



# TOOLKIT

**FOR DEVELOPING AND IMPLEMENTING A  
REGIONAL CIRCULAR ECONOMY ROADMAP**

**GUIDE AND TOOLS**  
IN 5 STEPS

# PRODUCTION TEAM

---

## COORDINATION

Centre de transfert technologique en écologie industrielle (CTTÉI)

## AUTHORS

Centre de transfert technologique en écologie industrielle (CTTÉI)

Conseil régional de l'environnement et du développement durable de l'Outaouais (CREDDO)

Conseil régional de l'environnement – région de la Capitale-Nationale (CRECN)

## TECHNICAL REVISION

RECYC-QUÉBEC

This Toolkit includes a methodology guide and tools. It was prepared for RECYC-QUÉBEC by the Centre de transfert technologique en écologie industrielle (CTTÉI) and its partners. RECYC-QUÉBEC owns the copyright. The Toolkit, guide and tools may be saved, printed in whole or in part, and published, provided the bibliographic record is included.

Every effort was made by CTTÉI to ensure the accuracy of the information in the Toolkit. It was carefully developed based on sources known to be reliable and credible with a view to informing, raising awareness and educating. However, CTTÉI and its partners assume no liability as to the use of the contents or products and services mentioned. Circumstances of time and place, along with general or specific conditions, may require the content to be adapted.

*Use of the masculine in this document also includes the feminine.*

## FOR MORE INFORMATION, PLEASE CONTACT RECYC-QUÉBEC

Telephone (Montréal area): 514-351-7835  
Toll free: 1-800-807-0678

Email: [info@recyc-quebec.gouv.qc.ca](mailto:info@recyc-quebec.gouv.qc.ca)  
Website: [www.recyc-quebec.gouv.qc.ca](http://www.recyc-quebec.gouv.qc.ca)

RECYC-QUÉBEC, 2022

## BIBLIOGRAPHIC REFERENCE

RECYC-QUÉBEC (2022). Toolkit for Developing and Implementing a Regional Circular Economy Roadmap: Guide and Tools, 72 pages.

# CONTENTS OF THE TOOLKIT

---

FOREWORD	1
THE TIME IS RIGHT!	2
CIRCULAR ECONOMY DEFINITION AND STRATEGIES	3
WHAT IS A REGIONAL CIRCULAR ECONOMY ROADMAP?	5
WHY THE NEED FOR A REGIONAL ROADMAP?	5
WHO IS THE TOOLKIT INTENDED FOR?	5
THE TOOLKIT: A SIMPLE METHOD CONSISTING OF 2 PHASES AND 5 STEPS	6
HOW TO USE THE TOOLKIT	7
WHAT THE TOOLKIT CONTAINS	8
KEY ROADMAP ACTORS	10
METHODOLOGICAL GUIDE	15
<b>STEP 1 PLANNING</b>	<b>16</b>
Activity 1.1 Planning project management	20
Activity 1.2 Managing stakeholders	25
Activity 1.3 Managing communications	27
<b>STEP 2 REGIONAL PROFILE</b>	<b>29</b>
Activity 2.1 Consulting the stakeholders	33
Activity 2.2 Compiling and analyzing the results	37
<b>STEP 3 VISION AND OBJECTIVES</b>	<b>38</b>
Activity 3.1 Engaging in strategic thinking	43
Activity 3.2 Setting up and facilitating Technical Sub-committees	44
Activity 3.3 Defining the objectives and indicators	45
<b>STEP 4 IMPLEMENTATION</b>	<b>48</b>
Activity 4.1 Developing the roadmap	53
Activity 4.2 Launching the roadmap	55
<b>STEP 5 ASSESSMENT AND ONGOING DEVELOPMENT</b>	<b>56</b>
Activity 5.1 Assessing and further developing the roadmap	61
THE TIME IS STILL RIGHT!	64
REFERENCES	65
BIBLIOGRAPHY	67

# CONTENTS OF THE TOOLKIT

## Appendices

Appendix I \_\_\_\_\_ Consultation and Validation Committee Members  
Appendix II \_\_\_\_\_ Examples of Circular Economy Roadmaps  
Appendix III \_\_\_\_\_ Democratic Governance

## Figures

Figure 1 – Circular economy and associated strategies \_\_\_\_\_ 4  
Figure 2 – The 2 phases of implementing a regional circular economy \_\_\_\_\_ 6  
Figure 3 – The 5 steps involved in developing and implementing the roadmap \_\_\_\_\_ 9  
Figure 4 – Five-step methodology: activities, sub-activities and tools \_\_\_\_\_ 9  
Figure 5 – Ecosystem and configuration of the organizational structure \_\_\_\_\_ 10  
Figure 6 – Roadmap tree \_\_\_\_\_ 39  
Figure 7 – Continuous improvement process (Deming Cycle) \_\_\_\_\_ 63





# LIST OF ACRONYMS

**4R-D** Reduction at source, reuse, recycling and recovery before disposal

**AC** Advisory Committee

**BAPE** Bureau d'audiences publiques sur l'environnement

**CE** Circular economy

**CEDC** Community Economic Development Corporation

**CERIEC** Centre d'études et de recherches intersectorielles en économie circulaire

**CFDC** Community Futures Development Corporation

**CFER** Centre de formation en entreprise et récupération

**CISSS** Centre intégré de santé et de services sociaux (Integrated health and social services centre)

**CJE** Carrefours jeunesse-emploi (Youth employment centres)

**CLD** Centre local de développement (Local development centre)

**CRD** Construction, renovation and demolition sector

**CRISA** Comité régional intersectoriel en sécurité alimentaire

**CSMO-ÉSAC** Comité sectoriel de main - d'œuvre – Économie sociale Action communautaire

**CTTÉI** Centre de transfert technologique en écologie industrielle

**EDDEC** Institut de l'environnement, du développement durable et de l'économie circulaire

**EDO** Economic development organization

**FRM** Fertilizing residual materials

**GDP** Gross domestic product

**GHG** Greenhouse gas

**IAE** Information, awareness and education measures

**ICI** Industrial, commercial and institutional sector

**ISO** International Organization for Standardization

**ISQ** Institut de la statistique du Québec

**MEI** Ministère de l'Économie et de l'Innovation

**MELCC** Ministère de l'Environnement et de la Lutte contre les changements climatiques

# LIST OF ACRONYMS

---

<b>MWMP</b>	Municipal waste management plan	<b>TISS</b>	Territoires innovants en économie sociale et solidaire
<b>NPO</b>	Non-profit organization	<b>TSC</b>	Technical Sub-committee
<b>OECD</b>	Organisation for Economic Co-operation and Development		
<b>OIL</b>	Open Innovation Laboratory		
<b>PDZA</b>	Plan de développement de la zone agricole (Agricultural zone development plan)		
<b>PMBOK</b>	Project Management Body of Knowledge		
<b>RCM</b>	Regional County Municipalities		
<b>RDC</b>	Regional Development Cooperatives		
<b>REC</b>	Regional Environmental Council		
<b>RISQ</b>	Réseau d'investissement social du Québec		
<b>RMM</b>	Residual materials management		
<b>SME</b>	Small and medium-sized enterprise		
<b>SSE</b>	Social and solidarity economy		
<b>SWOT</b>	Strengths, weaknesses, opportunities, threats		

# FOREWORD

## RECYC-QUÉBEC'S COMMITMENT

RECYC-QUÉBEC is a state-owned enterprise founded in 1990 to position Quebec as a leader in innovative and sustainable residual materials management practices for a zero-waste future. Through its programs, it encourages Quebecers to reduce, reuse, recycle and recover residual materials to promote a circular economy and fight against climate change.

