

**Change the World**

**CITY**

*A Change  
Maker's Guide  
To Fast Forward  
Sustainability*



**BY**

**CITY**

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 | LANNOO  
CAMPUS

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# Contents

<b>Foreword</b>	<b>8</b>
<b>Origins</b>	<b>11</b>
<b>Chapter 1: Introduction</b>	<b>13</b>
Cities in transition	14
Speeding up and scaling positive change	15
About this book	17
PART ONE: <b>HOW TRANSFORMATIVE INITIATIVES ARE REDESIGNING THEIR CITIES</b>	<b>21</b>
<b>Chapter 2: Change makers, transition initiatives and systems change</b>	<b>23</b>
<b>Chapter 3: Five transformative initiatives in five European cities</b>	<b>27</b>
PART TWO: <b>HOW CHANGE MAKERS ARE ACCELERATING URBAN SUSTAINABILITY</b>	<b>91</b>
<b>Chapter 4: Mechanisms for acceleration</b>	<b>93</b>
<b>Chapter 5: Overview of sustainability dynamics in five European cities</b>	<b>105</b>

PART THREE:  
**TOWARDS  
 FUTURE-FIT  
 CITIES**

**123****Chapter 6: Key insights** **125**

Meaningful change is happening organically, everywhere, all the time 127

Change starts inside 128

Food is a promoter and unifier for urban sustainability 128

Sequencing change by working on new patterns 131

**Chapter 7: Ten things to know and do to fast forward urban sustainability** **133**

#1. The next big thing will be a lot of small things 134

#2. The city of the future is designed for life (not cars) 138

#3. Human – nature – human nature reconnecting is key 142

#4. Forget power or status. Urban change makers are motivated  
by passion and purpose, shifting leadership from ego-based to soul-based 146

#5. Welcome urban hacking, to create the future is to hack the past 150

#6. Forget competition. The city of the future is built on collaboration  
and powered by reciprocal networks 154

#7. Building a new logic of value creation is the only way out of the status quo 158

#8. Updating urban social software is foremost about advancing  
collective learning and enabling collective intelligence and inclusive action 162#9. Space is an important resource for innovation. Open up space amid  
everyday busy-ness in support of business-as-UNusual 166#10. Forget certainty, stability and control. The future is made  
at the sweet spot between order & chaos and unity & diversity 170**Chapter 8: Conclusion** **173**

Reinventing ourselves as human beings 174

While change is constant, it is never easy 174

**Endings** **176****Saying thanks** **178****About the authors** **180****Endnotes** **181****Glossary** **183****Find out more** **195**

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Our struggle for global sustainability  
will be won or lost in cities.

**UN Secretary-General Ban Ki-moon**

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# Foreword

*By Bart Somers, Mayor of the city of Mechelen, Belgium and  
Winner of the World Mayor contest of 2016*

Benjamin Barber passed away on 24 April 2017. On that day, all mayors lost a passionate advocate. After all, in his book *If Mayors Ruled the World*, Benjamin Barber explained the difference between local and national politics in such minute detail. A mayor does not exist to develop abstract ideas or to define ideological dividing lines, but rather to resolve specific problems experienced by real people. In national politics you might be able to score points with walls and trenches, but a politician at local level knows that he must first and foremost build bridges.

This local approach works. Cities are fine examples of 'laboratories' in which solutions are devised for both minor and large-scale issues. Europe – and by extension the rest of the world – is now facing a multitude of challenges. Consider the flows of migrants and the pressure they are putting upon our society, the people's waning trust in traditional institutions, the environmental challenges of climate change and the depletion of natural resources. These are global challenges that must be addressed at local level in the first place.

I have read a great many theories about increased diversity. About how a society composed of different communities, with different origins and religious beliefs, is fuelling tension and unrest. That is certainly true, but as a mayor, I have very little use for such theories. As a mayor, you do not get bogged down in analyses, but instead you work on finding solutions. You need to ensure that those different communities all feel at home in your city, as it is also their city. You can't do that with a single measure and you can't do that alone either. You can only achieve results with the sustained efforts of many. As a mayor, your primary role is that of a coach, to bring people together and to ensure that everyone feels involved. This way, you provide scope for numerous bottom-up initiatives, which – when combined – result in a response at local level to the global migration issue.

