Reflow | Co-Creating Circular Resource Flows in Cities

constRuctive mEtabolic processes For materiaL flOWs in urban and peri-urban environments across Europe

REFLOW

COLLABORATIVE GOVERNANCE TOOLKIT

V1.0

Due date of deliverable: 31/05/2021
Actual submission date: 31/05/2021
Start date of project: 01/06/2019 Duration (36 Months)
Dissemination Level: Public

DELIVERABLE

Work Package	WP4 - Governance and Urban Strategies on Circular Economy
Deliverable	D4.3 - REFLOW Collaborative Governance Toolkit (RCGT) v1.0
Task(s)	Task 4.3 – Implementation and testing of governance models and strategies [M12-M24]
Document Name	REFLOW Collaborative Governance Toolkit v1.0
Due Date	M24 - 31/05/2021
Submission Date	M24 - 31/05/2021
Dissemination Level	[X] P – Public
Deliverable Lead	P2P Lab
Authors	Valentina Frosini, Riccardo Borchi, Laura Martelloni, Alex Pazaitis (P2P Lab); Milena Juarez, Pablo Munoz Unceta (IAAC).
Point of Contact	Valentina Frosini: valentinafrosini@gmail.com
Reviewers	Veronica De Salvo (POLIMI; Massimo Bianchini (POLIMI); Veronica Chesi (CBS)
Status	[X] Final
Abstract	This report presents the REFLOW Collaborative Governance Toolkit v 1.0. In its second iteration, the Toolkit is designed as a **website** hosted in the REFLOW web domain (www.reflowproject.eu) and featured as a sub-page within the REFLOW website (https://governance.reflowproject.eu/). Its architecture builds on the 'collaborative governance' framework captured in the beta version of the Toolkit, delivered in May 2020. This framework has been further enriched and adapted over time hand in hand with progress in the broader REFLOW project and the activities within the REFLOW Pilot Cities.
Keywords	Toolkit; Collaborative Governance; Circular Economy; Circular City Transition; Infrastructuring; Portfolio; Experiments.
Statement of Originality	This deliverable contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation or both.

Revision History

Revision	Date	Authors	Organization	Description
D 4.3 v 1.0	30/04/2021	Valentina Frosini, Riccardo Borchi, Laura Martelloni, Alex Pazaitis (P2P Lab); Milena Juarez, Pablo Munoz Unceta (IAAC).	P2P IAAC	First draft ready for internal review
D 4.3 v 1.1	21/05/2021	Valentina Frosini, Riccardo Borchi, Laura Martelloni, Alex Pazaitis (P2P Lab); Milena Juarez, Pablo Munoz Unceta (IAAC).	P2P IAAC	Second draft integrating reviewers' suggestions and feedback
D4.3 V1.2	31/05/2021	Valentina Frosini, Riccardo Borchi, Laura Martelloni, Alex Pazaitis (P2P Lab); Milena Juarez, Pablo Munoz Unceta (IAAC).	P2P IAAC	Final version to be submitted to the EC

The information, documentation and figures in this deliverable are written by the REFLOW project consortium under EC grant agreement number 820937 and do not necessarily reflect the views of the European Commission. The European Commission is not liable for any use that may be made of the information contained herein.

ACRONYMS	
EU	European Union
H2020	Horizon 2020
KPIs	Key Performance Indicators
RCGT	REFLOW Collaborative Governance Toolkit
SDGs	Sustainable Development Goals
UI	User interface
UX	User experience

CONTENT

About the Reflow Collaborative Governance Toolkit (v1.0)

The REFLOW Collaborative Governance Toolkit (henceforth, also referred to as RCGT) is a 'how to' resource conceived to support the design and development of **collaborative governance arrangements** for the transition to circular and regenerative cities. Vis-à-vis grand challenges of sustainable urban development, the circular economy appears as a viable alternative to our linear, extractive economic model, as it can contribute to transform cities into restorative and regenerative places by design. Yet, the transition to circular cities requires radical new synergies, collaboration and strategic alliances between all actors that have a stake in the circular economy - policymakers, enterprises, social organizations, universities, citizens, etc. - as well as new forms of *infrastructuring* **collaboration in ways that can unleash distributed agency and capacity for innovation**. Inquiring and exploring collaborative governance for the circular economy in cities is therefore a foundational step for any meaningful and long-term oriented transition, and this Toolkit aims to be a practical guide for cities willing to engage in such a transition.

In its second iteration (v.1.0), the Toolkit is designed as a **website** hosted in the REFLOW web domain (www.reflowproject.eu) and featured as a sub-page within the REFLOW website (https://governance.reflowproject.eu/). Its architecture builds on the 'collaborative governance' framework captured in the beta version of the Toolkit, delivered in May 2020. However, this framework has been further enriched and adapted over time hand in hand with progress in the broader REFLOW project and the activities within the REFLOW Pilot Cities. More in detail, the updated design of the RCGT considers three core bodies of work implemented (some of them still ongoing) in the second year of the project, which are also the key pillars of the REFLOW Framework as captured in D1.3:

- The development of the REFLOW Framework as a *multi-level design model* that embraces circular innovations at multiple scales, including material, product & tech, business model, socio-technical and societal innovation;
- A more granular definition of the so-called REFLOW *levers*, understood as instruments that create leverage to steer the transition to circular and regenerative cities;
- The definition and ongoing refinement of the REFLOW *Theory of Change,* which in turn sets the basis for monitoring and evaluation processes towards the Key Performance Indicators (KPIs) set at both project and pilot cities level.

Furthermore, the current version of the Toolkit builds on a thorough review of all official deliverables published by the Consortium in the second year of the project, with particular reference to **D3.1 Circular Principles and Indicators**, **D1.1 Co-Production Practices in Pilot Cities**, **D1.2 Cities' Circular Action Plans**.

This second iteration of the Toolkit occurs within a broader project progress where all the pilot cities are at implementation stages. Therefore, the objective of the RCGT at this stage is threefold: first, to crystallise some of the tools used over the past months in support of the definition of circular action plans and specific collaborative governance activities and experiments by the pilot cities; second, to capture some of the learnings (in the form of stories) gained so far that are relevant to the topics of the Toolkit; third, to consolidate the architecture and online infrastructure which will keep on hosting new tools, resources and stories over time. By doing so, we shall also contribute to the REFLOW legacy, creating an openly and easily accessible environment that hosts a rich set of carefully curated tools and resources for collaborative paths of discovery and experimentation towards circular and regenerative cities.

About REFLOW

REFLOW is an EU Horizon 2020 research project running from 2019-2022, which aims to enable the transition of European cities towards circular and regenerative practices. More specifically, REFLOW uses Fab Labs and makerspaces as catalysers of a systemic change in urban and peri-urban environments, which enable, visualize and regulate "four freedoms": free movement of materials, people, (technological) knowledge and commons, in order to reduce materials consumption, maximize multifunctional use of (public) spaces and envisage regenerative practices. The project will provide best practices aligning market and government needs in order to create favourable conditions for the public and private sector to adopt circular economy (CE) practices. REFLOW is creating new CE business models within six pilot cities: Amsterdam, Berlin, Cluj-Napoca, Milan, Paris and Vejle and assess their social, environmental, and economic impact, by enabling active citizen involvement and systemic change to re-think the current approach to material flows in cities.