Supporting the creation of this Toolkit in view of developing and implementing regional circular economy roadmaps enables RECYC-QUÉBEC to maintain its status as a Quebec leader in CE deployment.

## PRODUCTION TEAM

### Centre de transfert technologique en écologie industrielle (CTTÉI)

CTTÉI is a college technology transfer centre affiliated with *Cégep de Sorel-Tracy* and recognized by the *Ministère de l'Éducation et de l'Enseignement supérieur* and the *Ministère de l'Économie et de l'Innovation*. Its mission is to increase the performance of businesses and communities through research and development of innovative approaches and technologies in industrial ecology.

Under the supervision of RECYC-QUÉBEC, it coordinated the creation of the Toolkit in addition to contributing to the development of an accessible methodology and simple and easily adaptable tools.

### Conseil régional de l'environnement et du développement durable de l'Outaouais (CREDDO)

CREDDO is one of 16 regional environmental councils in Quebec. It deploys *Synergie Outaouais*, a regional circular economy project. As the main point of contact for the *Ministère de l'Environnement et de la Lutte contre les changements climatiques* (MELCC), its main mandate is to ensure consultation of the key Outaouais actors regarding the region's environmental issues.

### Conseil régional de l'environnement – région de la Capitale-Nationale (CRECN)

CRECN is a non-profit organization formed of associations, institutions and individuals concerned about upholding collective rights for a quality environment. Its strategy focuses on regional consultation, awareness-raising measures, concrete projects with local stakeholders, and designing dissemination tools.

### Open Innovation Laboratory (OIL)

The Open Innovation Laboratory, a college technology transfer centre affiliated with *Cégep de Rivière-du-Loup*, specializes in adopting user-centric open innovation practices. Its interdisciplinary team has led workshops and held individual meetings with members of the Consultation and Validation Committee. Valuable information has thus been gathered from actively involved actors.



## ACKNOWLEDGMENTS

### Consultation and Validation Committee

A committee made up of actors who have already started a regional circular economy initiative assisted the production team in creating the Toolkit.

In defining their needs, the committee members contributed to the methodological thought process and supplemented the contents of the Toolkit. The production team would like to thank them for their valuable contribution.

### Appendix I – Consultation and Validation Committee Members

# THE TIME IS RIGHT!

*Extract – manufacture – distribute – use – dispose of* resources summarizes the current linear industrial model. A dormant potential of economic, environmental and social value creation can be found in the opportunity to rethink and optimize the use of resources through closed loops. This perspective extends the resource life cycle and initiates a transition to a circular economy (CE), **an economy that does more and better with less.**

This new economic model reduces the extraction of raw materials, increases the gross domestic product (GDP), and generates local employment. With the end result being a reduction in greenhouse gases (GHGs) and improved individual and community wellness. Everyone wins: regions, organizations and businesses.

“Many European and Asian countries have implemented legislation, objectives and economic incentives to facilitate the transition to a circular economy” (RECYC-QUÉBEC, 2019). In Canada, Quebec is known through the many initiatives of government and local actors. CE has been included in several national policies, and programs have been developed to support its operational implementation.

Deploying CE on a regional scale is an emergent approach. Several regions have already followed suit and are developing customized, unique methodologies with their stakeholders. Quebec municipalities and regions appear to have the ideal governance and geographic scale for local CE launch. Their expertise pertains to several CE strategies (e.g., urban planning, property assessment, residual materials management, as well as cultural, economic, environmental and social development).

To meet the growing demand for CE support to organizations, regional leaders can now adopt an action plan and transition to the circular economy locally.

**With this Toolkit, RECYC-QUÉBEC would like to provide them with the means to develop and implement a regional circular economy roadmap.**

**Are you thinking about developing and implementing a regional circular economy roadmap?**

**What an excellent idea!**

This is the time to move on to an economic model closest to value chains and regional resilience. A more efficient model aimed at reducing and optimizing resource use.

Among the 11 strategic directions identified in its Status Report on the Management of Final Waste (***L'état des lieux et la gestion des résidus ultimes***), the *Bureau d'audiences publiques sur l'environnement* (BAPE) is proposing to the provincial government to **make CE a priority model** for residual materials management.



# CIRCULAR ECONOMY DEFINITION AND STRATEGIES

In 2016, the Quebec circular economy consultation hub defined CE as follows:

**“A production, exchange and consumption system aiming to optimize resource use in every stage in the life cycle of a product or service through a circular approach, reduce the environmental footprint and contribute to the well-being of individuals and communities.”**

## CIRCULAR ECONOMY STRATEGIES

The Quebec CE model has two main objectives: (1) Rethink and (2) Optimize resource use. To do so, it is proposing innovative strategies and business models (Figure 1). The hierarchy for implementing circularity strategies preserves value and enables subsequent strategies. A strategy introduced earlier on, such as **ecodesign**, facilitates the application of subsequent strategies such as **refurbishing**.

Short loops are preferred. First locally, from a geographic standpoint (Québec Circulaire, 2019), but also moderate, by favouring transformation activities that optimize benefits with the least amount of effort.

**“The Circularity Gap Report”** for Quebec (Circle Economy and RECYC-QUÉBEC, 2021) provides a referential analysis that determines the extent to which the Quebec economy is circular. In 2021, the circularity index was 3.5%, meaning that most of the resources used to meet society’s needs are not circular. Regional implementation of the roadmap is a concrete way to improve this figure and **“close the circularity gap.”**

### The Circular Economy in Quebec

#### RECYC-QUÉBEC

The circular economy: a priority

#### Quebeccirculaire.org

Platform that brings together CE actors in Quebec

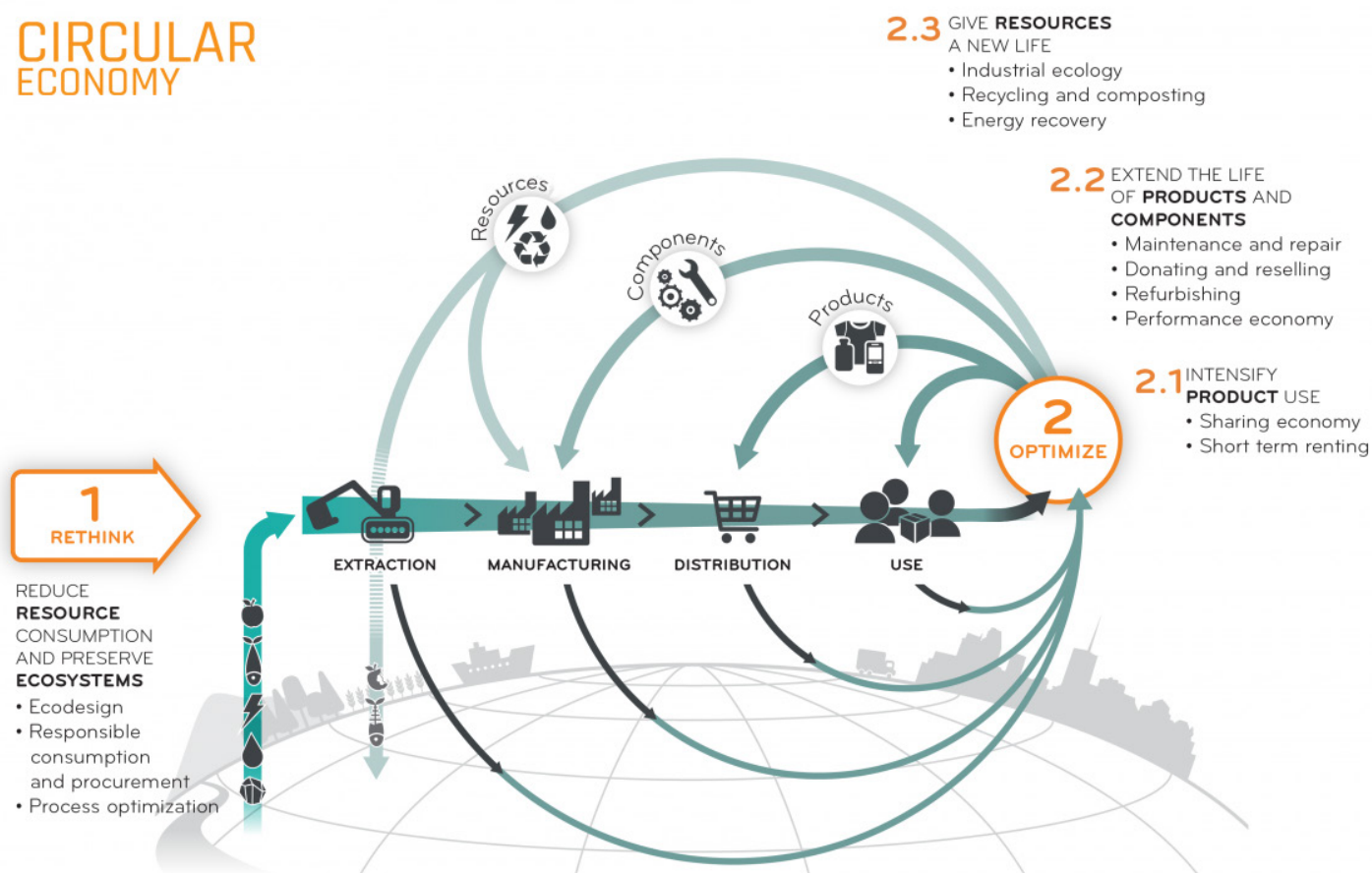
#### Centre d’études et de recherches intersectorielles en économie circulaire (CERIEC)

