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The Urban Lab of Europe!

# Antwerp Circular South Journal N° 2

Project led by the **City of Antwerp** 



CIRCULAR ECONOMY







## The ANTWERP CIRCULAR SOUTH project

The Antwerp Circular South project aims to position circularity as a community challenge for the New South district (a newly created district in Antwerp) and to engage its new residents in co-creating online and offline initiatives to change their consumption behaviours. A number of advanced technical solutions covering different resource streams (energy, water and waste) will be tested.

200 Circular South inhabitants will experiment with the so-called 'behavioural nudging', receiving cues to adapt their consumption behaviour of energy, water and waste in the most ideal circular way. Circular behaviours will be automatically rewarded by an alternative online currency, the Circular coin, through a blockchain- based reward and exchange system. A part of the most engaged Circular South participants will form a local energy community co-owning of an innovative collective energy system. In addition, a Circular South Community Centre will be set up to host a number of initiatives related to sharing, repairing and reusing activities.

#### Partnership:

- The City of Antwerp
- Vito/EnergyVille
- Digipolis
- Imec
- Pantopicon
- EnergieID
- De Kringwinkel
- Ecopower

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## 1. Executive Summary

Since the last visit to the project in September 2018, it has now taken shape and moved towards direct implementation: after a one-year gestation and conceptualisation, the activities of the project can almost all be eventually carried out. It has been possible with the adoption of an embodied paradigm in the way it addresses co-creation to foster Community-Building and, to ensure that the project is relevantly designed (e.g. the dashboard, the nudges, the cooperative, Circular Community Centre (CIRCUIT), with the strong partnership with two essential stakeholders, PleinPubliek and Domitys.

In terms of technical devices, the Public Procurements for smart meters (plugs and sensors) are finalized and the first devices installed. The Public Procurements for PVs (Photovoltaics), BIPVs (Building-integrated photovoltaics), storage batteries, are prepared and will soon be launched. As for the back-office modalities, the Community of Nieuw Zuid is increasingly engaged and the Transition Board is on its way. The user profiling has been drafted and the nudging trajectory is currently being designed. Procedures for data treatment (storage and processing) have been established

with adequate ICT design setup and information flows. The business logic for electricity is done, it remains to be done for waste. The Blockchain technology is currently being conceptualised together with the procurement procedures.

In terms of interface, the dashboard is currently being co-created and the CIRCUIT is fully operational. As for the activities of the project, the Energy cooperative, the circular coin and Smart contracts have been designed and the Waste challenge, 100-100-100 was one of the key highlights of the past few months for the offline activities.

This is not without saying that the project is not faced with new challenges that require on-going adjustments: on the "improvements in" but further "needs to" co-create within the project and further integrate the online and offline activities, to adjust — once again — to the reality that the project is taking place in a newly built district, which has led to the need to broadening up the geographical scale of the project. The timeframe of the project makes it necessary to look ahead. Finally, the change of project coordinator at the level of the City opens up a new area for the project.

## 2. Three introductory highlights

In six months, the Antwerp Circular South project has gone a long way. From theory, it has now moved to concrete implementation, with visible effects. More than the individual activities that were carried out, and nicely integrated in a comprehensive way, these last months have seen the embodiment of a paradigm anchored in the functioning of the project, in the way it addresses co-creation.

Indeed, during the first phase of the project, cocreation with the citizens mainly took the form of informing and consulting them for the future of the project, with an objective of Community building. Although this objective has not been left aside, it is now more deeply included in the overall objectives of the project and for the cocreation of the different aspects of the project. As such, the aims of co-creation are currently twofold: to foster Community Engagement for itself and increase the buy-in of the Circular South project and concept and, to ensure that the project is relevantly designed (e.g. the dashboard, the nudges, the cooperative, CIRCUIT). These would be impossible with the strong partnership with two essential stakeholders, PleinPubliek and Domitys.