PART 1 | **Introducing** the **RCGT v1.0**

1.1 Toolkit Objectives and Target-Groups

RCGT (v1.0) Objectives

The **REFLOW Collaborative Governance Toolkit (RCGT)** is a practical resource rooted in the concept of **collaborative governance** as a key lever for the transition to circular and regenerative cities.

In REFLOW, we recognise that such a transition cannot happen through siloed interventions at the edge of the current linear model; rather, it requires whole scale systems reform. Next to clear political visions and holistic strategies of urban development, it demands new regulations, financial investments, unedited partnerships and a radical new body of knowledge and capacities - all these premised on a renewed tension between the *hyper global* and the *hyper local*. Above all, circular transitions require new forms of 'democratised innovation'[1] so that all actors in cities can access to and benefit from the opportunities that the circular economy will create.

In this deliverable, we provide an overview of the second iteration of the Toolkit (v1.0). At this stage, its conception and design attempt to embrace the following objectives:

- **To capture and make available the key tools used to date** in support of the definition and design of circular action plans and collaborative governance activities and experiments by the pilot cities. In this respect, we have also attempted to select, curate and include additional tools that cover areas or domains where the REFLOW Pilot cities may need to make further efforts of design, so as to enhance implementation readiness and effectiveness;
- **To harvest some of the learnings** (in the form of stories) gained so far that are relevant to the topics of the Toolkit, whether coming directly from the REFLOW pilot cities, or from external initiatives, projects and organisations that can offer relevant knowledge and practices;
- **To consolidate the architecture and online infrastructure** which will keep on hosting new tools, resources and stories over time.

More broadly, by *i)* making available an online environment which specifically harvests and hosts governance-related tools and resources and *ii)* capturing new tools and methods which will reflect the specific governance experiments and activities of the pilot cities over time, we shall also contribute to the Reflow legacy, particularly from the point of view of knowledge capture and dissemination.

Target Groups

The **REFLOW Pilot Cities** are the key targets of the Toolkit in its standing fashion. As they comprise local partnerships including - from city to city - municipalities, universities, businesses, makers communities and other types of organisations across public and private sectors, the pilot cities unfold their circular plans through variable geometries of collaborations and co-creation. Therefore, their diversity in partnerships and types of actors involved is an important testbed for the Toolkit at this stage to assess the relevance of resources provided with this delivery, user journey experience, clarity in design and language, accessibility. Moreover, as we will better explain later in PART 4, close collaboration with the pilot cities will help inform

---

[1] Von Hippel, E. (2005). Democratizing Innovation. MIT Press

further implementation of the Toolkit and progressive expansion and dissemination beyond the pilot cities themselves.

When it comes to the individual target groups, the RCGT is meant to address the following target groups:

- *Practitioners*. This is a wide category which can be further scaffolded into specific personas such as **designers** (particularly systemic, strategic, and service designers); **process facilitators** and **community builders**; **project, service or knowledge managers**; **entrepreneurs**. In general, we refer to professionals working within both public and private organisations, and with expertise in designing, facilitating and steering innovation processes in a broad sense.
- *Decision makers*. We refer to personas that, especially within local and regional authorities, have decision capacities with respect to new programmes, projects, and policies in different sectors, including economic, social, and environmental affairs. In this category, we also refer to **technical experts and figures** that usually work in support to decision makers, providing evidence and data.
- *Researchers.* We refer to research experts working within both universities and other public and private research-oriented organisations, with key reference to researchers working in the fields of circular economy, transition theories, sustainable urban development, governance.

Clearly, these types of target groups may have different needs which in turn may derive from different ways of working and approaching the topic(s) covered by our work. For this reason, the way the Toolkit is organised, and the content provided at this stage (and meant to be provided in the run) acknowledges this diversity of needs and therefore builds on three respective axes, described below in general terms and further detailed in Part 3:

1. **Practical design and planning tools** that facilitate co-creative processes;
2. **Arguments, proofs of concepts and probes** that may inspire and guide uptake and implementation of circular innovations rooted in collaborative governance;
3. **Evidence and stories** that can enhance and contribute to advance knowledge creation and dissemination in the field.

Generally, this second iteration of the Toolkit is also deeply entangled with the contextual situation of the ongoing Covid-19 pandemic, which is currently *forcing* organisations across Europe to rely heavily on digital platforms and environments to maintain collaboration in place. Although there is high uncertainty around how any 'new normal' will look like, we may argue that the latter is likely to see a general trend toward smart working and limitation in physical meetups and collaboration moments. Therefore, the way the Toolkit is conceived and the integration with existing collaborative platforms such as Miro attempt to think through more long-term dynamics and ways of working.

PART 2 | RCGT **Framework** and **Structure**

2.1 Guiding Concepts and Framework

Collaborative Governance as *infrastructuring*

The RCGT (v1.0) builds on, and further expands, the starting definition of collaborative governance provided in both the REFLOW Handbook (D4.1) and in the beta version of the Toolkit. The definition of collaborative governance provided in the RCGT v1.0 is as follows:

> ''We understand collaborative governance as a long term, systemic process of steering and coordination of all the different levers in cities - policy, regulation, funding, knowledge, collective intelligence, and many others - in a way that allows distributed capacity, legitimacy and agency for (circular) change across public and private sectors. More in detail (building on Thorpe & Manzini 2018; Manzini 2015), we define Collaborative Governance as an ***open-ended infrastructuring process***: **a continuous work of providing the means for action, discovering and learning within a loose steering and coordination framework that supports both present and future collaborations**.
> This infrastructuring can be understood to operate at different scales and scopes and with different dimensions including:
>
> **STRATEGIC**, focused on creating synergies and alignment across different actors and agendas so that their resources can be made widely accessible and pooled towards collective impact;
> **OPERATIONAL**, focused on building operational capacities and tools in a way that allows different circular experiments and activities to exist as a highly connected, systemic process;
> **RELATIONAL**, focused on building trust, distributed agency and legitimacy, developing shared value.
>
> Each dimension can be fostered by combination and activation of different levers in a process that is iterative - thus facilitating the emergence of innovations at micro, meso and macro levels (from material to societal innovation) and over time.

This wide definition essentially acknowledges the following characters of collaborative governance for circular cities, which in turn form the backbone of the Toolkit in this second iteration:
- First, the transitional nature of circular economy and therefore the understanding of governance as an enabler of such a transition within an overall process that is **long term**;
- Second, the acknowledgment that the transition to circular and regenerative cities requires **multiple loops of mutually reinforcing portfolios of innovations** across material, product & tech, business models which in turn can trigger socio-technical and societal innovation. In turn, these innovations require the activation of multiple ''levers'' - understood in REFLOW as a set of instruments that create leverage to steer the change of individuals and collectives towards circularity.
- Third, the understanding of collaborative governance as a **'meta' concept** which cannot be considered as a self-standing one, but rather requires it to be **entangled within system dynamics and complex strategic, operational and relational networks**.

The figure below (Figure 1) provides an overview of the Toolkit framework based on the three characters just described. The practical elements of the framework within the Toolkit are as follows:

- Resources and tools (both present and upcoming) do not only cover governance-specific aspects such as organisational arrangements and actors' coordination - aspects typically associated with governance. Instead, they shall offer a broader undertaking, covering for example visioning and roadmapping, planning, urban assets management, and many more.
- Resources and tools (both present and upcoming) entail different levels of complexity and articulations, recognising that oftentimes the overall transition journey is far from being linear and that 'entry points' can vary.

