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Netherlands
2020**

Regional Circular Economy Status Quo

**REDUCES – Rethinking Sustainable Development in
European Regions by Using Circular Economy
Business Models**



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1 Background and context

Circular economy changes the methods and revenue models of business. Instead of traditional ownership, consumption is based on the use of services: sharing, leasing and reusing. The new method challenges countries and regions to develop and construct new business models that can be used to respond to the global climate crisis, among other things.

REDUCES contributes to the EU2020 strategy by advocating the priorities of Sustainable, Inclusive and Smart Growth. In addition, improving resource efficiency by sharing experiences on circular economy practices will translate into lower GHG emissions and give a much-needed boost to economic growth in the regional context. The project will also contribute to the vision of “Resource-efficient Europe” via inter- and intraregional cooperation and learning processes. This kind of interaction is vital in order to reach the EU2020 strategy goals. REDUCES also supports the fundamental objectives of decoupling economic growth from the use of resources and increasing the use of renewable energy sources which are underlying themes in the EU2020 strategy. The EU action plan of the circular economy also accentuates the need to create the conditions under which a circular economy can flourish and resources be mobilised. It is recognised in the plan that new business models are needed to enable us to rethink our ways of producing and consuming.

REDUCES brings together six European regions:

- Southwest Finland
- Utrecht, Netherlands
- Greater Manchester, UK
- Valencia, Spain
- Bulgaria
- Maramures, Romania



The overall objective of the project is to improve the implementation of regional policies in order to enable regions to adopt more environmentally sustainable ways of production and to reduce the negative environmental impacts of economic development. Circular business models can be used to help companies achieve resource efficiency and subsequent net revenue gains, and by doing so help regions achieve a more innovative, resilient and productive economy. Although circular

business models are often viewed as sustainable by nature, it is recognised that there are uncertainties about their potential impacts, such as externalities and rebound effects. REDUCES results will facilitate and better enable the adoption of environmentally sustainable circular business models with the support of improved regional policies.

Sub-objectives of the REDUCES project are:

1. To increase the knowledge and capacity of regional and European policymakers and stakeholders on circular economy business models
2. To improve the competence of partners and involved stakeholders to make informed decisions on promoting the transition to the circular economy in regions
3. To discover innovative and the most feasible circular economy business models in each region, which are instrumental to transforming production value chains towards environmental sustainability

4. To improve the competence of regional actors to assess the environmental impacts of circular economy business models in order to choose the most feasible and environmentally sustainable models recognizing regional assets, barriers, needs and strengths necessary for the circular economy transition
5. To improve policy instruments (4 ERDF policies and 2 regional plans) via 6 action plans to better introduce or integrate circular economy business models into the policy instruments and supporting the theme by proposing new project ideas or funding.

The purpose of this Status Quo report is to summarize the results of the studies carried out about the existing circular economy business and actions, strengths, opportunities, threats and weaknesses in Utrecht, the Netherlands. The Status Quo report provides the basis for the development work planned in the REDUCES project.



2 Definitions and methods



2.1 Circular economy

“Circular economy” can mean a lot of different things in different sectors. Common denominators include designing out waste and pollution (reduction of waste), keeping products and materials in use (quality improvement and value retention), regenerating natural systems (loops, transition) and social aspects, such as creating well-being. (Ellen MacArthur Foundation 2017b.)

A circular economy refers to an economic system that is based on business models that replace the current linear economic model. These business models replace the conventional model with reuse, recycling and alternative production, distribution and consumption processes. A new business context aiming at sustainable development requires extensive action at several levels, ranging from the micro-level (products, businesses and consumers) to the meso-level (eco-industrial parks) and even up to the macro-level (cities, regions, states and even more extensive entities). All of these share a common view and goal of more sustainable business that takes into account the environment, economic well-being and social justice at different operational levels. (Kirchherr et al. 2017, 224–225.)

