy organisations – and we might also see traditional models of business disrupted as people turn to more mutual business forms, such as co-operatives and associations, to create inclusive collaborative economy businesses. But the collaborative economy will not necessarily make cities more resilient, trusting and inclusive. In some versions,

collaborative economy organisations and companies actively seek to build those attributes within cities. But they are not part of the DNA of every collaborative economy organisation and company.

The potential of the collaborative economy to create stronger communities and cities is real, but it is not a short-term fix to the challenges cities face. ●

(NL). The barter economy is also growing through forms of alternative currency and old favourites like flea markets have shown a renaissance during the crisis years.

## QUESTIONS & DILEMMAS

The list can be extended. Many of the most dynamic entrants have emerged around new digital platforms; others are born out of necessity as resilient responses to the economic crisis. Many commentators agree that this type of entrepreneurship is growing, and will continue to do so. Jeremy Rifkin even speaks of a shift “from hierarchical to lateral power that will impact the way we conduct business, govern society, educate our children, and engage in civic life”<sup>3</sup>.

But all raise a number of questions that are largely unanswered:

- Regulation: should entrepreneurial citizens be subject to the same strict regulations – think of demands on workplace conditions, quality control, food safety and health and safety rules etc. – as the traditional companies with which they compete?
- Consumer Rights: What rights do consumers have when things go wrong?
- Taxation: to what extent should these citizens be treated as businesses and pay business taxes (VAT, taxes on profits, and tourist taxes)?
- What are the longer-term implications for urban labour markets? New jobs and incomes are generated but older sectors may be

placed under threat (e.g. taxis and hotels).

- What do cities know about what happens in their own city in these fields?
- Should cities empower their citizens to become part-time entrepreneurs? ●

## REFERENCES

*OuiShare is a global community and think and do-tank. Its mission is to build and nurture a collaborative society by connecting people, organisations and ideas around fairness, openness and trust. In 2014, OuiShare launched 'Sharitories', aimed at helping local governments seize the potential opportunities offered by the collaborative economy.*

More at:

- <http://magazine.ouishare.net/2015/01/sharitories-look-at-your-territory-with-new-eyes/>
- [http://ouishare.net/en/about/collaborative\\_economy](http://ouishare.net/en/about/collaborative_economy)

1 <http://fabcafe.com/barcelona/fab>

2 For example [www.shareyourmeal.net](http://www.shareyourmeal.net)

3 <http://www.thethirdindustrialrevolution.com>



# ECONOMIC INTELLIGENCE FOR CITIES: STRATEGIES AND PITFALLS

✍ By Willem van Winden  
and Luís de Carvalho\*

## WHY CITIES NEED ECONOMIC INTELLIGENCE

*The economies of Europe's cities are changing fast, and it is not easy to predict which segments of the local economy will grow and which ones will decline. Yet, cities must make decisions as to where to invest, and face a number of questions that are difficult to answer: Where do we put our bets? Should we go for biotech, ICT, or any other sector that may have growth potential? Do we want to attract large foreign companies, or rather support our local indigenous smaller firms, or must we promote the start-up scene? Or is it better not to go for any particular industry but just improve the quality of life in the city, hoping that this will help to retain skilled people and attract high tech firms?*

To answer these complex questions properly, the relevant city managers must have thorough and deep knowledge about the local economy. Each city is unique and has its own particularities and specific

growth opportunities. Also, city managers need to understand how global and national economic trends will affect the city's economy. From where and how do they get their management information?

To avoid mistakes and find real clues about what is really happening in their economies, cities must make their own analysis. For this, they need 'economic intelligence', which can be defined as smart information system in order to know, understand and anticipate the outside environment<sup>1</sup>. How can cities do this? How to make sure to have the right knowledge and information as a basis for adequate policy decisions? Across Europe, cities deploy several strategies. In this article, we present some tools, techniques, practices and insights.

## DATA, DASHBOARDS, OBSERVATORIES

A simple and relatively cheap way to obtain economic intelligence is to collect available statistics and present them in a systematic way. An increasing number of cities and regions have set up 'economic dashboards', consisting of key indicators that show how the economy is doing, through time and in comparison with other cities.