Under this perspective, the whole Toolkit is designed and shall be further implemented as a 'loose' compendium of tools and resources which are not prescriptive of a specific journey, but rather generative of multiple possibilities of design, planning and undertaking. Moreover, while the Toolkit is primarily designed from the perspective of cities (i.e. local authorities) as key triggers for the transition to circular and regenerative cities, it may also stand as a useful resource for the constellation of all those projects and initiatives, often distributed in cities and grassroots-led, that can meaningfully contribute to the transition.
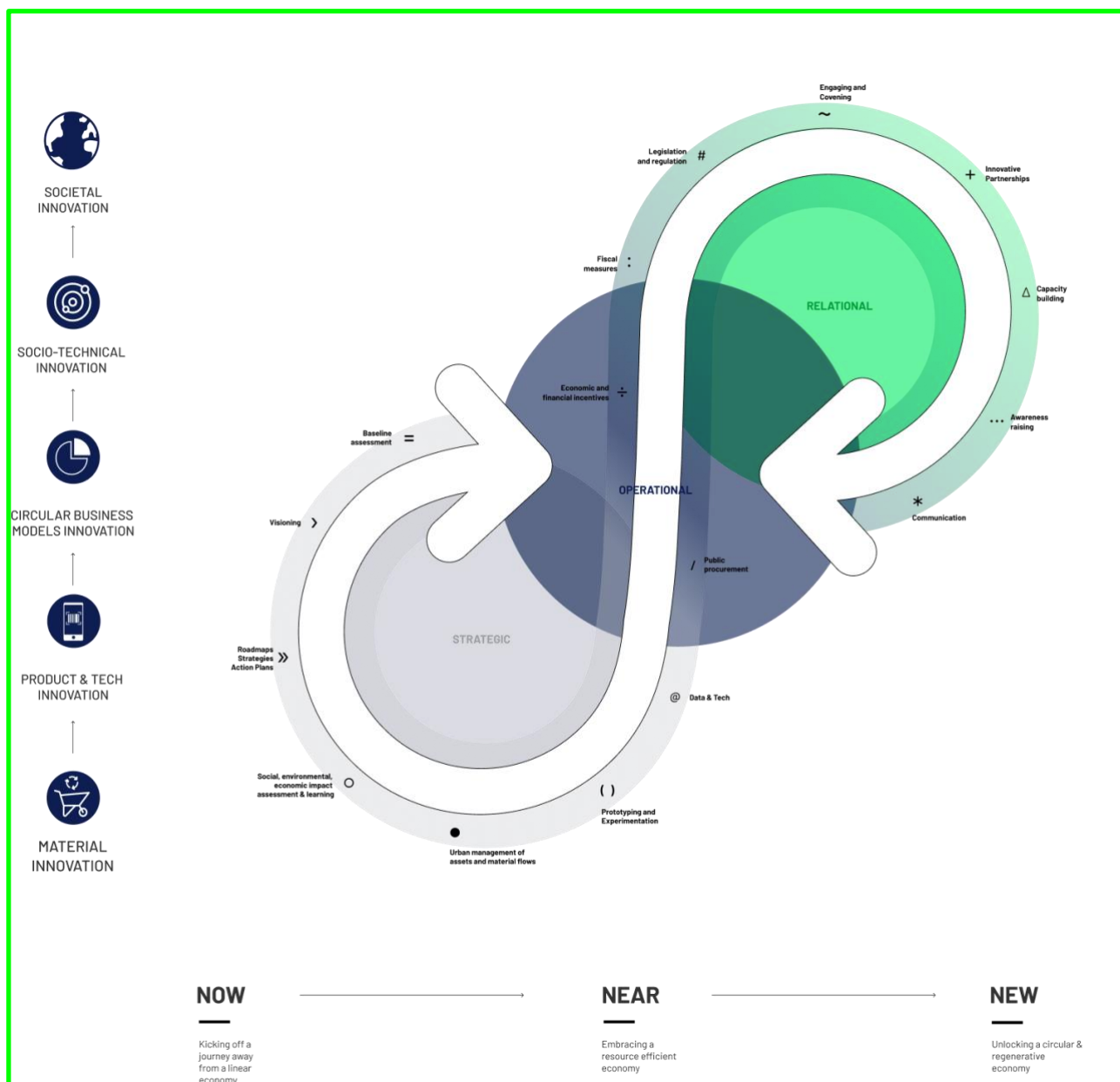
Figure 1: RCGT v1.0 Framework

2.2 Toolkit Structure

Overview of the core Toolkit pages

The **RCGT v1.0** is an online environment accessible from the official REFLOW website: https://governance.reflowproject.eu/.

The overall architecture of the Toolkit (Figure 2) has been designed to be user friendly and easy to navigate, in an overall journey that is meant to be simple, intuitive and designed through multiple, yet closed loops (e.g. contextualising tools within specific options of applications; providing stories that explains how a given tool or method has been concretely applied, etc.). The design of the Toolkit has gone through internal co-design sessions with WP4 members, in turn based on ongoing work of

observation and inquiring into the progress of the pilots' activities. The whole design process is meant to be iterative, and proceed along the evolution of the needs of the pilots and their local stakeholders.

Moreover, as we will explain later in the document, we have adopted Figma as a design platform to better allow collaborative design of the Toolkit architecture, user journey and interface design.
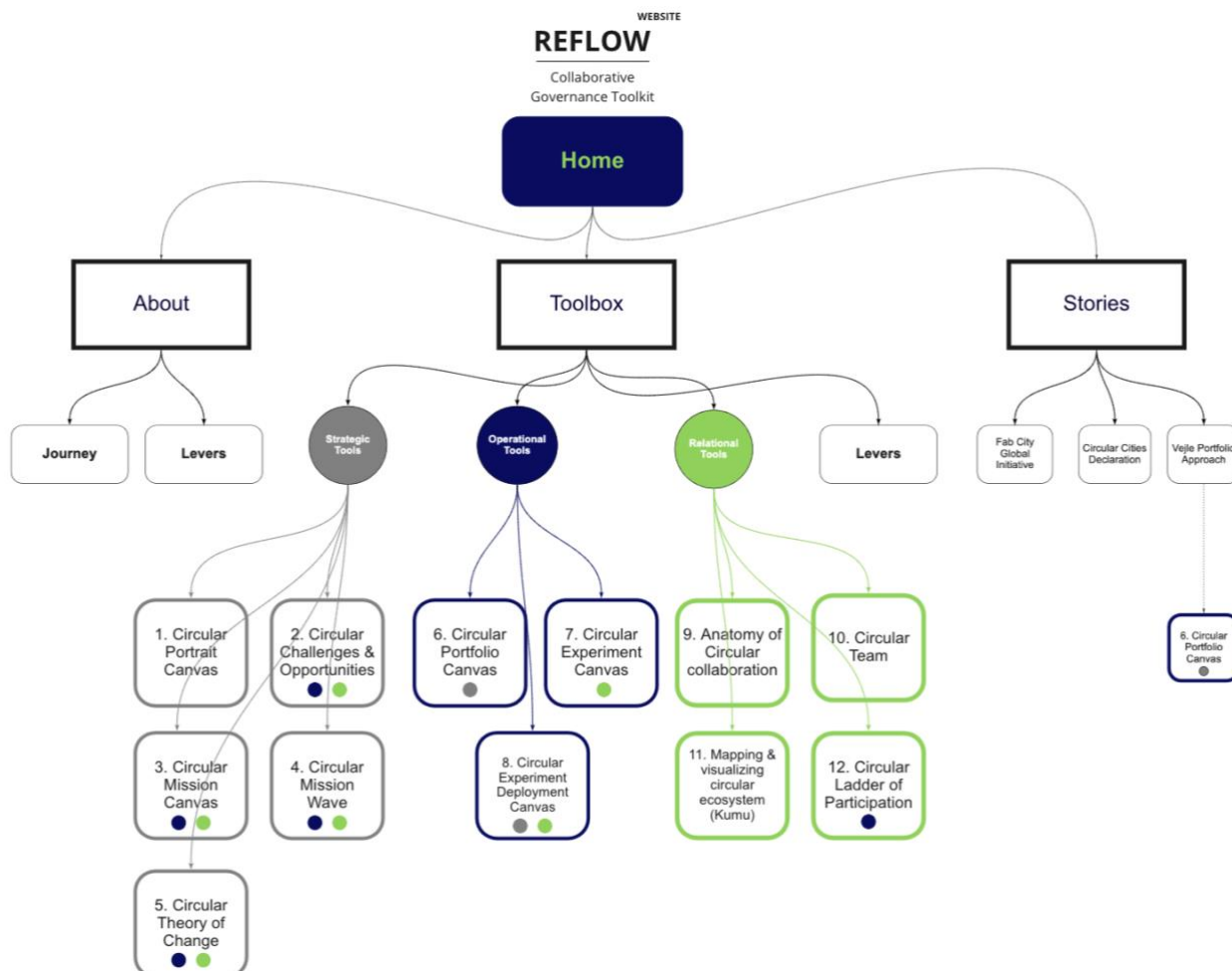