The same is true for people's waning trust in the traditional institutions. When you bear responsibility for policy at local level, you know better than anyone that imposing a vision from above does not work. These days, citizens' groups and associations sometimes have more scientific evidence and better technology than officials. Failing to appreciate their expertise will not

land well. For this reason, no other level of government experiments more with new forms of participation. For some time now, that input is no longer limited to voting yes or no to a particular proposal. We are now in the stage of co-creation in which citizens develop a proposal themselves by working together. It is inevitable that many of these experiments will find their way to the top level and also influence national and international politics.

A third global challenge that will be solved at local level is that of environmental sustainability and that is what this book is about. The authors highlight that the solutions to the global challenge of climate change and the call for more sustainable policy will have to come from the bottom-up, from our cities. And cities and municipalities are also aware of this. The five examples cited in this book are testament to that. But I also refer to the Covenant of Mayors for Climate and Energy, in which thousands of local administrators are getting involved in order to achieve the abstract European target of reducing CO<sub>2</sub> emissions by 40% by 2030 at local level. It is proof that local policymakers are aware of their duty and responsibility, because we will ultimately have to change our way of living and we will have to produce and consume in a different way. That change will happen at the local level.

By emphasising the importance of cities in the approach to tackling the challenge of climate change, the authors of this book pay tribute to Benjamin Barber. I agree with Barber in my certainty of one thing: if mayors ruled the world, the world itself would be a better place.

# Foreword

*By Walter Eevers, Research Director of VITO*

Important present-day challenges are of a global nature but manifest themselves in ways that are influenced by local conditions. They require an action-oriented and holistic approach of society cutting through and integrating research, technology and innovation. Cities can be characterised by a high concentration of people, finance, knowledge and networks. Because of their density, the increasing amounts of available data and the smarter methods to acquire and use these data, cities have become ideal breeding grounds for testing and implementing disruptive innovations across different societal systems, like mobility, biodiversity, housing etc. Successful innovations, in order to be action-oriented and holistic, require citizen involvement not only as a source of data but more importantly as an adopter of change, a coproducer of solutions. That's what makes the projects described in this book so exciting. They show how involving citizens at a very early stage in the innovation process as well as throughout the development process, can open new solution corridors and accelerate the uptake and upscaling of societal sustainable innovations. This book offers a cornerstone perspective on system change, for our cities, and thereby for a growing majority of people in our world.

# Origins

*– a personal intro*

It all starts with language and stories. Language – as an articulation of reality – is more primordial than strategy, structure or culture. Stories is how we arrange, remember and make sense of knowledge and experiences<sup>1</sup>, past and present. What is more, according to cognitive scientist Mark Turner, parables are the roots of the human mind, of our thinking, knowing, acting and creating, and therefore indispensable tools for everyday reasoning. And so it seems appropriate to start this book with a parable. One that shifted my mind.

It all started when the great forest caught fire. The fire raged and burned. It scared all the animals, small and large. They fled from their homes and gathered at the forest edge. All except one. Instead of being paralysed into inaction, the little hummingbird flew to the river, picked up a droplet of water and flew back into the burning forest to drop the water on the fire. Again she flew to the stream and brought back another drop, and so she continued—back and forth, back and forth. The other animals watched the bold hummingbird brave the enormous fire in terror. They called out to the little hummingbird, warning her of the dangers of the smoke and the heat. They all had opinions and moaned “the fire is too hot”, “the smoke is too thick” and “my beak is too small”, “my feet will burn”... But the little hummingbird could not be swayed to stop. She persisted in flying to and fro, picking up more water and dropping it, bead by bead, onto the fire. Finally the big bear said, “Little hummingbird, what are you doing?” Without stopping, the little bird looked down at all the animals and said, “I am doing my part.”<sup>2</sup>