According to the Ellen MacArthur Foundation, the aim of a circular economy is to look beyond

the current take-make-waste extractive industrial model. The idea is to gradually decouple economic activity from the consumption of finite natural resources. At the same time, the amount of waste is reduced and finally it is designed out of the entire system. The focus is on positive, society-wide benefits. The circular economy builds economic, natural and social capital, supported by the transition to renewable energy sources. (Ellen MacArthur Foundation 2017b.) The Finnish Innovation Fund Sitra defines the circular economy as a future economic model in which natural resources are used within the Earth’s carrying capacity. (Sitra 2019a).

Based on the knowledge and understanding of the REDUCES project partners, the circular economy refers to socially sustainable business that creates well-being. The objective of the economy is to maintain and restore the value of our natural resources. Even though the objective is full circulation, the number and level of loops can vary. The transition to a circular economy, as well as business in a circular economy, requires extensive co-operation between different parties.



2.1 Circular economy business models

The corporate world is shifting from the traditional model of a linear economy towards a circular economy. In the circular economy, production and consumption are increasingly based on services instead of owning. The operating methods and

earning models of companies change, and operations need to be updated so that they will support the mitigation of climate change. (Sitra 2019b.)

The themes of the circular economy business models investigated in the REDUCES project are based on the definitions of the Finnish Innovation Fund Sitra. The themes are renewability, sharing platforms, product as a service, product-life extension and resource efficiency and recycling. (Sitra 2019a.)

The circular economy business model is an economic model in which business is largely based on the forms of business mentioned above, i.e. consumption is based on the use of services – sharing, renting and recycling – instead of owning and increasing production of goods. Materials are not destroyed at the end but used over and over again for making new products. (Sitra 2019a.)

Design plays a crucial role in ensuring that products are durable and environmentally friendly and that the materials can be reused at the end of the product life cycle. The circular economy requires us to redesign our ways of working: our products, business models, cities and the linear systems that have lasted for the past centuries. Choices made at the start of the life cycle have impacts on each phase during the product life cycle. (Ellen MacArthur Foundation 2020a.)

internal and external stakeholders in the dialogue, decision-making and implementation of solutions to common problems or goals. It relies on the principle that if enough input is provided by all actors involved in a question, the eventual consensual decisions gain more legitimacy and therefore better reflect the set of perspectives rather than a single source of validation. Unlike in multilateralism, in which governments, as representative of their citizens, take the final decisions on global issues and direct international organizations to implement them, in multi-stakeholderism stakeholders become the central actors. Multi-stakeholderism often disconnects decision-making and the implementation of these decisions from the intergovernmental sphere, having no obligation to either report to or take instructions from the intergovernmental community. (Lin 2018, Gleckman 2018, Szuppinger & Kállay 2017)

In the REDUCES project, the multi-stakeholder governance model appears in involvement and engagement of the stakeholders from the different sectors and levels in all the regions in the project. Circular economy is not an individual game, and this gives a crucial role to wide cooperation between different stakeholders. Involvement appears in different ways for different project regions depending on the policy instrument and its role and activities in the field of business and circular economy activities.



2.3 Multi-stakeholder governance model

The multi-stakeholder governance model is a governance structure that comprises institutional ways of involving non-governmental actors, i.e.



2.4 Policy instrument

In general, a policy instrument is a means for public intervention in local, national or international economies, referring to any policy, strategy, instrument or law developed by government/public

authorities and applied on the ground in order to improve a specific territorial situation. Policy instruments are linkages between policy formulation and policy implementation, intended to achieve outcomes which conform to the objectives of public policy. They can take many forms, ranging from regulatory régimes to the provision of services to help improve the performance of businesses, and in most cases, financial resources are associated. However, an instrument can sometimes refer to a legislative framework with no specific funding. (Interreg Europe 2020, Saublens 2012.)

Policy instruments are often known as governing tools as well, particularly when they are applied to all conditions associated with them. The implementation of governing tools is usually meant to achieve policy targets of resource management but adjusted to social, political, economic, and administrative concerns. Concerns of sustainability

largely depend not only on what instruments are selected but also on how they have been applied. Assessment of policy instruments can therefore be an important component of policy sustainability. (Ali 2013)

In the context of Interreg Europe, “operational programmes for Investment for Growth and Jobs as well as Cooperation Programmes from European Territorial Cooperation are considered policy instruments. Beyond EU Cohesion policy, local, regional or national public authorities also develop their own policy instruments. Macroregional strategies can also be considered policy instruments in the context of Interreg Europe. However, considering the characteristics of these strategies, it may be easier for projects to influence the corresponding transnational cooperation programmes than the macroregional strategy itself.” (Interreg Europe 2020.)