Figure 2: Architecture tree of the website

This structure is captured in the Menu (Figure 3), which includes the following sections, each bringing the user to discover the Toolkit via different 'calls to action':

- **Home**: it provides a quick intro to the Toolkit, through three subsequent 'calls to action' that bring the user to discover the different parts of the RCGT in its standing fashion.
- **Journey**: it provides the user with an overview of the Toolkit framework so as to help the flow of navigation and retrieve of resources.
- **Toolbox**: it is the core of the Toolkit, with various resources and tools organised according to the framework.
- **Stories**: this section attempts to host learnings and experiences that can be either directly or less indirectly connected to the resources made available.
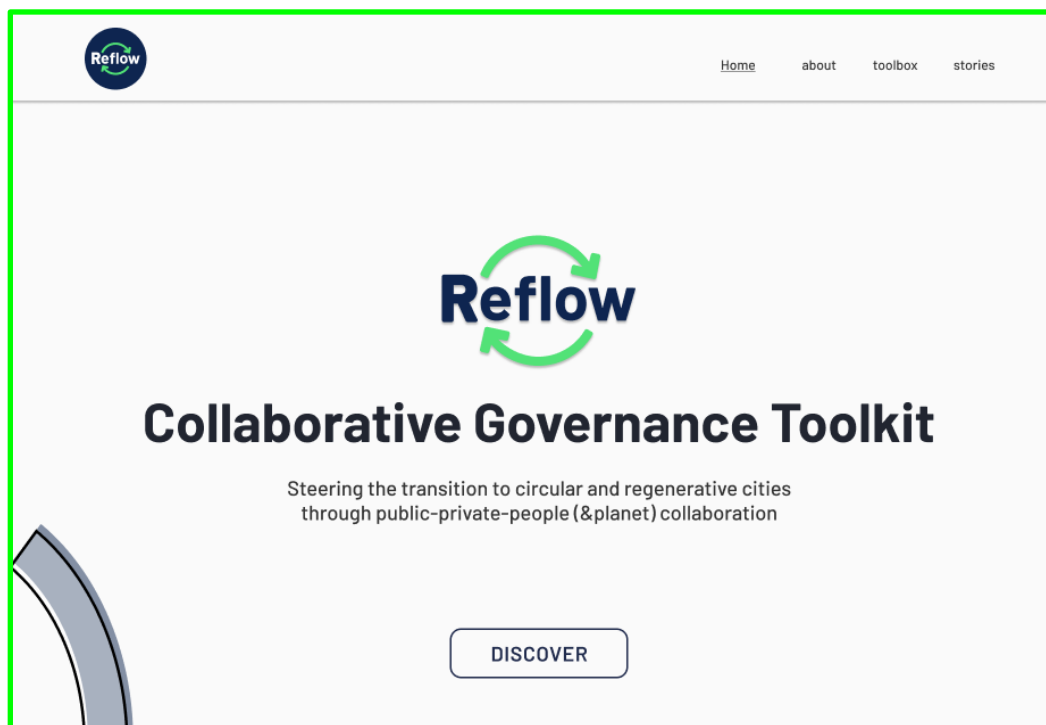
Figure 3: RCGT v1.0 Menu

Journey

As anticipated above, the journey page provides the user with an overview of the Toolkit framework so as to help the flow of navigation and retrieval of resources. The page provides first a brief, textual introduction to the topic of collaborative governance for the circular transition in cities; then it follows with a presentation of the 'infrastructuring' concept and framework already described earlier in this document (Section 2.1), and finally goes through an overview of the ''levers'' considered in the framework itself and by the broader REFLOW project. In the Toolkit, each lever has been associated with a symbol, in order to help and facilitate the user with categorisation and retrieval of tools and resources (Figure 4).
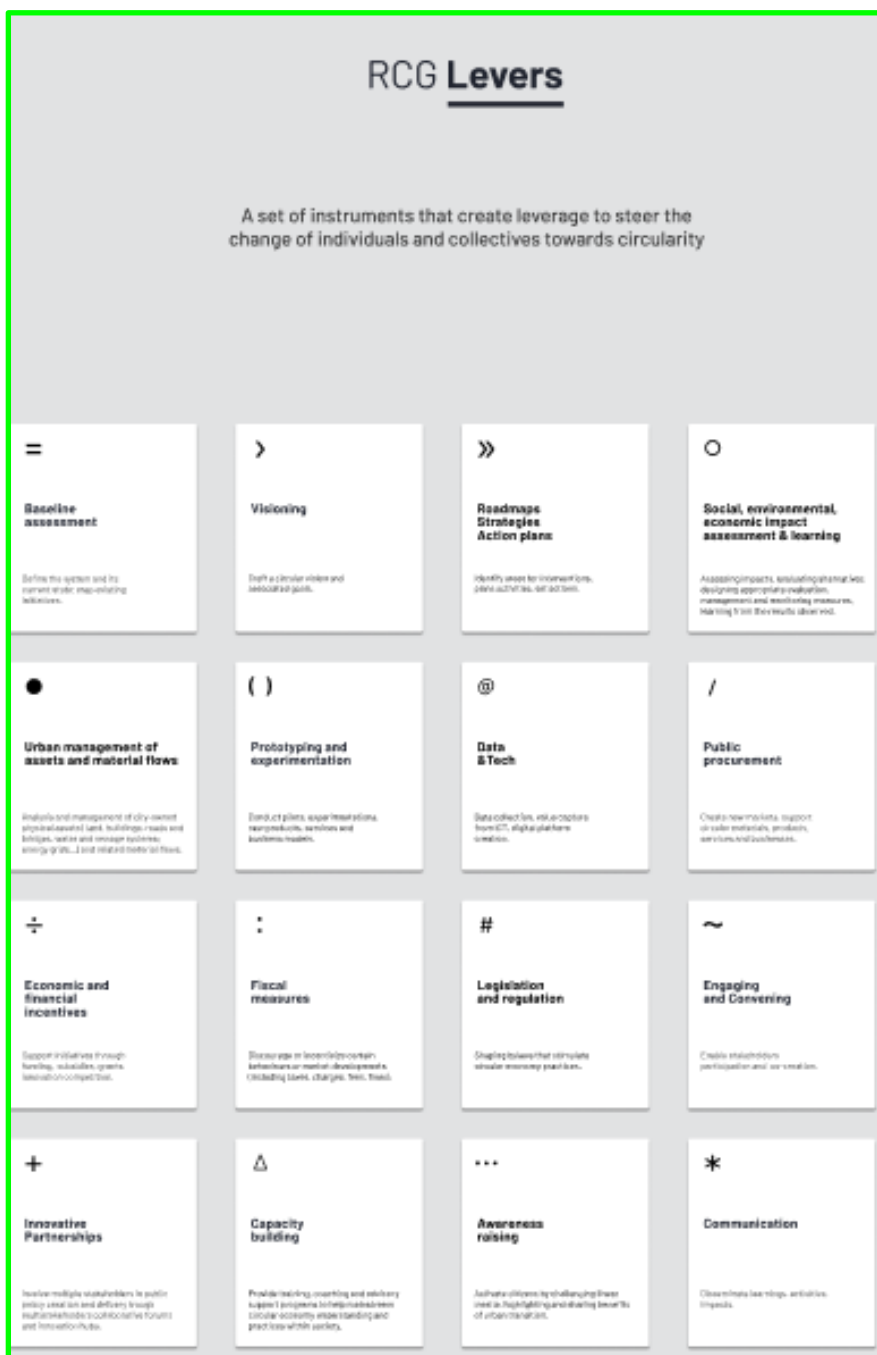
Figure 4: RCGT Levers