**San Diego's** fairly basic regional economic dashboard uses 20 different metrics to track the region's standing among the 25 most populous U.S. metropolitan areas<sup>2</sup>. It measures basics like unemployment rate, GDP, exports, patents, and venture capital investments in the region. For each indicator, the dashboard shows how the city ranks compared to its competitors. So, each year, San Diego knows where it stands among other metro areas. Note that the economy does not stop at the borders of the core city: it is important to collect data at the metro level and not just for the administrative districts of the core city.

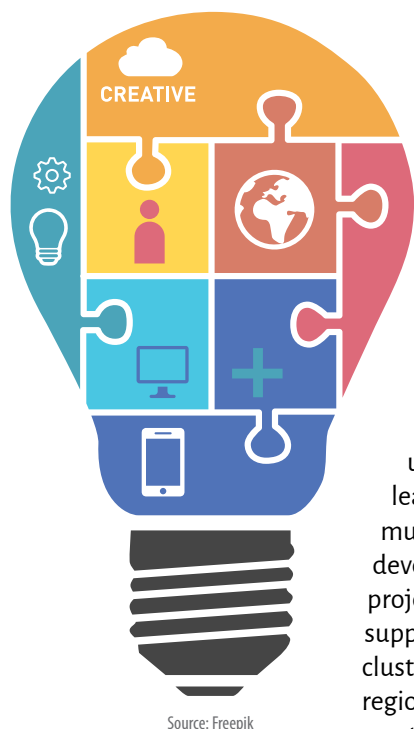
**Amsterdam** goes one step further: it also measures more specifically how its target economic clusters are developing. Its dashboard was developed in the context of a joint initiative of many institutions in the

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1 <http://lexicon.ft.com/Term?term=economic-intelligence>

2 <http://www.sandiegobusiness.org/research>





Source: Freepik

region. To boost the region's competitiveness, partners in the region installed an 'Economic Board', in which actors from the triple helix (city, universities, business leaders, surrounding municipalities) together develop policies and projects. The Board supports eight target clusters in which the region stands out and wants to become top

in Europe: creative industries, ICT, life sciences/health, horticulture/agrifood, tourism, finance/business services, logistics and high tech materials. The Board set up a dashboard that shows general economic data about the region and benchmarks it against competitors (comparable to the San Diego case). But also it measures each cluster's economic performance (employment, turnover, number of start-ups etc.), and shows how many projects are going on in each cluster, how much funding they receive, and how many actors from the triple helix are involved, how many cluster meetings were held, etc. In this way, the dashboard gives an indication on how the cluster communities are evolving. Moreover, it quantifies the progress of the region in a number of cross cutting 'key themes': knowledge & innovation, human capital, international connectivity, and general business climate. It assesses how each cluster contributes to these themes.

## THE ART OF INTERPRETATION

Collecting statistics is important and relevant, but what do the data actually mean? And what are the implications for policy? The same numbers may give rise to different opinions and interpretations. With this in mind, the city of **Tampere** in Finland developed a new innovative intelligence approach as a basis for policy decisions. Bi-annually, the city creates what it calls a 'situational picture'. Comparable to the previous examples, a dedicated team collects and structures the relevant and available data (based on readily available statistics, but also annual reports, city rankings and several other sources) on the state of

the regional economy, with a focus on its innovation potential. Data are collected in a six key areas: R&D funding, growth companies, higher education institutes, innovation platforms, internationality, and business environment. For each of these six areas, spider diagrams are drawn, showing how Tampere is faring compared to the previous two years. Each indicator gets a colour: green, indicating growth or progress, or red, meaning stagnation or decline. This renders a very visual picture showing where there is progress and where the city region is falling behind.

So far, nothing new: many cities do this. But then comes the interpretation part: what do the data actually mean? What are the causes of growth and decline, and what could – and should – be the policy implications? It is here that Tampere takes the next step: the data is discussed collaboratively, in a series of meetings with key players from different backgrounds: government officials, investors, employees of large firms, entrepreneurs, and academics. In a structured way, the participants discuss and interpret and contextualise the data, bringing their specific experience and particular backgrounds, and add additional qualitative information. This is a smart way of collecting intelligence that really 'makes sense', involving a diverse group of local experts who are not only knowledgeable in their specific field but also committed to the future of their own city. The process generates thorough insights into the state of the Tampere region that are helpful to support regional decision making.