#### 2.1 A new speed for community engagement

In order to further diffuse on the project a large share of the work has focused on promotional material and communication products, both for **static and dynamic presentations**: an information booth, animation video, Circular South Brochure and fiches, overall campaign visuals, PPT presentations for visits to Circular South, cards: "Dear neighbour... I registered for CS do you want to join?" **Videomaterial** and photos of the overall project have also been combined.

Online information has also been increasing with the production of a monthly Newsletter 'Circulair Zuid' and presence on social media via Twitter (@CirculairZuid), Hoplr, Whatsapp and Facebook (@CIRCUIT).

Yet, the highlights of these months have been that the project went on to the streets of Circular South by organizing breakfast sessions at the entrance of the site (see box below); information sessions for the cooperative and installing meters within the building of Domitys; with the installation of two information screens in the streets. These moments have served as feedback for the project partners on how and in which wording to communicate and further exchange on the different parts (energy monitoring, smart meters, energy cooperative).

#### Breakfasts @CirculairZuid

At the entrance of Circular South, on the terrace of Barchel Bar, the project welcomed twice citizens to come and have a coffee and croissant to talk to them in an informal way about their expectations from the neighborhood, upcoming projects, ... A dozen of residents attended each of these breakfasts and enabled putting a human and visible face to the administration behind the project, to make Circular South concrete, to create bonds with the residents, to get inputs for the next steps of the project and develop new partnerships.



Source: City of Antwerp

The organization of **events** such as "The Vintage & designmarket", "New Year's reception 2019", "GesprekSTOF evenings every first Monday" enabled providing a festive touch to the project together to making it concrete to their needs, as

the organisation of some of these activities actually come from the wishes of the residents (see the case of gesprekSTOF evenings box below).

## **GesprekSTOF**

The community night 'gesprekSTOF' (or 'FABRICofconversation') emerged from the demand for the restoration of textiles and for creative engagement with textiles. CIRCUIT gives it a circular twist by working with collected residual material and plastic. Some residents themselves cooperate and help in organizing them, at Domitys.



Source: City of Antwerp

Partners have had to dedicate time and energy to these processes. Yet, in return, they encountered motivated residents and have created dialogue and the possibility to be "doing Circular South together".

The initial learnings of these activities show that the main driver for interaction is social connection: the residents wish to gather in order to exchange with each other rather than from learning about the technicalities of the project. Which is then the focus of dedicated cocreating activities?

One of the main issues as Nik Baerten from Pantopicon stresses regularly is to "maintaining the right momentum - frequency, variety, complementarity - of Circular South and community-driven/supportive activities will remain a challenge throughout the project".

#### 2.2 Co-creation as an anchored baseline

The partners have now adopted an approach whereby they first design a concept or prototype (such as mock dashboards) by themselves before submitting them and exchanging them with the citizens. In the next few months, the same will apply to possible options for the Energy cooperative and for CIRCUIT, and for the installation of the smart devices. The dynamics of

these sessions have been highly productive and valued in combining the design experience and expertise of Pantopicon, together with the technical partners IMEC, EnergieID, and De Kringwinkel. Highlights of these co-creation moments are scattered along the text of this Journal. Highlights of these co-creation moments are scattered along the text of this Journal.

#### 2.3 Two essential stakeholders

The project could not be implemented without the strong support of two external partners. PleinPubliek is an event organiser which created a container-built temporary event location at the outskirt of Nieuw Zuid and which agreed to host CIRCUIT, after it lost its originally planned location (see the First Journal). PleinPubliek will also install BiPV and PVs on its rooftop. Communication of the partners is as such also streamlined.

**Domitys** is a residence service located at the entrance of Nieuw Zuid which has already hosted several workshops and activities, from the very first one on composting in April 2018, to the information sessions, and the Vintage Market. Its meeting rooms are visible to the pedestrians passing by in the streets. It has also accepted to host one of the two information screens on the project. It might also be one of the recipients of the PVs.