Toolbox

The Toolbox page stands at the heart of the Toolkit, as it harvests and organises all tools and resources made available. All tools are tagged and can be filtered according to two core categories (Figure 5):
- Infrastructuring dimension, i.e. strategic, operational, relational;
- REFLOW levers.

Clearly, many tools can fit within multiple categories at the same time. For example, a tool such as the Portfolio canvas relates to both strategic and operational dimensions, and covers multiple levers; therefore, it can appear under multiple options of filtering.
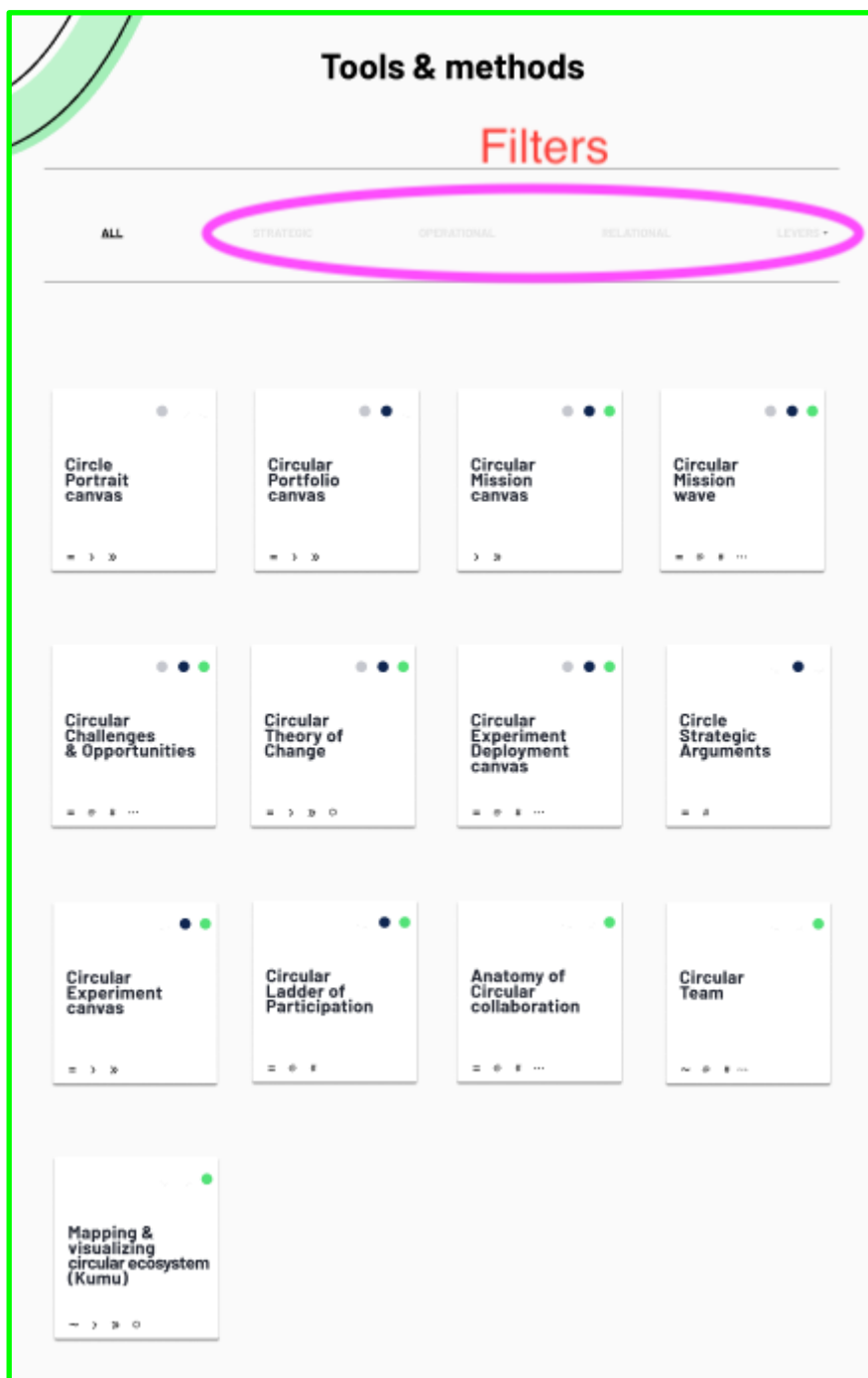
Figure 5: Toolbox Page