3 Status quo of the regional circular economy: Utrecht, Netherlands

3.1 Characteristics of the region

Position within the Netherlands

Utrecht is a province in the middle of the Netherlands, its capital is the fourth largest city in the country. The city of Utrecht is part of the area called “Randstad”, where the other three biggest cities are also situated. Of these cities Utrecht is situated most Eastward and land inwards. Compared to the other cities Utrecht does not have a large harbour (like Rotterdam or Amsterdam), nor does it house the national departments of government (like The Hague).

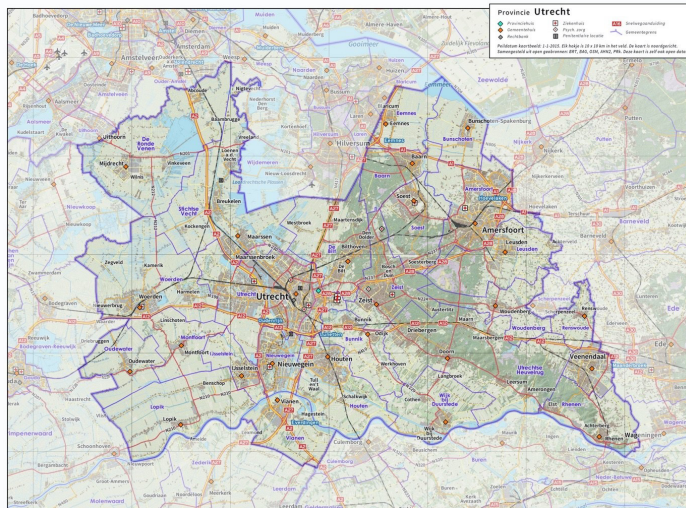


Figure 1 – Map of the Province Utrecht (instituut fysieke Veiligheid)

The region is seen as the Province Utrecht, in which there are several cities (see figure 1). The city of Utrecht is the capital city of the Province. Each city council has its local responsibilities like housing, social policy, education, local economic policy, etcetera. On a regional level the province is responsible for the development of the area,

infrastructure, maintenance of roads and waterways, regional economic and social policy and nature and urban development.

For the service economy, the Province Utrecht is an important area. Specifically for Dutch banking and insurance companies Utrecht has a specific status: the city hosts the headquarters of Rabobank and Volksbank (two of the four main Dutch banks). Insurer a.s.r. is also quartered in Utrecht city. The country's leading sustainable bank, Triodos is situated nearby. This leads to the establishment of several professional service firms like (national) consultants: Berenschot, Cap Gemini and offices for the big 4 accounting firms, and several smaller firms.

Building and manufacturing industry are important sectors in the region. The region houses several nationally active companies in building like

BAM, Ballast Nedam and Volker Wessels. Utrecht is also home to one of the biggest online retailers in the country: Bol.com

The city of Utrecht is an infrastructural hub. Due to its central location in the Netherlands Utrecht is a hub for motorways and railways. Utrecht Central Station is the busiest train station in the Netherlands as it connects all for corners of the country (NS, 2018). The main waterway from Amsterdam to the river Rhine into Europe passes Utrecht. The Utrecht freight terminal is one of the biggest inland harbours of the country.

The province and cities in Utrecht all work on making the area attractive for living and economic activity. The central location, available infrastructure and close proximity to other important areas of economic activity like Amsterdam, Rotterdam, Noord-Brabant, make the province popular with companies and new inhabitants.