# 3. What has been achieved in the last six months?

In six months, the project has been able to launch and implement most of its planned activities for this period: more than anything else, it starts being concrete and visible, as summarised in the table below and presented explained further in the text.

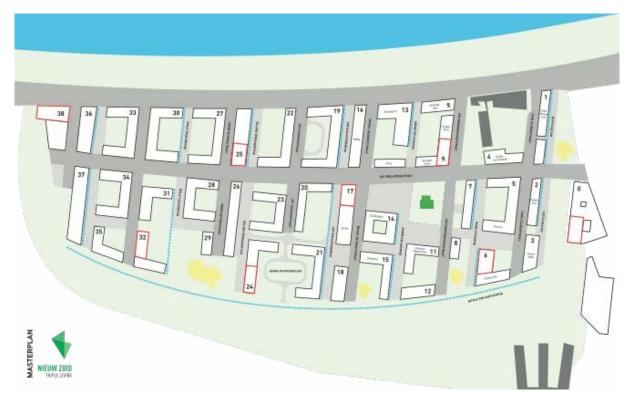
Stream	Technical devices	Modalities	Interface	Activities
Electricity	PV BIPV Storage batteries Smart plugs Smart sensors	Online Community Engagement Transition board Data treatment	Dashboard	Creation of a cooperative  Circular coin
Water Waste	Smart meters Smart waste bins A-card	procedures User profiling Business logic Nudges Blockchain		Smart contract  Waste challenges
Material		Recruitment of Repair buddies and makers	A Circular Community Centre (CIRCUIT)	Leasing of tools an devices Repairs cafes Circular material workplac Redesign service Study visits

Update on the Antwerp Circular South project

#### 3.1 Technical devices

The Public Procurements for **PV** (Photovoltaics), **BIPV** (Building-integrated photovoltaics) and **storage batteries**, are now shopped up in several separate procurement processes, depending on the found location to host the installation. The location for their installation is still under discussions. For sure, PVs will be installed on the rooftop of PleinPubliek where CIRCUIT is hosted.

Discussions are currently going on with Domitys to host some as well. Negotiations are also running with the Buildings 1 and 3, and EcoPower has responded to the tendering procedures on the social housing corporation Woonhaven for an installation on the social housing buildings 7, 8 and 12. The school should also be built with PV (see picture below, building nr. 10).



Buildings planned for the pvs (in red) (Source: City of Antwerp)

The Public Procurements for **smart meters** (plugs and sensors) are finalised and the first devices are being installed. The project has already identified volunteers to install them at their flats. A co-creation session will be organised once the

smart meters will be available to decide where to install them. **Smart waste bins** are already installed throughout the whole City of Antwerp. The use of data from this stream is being questioned though (see below).

#### 3.2 Back-office modalities

As presented above, the Community of Nieuw Zuid is increasingly engaged. In terms of project support, the list of members of the Transition board has now been established: a public procurement will be launched and its contributions to the project will be operationalised soon.

Based on the data collected via the 100-100-100 campaign (see below), notably via an ex post and ex ante questionnaire, IMEC drafted its **user profiling**, which has enabled an initial analysis and benchmarking with regard to attitudes towards the four streams of the project. Notably, the data of participants showed that these were, not surprisingly, mostly women, middle aged

educated, already advanced in their consumption practices and willing to change even more. Yet, even though this data would not enable supporting the change of practices of the wider population, for this already advanced group it makes it possible to identify adequate nudges. It has also been the opportunity to pilot some of the methods/tools that will be part of the nudging trajectory. The nudges were discussed and tested during a co-creation workshop (see box below).

