

SUSTAINABLE URBAN DELTA

An inspiring approach for rapidly growing metropolises and their citizens, to realize sustainable development goals in an encouraging way.



How beautiful the future is, with cities integrating green belts into urban areas, creating green, healthy environments, stimulating new economies and enhancing social coherence. This integration improves future societies by solving many environmental and social challenges.

Meiny Prins

SUSTAINABLE
URBAN DELTA



Green cities in deltas

The year is 2050. From all over the world leaders of megacities gather for working visits. For many years, more and more cities have become prime examples of well organized, clean, smart and innovative societies that are operating without any unnecessary laws or regulations and have managed to be entirely self-sufficient. In these cities along the water, the air is clean, energy is free and the food is healthy. Information is everywhere, making it easy for people to organize their lives, which is necessary, because there is no large central government. Almost everything is decentralized, and everyone lives in their own community with their own ecosystem. The perfect example of the circular economy. Metropolitan areas as sustainable deltas.

THIS VISION OF THE FUTURE IS NOT A DREAM

On the contrary. Some countries do have the ability to achieve such a status within thirty years. These countries already hold a high position in the worldwide rankings of living standards and happiness. Their systems of education, healthcare, social care and capacity to innovate are among the best of the world. The same goes for their logistic systems, their far-reaching energy savings, the availability of drinkable water, the high level of digitalization, the wide choice of healthy and safe food, and the green landscapes in cities and surrounding areas. Many of these best practices from many different places in the world are already a source of inspiration.

BUT WHERE TO START

If we really want to develop a sustainable standard of living for people, governments and businesses are going to have to set an example to invest in the new economy, no matter what. Most politicians and businesses don't seem to be too concerned about it, but they have a major task ahead of them. Economic and socioeconomic developments are moving at the speed of light. If, as an entrepreneur, you are not able to manage your own 'disruption', then the chance that your business will still exist in ten years' time is negligible. And it won't do our living and working environment any good having governments keeping the old economy in place, even in a forced way. This is not only an obstacle for future business, but also slows down the growth of many sustainable business opportunities by the entrepreneurial people of today. So it may go well, but for how long? And how long will the majority of the population stay happy if so many changes happen in such a short time, that it completely pulls our society apart? We can't turn back time and we need a goal to aim for, to offer us new perspectives.

WE NEED VISION, DECISIVENESS AND COURAGE!

The challenges are enormous, but we tend to make these problems so big that it paralyzes us and nothing happens. Where to start? How to make the right decision when it cannot be built upon facts and figures from the past anymore? That you can really create impactful change today, if you know and understand the possible solutions that are proven, yet within reach. We therefore also need a government with vision, decisiveness and courage. We need to start with something that is tangible, close to where people live, we need to include people in organizing their own communities. What we need is inspiration: a vision that will bring the people together that do want to make a change, know how they can participate in this change and can take ownership.

WE NEED A NEW PERSPECTIVE ON DEVELOPING A SUSTAINABLE ENVIRONMENT FOR PEOPLE TO GROW



The opportunities for developing Sustainable Urban Deltas start when rapidly growing metropolises realize that they can only continue to expand their city if the surrounding areas (the green belt or urban growth boundary) and their food production will be included as an integral part of these major urban developments. This integral approach is needed to help solve many problems related to living, mobility, energy, water and food and will enhance social coherence, create new jobs and business opportunities.

AN INTEGRAL APPROACH BETWEEN URBAN AND RURAL AREAS CREATES NEW CONNECTIONS ON A SOCIAL, ECOLOGICAL AND ECONOMIC LEVEL, SOLVING MANY ENVIRONMENTAL PROBLEMS.

The Sustainable Urban Delta is all about the intrinsic quality of people knowing how to deal with problems in an integral way. By adopting an integrated perspective, it becomes clear that close connections between the city and the green belt will create new connections on a social, ecological and economic level. It will ensure social cohesion, a green environment, employment opportunities and economic growth.

We can already find numerous examples of cross-sectoral innovations that can load this promise and even show the first steps towards a circular economy. By sharing this vision, I am looking for allies to continue to develop the ideological framework related to the Sustainable Urban Delta. As megacities arise, we are in urgent need of sustainable solutions.