I am often reminded of this parable because we live in turbulent times today. And more than others, change makers have to deal with a plethora of – often opposite – opinions, viewpoints, recommendations, comments and advice. Usually well-meant but more often than not sprouting from old and reductionist ways of thinking. As the saying ‘The only constant is change’ portrays, life on Earth is in constant evolution. Sustainability is not an endpoint, but rather a byproduct of regenerative value creation. So the question is not ‘Is this initiative big enough and 100% sustainable?’ but ‘How is this initiative building capacity for evolution?’, ‘How is this initiative adding value to the larger system?’ and ‘How is this initiative contributing to sustainability transitions?’. For, an initiative can only be value adding if it is beneficial to the larger

system it inhabits and if it can co-evolve with the environment it is embedded in. So, if we want to evolve our systems, we will have to evolve ourselves and our role in the system. And, like Mang and Haggard so eloquently show in their book *Regenerative Development and Design*, it all starts with evolving the way we think about sustainability<sup>3</sup>.

This book is about how we can all be the makers of positive change. The future is not something that happens to us, it is the result of what we do in the present. Our individual actions are not able to transform the system in its totality but collectively we are able to create the conditions for systems change. We all have a part to play. We can choose to become part of the solution. The city of the future is not the result of technologies and infrastructure, however smart they may be. The city of the future is what emerges from collective intelligence, collaborative action and unlimited creativity.

And so it is time to tell the story of how urban change makers are scaling beneficial change in their cities. A story that originated in a research project called 'ARTS', about accelerating the transition to sustainability<sup>4</sup>. This book is an attempt to disclose some of the more generic learnings that we gained throughout the project. It focuses on urban transition initiatives and how they contribute to the wider dynamics of change. It shows that urban change makers are important innovators. They are the creators of transition initiatives – the start-ups of a new future – that transform current urban living and thereby shape the pathways to the city of the future.

**Leen Gorissen**

Chapter 1:

# Introduction

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The illusion of powerlessness is a greater impediment  
to change than the power of vested interests.

**Flor Avelino, Dutch Research Institute for Transitions**

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## Cities in transition

On Earth Overshoot Day, we have used more resources from nature than our planet can renew in the whole year. In 2016, this was on August the 8th and it illustrates the alarming rate at which humanity extracts resources from the earth. It means that we are overexploiting nature to an extent that we are undermining its life support system by overfishing, overharvesting and deforestation. We simply do not give our Earth a chance to regenerate its sinks and resources – we need more than one planet to fulfil current consumption needs. Earth Overshoot Day highlights the dramatic disconnect that has arisen between humans and nature and is one more evidence point that we are now in the Anthropocene: the era that humans pose an irreversible impact on Earth. Our unstoppable hunger for resources, the ungracious way of heat, beat and treat to make stuff and our exploitative value system are important drivers of the present ecological crises. The sustainability challenges ahead of us, such as climate change, biodiversity loss, resource scarcity and related inequity are so grand and so complex that it may make many people feel powerless.

Yet, new leaders are standing up to resolve these grand challenges by taking responsibility to innovate, affect change and awaken creativity, ingenuity and compassion in their communities. They are civic innovators, urban change makers that shape local responses to global issues. Across the globe, these local responses are proliferating in cities. We call them ‘transition initiatives’ because they aim to change the way we think, act and organise ourselves to find more sustainable ways of addressing the needs of our society. Transition initiatives showcase that alternative and more sustainable ways of being, living and collaborating together are possible. This way, transition initiatives become pockets of the future in the present. They are the start-ups building the city of tomorrow, they are evolving our social software for the next phase of civilization. One that is more in harmony with the rest of life on the planet.