Procedures for **data treatment** (storage and processing) have been designed with adequate ICT design setup, information flows, which includes: the endpoint for ACPaaS data (push)

#### **CO-CREATING THE NUDGING EXPERIMENT (13/11/2018)**

Based on the profile information of the participants and the available log data about their engagement in the campaign (i.e. the waste weights they entered on the website) IMEC and Pantopicon organized a co-creation workshop, whose goal was to identify the way they deal with their waste, their motivations and barriers to participate in the campaign and based on this information, define a nudge that could be implemented within the campaign. It was an occasion to meet the needs of the residents with those of the projects. Due to technicalities, the first nudge that was identified (changing the timing of reception of the challenge's newsletter) could not be implemented. Yet, the learnings (such as anticipating) have been integrated in the next steps of the project.



Source: City of Antwerp

reception and its information scheme; the endpoint for providing PV data to ACPaaS data (pull) and its information scheme; the data pipeline and data treatment and persistence procedures; the integration of the Antwerpen A-profile, to enable citizens to log in easily and securely.

These are all being piloted in a HomeLab at IMEC's premises with the specification of data, event and nudge data formats together with all involved partners and the development of

backend platform for remote monitoring and management of the field trial household setups.

For the purpose of data analysis, the partners defined the required user context parameters that will be used for the analyses (e.g. family composition, apartment characteristics, ...) and the derived data will be generated (e.g. percentile ranks, stand-by power consumption, ...).

Digipolis has also developed an app for enabling all data exchange with the various project partners, integrated within Digipolis Antwerp's platform. This app organizes the data by topics (e.g. sensor data, nudges...) to which one can subscribe or post.

The **business logic** for electricity is implemented, it remains to be done for heat and waste. The **Blockchain system** is currently being developed. Yet, it is not clear yet, what data the project will

be able to use, which might question the experimentation phase:

- For heat, the service provider agrees to be part of the project
- For electricity and water, data should be made available later in the year;
- For waste, negotiations have just turned out positive and the project has access to the data.

#### 3.3 Interface

The dashboard is currently being designed on the basis of internal research and co-creation with the residents (see bow below).

The Circular Community Centre (CIRCUIT) was launched on 6 October 2018. It is now open on Wednesdays and Saturdays afternoon. Services

## **CO-CREATING THE DASHBOARD (3/12/2018)**

Co-creating the dashboard attracted a large number of residents, more than for the other co-creation activities. 16 participants were present. The residents were asked about the ways they wanted to interact with the information and what they wanted to learn from it. On the basis of canvasses and on some proposals, they identified the best options to them. This moment also served as a group binding moment for the residents and also for some of them to sign up to the project.



Source: City of Antwerp

include: leasing tools, devices and household appliances, weekly repair service for bikes, clothing and electronics, workshop room, monthly workshops: bike and clothing repair, cultural evenings (e.g. a purchasing power debate series), study visits for schools and companies. It also supports community events. The services it offers have been co-created with residents (see box below) and CIRCUIT is currently reflecting upon its administrative and financial form which could take that of a cooperative for makers, further develops partnerships (makers and circular entrepreneurs, cultural, restaurant, cooperatives), designs it branding and marketing

strategy and its Culture section, is starting to take shape.

The change of size of location (10 times less than the original plan) does not enable to carry out all the planned activities and proper piloting of the experimentation. Hosted at Plein Publiek which focuses on nightlife as opposed to CIRUIT's daily activities.

Yet, despite the difficulties with the location, visitors find their way to CIRCUIT and are inspired to bring in materials for repair. In addition, community is slowly starting to form at Nieuw Zuid with interest and participation in circular

## **CO-CREATION THE SERVICES OF CIRCUIT (7/11/2018)**

CIRCUIT organised together with PANTOPICON a workshop to co-create the activities and services that CIRCUIT could provide. They wanted to exchange on what CIRCUIT is offering that can be of use and what services CIRCUIT could offer. It appeared for example that people wanted not only to rent machines but the workforce as well. Three community members took part at the premises of CIRCUIT.



Source: City of Antwerp

events (textile evenings ('waste wave'), repair cafes, vintage markets, etc...).