Multidisciplinary scientific research program dedicated to CE

#### Synergie Québec

CE symbiosis network in Quebec

# CIRCULAR ECONOMY



© Institut EDDEC, 2018. In collaboration with RECYC-QUÉBEC. This illustration may be reproduced, but must not be modified.

**Figure 1 – Circular economy and associated strategies**

## WHAT IS A REGIONAL CIRCULAR ECONOMY ROADMAP?

**A roadmap is first and foremost a regional collaborative initiative aimed at engaging organizations to transition toward a circular economy.**

Created in close cooperation with regional stakeholders, the roadmap provides a framework for sustainably developing the circular economy on a regional scale. It provides a regional vision, strategic directions and collective objectives to be met according to a timetable set by the stakeholders. The roadmap proposes a multitude of coherent strategic, financial, regulatory and technological actions, as well as others related to service and procurement. **Its primary aim is to step up the regions' transition to a circular economy.**

**The Toolkit presents an accessible methodology and tools that can be easily adapted to create a roadmap in cooperation with the other stakeholders, in addition to ensuring its development and implementation.**

The roadmap is a key activity in the transition to a circular economy that reflects local concerns and issues. It is precisely aligned with each region's goals, needs and capacities. It also ensures that regional directions are in line with government policies and action plans.

## WHY THE NEED FOR A REGIONAL ROADMAP?

With its long-term systemic vision, the roadmap brings together stakeholders around a project full of economic, environmental and social benefits. Its development and implementation engage local driving forces in all sectors – public, industrial and civil. All are concerned!

### WHO IS THE TOOLKIT INTENDED FOR?

The Toolkit is intended for local stakeholders wishing to be involved in a project aimed at developing and implementing a regional roadmap.

## AVOIDING DUPLICATION

In the last few years, a number of regions have implemented regional initiatives in sustainable development, circular economy and even industrial symbiosis.

This Toolkit focuses on the knowledge acquired in relation to provincial policies and plans. It supplements regional initiatives and policies such as the municipal waste management plan and the agricultural zone development plan.

To avoid duplication, the roadmap is integrated into its ecosystem and maintains a dialogue with its stakeholders at all levels. This bidirectional alignment has the roadmap and the regional directions converge toward the same goal: transition to a circular economy.

*A regional action plan that sets out the major objectives and measures to be implemented to achieve a CE transition?*

*Regional planning that engages the stakeholders?*

*A coherent vision of the actions and means to be implemented to eliminate resource waste?*

**ALL OF THE ABOVE**  
and even more!

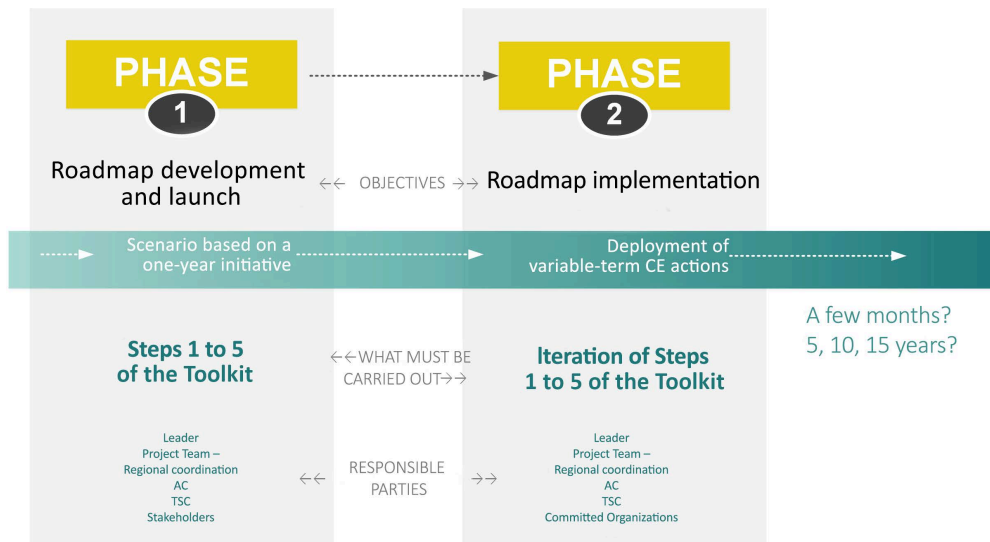
**France, Amsterdam, Finland? Look at other roadmaps for inspiration.**

Despite their specific characteristics (scale, objectives, means), the roadmap initiatives implemented elsewhere are a valuable source of information, experience and tools.

*Appendix II – Examples of Circular Economy Roadmaps*

## THE TOOLKIT: A SIMPLE METHOD CONSISTING OF 2 PHASES AND 5 STEPS

To assist regions in their transition to a circular economy, the Toolkit presents a methodology consisting of two phases and five steps (Figure 2). It follows project management best practices.



**Figure 2** – The 2 phases of implementing a regional circular economy.

### How much time is needed to develop and launch the roadmap (PHASE 1)?

As much time as needed to perform an assessment, consult stakeholders, and co-create the roadmap, but short enough to keep the ecosystem engaged. Each region must determine its own timetable for developing and launching its roadmap.

The methodology proposes PHASE 1, which extends over about **ONE YEAR**. Each step takes two to six months to complete and ends with an assessment and continuous improvement process. Some steps actually overlap. However, the workload, which is indicated at each step, is an estimate. The size of the region and the roadmap as well as the available resources determine the duration and intensity of each phase.



## What is the roadmap implementation timeframe (PHASE 2)?

It is determined by the strategic directions and the resources. After the roadmap is officially launched, the timeframe for implementing the actions depends on each region's specific plan. The decision is made by the region and the organizations that are concretely engaged in action. ***A pilot project of a few months? A project spanning 5, 10, 15 years?***

The roadmap actions are deployed progressively. However, the implementation timetable is different in each case. Since the roadmap is a project involving multiple actors, these actions must follow a logical sequence. Regional coherence is maintained through rigorous coordination of the roadmap's implementation, a task with a regional scope that must not be omitted and must be planned in **Step 1 – Planning**.