Stories

The 'stories' page (Figure 6) is where we capture and will keep on hosting and presenting learnings and experiences, directly coming from the REFLOW pilot cities and from external initiatives and projects that may be relevant to the core topics covered by the Toolkit, including the sister projects of REFLOW. These stories are also meant to provide examples and case studies of practical application of tools and methods made available in the Toolkit.
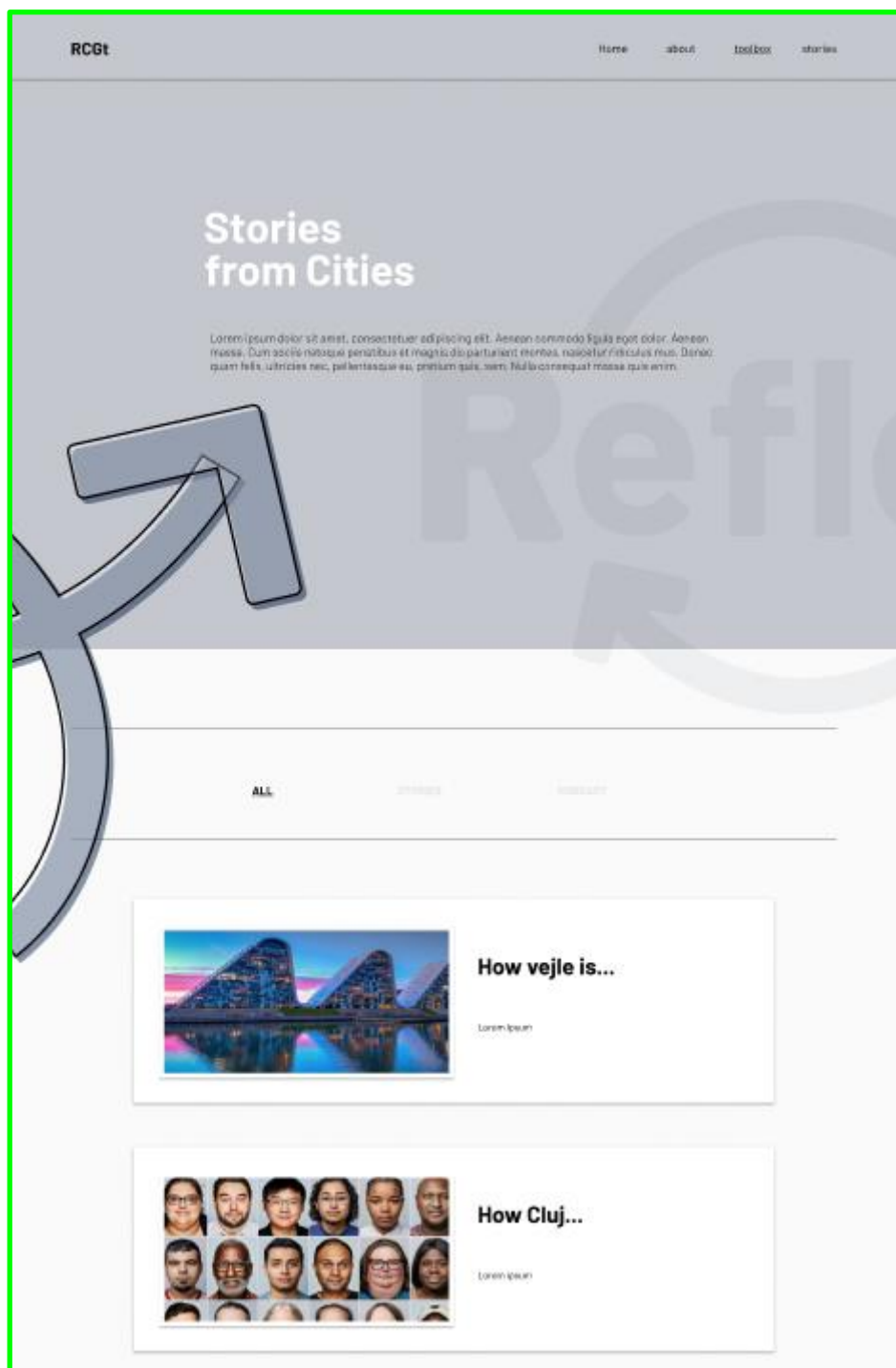
Figure 6: Stories Page

2.3 Technical Aspects

The REFLOW Collaborative Governance toolkit v 1.0 is a website https://governance.reflowproject.eu/ and a subdomain of our main REFLOW website https://reflowproject.eu/. IAAC provided us the subdomain via DNS to point at the information in our hosting space managed by P2P. The website is currently under development, and we are designing and developing the content thanks to Figma and Wordpress.

Figma

It's a web-based design tool where we are currently designing the website prototype. This environment helps us to co-editing and collaboratively view all the designed elements. The platform empowers the UI and UX design process since it helps us to share instant feedback across web design and web developers, facilitating the iterative process.

Wordpress

It's a free and open-source content management system where we are developing our website. All the content of our website is hosted on P2P Lab server and will be managed beyond the end of REFLOW.

Figma

PART 3 | RCGT **Key Content**

3.1 Tools & Resources

Rationale for tools selection

In this second iteration, the Toolkit offers **12 tools**. The selection and curation of these tools have been based on the following two aspects:

- A core set of tools build directly on the **portfolio approach** used in our own work with cities for the scoping out and design of collaborative governance activities and experiments, and further used by the whole Reflow project to foster collaboration, synergies and alignment between the various streams of work at play in the project, namely pilot actions across the six REFLOW cities and thematic work taking place within each individual work-package. In this Toolkit - and within the design process that underpins it - we adopt a **portfolio logic**[2] as an approach to trigger experimentation and learning across a *full-stack* designed transition. The intent is to support the pilot cities (and cities beyond the REFLOW ones) in articulating their circular action plans with a systemic perspective, defining a set of **strategically connected and mutually reinforcing activities and experiments that offer the highest potential of learning, create new value and guide strategic investments**. Moreover, the approach articulates activities and experiments across three horizons of reference - short, medium and long term -, as a way to foster strategic and long-term visioning and planning. Lastly, already with the first iteration of the Toolkit, we introduced the 'experiments' terminology, as a way to support cities in the definition of governance-related and connected activities in a highly contextualized and place-based, tangible, rapidly implementable, observable and flexible way.

  Therefore, a starting number of tools look at the Portfolio approach from different perspectives, including general Portfolio design, experiments design, experiment deployment planning and roadmapping.

- A second tier of tools, whilst still somehow linked to the portfolio approach, are more general and attempt to cover broader aspects of design and planning around governance. These tools have been identified based on the need to reinforce and enhance some aspects across the pilot cities' plans so as to improve their implementation readiness and effectiveness.

Tools

What follows is a brief overview of the 12 tools provided at this stage. Those directly connected to the Portfolio approach are underlined in green.

1. **Circular Portrait Canvas**: Inspired by the four lenses of the City Portrait, this canvas helps assess city strategies, policies, and programmes in a holistic way, integrating environmental, social and economic, as well as local and global considerations. This tool helps gain a preliminary overview of the country profile on historical and target emissions, national climate commitments, climate

---

[2] We took inspiration from the Transformation in Time Strategy of EIT Climate-KIC, who adopts the portfolio logic in its own work with a cohort of European cities committed to ambitious climate action by 2030. The Portfolio canvas upon which we built our own canvas for this Toolkit has been elaborated by Dark Matter Laboratories in the context of the Healthy, Clean Cities Deep Demonstration of EIT Climate-KIC. See: https://www.climate-kic.org/wp-content/uploads/2018/12/Transformation-in-time.pdf

vulnerability and readiness and linkages between climate and sustainable development goals. This tool is particularly relevant to the Strategic Infrastructuring.

2. **Circular Challenges and Opportunities**: A tool that helps collaborative brainstorming on circular challenges and opportunities, as well as their prioritization for action. This tool is particularly relevant to the Strategic Infrastructuring, but it is also useful for the Operational and Relational Infrastructuring.