## GO OUTSIDE, TALK TO PEOPLE, AND FIND OUT ABOUT THE NEWEST DEVELOPMENTS

Economic intelligence requires smart information management in order to know, understand and anticipate the external environment. A key (but somewhat less conventional) strategy for urban managers is to leave the office, and collect intelligence first hand: by talking with company managers, investors, entrepreneurs, start-ups; by visiting meet-ups of local business clubs and associations, going to conferences, etc. These are the places and events where business people exchange and share information, where they discuss the new trends they see, and how they plan to respond, but also how they perceive the qualities and opportunities of the city, or particular locations.



This type of inside knowledge, information and ‘gossip’ cannot be found in any statistics, but is very relevant for urban economic policy makers, so they should better be around. As Joep Brouwers, vice-director of Brainport Development (**Eindhoven**’s economic development organisation) puts it: “I am happy when many desks here are empty: it means that our staff are somewhere in the city, listening to what’s going on”. This way, Brainport is able to spot emerging economic trends and opportunities for the region in an early stage, and to respond if needed. Also, Brainport’s ‘outgoing’ orientation and culture helps to build trust between companies and Brainport.

The city of **Dublin** learned – the hard way – to listen carefully to the stakeholders before making investment decisions. Some years back, the city planned new hotspots for innovative companies, without fully understanding the needs of these companies. As Jamie Cudden, working for the Dublin City Council, says: “We did not collect intelligence. We thought that we, the city planners, knew well what businesses would need. But we were wrong: firms were not very interested in ‘our’ developments and moved to other locations in the city: so we ended up always choosing locations that nobody wanted”.

Since, the council has learned its lesson: when developing new business locations, it closely involves the end users in the process: the city organises sessions where firm representatives are heard.

## A FINAL WARNING

Going out to consult companies, and involving them before making decisions is a good approach. But there are risks in the approach and pitfalls to be avoided. First, there is the temptation of listening mainly (or even only) to the bigger and more influential companies. They are easy to spot, know their way into the city hall and have contact with key political decision makers. However, they do not necessarily have the best ideas for economic development policy. To detect new economic opportunities, cities must reach out to a wider spectrum of economic actors, including small companies in emerging industries, “almost like a social worker reaching to difficult youth” as Mr Brouwers put it.

Second, companies will defend their own particular interests, so city managers must keep a critical attitude. It is evident that the self-interest of particular companies or sectors may not always coincide with the interest of the city as a whole. Declining industries and organisations have an extra reason to ‘engage with policy’ (read: lobby for support). A classical case from the 1970s and 1980s is the German Ruhr area, where the old boys network of declining heavy industries (well organised and politically very influential) managed to secure massive state aid, hindering the necessary re-orientation of the region towards new growth opportunities. ●

### INTERESTING LINKS

- **Urban Audit database (Eurostat):**  
<http://www.eea.europa.eu/data-and-maps/data/external/urban-audit-database>
- **The OECD Regional Database** provides a unique set of comparable statistics and indicators on about 2,000 regions in 34 countries. It currently encompasses yearly time series for around 40 indicators of demography, economic accounts, labour market, social and innovation themes in the OECD member countries and other economies.  
<http://stats.oecd.org/Index.aspx?Datasetcode=CITIES>
- **The OECD Metropolitan Database** provides a set of economic, environmental, social and demographic estimated indicators on the 275 OECD metropolitan areas (functional urban areas with 500,000 or more inhabitants).  
<http://stats.oecd.org/Index.aspx?Datasetcode=CITIES>
- **The Brookings Institute** has a ‘global metro monitor’ with economic data on the world’s 300 largest metropolitan areas.  
<http://www.brookings.edu/research/reports2/2015/01/22-global-metro-monitor>



# ARE EUROPE'S NEW URBAN ECONOMIES GOING TO GET YOUNG PEOPLE BACK TO WORK?



Interview with  
[Alison Partridge](#)  
co-ordinator of the  
URBACT workstream  
'Job generation for  
a jobless generation'

Interviewed by  
[Willem van Winden](#)

Co-ordinator of the URBACT workstream  
'New urban economies'

*URBACT's 2014–2015 capitalisation work on youth employment, workstream 'Job generation for a jobless generation', has focused on what can cities do to grow jobs for young people.*

*Your workstream is about what cities can do to grow jobs for young people. What are your key findings and messages?*