The workload required to coordinate and oversee the roadmap's implementation is not known. The content of the roadmap and the project scope will determine the resource requirements.

## HOW TO USE THE TOOLKIT

First, deploy **PHASE 1** and engage the organizations in the transition to a circular economy. Carry out the five steps in the Toolkit for a first iteration. Set up a continuous improvement process.

Next, plan the succession for **PHASE 2**, roadmap implementation. Regional coordination is crucial for long-term launch of the roadmap. Repeat **Step 5 – Assessment and ongoing development** and update the previous steps to track progress and adapt the roadmap.

# WHAT THE TOOLKIT CONTAINS

The Toolkit, which presents a methodology and tools, is just as flexible as the needs of the teams in charge of developing and implementing the roadmap.

The Toolkit contains:

## 1. A methodology guide consisting of two phases and five steps

The methodology phases and steps are based on an iterative approach centered on continuous improvement (Figure 3). They can be adapted to each region's context. Their duration varies, although some periods are particularly intense, such as **Activity 4.1 – Developing the roadmap** and **Step 4 – Implementation**. The detailed progression of the methodology shows the sequence of steps along with the associated activities and tools (Figure 4).

## 2. Activities and sub-activities

Each step involves objectives and how they can be achieved through various activities and sub-activities. To make them easier to implement, they are presented synthetically and consist of answers to the questions What, Why, Who and How.

## 3. Tools

Tools have been developed to support the execution of the steps. They are included with some activities and sub-activities, and can be used free of charge and customized if necessary.

## 4. Sidebars on crucial topics: stakeholders and communication

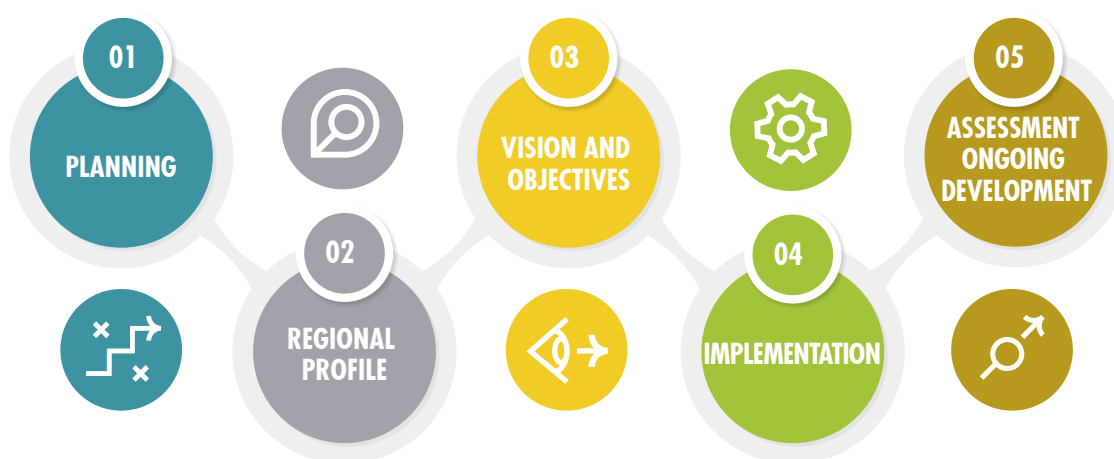
Stakeholders and communication are ongoing considerations throughout roadmap development and implementation. At each step, **SIDEBARS** cover these topics to ensure a cross-functional vision is maintained in the process.

## 5. Supplemental information and references

At each step, there is additional information in the margins of the guide that supplements the methodology.

### IMPORTANT:

It is crucial to think about the follow-up and assessment at each stage of the project and not only at the end.



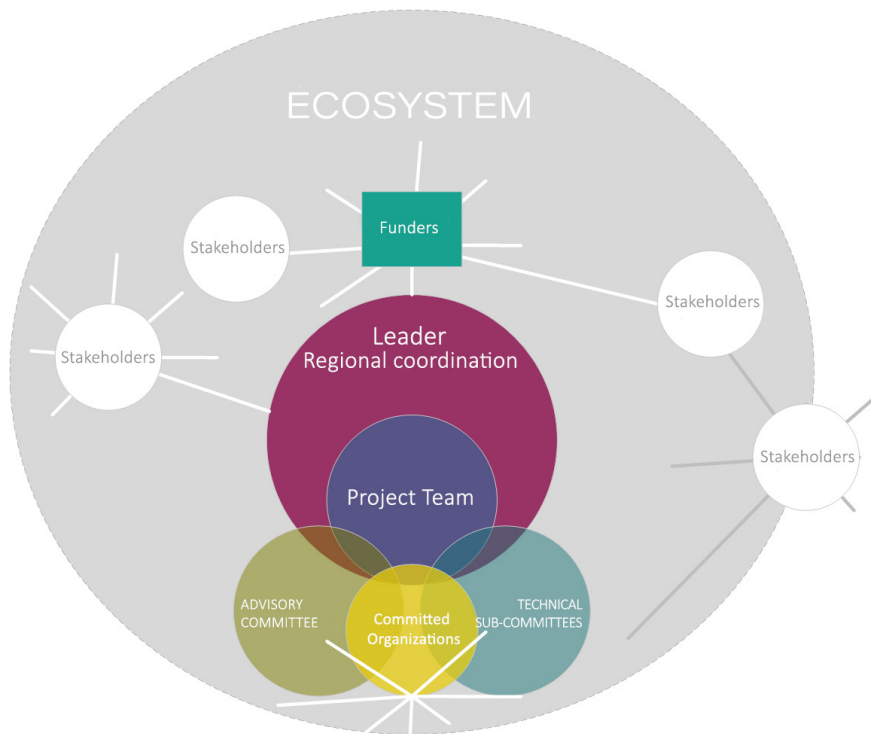
**Figure 3** – The 5 steps involved in developing and implementing the roadmap.

Step	Activity	Sub-activity	Tool
<b>1 – Planning</b>	1.1 – Planning project management	1.1.1 – Configuring the organizational structure	1.1.1 – Configuration of the organizational structure
		1.1.2 – Drawing up the timetable	1.1.2 – Timetable
		1.1.3 – Establishing the budget	1.1.3 – Budget calculation chart
		1.1.4 – Identifying and analyzing the risks	1.1.4 – Risk identification and analysis
	1.2 – Managing stakeholders	1.2.1 – Identifying the stakeholders	1.2.1 – List of stakeholders
		1.2.2 – Engaging the stakeholders	1.2.2 – Stakeholder engagement
	1.3 – Managing communications	1.3.1 – Communicating	1.3.2 – Diagrams, definitions and examples
		1.3.2 – Developing a common understanding of the circular economy	
<b>2 – Regional profile</b>	2.1 – Consulting the stakeholders		2.1 – Regional circular economy assessment questionnaire
	2.2 – Compiling and analyzing the results		2.2 – <i>Regional circular economy assessment</i> report template
<b>3 – Vision and objectives</b>	3.1 – Engaging in strategic thinking		3.1 – Support for defining the vision and strategic directions
	3.2 – Setting up and facilitating Technical Sub-committees		3.2 – Creation of Technical Sub-committees
	3.3 – Defining the objectives and indicators	3.3.1 – Setting SMART objectives	3.3 – Template of SMART objectives and indicators
		3.3.2 – Identifying circularity indicators	
<b>4 – Implementation</b>	4.1 – Developing the roadmap	4.1.1 – Defining and prioritizing roadmap actions	4.1.1 – Validation criteria and multicriteria matrix
		4.1.2 – Drafting the roadmap	4.1.2 – Regional circular economy roadmap template
	4.2 – Launching the roadmap		4.2 – Roadmap launch toolkit
<b>5 – Assessment and ongoing development</b>	5.1 – Assessing and further developing the roadmap		

**Figure 4** – Five-step methodology: activities, sub-activities and tools.

# KEY ROADMAP ACTORS

Many stakeholders, at different positions in the ecosystem, are involved by the development and implementation of the roadmap (Figure 5). The configuration of the stakeholders' organizational structure is unique to each region.