These transition initiatives are transformative, local answers to our global problems. They are driven by urban change makers from civil society, business, government or their partnerships and insert innovative solutions into their cities. Think of community-supported agriculture initiatives, renewable energy cooperatives, sharing platforms, repair cafés, food forests, urban beekeepers, participatory budgeting approaches etc. Yet, can these typically small-scale interventions impact wider systems’ change? Can small alterations within urban communities cascade into big changes on a planetary scale? In other words, are local transition initiatives just operating in the fringe or do they contribute to acceleration of urban sustainability transitions, shifting urban systems to higher levels of sustainability?



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In this book, we take you on a journey to five European cities: Brighton, Budapest, Dresden, Genk and Stockholm, to discover how transformative, local initiatives in these cities are shaping a more sustainable future. The findings presented here are based on a collaborative research project funded by the European Commission titled ‘Accelerating and Rescaling Transitions to Sustainability’ (ARTS project) in which researchers, policymakers, civic innovators, community builders and entrepreneurs came together to create local roadmaps to accelerate progress to sustainability in their cities.

## Speeding up and scaling positive change

Cities are hotbeds of consumption and pollution. But cities are also breeding grounds for sustainable innovation and solutions. By becoming more sensitive and responsive to sustainability challenges and concerns, they can become important catalysts to increase the pace of positive change and accelerate the transition to a more benevolent, regenerative way of urban living. So, the questions we ask ourselves while thinking about transformative change in cities are:

- What changes?
- Who is promoting change?
- Is the pace of positive change accelerating and if so, how?

To find answers to these questions, we look at pockets of transformation in cities. To comply with current scientific rigor, we need to set relevant systems boundaries and definitions. We define transition initiatives as ‘locally-based activities which aim to drive transformative change of existing societal systems towards higher levels of environmental sustainability’ and the system under study is the city region. Environmental sustainability is understood as contributing

to conditions of balance, resilience and interconnectedness that allows society to satisfy its needs without exceeding the capacity of its supporting ecosystems to continue to regenerate the services to meet those needs and without diminishing biodiversity. We view these transition initiatives as living and evolving entities that are shaping and are shaped by the contexts they operate in. We thus adopt a multilevel (community, district, city, region, nation) governance approach and specifically set out to understand how transition initiatives, initiated by civil society, business and the government or partnerships of those, help accelerate progress to sustainability in urban settings.

### What?

By what changes, we do not focus on the solutions in themselves but rather on the dynamics of change that encompass the way of thinking (culture), doing (practice) and organising (structure). In other words, are transition initiatives fuelling new mindsets, new practices and new arrangements and structures that can be the seedbeds for wider societal change? Widening our understanding from solutions to dynamics of change helps us build a more holistic, systemic understanding of urban transformation.

### Who?

The focal unit of analysis are the innovative activities and related actor-networks from the city region, defined as ‘transition initiatives’, situated within the local governance context, that are focused on driving environmental sustainability. Since sustainability in cities is a collective effort and outcome, we do not only include policies or government interventions but all transformative local actions that improve environmental sustainability locally. We look at initiatives that transition the way we think, act and organise and their ‘journeys’ in making cities more sustainable by looking at the people driving these solutions and how they interact and synergize.

### How?

To study how the pace of positive change can be increased, we looked at aspects of acceleration<sup>5</sup>. From scientific literature, we know that replication, partnering, upscaling, instrumentalising and embedding have been put forward as important mechanisms that promote acceleration<sup>6</sup>. While we theorize that each of these mechanisms can contribute to faster transformation processes, we investigated whether local transition initiatives adopt these mechanisms and whether these can effect wider and faster change. Each of these aspects of acceleration will be explained in more detail in the following chapters and illustrated with findings from the five case cities.



**Replicating:** The reproduction of alternative ways of thinking, doing and organising from one neighbourhood to another and from one city to others.



**Partnering:** The formation of partnerships to create synergies and to promote diffusion of alternative ways of thinking, doing and organising within cities.

 **Upscaling:** The increase in the amount of people involved in sustainable alternatives to enable their mainstreaming within cities.