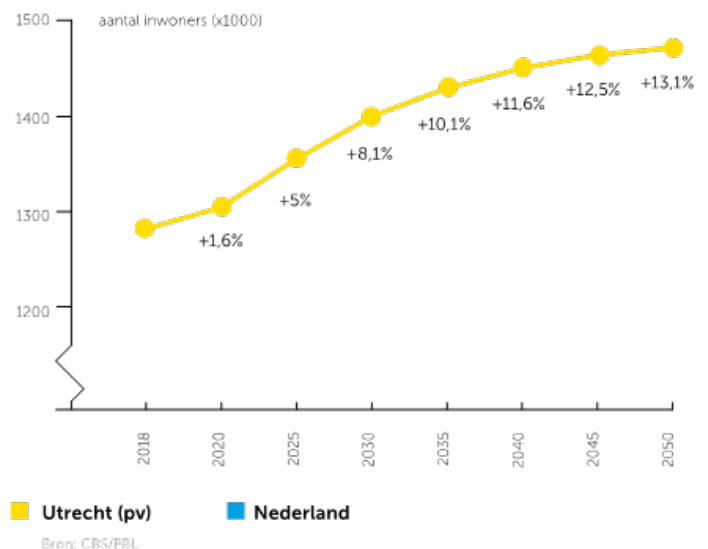
One of the driving forces of the economic success for the region is the access to highly skilled labour. The area provides education on (applied) university level, but also educates a large score of technical professionals at vocational level. (Economic Board Utrecht, 2019)

Development of the region

The economic development of the region Utrecht, as part of the Northern wing of the Randstad area has been summarised in two factors: the number of inhabitants and the number of companies active in the region. The attractiveness of the region for inhabitants and companies is a product of the living environment, available housing, demographic development of the region, accessibility and the supportive policy.

Based on demographic predictions the population of the province will grow by 200.000 people in the next 30 years, which can be seen from the

graph below. In the province several local developments will provide housing for these people. A notable example of developments in housing is the “Merwedekanaalzone” where 10.000 new houses are being built, in which circularity plays a central role.



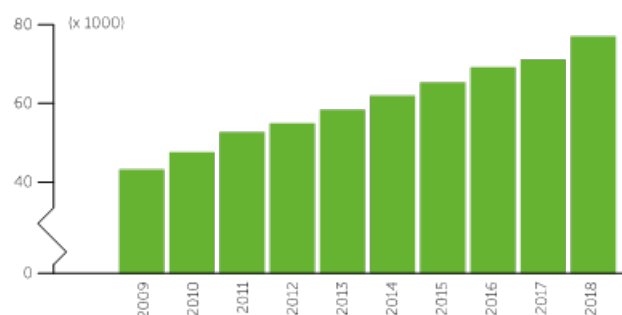
Graph 1 – The development of the inhabitants of the Province Utrecht (Economic Board Utrecht, 2019)

The city of Utrecht has been adding housing inside and outside the city limits in the limited space that is still available. This leads to the following challenges: smart reuse of space in the city area, smart demolition and renovations, and building houses in areas of relative low economical value. This puts a strain on the choice how to use the available space, not just for entrepreneurship or living, but also for recreation, education, public area, sports and nature. Examples of developments are new housing projects on former industrial areas just outside of the city centre, the redevelopment of the Central Station area and a neighbourhood just west of the central station that will be redeveloped sustainably. Social housing providers are experimenting with smart renovations of housing that will generate more energy than it uses. (Project Henriëttedreef)

Economic development of the municipality of Utrecht

According to the Economic Board Utrecht, the city of Utrecht represents 62% of employment in the province with 460.000 jobs (Economic Board Utrecht, 2019). From 2009 until 2018, there was a strong growth of companies started in the region, from 40.000 in 2009 to 80.000 in 2018 – see Graph 2. In part this development is due to the flexibilisation of the labour market (people becoming independent contractors), as this has been a national trend (CBS, 2020).