The future location of CIRCUIT will be in Building 20, in the centre of Nieuw Zuid. The Kringwinkel

and the City of Antwerp are currently working on their cooperation agreement. At the same time the Kringwinkel and the real estate developer are finalising the sales agreement.

#### 3.4 Activities

The **Energy cooperative** is now under co-design: after some internal research and analysis, EcoPower suggests making residents co-investors and owners of the solar panels on the buildings in Nieuw Zuid, with the form of a Local energy community within an already existing experienced cooperative, EcoPower. So far, 33 residents are interested in the cooperative. Within this model, EcoPower has developed a financial model and agreement to remunerate the owner or homeowner association that has the building in property on or in which the energy installation will be installed. It was also decided that the purchase of the installation (PV) would be under the responsibility of EcoPower and not of the City of Antwerp anymore. This to ensure a relevant

follow-up after the end of the project, more consistent with the fact that part of the initial UIA agreement was initially to transfer the installation to the cooperative.

The circular coin and Smart contracts have been designed. The technical implementation of the Circular Coin and Smart Contracts will start soon. Some of the main questions at stake at the moment related to the object of award: the effort or the result? These will be co-created with the residents.

The Waste challenge, 100-100-100 was one of the key highlights of the past few months for the offline activities (see box below).

### The 100-100-100 Challenge

The Concept of 1000-100-100 comes from the Netherlands: over 100 days, 100 participants seek to become 100% zero waste. The City of Antwerp set up an online platform, organized workshops on producing cosmetics and detergents, sent out some tips and information by email, held stands... During this period,



participants weighted their waste and exchanges on their experiences on line. 157 participants, including 4 people from the core team from the Administration, and 10 from Nieuw Zuid. They accomplished 68% of waste reduction. The analysis from IMEC showed that the participants created some new habits with sustainable effects and overcame barriers (such as bringing a box to the butcher's).

Source: City of Antwerp

# 4. On-going challenges and readjustments

Circular South keeps on being highly inspiring in terms of moving on with its planned objectives and achievements. And this is what would appeal to an external audience. Yet, the project has faced and is facing quite some challenges, that it seeks to address in the most efficient and creative ways by further integrating its online and offline activities, adjusting – once again – to the reality

that the project is taking place in a newly built district, leading to the need to broadening up the geographical scale of the project, while at the same time addressing the strict timeframe of the project which makes it necessary to look ahead. Finally, the change of project coordinator at the level of the City opens up a new era for the project.

#### 4.1 Co-creating and integrating online and offline activities

Since the First Journal, the co-creation within the project has highly improved. Partners got to know each other, their languages, expectations, ways of working. For the whole online activities, biweekly meetings ensure on-going interactions between the partners. The offline activities are strongly bringing together CIRCUIT and the City of Antwerp. "We came from a very theoretical model and have had to translate this into a real functioning site", Katrien Van Den Bleeken explained. The whole project starts to make sense as a whole, and not as isolated blocs. Partners are also taking part themselves in both offline and online activities.

In particular, we can see the flows of the online interactions being clear by now: the energy sharing system is strongly linked to the cooperative on the one hand, whose structure will be the interface for the production of energy (via the PV and BIPVs) and measurement (via smart meters), whose information will feed into

the business logics to create nudges diffused via the application, which in return will use

the blockchain mechanism to reward the residents. These have been strongly related to the co-creation activities (see above).

Yet, the potential synergies between the various activities are not used up to the best they could. For example, at the moment, the list of those having taken part in the 100-100-100 Challenge has not been used for promoting the Energy Cooperative. Within the scope of GDPR, the project could ask permission to use the participants' data for further exchange on the project. As a starting point, information could be shared via the newsletter of the project. Finally, CIRCUIT seems to be a project on the side of online activities: probably because of the material stream it addresses, of the location, the fact that a specific public attends its activities. Its integration with the other offline activities could serve as an example for its further integration with the online ones.