First and foremost, jobs for young people is all about the economy - at a basic level cities need to improve conditions for competitiveness, and develop and sustain a balanced economic structure by both attracting new investors and developing indigenous businesses. This was the central message of URBACT's More Jobs Better Cities work in 2012/13. This time, with a focus on young people, one of the key messages is that the labour market is changing, and young people now need a different skills set to cope with it. Nine-to-five fixed contracts have become the exception. Whatever the reason, the results are clear: in more and more parts of the labour market, jobs are flexible and insecure. So maybe young people need at least a certain minimum of multiple, cross-cutting skills to find their way; perhaps they will need to develop

an entrepreneurial attitude, and build 'portfolio of projects'. The 'Job generation for a jobless generation, URBACT II capitalisation, April 2015' publication includes an interesting presentation of this labour market hybridisation and some pointers on how cities can help young people to adapt. Examples from Tampere and Wroclaw point to the importance of entrepreneurship education irrespective of whether young people want to start their own company or take a more traditional employment route.

Cities also need to better understand the problem. The education system in too many cities is not prepared: most schools and universities offer training for a specific job or sector, and hardly teach these more transferable skills. Teaching seems to be based on the assumption that the student will work in a particular job or industry for the rest of his/her life. So in a way we are lining up young people for failure! Youth unemployment is one of Europe's biggest problems.

*Would it help to put more emphasis on promoting urban economic growth and innovation?*

Well, it may help some but certainly not all. We see an increasingly polarised labour market. The upper part of the hour glass is doing fine. Here we have innovative companies, knowledge-intensive jobs,



high salaries. This segment also includes successful start-ups, created by entrepreneurial and resourceful young people that manage to take the future in their own hand and build their own company. It seems that this level benefits most from innovation stimulation policies. At the bottom, we have an army of flexible, precarious and poorly-paid jobs in cleaning, catering, personal services etc. The middle range in-between is increasingly being hollowed out, as a result of outsourcing, digital technologies, robotisation, organisational innovations etc. The problem is that for most youngsters, graduates or not, it is very hard to move upwards, and many of them risk to stay at the bottom for too long.

*What can cities do about this?  
Could the triple helix concept help?*

Cities can actually do a lot, but only when they manage to collaborate effectively with other stakeholders in a triple helix type relationship: schools, employers, universities. They can help address the mismatch between demand and supply on the local labour market, promote entrepreneurship, create spaces and places for connections and improve skills (read the 'Job generation for a jobless generation,

URBACT II capitalisation, April 2015' publication). The city of Debrecen in Hungary, partner of the URBACT ESIMeC network, is a good example. This city set up an award for young entrepreneurs, it managed to have IT companies deliver lectures at schools, and it organised a 'superclub' where employers could meet ambitious young people in an informal way. Cities can also support manufacturing industries that have difficulties to attract talent due to an image problem. Igualada, Lead Partner of the URBACT 4D Cities network, is a good example many local people still think the textiles jobs in Catalonia are boring and poorly paid. But in fact, this sector has changed dramatically; it has become much more creative and dynamic and is providing quality job opportunities for the city's young people. ●

**MORE INFORMATION**

→ **Job generation for a jobless generation, URBACT II capitalisation, April 2015:**  
<http://urbact.eu/capitalisation-and-dissemination>



Source: Freepik



# 'NEW URBAN ECONOMIES': CHALLENGES AHEAD

 By Willem van Winden and Luís de Carvalho\*

*Europe's urban economies do not look the same as ten years ago. And in ten years from now, they will again be different. The digital revolution is particularly disruptive: entire sectors are being transformed, old players are losing out, newcomers are taking over, and competition is fiercer than ever. At the same time, citizens are not just workers in companies, but many become independent entrepreneurs, and active producers.*

*Innovation is becoming open, involving interaction between companies, universities and users. Working, living and recreation become intertwined in place and time.*

In a growing number of industries, companies need to innovate to survive, and they can only do so when they have dynamic people in the right positions and when they work with others. In this context, cities must become effective 'innovation ecosystems', places where people and companies meet, exchange, learn, collaborate and get inspired. Places that make most of their own resources: their people, their inherited natural and cultural assets. This sounds great, but is very hard to achieve, especially for cities that do not start from a pole position.

This publication has provided many illustrations of the economic changes that cities face – highlighting the dynamics in digital, health and care, 'green' and collaborative economies – new opportunities that arise, and new approaches that may drive change in traditional urban economic policies. Table 1 summarises the shifts advocated and illustrated.