 **Instrumentalising:** The resourcefulness to seize relevant windows of opportunity to support new ways of thinking, doing and organising in cities.

 **Embedding:** The integration of more sustainable ways of thinking, doing and organising in city-regional governance patterns encompassing routines, habits, customs, political and institutional structures.

## About this book

This book thus explores the ways transition initiatives are scaling positive and meaningful change in their cities by transitioning urban culture, practice and structure towards higher levels of sustainability. The focus lies on change makers' initiatives and how they contribute to the dynamics of change within their city regions to accelerate progress to sustainability. This approach offers a more exploratory take on sustainability dynamics in cities: How are transition initiatives in cities influencing the spreading of more sustainable ways of thinking, doing and organising in their local context? How are they interrelating with the local government? And how are they creating local and trans-local impact? This way, we offer more insights in how sustainability in cities is evolving. Even though our understanding is work-in-progress, our findings show that cities are places where we can observe sustainability transitions in the making. We expand the current and often technological-myopic understanding of transitions to how people, initiatives and places in our cities play out in transitions. We highlight that place is also important in demarcating transformations: transitions are also about changing places, in confluence of changing ways of doing, thinking, organising. The transition initiatives studied combine these dimensions, and showcase a great variety of sustainable alternatives that work in their place.

The next sections of this book are organised as follows: you can read how transition initiatives are redesigning their cities in part one. Here, we introduce how local transitioners can contribute to wider system change, the five cities under study and a diverse set of inspiring local transition initiatives in Brighton, Dresden, Stockholm, Budapest and Genk. In part two, we zoom in on the mechanisms of acceleration and how transition initiatives work to speed up progress towards sustainability in their cities. Each mechanism is explained and illustrated with an example from the cities under study. For readers who want to learn more, we dive deeper into the dynamics of change and how these relate to the mechanisms in the next chapter. Here you will find a lot of examples describing how urban transition initiatives are accelerating meaningful change.

Colour codes and icons will tell you from which city they are and in which domain they are working. In part three we reflect upon the learnings we took from these initiatives on a meta level. In other words, if we zoom out, what generic insights come to light? How do these transition initiatives accelerate sustainability in their city regions? We highlight ten things to know and do to fast forward sustainability in your city. We summarize what this means for transitioning urban systems to sustainability in the conclusions and offer some guidelines for further reading.

### Icons for Domains:



**Education**



**Nature**



**Water**



**Energy**



**Resources**



**Social**



**Food**



**Buildings**



**Mobility**



**Finance**

Throughout the book, you may encounter words that are not familiar to you. Do not worry, at the end of the book you will find a glossary where we explain these. For changing systems also requires us to change our language and a better understanding of how transitions unfold requires new words to describe the new processes and insights. It is no coincidence that Inuit have so many different words for snow. They use it as an important resource and thus need to specify richer and more precise meanings. The same holds true for transition language. Changing urban culture, practice and structure requires changing our language too. An important feedback that we got from the change makers we worked with was that long, academic and descriptive literature is not appealing to them. That is why we chose to present this book in a format that resembles a city guide that you can browse according to your interests. Bearing the change makers' feedback in mind, we tried to keep it short, focus on what works, highlight insights from change makers and keep references to a bare minimum.

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The global crisis of unsustainability is not only a crisis of the hardware of civilization, it is also a crisis of the software of minds. The search for a more sustainable development in the ‘developed’ world has, so far, been focusing too much on hardware updates, such as new technologies, economic incentives, policies and regulations, and too little on software revisions, that is cultural transformations affecting our ways of knowing, learning, valuing and acting together. The cultural software is, nevertheless, at least as much part of the fundamental infrastructure of a society as its material hardware.

**Sacha Kagan, Institute of Sociology and Cultural Organization**

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## PART ONE:

# HOW TRANSFORMATIVE INITIATIVES ARE REDESIGNING THEIR CITIES





Plan 4 Sápmi  
Floor 4 Sápmi  
Plan 3 Tra  
Floor 3 Traunons