#### 4.2 Facing the reality of a newly built district

As the Circular South project is being implemented in a newly built district, some issues had to be balanced and innovative solutions had to be found regularly. Some of them were already mentioned in the First Journal, which affected in particular the location of the Community Centre.

Amongst the advantages of such a location, it is key that new residents made a choice to move to a sustainable district, as such, they would be eager to buy in to sustainable lifestyles. As Vincent Dierickx stated, this is "life event theory: people experiencing a new life event (such as moving to a new apartment, starting a new job, ...) are more susceptible to change their behaviours". Overall, residents are willing to create bonds and meet with neighbours, they are motivated and can really feel they co-own the neighbourhood. Everything seems to be possible. And this also goes along with the fact that the newest technologies and infrastructures can be used.

At the same time, many challenges have already arisen that require the partners to be creative. This relates to the narrative of the project, the difficulty to find potential sites for PV and battery

and to convince site owners and residents. As mentioned above also, some of the buildings blocks on which PVs will be hosted will be finalised only towards the end of the project. It is probable that they will not be in time for being included in the experimentations of the project (via the dashboard, nudges, etc.).

Also, as only part of the neighbourhood is inhabited, it limits the number of residents to buy in for the citizen energy group (energy cooperative) and participants for the smart meter experiments. For CIRCUIT, it is difficult to make activities which are not currently profitable, reaching out to residents. Recruitment has also appeared to be difficult for that reason: for example, the session on the co-creation of the nudging experiment was organized in the evening at the location of CIRCUIT which is currently hosted at PleinPubliek, currently 1 km away from the main (and already built) part of Circular South. As such, only two participants overcame these hurdles and eventually came.

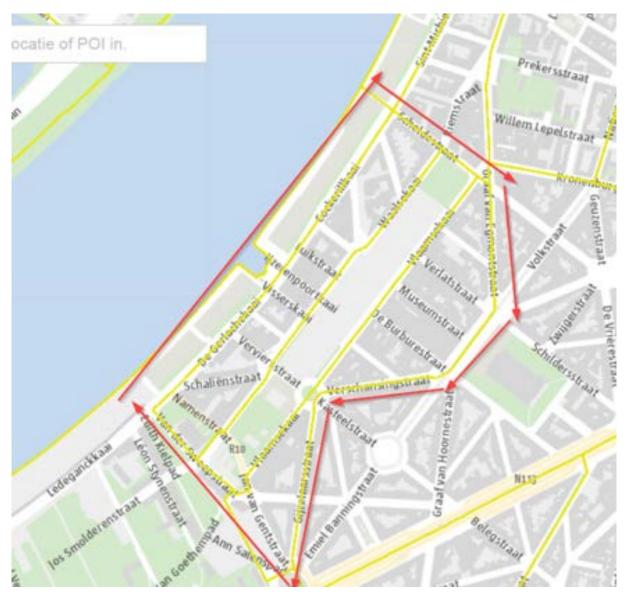
In terms of behavioural change, new apartments use techniques that are already very efficient, so there is only a small margin for improvement. This might make generalisation more difficult.

#### 4.3 Broadening up the geographical scale of the project

In relation to this, only 691 residents have started living and are living (social housing included) in the area so far. The critical mass to ensure that an adequate number of them would take part in the activities has not been reached. For example, out of the 157 participants to the 100-100-100 Challenge, only 10 came from the neighbourhood. As was foreseen in the First journal, it was therefore decided to expand the focus Area from 'Nieuw zuid' to 'Antwerpen Zuid' (see the map).

Dedicated activities are now being prepared: more diverse press communication, communication fragmented on channels water, energy, materials and waste in order to not overkill the residents with information, participation in local activities (e.g. consultations over the transformation of a parking lot into a park).

As such, the Waste challenge is indeed having a wider impact on the city than on the new



Source: City of Antwerp

neighbourhood. Additionally, the challenge is now a Belgium experience, not only a Dutch,

which will make it easier to expand to the wider City.