**Figure 5** – Ecosystem and configuration of the organizational structure.

## ECOSYSTEM

In keeping with the “living lab,” the “ecosystem” consists of all the regional actors and the dynamic relationships that drive them. The ecosystem of the roadmap project is based on a public-private-citizen partnership with a structured regional collaborative approach (Dubé, 2014). Regional facilitation and coordination enable a common vision of the transition toward a circular economy to be created.

## LEADER

The **Leader** is the organization that sets up and coordinates the roadmap initiative. Often already known as a regional organization or local actor in the area of economic, environmental or social development, the Leader has the leadership and credibility needed to carry the roadmap development and implementation initiative. Responsibility for the project may also be shared by several organizations.

The **Leader** is responsible for obtaining funding and for setting up the **Project Team**. The initiative, based on stakeholder collaboration, must be transparent and widely communicated in the ecosystem.

## REQUIRED REFERENCE

### Tool 1.1.1 – Configuration of the organizational structure

For detailed information on the stakeholders' roles and responsibilities and the creation of the committees.

### Leader's qualities

Expertise and recognition among local actors • Operational capacity • Expertise in circular economy or sustainable development • Expertise in communication and consultation • Complementary partnerships • Experience coordinating similar projects • Complementary services • Positive collaborations with several stakeholders • In-depth knowledge of regional and national issues • Familiarity with regional reporting

## EXAMPLES OF ROADMAP INITIATIVE LEADERS

**Regional organizations:** administrative region, metropolitan community (MC), agglomeration, regional county municipality (RCM), municipality.

**Group of organizations:** symbiosis, activity area, industrial park.

**Economic development organizations:** Community Futures Development Corporation (CFDC)/business development centre, local development centre, chamber of commerce and industry (CCI).

**Environmental and social organizations:** regional environmental council, social economy hub, social economy organization, regional development cooperative, citizens' groups.



## PROJECT TEAM

The **Project Team** coordinates the development and implementation of the roadmap. It is made up of the resources allocated by the **Leader**. The number of persons involved is not determined by the methodology and varies by context, based on need and according to the available resources.

Ideally, the roadmap is a deliverable to be included in regional strategic planning. Its local quality and relevance are key, just like communication at all stages of the process.

In addition to internal resources from the **Leader**, the **Project Team** can share or delegate certain tasks to outside resources that are funded at the same time, such as through a regional development funding program or partnerships with other organizations.

The **Project Team** brings together the actors with the expertise needed to address regional development differently and make the CE transition. It therefore maintains partnerships in order to remain connected to the issues and stakeholders' needs. To do so, it sets up consultation, participation and engagement mechanisms.

### THREE MECHANISMS FOR STAKEHOLDER CONSULTATION, PARTICIPATION AND ENGAGEMENT:

1. **Advisory Committee (AC):** brings together experts from various fields who provide advice on project directions and decisions.
2. **Technical Sub-committees (TSCs):** include the stakeholders concerned by the strategic directions.
3. **Committed Organizations:** bring together stakeholders that carry out the roadmap actions and are in charge of implementing them.

## ADVISORY COMMITTEE (AC)

The **Advisory Committee (AC)** is made up of stakeholders chosen to provide the **Project Team** with their expertise and insights in varied fields to ensure the success of the initiative. The members' role is to present informed views, ensure alignment with the current actions, provide input on decisions, share their expertise and network of contacts, and support the search for funding. The committee is facilitated by the **Project Team**.

An **AC**, or other validation mechanism, is crucial during roadmap development and implementation. It helps maintain a concerted vision and ensures that actions are consistent over the long term.

## PLANNING THE NEXT STAGE

**Should not be overlooked, starting with PHASE 1!**

Performance monitoring and measurement of roadmap actions do not happen on their own! The roadmap is a long-term investment with a regional scope. In PHASE 2, regional coordination of roadmap implementation should also be supported by the region.

To avoid not having a regional coordinator, the **Project Team** must consider the sustainability of the roadmap, in particular shared governance and financing, starting with the planning stage.

## TECHNICAL SUB-COMMITTEES (TSCs)

The **Project Team** is responsible for creating, facilitating and coordinating **Technical Sub-committees (TSCs)**, which are informal, non-remunerated entities made up of external stakeholders concerned by the circular economy. The TSCs are responsible for furthering reflection on the roadmap vision, directions, objectives and indicators. However, they are not responsible for implementing the roadmap actions.

The **TSC** topics, their number and the number of persons involved vary depending on the scope and the regional strategic priorities. The **Project Team** thus brings together the stakeholders concerned in the ecosystem by creating **TSCs** by roadmap strategic direction in order to maximize each contribution.

## COMMITTED ORGANIZATIONS

**Committed Organizations** carry the roadmap actions. In the field, they are responsible for implementing the roadmap actions and for reporting to the **Project Team** on the regional coordination of the implementation. Several organizations may be jointly responsible for implementing an action.

Some members of the **TSCs** will naturally be part of the **Committed Organizations**. These organizations are involved in developing the roadmap by taking part in the selection of CE actions to be included in the roadmap. They must then carry, manage and implement the CE actions, which they are committed to, in addition to doing a follow-up. They are also responsible for transmitting the information to the **Project Team** in charge of regional coordination of the roadmap implementation.

## STAKEHOLDERS INVOLVED BY CE ACTIONS

These stakeholders are all involved by the roadmap implementation actions. Most did not actually participate in the roadmap development process. However, their participation is crucial for implementing the roadmap. **Committed Organizations** are responsible for engaging the stakeholders through various means so that they adopt the CE principles and positively contribute to the roadmap actions.

## TSCs during the two roadmap phases

**PHASE 1:** the **TSCs** translate the strategic directions into measurable objectives by selecting the appropriate circularity indicators. Through this process, they promote the views and interests of the stakeholders they represent. Ultimately, they define the actions to be included in the roadmap and the concrete means of achieving the objectives. The **TSCs** must identify the **Committed Organizations** responsible for implementing the roadmap actions.

**PHASE 2:** the involvement of the **TSCs** does not end when the roadmap is launched. Together with the **Project Team** responsible for the regional coordination of the roadmap implementation, the **TSCs** monitor the performance of the actions and are involved in continuous improvement. Always rooted in the community, the **TSCs** bring together the conditions for success in implementing the roadmap.

## INVOLVING AND EMPOWERING THE STAKEHOLDERS

With the aim of being pragmatic, the roadmap favours stakeholder involvement throughout all the steps and at different levels. These close exchanges support the development of synergies where everyone mutually benefits from the roadmap. As the roadmap is developed and implemented, mechanisms for stakeholder consultation, participation and engagement must be set up (**Tool 1.1.1 – Configuration of the organizational structure**).

Creating mechanisms such as the **AC** and the **TSCs** is crucial. Although often on a volunteer basis, these collaborations are an investment for both the **Leader** and the key actors involved.

At this stage, it is difficult to assess the workload for the main roadmap actors (e.g., meeting frequency and duration). By providing project details, milestones and deliverables, the **Project Team** can more easily solicit their involvement on a volunteer basis.