Bedrijven en organisaties stadsgewest Utrecht (aantal), 2009-2018



■ Stadsgewest Utrecht

Bron: PAR/LISA (2018), bewerkt door EBU research

Graph 2 – Development of incorporation of companies in the municipality of Utrecht (Economic Board Utrecht, 2019)

Development of CE in a national perspective

The Dutch government has made sustainability a key issue and has developed a National Climate Accord (Rijksoverheid, 2018). Although this covers more than just Circular Economy, the subject of Circular Economy is seen as an important factor in reaching the long term goals. Several transition agendas have been set up to enhance the change to circular development of Biomass & Food, Construction, Consumer Goods, Plastics,

and Production. (Ministerie van Infrastructuur en Waterstaat, 2018)

The national government has delegated the responsibility for the implementation of circular economy to the regional level. The municipalities, provinces and water boards have set up a sustainable investment agenda in which they pledge to yearly invest and procure for € 28 billion in durable, energy and climate neutral and circular initiatives. (IPO, Unie van Waterschappen, VNG, 2017)

Several regions, like the Province Utrecht and the municipalities in the province have been making and publishing ambitious plans for circular development of the region. These plans have been linked to the National Climate Accord when that was ratified in 2018 (Gemeente Utrecht, 2020a).

On a national level several institutes are working on a way to make the effects of circular economy measurable. National research institutes, like the Dutch National Bureau of Statistics (CBS), the National Bureau for the Living Environment (PBL), the Netherlands Bureau for Economic Policy Analysis (CPB), the Netherlands Organisation for applied scientific research (TNO) and Utrecht University are collaborating to develop a way to objectively measure the effects of policy and initiatives in a circular economy. This signifies the next phase in the development of the circular development in the Netherlands (Prins & Rood, 2020).

In 2019 the National Bureau for the Living Environment (Planbureau voor de Leefomgeving) (2019) calculated that about 85.000 circular initiatives were active in the Netherlands. The most part of these were focused on the repair of consumer appliances. Initiatives for the reuse of consumer goods and the making energy from biomass and the production industry were a far second and third. Even though the amount of these initiatives was a lot smaller, the size of each of these was a lot larger.

Circular initiatives in the region

As stated in the publication by the PBL a lot of different circular initiatives have been developed by companies and inhabitants in the city of Utrecht. We can easily state that entrepreneurs are recognising market potential for circular solutions to replace linear use of materials, reusing waste or to lower the impact of consumption. Each of these entrepreneurs is working on making circular economy more mainstream. Most of them spearhead the development of circular economy in their value chain.

Regardless of their business model (Isoaho, 2019) or revenue model (Copper8, 2019) initiatives in the city of Utrecht could be clustered in the following three categories: I) circular/social business, II) circular business model for an existing company and III) circular collaboration.

I) Circular/social business – Business models that have proven to be (somewhat) financially sustainable in their current form. A part of these companies do not necessarily identify themselves as circular economy business models. These companies share an ideology with regards to sustainability and circular economy, with the potential for a business model. These initiatives usually have to work hard to remain financially sustainable, and in many cases receive financial support through subsidies, although they are able to create enough income to function independently. The people linked to these initiatives are seen as thought leaders and action leaders for new circular initiatives. Scaling up is a challenge for these initiatives, or it might not be a focus for the organisation.

- Examples: Buurman, Hof van Cartesius, WeDriveSolar, WeCycle, Iwell, Bixbi Bamboo, Sympany, Instock, Repair cafés, Kromkommer
- These entrepreneurs focus strongly on the social component of circular economy: exchange of knowledge, education, valuing of resources

used or the use of consumer goods, these provide a good or service that is an alternative to linear consumption.

II) Circular business model for an existing company – Incumbent companies that have developed a circular initiative or subsidiary in a mostly linear sector like construction, facility services, clothing and fabrics. For these sectors these initiatives are seen as innovative. These organisations regularly have a first mover advantage, the profit motive usually is not leading in these initiative, but it is part of the business case that was developed. The parent company expects the initiative to break even at least within a reasonable period of time. This can be within five to ten years. These initiatives represent changes to the “way we do things here” and shared wisdom in the sector. In many cases the initiative is placed outside the regular business in a separate unit. Most of the initiatives have noticed that proprietary limitations limit the success of these initiatives, and have therefore either shared use of the initiative or started working together with competitors.

- Examples: Vitens, Bouwhub, Returnity, Pouw, Sympany
- Focus on innovations in value chains with the aim to lower the environmental impact of the value chain or to add value to waste streams (for example by transforming waste in reusable resources (Sympany) or market side products for alternative use in other sectors (Vitens) or to lower the environmental impact by using smart logistics (Bouwhub)).