## WHAT CAN CITIES DO TO PROMOTE 'NEW URBAN ECONOMIES', TODAY AND IN THE LONG TERM?

Table 1 shows a sharp distinction between a traditional approach and a new-style economic policy. Many cities sit in the middle, in a transition process, seeking to adapt their approaches. We are well aware that City Hall and its policy making procedures will not change overnight. What we advocate here is a process of gradual change in the way economic development policies are designed and implemented. We consider this essential to strengthen the urban economy and enhance its resilience in the face of rapid economic change. Our suggestions may also provide ammunition for EU policy frameworks to strengthen the urban dimension of the EU2020 strategy, magnifying its impacts in cities and urban economies; but the action must come from the cities.

So, what can cities do, what should they avoid, and where should they let go? Here is some advice:

### **Turn your urban challenges into economic opportunities.**

Improving local care systems or greening the city are key tasks for many European cities. Think how to involve local companies, and create new markets and job opportunities around it. This is the best way to combine economic growth with inclusive and sustainable growth. Recognise that not every project can be inclusive, smart and sustainable. Taken together all the actions should be heading in this direction.

**Refrain from picking winners.** Instead of supporting trendy sectors that show great growth prospects worldwide (but not necessarily in your city), try

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**Table 1. Shifting approaches: traditional vs. new urban economic policy**

TRADITIONAL URBAN ECONOMIC POLICY	NEW URBAN ECONOMIC POLICY
City focuses investment on high profile iconic buildings, business parks and incubators	City facilitates innovation platforms among different players
City has a stand-alone economic development strategy	Economic strategy is linked to urban planning, social and environmental policy
City picks winning sectors	City facilitates new linkages between sectors around transversal themes
City managers design economic policy in-house and rely on consultants	City managers engage deeply with local stakeholders and find a direction together
City bases its decisions on hunches, general statistics, policy trends and what big company bosses say	City has a fine grained 'economic intelligence' in place, involving a wide range of sources
City plans technology parks as secluded locations	City facilitates mixed innovation districts combining multiple functions
City focuses on attracting inward investment and attracting people from outside	City works with its business sector and tries to maximise existing human resources, combining them with external-to-the-region competences
City managers work from '9 to 5' at their desk in city hall	City managers are out in the city, listening to and engaging with stakeholders

to foster linkages between new growth domains and the endogenous skills and qualities that you have in your city. Connecting missing links between local industries and new activities (inside and outside the city) can do a lot more than supporting new sectors from scratch. Avoid labelling the city as a 'creative city', a 'science city' or a 'maker city' unless there is a lot activity on the ground, initiated and carried by local communities and stakeholders.

**Hack the education system.** Universities and schools are slow to change their curriculum, and they are not naturally oriented to the city (but rather to the national ministry of science and education). Mobilise individual professors, researchers, teachers and students to work with the industry and/or tackle local challenges. Invite them to 'co-create' the city, turn it into a 'living lab'.

**STOP following fashion and beware of mega projects.**

Ever since the Guggenheim in Bilbao, cities have been seeking out starchitects to design iconic buildings for science parks, museums, galleries and concert halls. Others have thought that hosting a major global event such as the Expo or Olympics would transform their city. Mega projects mean mega risk, with all your eggs in one basket. .

**Facilitate bottom-up developments.** Make sure you facilitate bottom-up developments initiated by entrepreneurial individuals or communities. Be open and ready to support new ideas and ventures in their start-up stage (after that they must stand on their own feet).

**Don't stand in the way.** Rules, regulation and bureaucracies exist for a reason, but they kill too many initiatives at too early a stage. Instil an enabling culture of 'making things possible' to unleash the energy. Make the city business friendly without making it unregulated.



**Have big ears.** City leaders are used to talking with strong and influential players: powerful developers, local captains of industries, as well as with big investors. But they need to listen just as carefully to small entrepreneurs, newcomers and unusual suspects. Much of the innovation will come from that direction.

**Develop and implement strategies in a triple helix context.** Actors from government, knowledge institutes and business should together draw the policy framework, agree on implementation responsibilities, and deeply commit themselves on a long-term basis. Strategy building should not be a one-off event, but a continual process, open to incorporate new insights and developments. This requires ‘intelligence’, new participation methods and hands-on work; one-off, high-level institutional meetings are not enough.