***The key actors and the stakeholders are a constant and cross-functional consideration throughout the steps of this Toolkit. Consultation, decision-making process, assessment: these discussions help mitigate the risks, overcome some resistance and, ultimately, transfer responsibility for implementing the roadmap to the community.***

## SEARCHING FOR ACTORS INTERESTED IN THE CIRCULAR ECONOMY?

**Types of organizations to solicit to join the project**

Regional organizations • Metropolitan communities • Agglomerations • RCMs • Municipalities • Local development centres • EDOs • CFDC/business development centres • Industrial symbiosis • CE initiative or living lab • Organizations with a specific clientele, e.g., entrepreneurship schools, innovation incubators • CFER, CJE • CDR • Sector-based associations • Groups and clusters • Chambers of commerce and industry • Environmental protection organizations • Regional environmental councils • Regional social economy hubs • Funders • Financial sector, credit unions, banks, financial institutions • RECYC-QUÉBEC • All levels of government departments and agencies • Health and education sectors • CISSS • And many others!

**Not to forget the public along with businesses of all sizes and from all sectors!**

**HOWEVER, THINK ABOUT PRIORITIZING THE TARGETS AND ACTIONS TO CREATE A MULTIPLIER EFFECT AND MAKE EFFICIENT USE OF RESOURCES.**

## COMMUNICATION: AT EACH AND EVERY STEP

### External communication

How well information is communicated is one of the key factors for roadmap success. The transition toward a circular economy is based on changes in perception and behaviours of various stakeholders with different, even contrasting, issues and priorities.

Just like a central nervous system, communication establishes a smooth link between all the stakeholders in the regional ecosystem.

For the **Project Team**, the management of communication is a task to be carried out on a continuous basis. Throughout all the steps, communication maintains a clear and transverse flow of information. Being bidirectional, it creates a form of regional CE acceptability and engagement. ***It rallies the stakeholders around the development and implementation of the roadmap.***

**Activity 1.3 – Managing communications** presents the main steps for creating a communication plan to ensure the development and launch of the roadmap. In addition to these basic elements, the Toolkit presents the communication aspects to consider at all the methodology stages.

External communications are directed toward the stakeholders involved. Use **Tool 1.2.2 – Stakeholder engagement** to identify the actions to take for each stakeholder.

### And what about internal communications?

Internally and in relation to stakeholders that are closely involved, the **Project Team** implements best practices and uses appropriate information exchange methods such as virtual meetings, the cloud and collaborative platforms (e.g., Microsoft Teams, Google Workspace).

These processes also define the type of meetings, their frequency and the stakeholders involved. The *Guide to the Project Management Body of Knowledge* (PMBOK® Guide) identifies three categories of management meetings: exchange of information, brainstorming and decision-making (Project Management Institute, 2022).

### Expert tips:

- For the sake of efficiency, a meeting focuses on only one category at a time.
- Send out invitations to stakeholders well ahead of scheduled meetings.
- Communicate the purpose and agenda of the meetings clearly to the stakeholders.
- Provide the minutes and tasks to be carried out to the stakeholders concerned.

## What should be communicated, why, to whom, when and how?

### TARGET AUDIENCE

The internal and external stakeholders identified in [Sub-activity 1.2.1 – Identifying the stakeholders](#)

### Additional tool

[Tool 1.2.2 – Stakeholder engagement](#) (available in French only)

### Need some help?

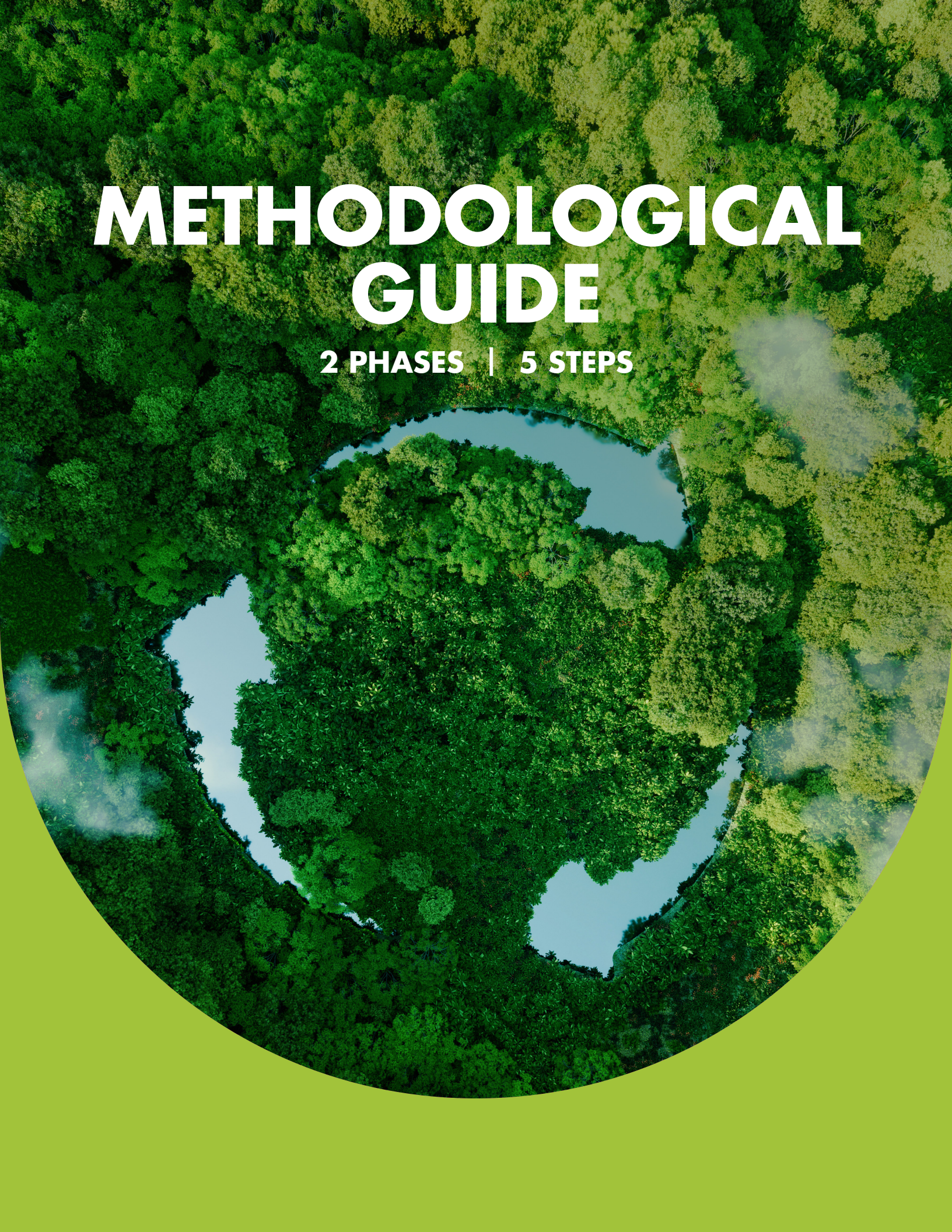
Coordinating a project is an art, all the more so when multiple actors are involved and where management and communication must be ongoing and meticulous.

*Many reference websites propose various management tools such as managing the technique, drawing up an agenda, setting objectives, and engaging in collaborative work.*



# METHODOLOGICAL GUIDE

2 PHASES | 5 STEPS





## STEP 1

---



# PLANNING

*A unifying regional roadmap  
engages all CE stakeholders...  
starting from the planning stage.*

Natacha Beauchesne,  
City of Montréal

# Planning lays the groundwork for a successful roadmap initiative. Start this first basic step using tools suited to the regional reality.

The PLANNING step focuses on the planning and management of the regional CE roadmap development and implementation project. It provides an overview of the project by including the stakeholders, communications and management tools.