Living ideas and great solutions developed by the citizens themselves, are at hand. My aspiration is to continue to connect, share and develop ideas within metropolitan areas, stimulating the creation of Sustainable Urban Deltas.

Meiny Prins



Changes are inevitable

I see life from the positive side. Personally, I am convinced that we are just in time to turn around the disastrous consequences of our old economy for the quality of life on our planet. From a technological point of view, we could solve so many problems today. The fact that we can't change now - or don't want to - is really up to ourselves. It is even worse. Looking globally at -for example- all subsidies for agriculture and fossil fuels, we spend more than 7000 billion a year to keep a system alive that is in fact destroying our own planet. Causing unhealthy living and even hunger in this world. While we have enough food today to feed around 12 billion people, how come we are still facing so many undernourished people? It looks like keeping these systems alive is only good for the profits of the largest companies on our planet, influencing also our policymakers. But all these systems will be stripped away! Whether people want it or not, things will change.

At present, we are already witnessing the creation of a new reality, driven by three major changes:

A. EVERYTHING WILL BE DIGITAL

Telemedicine, nanotechnology, high-tech food, 3D printing, robotics, smart mobility and the internet of everything. Within the next ten years, all of these technological breakthroughs will turn the whole world upside down. Developments in digital technology are moving so rapidly that it's almost impossible for individual companies to keep up, so innovative businesses are seeking for collaborations and different business models.

More cooperation is also required because businesses are finding it increasingly difficult to attract and retain new people with the right skills and/or talents. If a company wants to grow, it will have to make its employees enthusiastic about working together, and that is only possible with an inspiring mission and a clear vision. And the same goes for customers and suppliers. The businesses of the coming decennia are far more 'purpose-driven' and no longer only motivated by profit. Creating new prosperity is something that can only be done together. It's

becoming more and more enjoyable to be involved in changes that are contributing positively towards an improved quality of life.

Because it will be the people themselves who will be making all those major breakthroughs possible as they will be the ones adopting all the available, affordable and user-friendly technology. It will become more and more easy to solve complex problems collaboratively. For instance, mobile phones won't only be used to share information and photos but also to share business cards by simply using a QR code. In China already everything has a QR code. Like in WeChat, for instance, a QR code is used to pick up a free bike and drop it off at your destination, for paying for shopping, train tickets, taxis or Uber. Even in some restaurants, you can find a QR code on the menu on your table, you order your food electronically and wait until somebody comes to serve you, and so it goes on. The mobile phone is today's prime example of the internet of things. Everything is becoming digital.

B. ANYTHING THAT NO LONGER ADDS VALUE WILL CEASE TO EXIST

Anything that stops having any added value will cease to exist. At the moment there is an incredible number of traditional systems, products and services that are all in the process of losing their value. This is happening so fast that it is difficult to keep track of what it all means for life as we know it. Internet shopping may cause empty shopping streets, but it also gives a new purpose: space for living, cafes, restaurants and leisure activities. And what will happen to the banks if normal payments are made in crypto currency, mortgages are taken over by insurance companies and if entrepreneurs start funding each other? Or if nobody needs loans anymore because we're moving further towards using rather than owning. And what will the role of a family doctor be when Google completely takes over the primary healthcare role and the available online medical information leads to better remote healthcare?

Even fossil fuel, the foundation of our current economy, is losing its value at

a rapid pace. Who still wants to invest in a new oil platform? In the coming decades, enormous reserves of fossil fuel assets will be written off in the balances of both businesses and governments. That's because they will simply remain in the ground. And that's a good thing. The fossil fuel the world has used up in an extremely short period of time has had an immense impact on that same world. That's simply unsustainable. The fossil fuel era is past tense, even if many people are desperately holding on to the assumption that there's no alternative on a short notice.

And finally, politics. If the only votes left are protest votes because we, the people, have the feeling that national politics are not interested in our future, that also means the end of politics and the democratic system as we know them today. The gap between what cities find important facing major problems for their citizens and what the national government wants, is growing more and more. The most significant issues like migration, energy, water, climate, food and mobility extend beyond party politics and even far beyond national borders.

THE GAP BETWEEN WHAT CITIES FIND IMPORTANT AND WHAT THE NATIONAL GOVERNMENT WANTS TO INVEST IN, IS GROWING.