**Organise the effort at the appropriate spatial scale.** Develop integrated approaches on the level of the urban city-region or metropolis, not the administrative city only. Municipal borders are not relevant for labour markets, start-ups, universities, or location decisions of companies. A problem might be that businesses pay taxes to a particular municipality, leading to ‘zero sum’ competition between neighbours. To get rid of this, you need either a higher order authority, or some sharing system.

**Empower appropriate vehicles to deliver local economic strategies.** In many occasions, the city has to let power go and trust other players to take the lead; in other situations, the city should support the development of new overarching organisations with more leeway to act instead of a myriad of competing ones. Yet, it is essential to assure that agility goes hand-in-hand with systems of checks and balances.

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## WHAT COMPETENCES DO CITIES/CITY MANAGERS NEED TO MANAGE ‘NEW URBAN ECONOMIES’ ADEQUATELY?

The challenges opened to manage ‘new urban economies’ require new capacities from city’s staff, its managers, but also from elected representatives. We conclude with a number of hints in this respect.

**New analytical knowledge.** Managing urban economies is increasingly seen as a multi-disciplinary practice, and different types of knowledge have to come together, rather than be separated in municipal departments.

**Economic foresight.** Beyond relying on backward-looking statistical analysis, the implementation of qualitative foresight methods and tools are necessary.

**Social skills and network management.** Unlike managing a company, economic development is increasingly about mobilising and engaging with stakeholders outside the city administration. Hence, city managers need to be able to speak – or at least understand – the ‘languages’ of the different stakeholders they interact with, and create common ground between them.

**Dealing with uncertainty.** New urban economic policy involves a great deal of uncertainty, piloting and experimentation. Urban managers must be able to step outside their comfort zones and take a moderate level of risk. This implies also accepting that not everything will work and that some failure is a necessary part of the entrepreneurial municipality.

**Combine room for manoeuvre with efficiency.** Engaging with stakeholders, building triple helices and exploring new developments require some amount of slack in the city administration, and it will not pay-off the day after. City managers have to find ways to balance this with the call for efficiency and ‘doing more with less’. ●



Source: Freepik



# THE URBACT WORKSTREAM 'NEW URBAN ECONOMIES': HOW DID WE GET HERE

*Within the framework of its capitalisation activities for 2014–2015, the URBACT II programme has set up four working groups (workstreams) on 'New urban economies', 'Job generation for a jobless generation', 'Social innovation in cities', and 'Sustainable regeneration of urban areas' to give answers on what can cities do about specific urban challenges.*

This publication contains examples of innovative actions and practical recommendations, coming from the insights and experience of the workstream members and a number of other people. Hopefully, it helps urban practitioners and decision makers in their daily work.

This is the result of intense debates and discussions with many people. When we started, we of course had some ideas on 'new urban economies' and what cities could do about them. We had put them in a proposal, and we were very glad when we learned, in spring 2014, that the URBACT Secretariat had selected us to do the capitalisation work on the theme. The very good thing about working in this setting is that you cannot stay in your office and write down what you know (or what you think you know...). The idea of the workstream was to work through a stream of activities, meetings and focused sessions in which we would speak to people with experience and new ideas in the field, both 'thinkers' and 'doers'. We were to collect 'lessons learned' from URBACT networks and beyond, and also to explore new developments across Europe in the broad field of 'new urban economies'. In our quest, we were not alone, but had a strong 'core group', made up

of people with practical experience, and strong analytical skills. They helped us to set priorities, to see what was important and what was less so, to select the right case studies, and to review our work.

The workstream meetings formed the heart of our work. We held our first in the city of San Sebastian (July 2014), where we discussed the organisation of our activities, and also had in-depth debates with a number of local companies and economic development officers about 'new style' cluster policies and how to involve stakeholders in the process. In September 2014, we held our second meeting in Eindhoven (a reference example when it comes to triple and quadruple helix collaborations), where we focused on the health and care industry as potential growth driver, with valued contributions from the URBACT 4D CITIES network (on patient-centred health innovation). During our third meeting in Amsterdam (November 2014), we invited experts to discuss the green economy, the digital economy, and the collaborative economy. Participants from different backgrounds and from different corners of Europe (Professors from Sweden and Portugal, policy makers from the Ruhr Area, Eindhoven, Dublin and San Sebastian, a company director from Košice, Slovakia, a researcher from Amsterdam, think tanks and consultants from London) presented and discussed their views, but we also had intense thematic interactive sessions in which participants worked on a hypothetical case. It is this diversity of people and views that sparks ideas, and hopefully some of this debate found its way into this publication.