## MAIN PLANNING OBJECTIVES:

1. Set up a **Project Team**. This activity is handled by the **Leader** of the project, who provides leadership in the development and implementation of the roadmap.
2. Identify the stakeholders and bring together the main actors.
3. Develop a communication plan, the means of which will be deployed throughout all the project steps.
4. Create or customize the project management tools required for the proper execution of the project.
5. Set up an evolving project structure.

Planning is handled by the **Project Team** and validated by the **Leader**. The workload is estimated at two months, in particular due to the efforts required to set up the management tools and identify and engage the stakeholders.

Despite its structuring effect, the roadmap must be flexible enough to quickly respond to changes in the context and the iterations specific to the collaborative and regional initiatives.



# **STEP 1 – PLANNING** **Overview**

## **WHO**

- Leader
- Project Team

## **WORKLOAD**

2 months

## **3 ACTIVITIES**

- 1.1 Planning project management
- 1.2 Managing stakeholders
- 1.3 Managing communications

## **8 SUB-ACTIVITIES**

- 1.1.1 Configuring the organizational structure
- 1.1.2 Drawing up the timetable
- 1.1.3 Establishing the budget
- 1.1.4 Identifying and analyzing the risks
- 1.2.1 Identifying the stakeholders
- 1.2.2 Engaging the stakeholders
- 1.3.1 Communicating
- 1.3.2 Developing a common understanding of the circular economy

## **7 TOOLS**

- 1.1.1 Configuration of the organizational structure
- 1.1.2 Timetable
- 1.1.3 Budget calculation chart
- 1.1.4 Risk identification and analysis
- 1.2.1 List of stakeholders
- 1.2.2 Stakeholder engagement
- 1.3.2 Diagrams, definitions and examples

# STEP 1 – PLANNING

## ON THE PART OF THE STAKEHOLDERS

### Stakeholder cooperation and collaboration

To create the emerging connections needed to transition to a circular economy, the Toolkit focuses on stakeholder cooperation and collaboration. **Step 1 – Planning**, together with **Activity 1.2 – Managing stakeholders**, ensures this alignment. In addition, a SWOT analysis (Strengths, Weaknesses, Opportunities, Threats) may be useful for a strategic assessment or for more specific analysis needs.

Stakeholder involvement is sought throughout roadmap development and implementation. The continuity of this collaboration is needed to set up a regional CE strategy that is coordinated and truly foundational. For stakeholders, the potential benefits are the key incentive for this long-term involvement.

## IN TERMS OF COMMUNICATION ACTIONS

### Importance of ambassadors and allies

To reinforce the initiative, involve the more resolute regional stakeholders as roadmap ambassadors. Use the power of communication to create a multiplier effect and reach other stakeholders.

### Communication is an art! Need some help?

For easier communication with stakeholders, **create a strong brand image**. Create a unique visual identity (logo, slogan) to be used on all communication media: press releases, websites, micro-sites, social networks (LinkedIn, Facebook).

Many resources are available to facilitate communications (e.g., in-house or professional resources, reference websites).

## Have adequate expertise

*Often demanding, communication is a department of its own. For greater efficiency, seek out the **Leader's** internal communication resources or external stakeholders with these qualifications.*

# **Activity 1.1** **Planning project management**

## **SUB-ACTIVITY 1.1.1** **Configuring the organizational structure**

### **WHAT**

Provide training to the **Project Team** and the other committees whose mandate is to oversee and coordinate the initiative or deliver the roadmap.

### **WHO**

**Leader** and **Project Team**.

### **WHY**

Define a clear mandate. Make sure to provide training to a **Project Team** made up of persons with the qualifications and experience needed to carry out the mandate.

### **SPECIFIC ACTIVITY OBJECTIVES:**

- Identify the roles and responsibilities of the members of each structure.
- Target individuals who would like to be on the various committees and teams and who have the required qualifications.
- Identify the objectives, deliverables and performance criteria specific to the various committees and teams.

### **HOW:**

- Refer to **Tool 1.1.1 – Configuration of the organizational structure**.
- Based on the regional reality and proposals found in the tool, identify representatives or organizations that meet the requirements of the various positions.
- Obtain written confirmation of each committee member's involvement.

#### *Tool to use*

**Tool 1.1.1 – Configuration of the organizational structure**



# **Activity 1.1** **Planning project management**

## **CREATING THE ADVISORY COMMITTEE (AC)**

The **AC** brings together partners from the extended regional ecosystem. It groups influential stakeholders with an interest in the roadmap, without necessarily being involved from an operational standpoint in developing and implementing the roadmap.

### **SPECIFIC OBJECTIVES:**

- Ensure regional governance in developing and implementing the roadmap.
- Promote the roadmap within the ecosystem.
- Provide support during the development phase and facilitate the implementation of the roadmap by providing feedback and advising the **Project Team**.
- Overcome barriers and challenges in the development and implementation of the roadmap by fostering dialogue and connections, and by establishing conditions favouring the transition.

### **HOW:**

- Refer to **Tool 1.1.1 – Configuration of the organizational structure**.
- Based on the regional context and the proposals included in the tool, identify, for each seat on the **AC**, representatives or organizations that meet the requirements of the various positions.
- Obtain written confirmation of each **AC** member's involvement.
- Plan the meeting schedule and send out the agenda items.

# **Activity 1.1** **Planning project management**

## **SUB-ACTIVITY 1.1.2** **Drawing up the timetable**

### **WHAT**

Draw up the timetable for the roadmap development and implementation project.

### **WHO**

**Project Team.**

### **WHY**

This management tool is crucial for monitoring the project status. It facilitates communication with stakeholders and favours their engagement.

### **SPECIFIC ACTIVITY OBJECTIVES:**

- Identify the main project milestones.
- Break down the roadmap project in the same way as during project management: into separate activities and tasks.
- Determine the time required for each one.
- Identify the main deliverables for each one.
- Identify those in charge of each one.
- Establish links between them.
- Identify the resources available to carry them out.
- Identify the milestones that require the **Leader's** approval.

### **HOW:**

- Refer to and customize **Tool 1.1.2 – Timetable**.
- Establish the timetable by including the main project milestones and the various tasks according to the proposed methodology.
- Submit the timetable to the **Leader** and the **AC** for feedback and validation.
- Regularly update **Tool 1.1.2 – Timetable** and communicate the project status during the initiative.
- Inform each person of the tasks assigned to them as well as the timetable that has been established and the available resources.

### **TIMETABLE**

A crucial project management tool for a regional roadmap implemented over several months or even years.

It is used by the **Project Team** for time management purposes as well as to properly oversee the status of the work and the project.

#### *Tool to use*

**Tool 1.1.2 – Timetable** (available in French only)

# **Activity 1.1** **Planning project management**

## **SUB-ACTIVITY 1.1.3** **Establishing the budget**

### **WHAT**

Draw up a budget in order to better determine the financial resources required for the project.

### **WHO**

**Project Team**, validation by the **Leader**.

### **WHY**

This management tool helps determine how the funds required for developing the roadmap and coordinating implementation of the actions it proposes are allocated. This is a way to anticipate management of the project's financial resources.

### **SPECIFIC ACTIVITY OBJECTIVES:**

- Control the project's finances.
- Set expenditure objectives based on the means associated with the project.
- Plan the actual costs of the project.
- Determine priorities.
- Anticipate contingencies and propose solutions.

### **HOW:**

- View and adapt **Tool 1.1.3 – Budget calculation chart**. Use estimates of the required time to draw up a budget for the project.
- Draw up the budget by including the list of expenses needed to develop and implement the roadmap as well as the associated amounts.
- Enter the sources of funding for each milestone. To avoid certain problems, determine the expenses for which funding has not been confirmed. Begin the search for funding to finalize the financial package.
- Regularly update **Tool 1.1.3 – Budget calculation chart**. Provide the financial statements based on the progress throughout the initiative.
- Develop strategies to ensure funding for the actions resulting from the roadmap.