C. QUALITY OF LIFE IS MORE IMPORTANT THAN ECONOMIC GROWTH

Many people are looking for a better life in the city, a career, more varied food, health and mobility. Worldwide, more than 200.000 people migrate to the city every day. Today, there are already over 30 large metropolises; from Tokyo with 35 million inhabitants, to Lagos and Manila with more than 20 million inhabitants. But Seoul, Mumbai and New York are also in the league. A lot of these cities are located in a delta. These deltas are the metropolises of the future. In 2030, 60% of all people on earth live in metropolises. There will even be super cities with more than 50 million inhabitants.

Shanghai City now has about 27 million inhabitants, but the Yangtze River Delta, which Shanghai is part of, has more than 65 million people. It is a contiguous metropolitan area where city and countryside alternate, but where the countryside is increasingly being oppressed. Cities need to realize that they can't continue to sacrifice the land around the city. Because cities need this land to produce the food they require. That is why the land close to a city that is used for food production, the 'green belt', will have to be integrated into

metropolitan developments. In China, we already see some large cities that encourage project developers and real estate entrepreneurs to invest in the surrounding area: in large-scale and professional fresh food production. The project developer then takes on a new role: he becomes a grower.

Cities will become the biggest drivers for sustainability and radical innovations. For technological breakthroughs. Local authorities can and will increasingly use their cities as a testing ground for new technology. And with a clear goal: to solve their major problems with living, air quality, sewage, water, energy, lack of green space, mobility and safe and healthy food. Because the cities' inhabitants are becoming more demanding and critical. People no longer want to live in the smog and pay too much money for a small apartment with a poor indoor climate that smells like a sewer. Corruption is no longer accepted. Quality of life is becoming more important than economic growth!

We already see this happening. President Donald Trump may deny the climate problem, but that doesn't stop the governments of metropolises like San Francisco and New York from

setting ambitious sustainability goals for their cities. At this moment there is even a large movement going on in the USA, involving almost a hundred cities reaching their sustainability goals (www.wearestillin.com). And Texas, the largest oil producing state in the US, is already one of the largest suppliers of wind energy in the world. It is partly thanks to the vision of many cities that the move towards sustainability and a circular economy is unstoppable. The gap, between what cities find important and what the national government wants to invest in, is growing.

The 19th century was the century of the empires. The 20th century was the century of the countries and national states. And the 21st century will be the century of the cities. With that, people will get more and more involved in organizing their own communities, leaving no one behind.

Investing in creating new value

These major changes are also supplying us with inspiration and insights for adapting policy and business strategy. It spurs us on to new value creation and a future perspective for people. As the future becomes increasingly clear, what is stopping us from actively embracing it?



Take telemedicine, for example. If a patient can use a smartphone to send an ECG to a specialist and receive the correct diagnosis and treatment online, then won't applications like this eventually reduce the spiraling costs of healthcare?

Why are we still training people for certain jobs, when we know those jobs are disappearing? Are we sure that the current training of family doctors will still be appropriate for what they will need to know to take care of their patients in 10 years' time?

Just look at the unlimited possibilities for saving energy! It is ridiculous trying to predict the future of energy

production and distribution based on current data about energy use and our existing infrastructure. With small investments, the data from existing climate-control systems in offices, for example, could be connected to new cloud solutions. Smart algorithms, for example could deliver enormous reductions in the usage of natural gas for heating buildings. In the space of months! So, what's stopping us from introducing a policy based on these solutions, more rapidly? And what will happen if data tell me when my neighbor needs energy that I can supply directly to him, instead of having to sell my power back to the central energy grid at a low rate. Do we still need to invest billions in

updating our existing power grids? We really need to take into account breakthrough technologies, the possibilities of big data, the existence of the sharing economy and the general public's awareness that things need to change! And they will change!

AS THE FUTURE BECOMES INCREASINGLY CLEAR, WHAT IS STOPPING US FROM ACTIVELY EMBRACING IT?

Success factor: integral solution-based thinking

Metropolitan areas are already facing immense challenges, and these will only get bigger in the years to come. More and more people are moving from the country to the city. If the city authorities are to succeed in meeting these challenges, they will have to think in an integral way to find solutions. Starting with creating green space in urban areas bringing future farmers back into the city.