To give our work more depth, we conducted two full case studies using the URBACT case study approach. These were on Dublin's Open Data and innovation network initiative and on San Sebastian's surf cluster.





In each case, we interviewed a variety of stakeholders (including representatives from the city council, universities, economic development agencies, associations, large companies and small start-ups) and asked them about their first-hand knowledge and experience in order to get a 360 degree view on their initiatives. We used these interviews to explore, the planning process, management, results, success factors, problems and lessons for other cities.

Another source of inspiration was the URBACT Sharing Event during the Open Days in Brussels, in October 2014. In the spirit of URBACT, this was a fun way to approach serious topics. The participants, URBACT cities but also newcomers, were invited to visit different workstream corners, intended to stimulate discussion and debate. Many responded to our provocative 'theses' that we had put on the wall, and gave us new ideas to work on.

We want to thank all the people who, directly or indirectly, helped us to realise this publication. Special thanks to the guest authors Emma Clarence and Stefan Anderberg. And also to our colleagues from the other workstreams: Alison & Mike, Darinka, Francois & Marcelline. We worked together as a team, and shared our ups and downs. And also special thanks to Emmanuel, Jenny, Maria and Melody from the URBACT Secretariat, and Peter Ramsden (URBACT Thematic Pole Manager) for their valuable comments, their commitment to make this exercise a success, and the courage to break new ground.

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## WHERE TO FIND OUT MORE

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## WEBSITES

- URBACT City logo network  
<http://urbact.eu/citylogo>
- URBACT Creative Spin network  
<http://urbact.eu/creative-spin>
- URBACT REDIS network  
<http://urbact.eu/redis>
- URBACT EUniverCities network  
<http://urbact.eu/eunivercities>
- URBACT 4D Cities network  
<http://urbact.eu/4d-cities>
- URBACT ESIMeC II network  
<http://urbact.eu/esimec-ii>