### 4.4 The timeframe of the project...

As part of an UIA grant, the project is extremely tightly linked to a workplan and deliverables initially agreed upon. One main concern is that such a subsidy should cover the *implementation* of a project. Yet, in this case, and as originally planned though, the first year has been dedicated to *conceptualisation* and *design*. It is only now that the project actually takes shape, which makes it concrete and hopeful for the changes it

can bring as well as rewarding for the team on board.

The project also needs to accelerate some of its activities and to "condense" them as opposed to the first phase. For example, the next editions of the Waste Challenge will need to be thought through and planned together in order to be organised within the UIA project and to benefit



Foreseen timeframe for the upcoming waste challenges (Source: UIA expert)

from synergies with other events and dissemination opportunities (see figure below).

In addition, in relation to the fact that the project takes place in a newly built neighbourhood, the given timeframe makes it difficult to envisage the entire possibilities it aimed at originally. For example, the time required to eventually install PVs on buildings will prevent them from being included in the dashboard and nudging experiment. As such, the partners have started individually and collectively to think ahead and plan the after-life of the project.

#### 4.5 ... makes it necessary to look ahead

The UIA project will have strong impacts on the Circular South district as well as on the activities of the partners. CIRCUIT and the Energy Cooperative will be a clear follow-up of the project in a form of their own. A co-creation session will take place to discuss the form and content of that CIRCUIT should take to be responding to the needs of the residents. In parallel, it is seeking to develop a Business Model that would enable its activities to be self-sustainable as part of the De Kringwinkel NGO. In order to design the best model for the Energy Cooperative and for it to have its own life after the UIA project, a co-creation session with the residents is also planned. For these two projects,

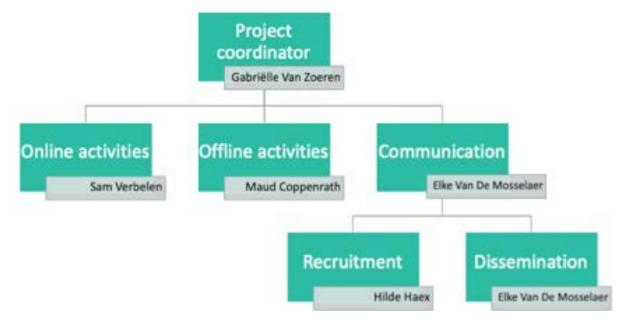
an important aspect is their Business Models and Governance structure: how to ensure that the ethics and spirit of the project will be maintained, at the same time as citizens owning them (via cooperative structures) but also ensuring the viability of these?

The project will also lead to clear takeaways for the partners. The IoT platform designed by Digipolis was created in accordance with GDPR and "privacy by design", and will be highly beneficial to the rest of the city. The dashboard designed by EnergieID will remain and its structure will be integrated into the EnergieID platform.

## 4.6 The change of project coordinator

A final element of the life of its own that the project is having, the current project coordinator, Gabriëlle Van Zoeren, will be leaving her functions on 31 March 2019. Finding a replacement was easy as the colleague currently in charge of the offline activities, Maud Coppenrath, will take over this position: she is particularly versed in the

project, has the adequate knowledge, experience and expertise, in general and in the project. Yet, this will require some time for readjustments, and will particularly lead to a reorganisation of the current organigram within the City of Antwerp for this type of project (see figure below). As mentioned already in the previous journal, it



Organigram of the project at the City of Antwerp (Source: UIA Expert)

already seems challenging to recruit a new coworker to replace Maud Coppenrath in her offline responsibilities even more now that the project is mid-way through. Yet, the team has found a talented replacement and is looking forward to this new cooperation.

## 4.7 Overview of challenges

Based on the above, it appears the challenges of the project in the past six months are being mitigated and that the team is engaged and motivated to identify (creative) solutions. They can be summarised as per the table below.