A GREEN CITY IN A RIVER DELTA

Looking at cities that adopt an integral approach to problems, we can already see living examples. Take Singapore for example, a metropolis in a river delta, with an extremely rich history of urbanization and living along the water. Cities and countryside have been integrally developed with a dense network and infrastructure of roads, energy, water(ways) and IT. Singapore has the ambition to become the greenest city in the world!

A country that can also be seen as one big metropolis, is the Netherlands. Just like Guangzhou, Tokyo, Rio de Janeiro or New York. If we look at things from a global perspective, then also the Netherlands is a metropolitan area in a delta. In fact, today the Netherlands

could be seen as the greenest city in the world. There has been a close connection between city and countryside for centuries and there still is. The rural area (green belt) is fully integrated into urbanized areas. The Netherlands have enjoyed a rich history of urbanization and, over the years, the people have developed an increasing number of innovative solutions relating to energy, water, mobility and food in an integrated way.

LEARNING FROM LIVING EXAMPLES AND ADAPTING TO LOCAL CONDITIONS

Let's look at the many living examples that a country like the Netherlands already shows. The Netherlands have succeeded in creating social and green living and working environments.

Where smart logistics systems have been created in developed areas that have grown over time. Where decentralized energy solutions are being used and waste water is being re-used, for instance for the production of locally grown food. Where smart grids have been in use for years, for example in greenhouses, and where the number of district heat networks is growing. Strong living examples can create new ways for other countries creating Sustainable Urban Deltas.



CROSSING BOUNDARIES

Currently, the required knowledge and expertise is often already available, but too fragmented. Our current points of view, however well-intentioned, tend to intensify fragmentation. Real innovation takes place at the borders between sectors and that is exactly where worldwide innovation policy should be concentrating. If we succeed in creating more space for mixing rural and urban areas in the growing metropolitan areas and take away the rules and regulations that prevent people from taking initiatives in the field of building together successful examples of 'green belts' in the city, people can also take the opportunity to become entrepreneurial, creating work and building communities around their initiatives. Stimulating an integral approach, Sustainable Urban Deltas can be created all around the world.

The green belt (farmland) has been pushed away by the growing metropolis, having a different value for real estate developments. But these values can also be realized by developing urban areas combined with green economics, using new technologies, creating jobs, developing different business models, intensifying the productivity of land and integrating this with the city needs of energy, re-use of waste water or other recycling opportunities. Stimulating small scale circular economies within growing communities in urbanized areas.

WE CAN CREATE A CLIMATE THAT FOCUSES ON WELL-BEING RATHER THAN WEALTH.

CREATING THE GREEN BELTS OF THE FUTURE

Together, we can create solutions that really matter, that make a difference, based on a vision for the future. We focus on creating our own climate, a climate where our health, sense of comfort and safety, nature, our food, energy and water use are all in balance with each other. Where we can grow as people, both in personal and business terms. Where making a profit is not a goal in its

own right, but a means to achieve growth. Where the focus is on well-being rather than on wealth. Where we invest in new opportunities on creating the green belts of the future. Helping the growing metropolitan areas with their major challenges, by re-thinking their urban planning, step by step, integrating the green belt into urbanized areas, investing in the well-being of the people of their cities.

One vision, one joint ambition.

Looking for allies to help in further developing the framework for the Sustainable Urban Delta, I started a Foundation.

It's not only about sharing the vision of integrating green belts into the rapidly growing metropolises in the world. It's also about the qualities that we already have today, all over the world, to deal with problems in a creative and an integrated way. About the fact that there are already great examples of Sustainable Urban Deltas, taking the first step towards a more circular economy. Where, for decades, the bonds between city and countryside have ensured the creation of social cohesion, employment opportunities and economic growth. Today, we can find numerous examples of all sorts of cross-sector connections. So why not follow good examples, create new 'living labs', connect these with other metropolitan areas and create new economic growth together in a sustainable way?

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Main purposes of the Foundation:

1.

Inspiring by sharing her vision and knowledge on integrating 'green belts' into 'urbanized areas', so that government, business, education and citizens can connect and contribute with their aspirations, ideas and living examples.

2.