## → URBACT II PROJECTS

PROJECTS	ISSUES ADDRESSED	LEAD PARTNERS
<b>1<sup>ST</sup> CALL PROJECTS (2008–2011)</b>		
Active A.G.E.	Strategies for cities with an ageing population	Rome – IT
Building Healthy Communities*	Developing indicators and criteria for a healthy sustainable urban development	Torino – IT
CityRegion.Net	Urban sprawl and development of hinterlands	Graz – AT
CoNet	Approaches to strengthening social cohesion in neighbourhoods	Berlin – DE
Creative Clusters	Creative clusters in low density urban areas	Obidos – PT
CTUR	Cruise Traffic and Urban Regeneration of port areas	Naples – IT
EGTC	Sustainable development of cross-border agglomerations	Mission Opérationnelle Transfrontalière – FR
FIN-URB-ACT	Small and medium enterprises and local economic development	Aachen– DE
HerO*	Cultural heritage and urban development	Regensburg – DE
HOPUS	Design coding for sustainable housing	University La Sapienza, Roma – IT
JESSICA 4 Cities	JESSICA and Urban Development Funds	Regional government of Tuscany – IT
Joining Forces	Strategy and governance at city-region scale	Lille Metropole – FR
LC-FACIL	Implementing integrated sustainable urban development according to the Leipzig Charter	Leipzig – DE
LUMASEC	Sustainable land use management	University of Karlsruhe – DE
MILE*	Managing migration and integration at local level	Venice – IT
My Generation	Promoting the positive potential of young people in cities	Rotterdam – NL
NeT-TOPIC	City model for intermediate/peripheral metropolitan cities	L'Hospitalet de Llobregat – ES
Nodus	Spatial planning and urban regeneration	The generalitat of Catalonia – ES
OPENCities*	Opening cities to build-up, attract and retain international human capital	Belfast – UK
REDIS	Science districts and urban development	Magdeburg – DE
RegGov*	Integrated policies and financial planning for sustainable regeneration of deprived areas	Duisburg – DE
REPAIR	Regeneration of abandoned military sites	Medway – UK
RUnUP	Strengthening potential of urban poles with triple helix partnerships	Gateshead – UK
SUITE	Sustainable housing provision	Santiago de Compostela – ES
UNIC*	Promoting innovation in the ceramics sector	Limoges – FR
URBAMECO*	Integrated sustainable regeneration of deprived urban areas	Grand Lyon – FR
Urban N.O.S.E.	Urban incubators for social enterprises	Gela – IT
WEED	Promoting entrepreneurship for women	Celje – SI
<b>2<sup>ND</sup> CALL PROJECTS (2009–2012)</b>		
Active Travel Network	Promoting walking and cycling in small and medium-sized cities	Weiz – AT
CASH*	Sustainable and affordable energy efficient housing	Echirolles– FR
ESIMeC	Economic strategies and innovation in medium-sized cities	Basingstoke and Deane – UK
EVUE	Electric Vehicles in Urban Europe	Westminster – UK
LINKS	Improving the attractiveness and quality of life in old historical centres	Bayonne – FR
OP-ACT	Strategic positioning of small and medium-sized cities facing demographic changes	Leoben – AT
Roma-Net*	Integration of the Roma population in European cities	Budapest – HU
SURE	Socio-economic methods for urban rehabilitation in deprived urban areas	Eger – HU
TOGETHER	Developing co-responsibility for social inclusion and well-being of residents in European cities	Mulhouse – FR
<b>3<sup>RD</sup> CALL PROJECTS (2012–2015)</b>		
4D Cities	Promoting innovation in the health sector	Igualada – ES
CityLogo	Innovative city brand management	Utrecht – NL
Creative SpIN	Cultural and Creative Industries	Birmingham – UK
CSI Europe	Role of financial instruments (Jessica Urban Development Fund) in efficient planning	Manchester – UK
ENTER.HUB	Railway hubs/multimodal interfaces of regional relevance in medium sized cities	Reggio Emilia – IT
EUniverCities	Partnerships between cities and universities for urban development	Delft – NL
Jobtown	Local partnerships for youth employment opportunities	Cesena – IT
My Generation at Work	Youth employment with focus on enterprising skills and attitudes	Rotterdam – NL
PREVENT	Involving parents in the prevention of early school leaving	Nantes – FR
RE-Block	Renewing high-rise blocks for cohesive and green neighbourhoods	Budapest XVIII District – HU
Sustainable Food in Urban Communities	Developing low-carbon and resource-efficient urban food systems	Brussels Capital – BE
URBACT Markets	Local markets as drivers for local economic development	Barcelona – ES
USEACT	Re-utilizing existing locations to avoid land consumption	Naples – IT
USER	Involving users and inhabitants in urban sustainable planning	Agglomeration Grenoble Alpes Metropole – FR
WOOD FOOTPRINT	Local economic development through the (re)use of brownfield and buildings of the wood furniture sector	Paços de Ferreira – PT
<b>PILOT PROJECTS (2013–2015)</b>		
Diet for a Green Planet	Cooperation to align eating habits for an ecologically sustainable development	Södertälje – SE
ESIMeC II	Economic strategies and innovation in medium sized cities	Basingstoke and Deane – UK
EVUE II	Electric Vehicles in Urban Europe	Westminster – UK
Gastronomic Cities	Promoting gastronomy as a key urban development	Burgos – ES
Genius: Open	Creating innovative solutions to city challenges via an on-line collaborative platform	York – UK
Healthy Ageing	Cities' action for an active and healthy ageing	Udine – IT
PlaceMaking 4 Cities	Useful public spaces instead of nice public spaces	Dún Laoghaire Rathdown County Council – IE
Roma-Net II	Integration of Roma populations	Budapest – HU
TUTUR	Temporary use as a tool for urban regeneration	Rome – IT

\*Fast Track Label

## **URBACT is a European exchange and learning programme promoting integrated sustainable urban development.**

It enables cities to work together to develop solutions to major urban challenges, re-affirming the key role they play in facing increasingly complex societal changes. URBACT helps cities to develop pragmatic solutions that are new and sustainable, and that integrate economic, social and environmental dimensions. It enables cities to share good practices and lessons learned with all professionals involved in urban policy throughout Europe. URBACT II comprises 550 different sized cities and their Local Support Groups, 61 projects, 29 countries, and 7,000 active local stakeholders. URBACT is jointly financed by the ERDF and the Member States.

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