3. **Circular Mission Canvas**: A tool that helps scope out specific, place-based yet systemic missions for circular and regenerative cities. This tool is particularly relevant to the Strategic Infrastructuring, but it is also useful for the Operational and Relational Infrastructuring.

4. **Circular Mission Wave**: A tool that helps you define and visualise a mission-oriented transition to circular and regenerative cities based on a systemic and long term approach of intervention. This tool is particularly relevant to the Strategic Infrastructuring, but it is also useful for the Operational and Relational Infrastructuring.

5. **Circular Theory of Change**: set of tools and methods to co-design and co-create circular theories of change. This tool is particularly relevant to the Strategic Infrastructuring, but it is also useful for the Operational and Relational Infrastructuring.

6. **Circular Portfolio Canvas**: A visual tool that helps scaffold circular activities and experiments across different horizons of time, and to reflect on ''connectivity'' and ''linkages'' towards higher and longer term ambitions of circular and regenerative cities. This tool is particularly relevant to the Operational Infrastructuring.

7. **Circular Experiment Canvas**: A tool that helps design the key characteristics of a circular experiment and to carry them forward into iterative cycles, towards a more detailed delivery plan. This tool is particularly relevant to the Operational Infrastructuring.

8. **Circular Experiment Deployment Canvas**: A tool that helps defining, planning and resourcing a circular experiment towards impact. This tool is particularly relevant to the Operational Infrastructuring.

9. **Matrix of Circular Collaboration**: A tool that facilitates coordination, matchmaking and collaboration across different circular projects and initiatives. This tool is particularly relevant to the Relational Infrastructuring.

10. **Circular Team**: A combination of tools that support the definition of circular teams and the overall decision-making path. This tool is particularly relevant to the Relational Infrastructuring.

11. **Mapping and Visualizing Circular Ecosystems**: A tool that allows dynamic mapping and visualisation of circular ecosystems, including stakeholders, individuals and circular initiatives and projects. This tool is particularly relevant to the Relational Infrastructuring.

12. **Circular Ladder of Participation**: A tool to map out the degree of power and agency in a circular ecosystem, project, or initiative. This tool is particularly relevant to the Relational Infrastructuring.

Tools Presentation

From the 'Toolbox' page appearing in the first level of the Toolkit (i.e. core Menu page), each tool can be retrieved and discovered through the filters described earlier in this document. Each Tool is presented through a dedicated sub-page (Figure 7) where we provide:

- A short characterisation of the tool (what is all about);
- A preview where the tool can be navigated either through Miro or be downloaded in pdf;
- A brief explanation of the core needs addressed by the tool ('Why use it')

- A concise indication about the basic steps to be followed for using the tool.
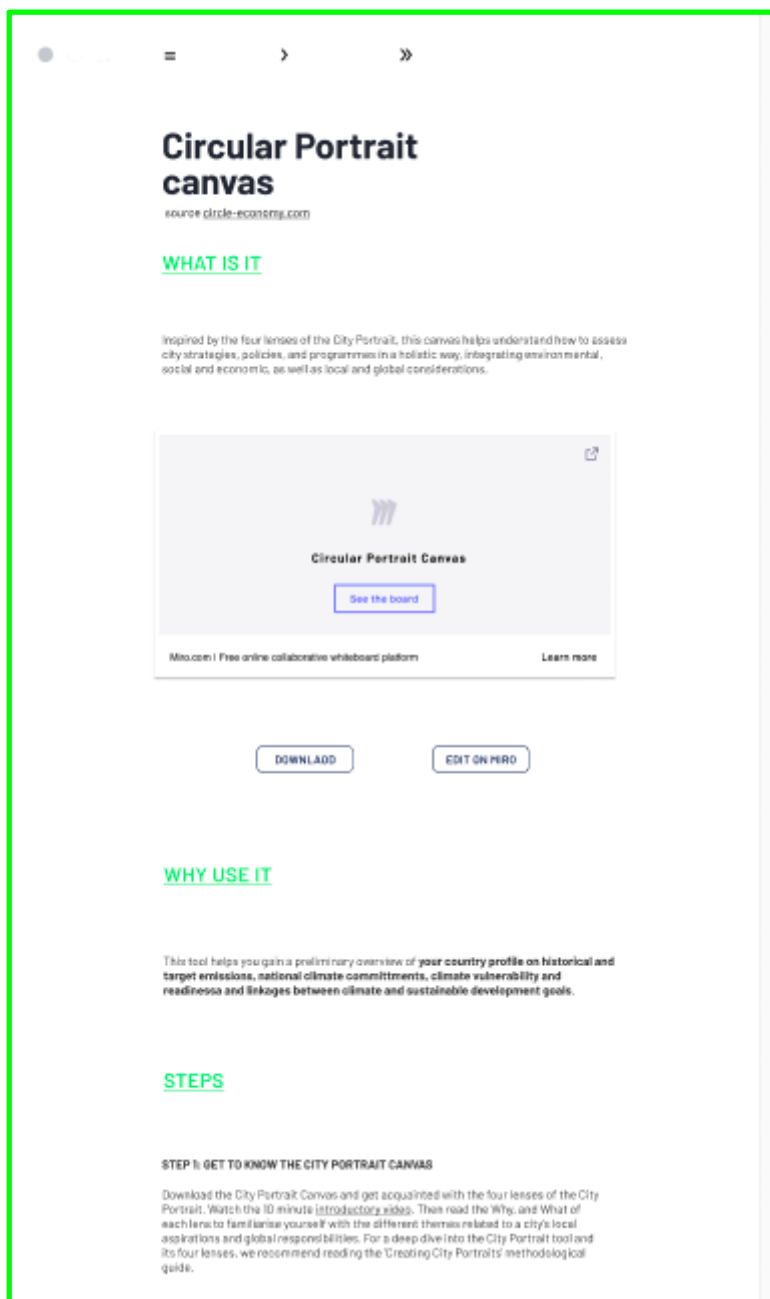