Connecting the living examples from several metropolitan areas in the world and investing in building sustainable relationships with these urbanizing areas. By sharing knowledge, experiences and results, new initiatives will emerge.

3.

Helping the metropolises by supporting people who drive integrated 'green belts' initiatives to successfully implement the project.

A VISION TO CONNECT AND INSPIRE, THAT PROJECTS A GLOBAL AMBITION TO OFFER NEW PROSPECTS FOR ALL OF US.



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PERSONAL

This document is a white paper, an e-book or a guide... It really doesn't matter what it's called, as long as the meaning behind the story of the Sustainable Urban Delta is clear. This document is meant to inspire you, governments, sectors, entrepreneurs, city planners and inhabitants of metropolitan areas.

Wouldn't it be great if we could gather and consolidate the vast number of fragmented initiatives taking place around the world?

By joining forces, we can provide new perspectives for the compelling issues mega cities face, and solve many environmental issues caused by the way food production is being organized today. Let's share knowledge and benefit from the learnings of living examples.

In the past few years, I have had the

privilege of sharing the story of the Sustainable Urban Delta, with all my enthusiasm and conviction. My adventure began with an invitation from the Social and Economic Council of the Netherlands (SER) to contribute to the SER lecture on 11 October 2012, with the theme of 'Living well in a time of crisis; how is it possible?' That was the first time I seriously wrote down the story of the Sustainable Urban Delta.

Following this, I was not only privileged to speak during several other interesting occasions, but the theme was also used as an inspiration for the international positioning strategy of the Netherlands. It was adopted by several institutions to show a wide range of smart, integral solutions relating to energy, water, living, mobility and food. It generated a great deal of interest and the international press reported that the Sustainable Urban Delta framework potentially has the knowledge,

innovations and experience to provide effective solutions for complex issues in metropolitan areas.

In the past few years, I have looked for concrete examples to add color to the concept of the Sustainable Urban Delta, because references make the story come alive and ensure that the entrepreneurs behind these projects are visible. Show, inspire and start a conversation. The examples on the website sustainableurbandelta.com are therefore not 'just about water' or 'just about energy', but about showing 'cross-overs' such as energy from water or living on the water.

And there are still many more examples available because the Sustainable Urban Delta is also about creating social cohesion, about operating independently, close communities, about healthy, safe and active aging, about knowledge, commitment and creativity. About healthy soil and

creating a healthy, green climate. And with all the examples that I have seen already, I am acutely aware that even more is possible! Even knowing that a lot of metropolitan areas are still addicted to natural gas, subsidies are

still too often used to maintain existing markets and multinationals still have too much influence on national politics.

I believe this can be disrupted by presenting a united front to a new

world where cities will have the power and will become the promoters of the creation of a green, healthy and circular society.

ON TO A NEW WORLD WHERE CITIES WILL HAVE THE POWER AND WILL BECOME THE PROMOTERS OF THE CREATION OF A GREEN, HEALTHY AND CIRCULAR SOCIETY.

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INSPIRATION

I have been inspired by the many journeys abroad and by the people I have spoken to, but also by the Dutch books 'De wereld breekt open' (which teaches you to process chaotic information using simple rules) and 'Metamorfose' (which explains the new world that is becoming a reality) by Wim de Ridder and the book 'Humanification' by Christian Kromme.

The internet has also been a valuable source of information, with interesting articles such as 'Two billion more people will live in cities by 2035' by Alejandro Aravena, which can be found, for example, on www.graylinegroup.com and www.theguardian.com. In addition, the websites of CBS and the EIA have provided me with further interesting information.

A lot of information can also be found on www.sustainableurbandelta.com, which aims to provide the incentive to showcase concrete projects in the Netherlands related to a whole range of integrated solutions to large urban challenges.

THANK YOU

I would like to thank everyone who contributed in any way to the realization of this document. For their insights and feedback.

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SUSTAINABLE URBAN DELTA

A vision of cities integrating their green belts into urban areas, creating green, healthy environments, stimulating new economies and enhancing social coherence. This integration improves future societies by solving many environmental and social challenges.



Sustainable Urban Delta

A vision of an integral approach to solve problems related to living, mobility, energy, water and food for rapidly growing metropolitan areas.

WWW.SUSTAINABLEURBANDELTA.COM