III) Circular collaboration – in several alliances organisations work together to reach circular goals in their own organisation. These initiatives are different in scope, duration and commitment. Mostly these initiative start with a public declaration of goals and activities. These are followed by periodical reports on the progress of the goals met. In most cases this process is supported by

a facilitating partner on a specific circular subject. Other cases are permanent circular coworking spaces and circular craft centres, that in several cases lead to collaborative strategy on circular development.

- Example: Circular Office Challenge,
- Examples of permanent collaboration: De Stadstuin, UCo, Hof van Cartesius
- Focus on: collaboration, awareness for the circular economy and to set up new initiatives at the organisations that participate beyond the scope of the collaboration

3.2 Regional CE perspective

The city of Utrecht and the province Utrecht have each spent several years to develop and support initiatives in circular economy. Specific initiatives go back to 2014/2015, where the Province and City of Utrecht have participated in networks or were instigator of initiatives.

Since 2012 the Economic Board Utrecht has been specifically putting the spotlight on and supporting initiatives in circular economy from companies. These have been small start-ups, volunteer work and business models for existing companies (Economic Board Utrecht, 2012).

The vision for the development of policy on circular economy has been embedded in the coalition accords of the political parties in government for both the Province as the city of Utrecht.

3.2.1 Development of CE perspective

Inspired by international and national research both the Province and city of Utrecht are setting an agenda for the circular economy. Based on an analysis of potential and opportunities, priorities

were set and a general approach was chosen to make initiatives happen (Bastein & Rietveld, 2016).

This led to a focus on the construction sector for circular initiatives, due to potential impact in this sector. Linked to this was the focus on becoming a purchaser for sustainable and circular construction of civil engineering and utilities. In social and economic development both organisations become facilitators: bringing parties together to inspire each other and help take away barriers to the unaided development of circular initiatives.

Collaboration has been another important factor in the development of Circular Economy in the region. The Province Utrecht collaborates with the Provinces of North Holland and Flevoland (the neighbouring provinces to the west and north) and institutes at a national level, like MVO Netherlands, to cooperate and develop policy. Within the region the province partners up with the city of Utrecht and other municipalities in the Province, the Economic Board Utrecht, Cirkelstad and the Utrecht Sustainability Institute (USI), Utrecht University and University of Applied Sciences Utrecht.

3.2.2 Province Utrecht

The province Utrecht facilitates the development of circular economy. In 2018 it participated and supported a study with the name “De Nieuwe Utrechtse Stijl” (The New Utrecht Stijl). The project was supported by ambitious entrepreneurs in the province to develop a future vision of circularity in the area.

This study distinguishes three main movements: building new initiatives in circular business models, the remodelling of existing business(es) (models) towards business models that could work in a circular economy, and the breaking down and

phasing out of linear practices that cannot be sustained anymore.

Within these movements the following five principles are leading (Provincie Utrecht, 2018) :

1. The value of materials gets maximized every time.
2. Economic activities have a positive influence on humans and environment.
3. Energy comes from renewable sources.
4. The scale of cycles are as small as possible and as big as necessary.
5. Products and other designs are flexible, adaptable and modular.

The province Utrecht has the ambition to be a circular purchaser and so sets out tenders for sustainable building projects in both infrastructure and utilities. The province Utrecht has been careful not to be too ambitious in the goals set. The organization realises that realistic goals that are met would enhance the sense of achievement and help set more ambitious goals. In the coalition accord (Provincie Utrecht, 2019) the political parties that make up the local government board have set specific goals towards 2023 making sustainability and circular economy key goals.