# MAPPING ANTWERP CIRCULAR SOUTH AGAINST THE ESTABLISHED UIA CHALLENGES

Challenge	Level	Observation		
1. Leadership for implementation	Medium	The change of project coordinator is not an issue per se, ye partners did express that a transition period will be needed.		
2. (Smart)Public procurement	Low	Public procurement does not appear to be a major issue to the project. Procedures can be cumbersome but biggest challenges were solved by doing a budget shift.		
3. Organizational arrangements within the urban authority	Medium	As mentioned in the First journal, organizational arrangements within the urban authority could be an issue if the other departments lose the buy-in and commitment they have developed so far.		
4. Participative approach for co-implementation	Low	Participation is in the spirit of the project. As presented in this Journal, activities within the partnership and with the citizens have been increasingly organised to ensure a real co-creation and co-implementation of the project.		
5. Monitoring and evaluation	Low	Monitoring and evaluation do not appear to be a major issue to the project.		
6. Communication with target beneficiaries	Medium	As mentioned in the First Journal, communication does not appear to be a major issue to the project, yet, new strategies will need to be further developed in order to reach out to the planned number of citizens.		
7. Upscaling	Low	As mentioned in this Journal, strategies to look ahead are in place.		

# 5. What are the new learnings of the project?

The project is unique and inspiring, and requests to present it are actually beyond the capacity of the partners to handle. With the extension of networks, for example the social media activities of CIRCUIT, the project acknowledges it fulfils a need that apparently many people felt in the wider city as an alternative to linear consumer society. Partners also feel that if all aspects of the project can be achieved, it has a great potential to involve more citizens in the energy transition. By getting more involved, either by co-investing in the energy installations or by monitoring its energy consumption, citizens become more energy conscious.

The last six months have confirmed that such a project requires a new way of working and that co-creation is not given at hand. Yet, with time, goodwill, willingness and with the objectives of the project as a shared goal in mind, partners can get to know each other, and take the most out of each other's expertise and experience. Some further integration to include the potential of CIRCUIT is still needed. This way it would not be so isolated for the rest of the project, but the ground for this is already available.

In addition, community engagement, is **time consuming** and requires a very individual basis, yet, the investment made in the last six months has shown good results in terms of buy-in and recruitment to the different activities of the project.

The particular setting of the project in a newly built district has some practical and epistemological implications. This has required developing **new partnerships**, with PleinPubliek and Domities, together with the **adaptation of methodology and activities**.

The overall timeframe of a project such as within a UIA partnership requires partners to be **patient** in the development of its conceptualisation but also to already foresee the **afterlife** of the project, to make it worthy and useful for the entire society, beyond the mere administrative frame.

Finally, project partners have a life of their own and changes within the team requires **flexibility**, **competencies** and **adaptabilities**, that will be tested from April onwards.

## 6. What's next?

In the next couple of months, the focus of the project will be to launch effectively its experimentation:

- PV, BIPVs, storage batteries and smart meters will be installed
- The project will benefit from the inputs from the transition board
- Data will be treated and integrated in the information pipeline, benefiting the business logics and blockchains
- The user profiling will be finalised and nudging experiment designed
- The Community of Nieuw Zuid will continue on being engaged
- The dashboard will be finalised and tested
- CIRCUIT will continue its activities to further develop its future base on the finalisation of the cooperation agreement with the real estate developer

- The Energy Cooperative financial and governance model will be designed (The first assembly of the local energy community will take place on 23rd April 2019)
- The technical implementation of the Circular Coin and Smart Contracts will be initiated
- The next waves of the Waste challenge will be designed, while integrating the bottle deposit challenge as originally planned

If you would like to see concretely the way the Antwerp Circular South project will concretely act to support the transition of energy consumption practices of the residents of Nieuw Zuid, we invite you to read our next Journal to be published late 2019!

## 7. Acknowledgments

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Source: UIA expert

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