Figure 7: Tool display

Furthermore, each tool is associated with other tools and stories (Figure 8) that may complement its own functions and scopes by making them richer and more complete, as well as with broader resources.
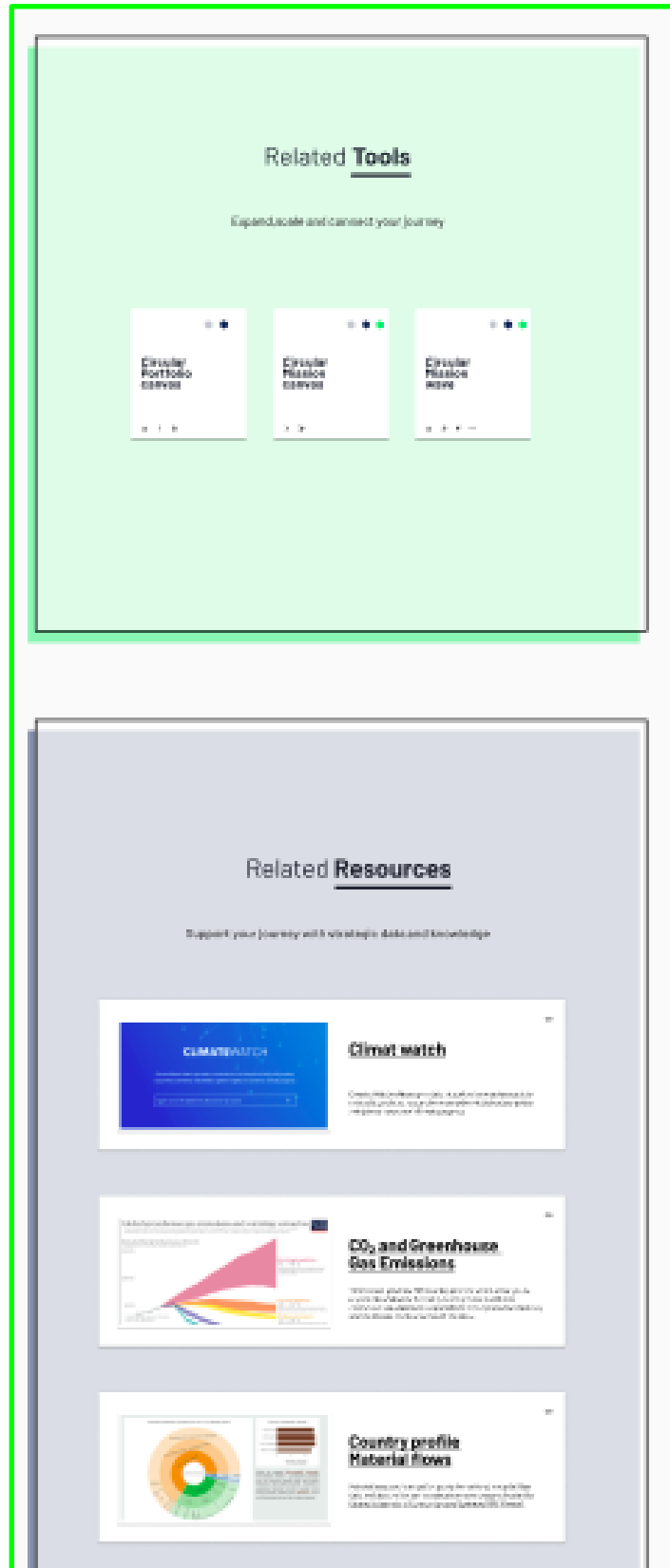
Figure 8: Tools connections

Integration with Miro and Miroverse

Miro is an online platform which allows collaborative teamwork. In essence, Miro is a digital whiteboard that offers multiple functionalities, including a rich variety of templates and tools that can be used for different purposes, for example during design workshops and brainstorming sessions. During the months of lockdown repeatedly experienced in the past year - and still largely ongoing - Miro has become quite popular especially across international projects such as REFLOW, offering an effective solution for maintaining collaboration in place despite the limitations brought about by the restrictions in travels and physical meetups. The design of the Toolkit in its second iteration, which has occurred precisely alongside the spread of the pandemic, is based on integration with Miro. This choice reflects not only the reality that we are likely to keep on experiencing in the coming period, but more broadly a possible longer term trend toward smart working. Moreover, as Miro is getting more and more popular and used globally by a wide plethora of different users (designers, facilitators, researchers, project managers and many more), integration strategies may offer higher chances of wide dissemination of the tools and resources produced within REFLOW.

Integration between the RCGT v1.0 and Miro works as it follows:

● **Preview and Exploration**: each Tool in the Toolkit can be previewed and explored as it appears in Miro, but still remaining in the Toolkit's environment itself.
● **Redirection**: each Tool can be explored and used directly in Miro, by retrieving a given tool through [Miroverse](Miro's open source library of tools) and using it on personal Miro accounts and boards.

3.2 Stories

Stories are another key component of the RCGT, meant to provide the user with inspiration, case studies and knowledge about the core topics covered by the Toolkit. Stories come from both the REFLOW pilot cities, as well as from external projects and initiatives that are relevant to the Toolkit. By the deadline of the RCGT v1.0 (M24), the number of stories published will be limited (approximately 4 stories), given that our work has mainly focused on the design of the architecture, elaboration and curation of tools and resources, and integration with Miro. From the delivery onwards, the plan is to work on new stories on a regular basis, following an editorial plan as explained in Part 4.

PART 4 | Next **iterations**

4.1 RCGT as a living resource

As an online and living resource, the REFLOW Collaborative Governance Toolkit provides both the pilot cities and other interested cities with a rich and updated repository of tools and resources to develop collaborative governance transitions in urban contexts. The REFLOW project offers an opportunity to experiment and explore the suitability of this repository for specific circular transition processes in pilot cities. In this sense, the RCGT works in two directions. On the one hand, pilot cities will access tools and methods, as well as practical approaches and case studies that may support them in their transition. On the other hand, some of the tools presented in this second iteration are being tested by the REFLOW pilot cities, whose feedback allows iterative improvement and deployment of new resources.

The Toolkit is, along with the REFLOW Handbook and the Policy Proposals for Flexible Urbanism, the main outcome of the project within the work-package on Governance and Urban Strategies on Circular Economy. As such, it should be readily accessible and able to be implemented across European cities and beyond.

The content of this deliverable will necessarily have to evolve. First, it must be easily accessed and navigated by the pilot cities during the REFLOW project. Second, it must stand as an online resource after the project ends, remaining accessible to cities who want to explore collaborative governance frameworks for a circular transition process. For these two reasons, the online version of the Toolkit must be:
- Openly accessible online: it can be used by different cities and users from inside and outside the REFLOW project.
- Customizable: it can be adapted and tailored to pilot cities needs during the REFLOW project
- Replicable: it can be adopted and adapted by cities in the future.
- Inter-relatable: Connections between its content and other resources must be possible. It should be possible to establish links between the RCGT and other REFLOW resources, such as the REFLOW Handbook, but also other European Projects and international initiatives that are using online platforms as knowledge dissemination tools.

Editorial Plan, Structured Feedback

Right after the delivery of the second iteration of the Toolkit, an Editorial Plan is planned to be loosely elaborated that can provide a calendar of tools and stories meant to be published in the upcoming period. These tools will be proposed directly by the WP4 team, and based on ongoing work with the pilot cities; an integration with the REFLOW Forum and main REFLOW social media channels are also under discussion to make sure that every new tool and/or stories are first communicated via these channels. Furthermore, we are currently designing and testing a structured feedback system hosted directly in the platform to allow for ongoing harvesting of user experience.

REFERENCES

Bollier, D. *The city as platform. How Digital Networks Are Changing Urban Life and Governance*. Washington: The Aspen Institute, 2016

Foster, S. and Iaione, C. "The city as a commons". *Yale Law & Policy Review.* 281 (2016): 281-349

Iaione, C. "Governing the urban commons". *IJPL* issue 1 (2015): 1-53

Le Dantec, C. and Di Salvo, C. Infrastructuring in Public Design. SAGE, 2013

Manzini, E. *Design, When Everybody Designs: An Introduction to Design for Social Innovation*. MIT Press, 2015

Morlett, A., Blériot, J., Opsomer, R., Linder, M., Henggeler, A., Bluhm, A., and Carrera, A. *Intelligent assets: Unlocking the circular economy potential*. Ellen MacArthur Foundation, 2016.

Morlett, A. "Cities as the front-runners of circular economy". *London Infrastruct. Plan–Circ. Econ. Present* (2014)

Thorpe, A. and Manzini, E. Weaving People and Places: Art and Design for Resilient Communities, 2018.

Von Hippel, E. (2005). Democratizing Innovation. MIT Press