3.2.3 Collaborating with regional partners – Circle region Alliance Utrecht

The province Utrecht participates in the Circle region Alliance Utrecht with the city of Utrecht, the city of Amersfoort, the Economic Board Utrecht, USI, Cirkelstad, U10, the Nature and environment Federation in Utrecht and the Water Authority HDSR. Each of these partners work together in different configuration on the subject. Cirkelstad, for example, is a national platform for circular construction that works with the city of Utrecht to enhance circular construction. USI, together with the Copernicus Institute for Sustainable Development

works on a knowledge agenda, research and education projects (Gemeente Utrecht, 2020a). USI regularly publishes reports that are seen as influential on the development of thinking and action on circular economy with in the regional government and civil servants within the Province. (Utrecht Sustainable Institute, 2020)

Input from knowledge partners in the region

The province collaborates with the University of Utrecht and the University of Applied Sciences Utrecht (research group Building Future Cities) and the Sustainable Finance Lab, linked to the University College. Additionally, a host of private companies and initiatives have provided research into the possibilities of circular economy. To name but a few, the following parties have presented reports in the last ten years: Rabobank, Triodos bank, Circle Economy, Ecopreneur, PACE, CircularIQ, Ellen MacArthur Foundation, CB'23, Copper8, Arcadis, CE Delft, NEN, WBSCD, WNF, Deloitte, Pianoo, Metabolic, RWA, Alba Concepts.

3.2.4 City of Utrecht

One of the roles the city of Utrecht plays is the role of circular purchaser for products and services. In tenders circularity and sustainability are part of the selection criteria, companies get the possibility to explore and develop circular initiatives in the core sectors.

In its policy (Gemeente Utrecht, 2020a) the Utrecht municipality distinguishes the following principles:

- Utrecht strengthens the entrepreneurial climate for circular companies.
- Utrecht strengthens the investment climate and procures circular.
- Utrecht stimulates circular area development and circular building development.

- Utrecht will become waste free (from waste to fuel).
- Utrecht stimulates education for circular building and circular entrepreneurship and works towards an agenda for knowledge development for circular economy.

In addition to the agenda for knowledge development for circular economy and a link to (technical) education circularity is embedded in general social policy and education policy (Gemeente Utrecht, 2020b). It will become part of the development of social and education policy.

The construction sector is seen as a high potential sector by the city of Utrecht. Many cases in circularity are from the construction sector. Two examples of redevelopment of property are the former derelict industrial area Werkspoorkwartier and the industrial area Lage Weide. These two areas are supported and developed with support from the ERDF programme Kansen voor West II. Additionally, in several building projects in the city there is a focus on circular development of housing. Because of the large amount of building projects in development the city of Utrecht has selected to tender specific projects as circular building project (Gemeente Utrecht, 2020a; Gemeente Utrecht, 2020b).

An example of a circular building project is the Bouwhub developed by the Volker Wessels construction firm. This initiative is a logistic hub located at the city borders where the builder collects and bundles materials for several building projects in the city and the region, and beyond for projects in Amsterdam. Suppliers deliver the bulk of materials to the hub, leading to full truck loads and less kilometres travelled for the materials. Based in the construction planning the Bouwhub bundles the materials in smaller work packages and delivers them overnight so that contractors can start production right at the start of their workdays. This smart logistics has lowered the amount of kilometres travelled inside the city and towards the city. Waste gets removed from the building sites in the same haul. The results is there is less material and waste stored on the building site, and thus increasing the efficiencies and lowering the risks at the building site.

The city of Utrecht facilitated the area for the Bouwhub and allowed the building transport via restricted infrastructure (bus lanes) so the building materials could be moved safely.



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3.3 Drivers of CE (strengths and opportunities)

Taking stock of the strengths and opportunities based on the literature review and good practices the following developments have been found.

The policy on circular economy of the province Utrecht and city of Utrecht has been imbedded in several types of policy, such as: building and urban planning, social development, and education. Policy execution is left to the partners, as the organisations both still have limited personnel linked to the execution of the policy. The infrastructure for collaboration has matured and has become effective to reach goals.

Urban planning and construction and building have been areas of focus for initiatives in circular economy. The sector has a big impact on the environment. Circularity has been added as a condition for contracting for building and construction and for logistics. Examples of this are Merwedekanaalzone and the Volker Wessels Bouwhub.

A large amount of flexible alliances on circular economy with regional partners between the Province, city of Utrecht, other municipalities and partners have been set up. These have the aim to organise initiatives in such a way that goals are met effectively and efficiently. The province and city provide place making and facilitation of the process. The city of Utrecht has provided place making for several circular initiatives, making it possible for these initiative to blossom and further connect and collaborate. Clusters of circular activities have developed and those clusters link with other clusters

Change in value chains is seen as a chance. Some value chains, like the value chain for construction are mostly organised regionally or locally and can be influenced to work together to limit their

impact and to do so significantly. There is proof of industry leaders taking the initiative to collaborate in logistics.

3.4 Barriers and bottlenecks in CE (weakness and threats)

Based on the literature review, input from the stakeholders and from the good practices the following current barriers and bottlenecks in the development of CE have been found.

The networks employed are made of flexible alliances, this leads to a lot of briefing and meetings with a large number of stakeholders. These networks do not necessarily match up in priorities. The process of managing these stakeholders has made the development of initiatives slow in the past.

Scaling up initiatives to a scale beyond a local level. There are a limited number of initiatives that know how to scale up beyond the borders of the province without suffering financial problems or scaling up infrastructure. Companies that already have infrastructure outside of the province have less trouble scaling up.

Blind spots in circular initiatives that are not known in the networks, or do not know the current networks or do not want to participate in the networks, will not be reached, losing the potential for learning or knowledge transfer.

The parties in the region do not search for best practices from other areas in the Netherlands. Other regions have frontrunner initiatives that can be a source of knowledge and collaboration. The subject circular economy is seen as a new concept, and that limits large scale adoption of new initiatives. So far a lot of the initiatives are due to entrepreneurs in the region reaching out to the province and city.

The current emphasis on the urban area in circular economy is seen as threat to the development of circular economy in rural areas, and for example the agrarian areas and food industry.

In the period leading up to 2020, funding for Circular Economy has been limited. This has made civil servants creative to find funding and to reach goals with limited funds. The Province and city of Utrecht have made use of the ERDF Kansen voor West II programme to help finance several circular initiatives, the Werkspoorkwartier-area being the most notable example.

The limited data available on for example the use of materials impedes the measurement of effect. Data is either propriety or not publicly available, limiting the potential of data analysis and more data driven initiatives.

3.5 Development of the CE vision for the region

For the development of a vision for Circular Economy the Province and the city of Utrecht have decided to develop integral policy at a super-regional level. In the province of Utrecht, the two biggest cities – Utrecht and Amersfoort – spearhead the development of Circular Economy. They are linked with the Province and the Economic Board Utrecht in the Circle region Alliance Utrecht. The city of Utrecht has presented its vision to function completely circular in 2050. This ambitious goal is made in three steps. The period until 2023 is about experiments and figuring out what works. From 2023 to 2030 the development will be accelerated, while the period until 2050 is used to consolidate.

To reach these goals, the cities in Utrecht have set priorities and have made alliances with parties that distinguish themselves in circular operations and front runners. The experiments at the

city level need to become more mainstream and accepted.

The province Utrecht has been instrumental in setting up a Regional Development Company (Regionaal Ontwikkelingsmaatschappij or ROM), which has several shareholders in the area to support local development in a way that the public organisations cannot. The ROM will finance and support local and regional initiatives for a sustainable and circular economy.

In addition the flexible alliances that have been forged are being used to reach the goals that were set. Based on an analysis of potential development, the priorities have been set to realize the circular goals in 2050 (Gemeente Utrecht, 2020a).

3.6 Policy instrument – Kansen voor West III

In collaboration with the other provinces and large cities in the Randstad areas Province Utrecht and the city Utrecht have developed the Kansen voor West II (Opportunities for West II) programme. This subsidy programme, largely funded with ERDF funds supports development of innovations in the regional economy. The main goals of the instrument is the valorisation of available knowledge in the regional economy. Due to the fact that less funding is available, this funding was restricted to limited subjects including reduced CO₂ in production and improving locational advantages for companies.

Currently, the organisation is preparing the third programme of subsidies; this round is more specific aimed at smart specialisation for companies in the region to keep the region in a competitive position and to develop a more sustainable economic development of the region for the period 2021–2027. (Managementautoriteit Kansen voor West, 2020)

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