This initial budget is allocated to develop the roadmap and coordinate implementation of the proposed actions.

Subsequently, for each action found on the roadmap, the **Committed Organizations**, which are in charge of the actions, will also implement a project management process with an associated budget.

To ensure the financial health, continuity and achievement of the objectives (quality, time, budget) of the initiative, the stakeholders must be involved in searching for financing.

### **Tool to use**

**Tool 1.1.3 – Budget calculation chart** (available in French only)

# **Activity 1.1** **Planning project management**

## **SUB-ACTIVITY 1.1.4** **Identifying and analyzing risks**

### **WHAT**

Identify, analyze and anticipate the risks inherent in the development and implementation of the roadmap that may jeopardize its success.

### **WHO**

**Project Team.**

### **WHY**

Identify prior to the process, methods and tools to increase the likelihood of achieving the project objectives.

### **SPECIFIC ACTIVITY OBJECTIVES:**

- Be aware of the risks that may affect completion of the project.
- Provide mitigation measures to prevent these risks and their negative consequences.
- Anticipate responses if these risks cannot be reduced or avoided.

### **HOW:**

- Customize and complete **Tool 1.1.4 – Risk identification and analysis** for each project activity to anticipate the risks inherent in the development of the roadmap, their sources and the possible mitigation measures.
- Set up a meeting with the volunteer stakeholders to supplement this process.
- Set up mitigation measures.

### **IMPORTANT: BLIND SPOT!**

Don't forget about employee turnover and the often busy schedule of those involved in the project. Consider the succession capacity and anticipate how to replace them if needed.

The change in leadership of the organizations involved in the roadmap is a particularly important aspect to consider in continuation efforts.

### ***Tool to use***

**Tool 1.1.4 – Risk identification and analysis** (available in French only)

# **Activity 1.2** **Managing stakeholders**

## **SUB-ACTIVITY 1.2.1** **Identifying the stakeholders**

### **WHAT**

Map internal and external stakeholders using an identification table.

### **WHO**

**Project Team.**

### **WHY**

Draw up a profile of the organizations and stakeholders that are involved or exert an influence in the roadmap development and implementation project.

### **SPECIFIC ACTIVITY OBJECTIVES:**

- Have an overview of the stakeholders involved in or interested by the project.
- Guide the development of the stakeholder consultation and engagement process (e.g., promote the questionnaire for **Activity 2.1 – Consulting the stakeholders** in **Step 2 – Regional profile**).
- Understand the strategic importance of each stakeholder in the development and implementation of the roadmap.
- Begin reflecting on the composition of the **TSCs** (in anticipation of **Activity 3.2 – Setting up and facilitating Technical Sub-committees** in **Step 3 – Vision and objectives**).
- Make sure the roadmap is based on collaboration and inclusive governance in order to optimize results.

### **HOW:**

- Reflect on the regional ecosystem to identify the stakeholders.
- Adapt and complete the table in **Tool 1.2.1 – List of stakeholders**.
  - In **Step 1 – Planning**, the stakeholders are identified and analyzed.
  - In **Step 2 – Regional profile** or during major changes in context, update the table.

The table in **Tool 1.2.1 – List of stakeholders** specifies, for each stakeholder, the reciprocal expectations, power of influence, and interest in the roadmap.

**Stakeholder mapping must be regularly updated throughout the process.**

### *Tool to use*

**Tool 1.2.1 – List of stakeholders**

# Activity 1.2

## Managing stakeholders

### SUB-ACTIVITY 1.2.2

#### Engaging stakeholders

#### WHAT

Engage stakeholders and get them involved in the project.

#### WHO

Project Team.

#### WHY

Convince stakeholders of the interest in contributing to a coherent, collaborative and coordinated initiative proposed by the regional CE roadmap project.

#### SPECIFIC ACTIVITY OBJECTIVES:

- Create an interest in the roadmap project.
- Engage stakeholders in developing and implementing the roadmap.
- Gather support from within the regional ecosystem. Create a network of roadmap project ambassadors and allies to generate a ripple effect.
- Find sources of financing for PHASES 1 and 2 of the roadmap to be implemented.

#### HOW:

- Use and adapt **Tool 1.2.2 – Stakeholder engagement** by adding examples and arguments based on the regional reality, if needed.
- Starting with **Tool 1.2.1 – List of stakeholders**, draw up a list of the first persons and organizations to meet to convince them of the relevance of the roadmap.
- Invite the target individuals and organizations to a meeting to create a network of ambassadors and allies.

#### The role of social and solidarity economy (SSE) enterprises

SSE is a major lever of the circular economy. Both share several principles and values. It is no coincidence that many SSE enterprises develop locally anchored circular activities, such as refurbishing, collaborative economy, performance economy, and industrial ecology.

**TIESS** – *Territoires innovants en économie sociale et solidaire* specializes in SSE knowledge transfer. It develops and consolidates this niche with other contributors, such as the *Chantier de l'économie sociale*, the Hubs and the EDOs. It has already documented the most promising initiatives and business models: ecodesign, sharing, reuse, repair, transformation, logistics, citizen hubs.

#### To learn more

[\*Économie sociale et économie circulaire: potentiels de synergie et modèles d'affaires porteurs\*](#) (TIESS, 2021)

[\*Économie sociale et économie circulaire: freins & leviers\*](#) (Chantier, 2019)

#### Tool to use

**Tool 1.2.2 – Stakeholder engagement** (available in French only)

#### Additional tools

**Tool 1.2.1 – List of stakeholders**

**Tool 1.3.2 – Diagrams, definitions and examples** (available in French only)



# **Activity 1.3** **Managing communications**

## **SUB-ACTIVITY 1.3.1** **Communicating**

### **WHAT**

Develop and deploy a communication plan for the roadmap. The plan includes strategies, key messages and means of communication tailored to the roadmap target audience: the stakeholders.

### **WHO**

**Project Team.**

### **WHY**

Identify, plan and carry out the communication activities needed to achieve the objectives.

### **SPECIFIC ACTIVITY OBJECTIVES:**

- Assess early on the needs in human, financial and material resources to ensure funding for communication activities.
- Produce a communication plan.
- Ensure that the roadmap communication plan is effective.
- Develop a common understanding of the circular economy.

### **HOW:**

- Analyze the situation and issues: the assessment situates the roadmap in a regional context and evaluates how it is received.
- Define the communication objectives: inform, raise awareness, educate, overcome resistance, incite changes in perception and behaviours.
- Identify the target audiences for developing communication strategies and appropriate messages.
- Select communication means and tools.
- Draw up a budget for human, financial and material resources needs for each means of communication that is used.
- Assess the efficiency of the plan using validation and follow-up mechanisms: indicators for processes, public participation and Gantt chart performance.
- Adjust the plan and set up a continuous improvement process for communications.

*The **Leader** may already have some internal communication resources with which to co-create this plan.*

### **Rely on your network of front runners!**

Aim for the collaboration of ambassadors and allies in implementing the communication plan.

### **The messages being conveyed dictate the means of communication.**

Include indirect communication activities in addition to traditional direct media, such as spaces used for discussion and interacting with the target audiences.

### **Additional tools**

[\*\*Tool 1.1.2 – Timetable\*\*](#) (available in French only)

[\*\*Tool 1.1.3 – Budget calculation chart\*\*](#) (available in French only)

[\*\*Tool 1.3.2 – Diagrams, definitions and examples\*\*](#) (available in French only)

# **Activity 1.3** **Managing communications**

## **SUB-ACTIVITY 1.3.2**

### **Developing a common understanding of the circular economy**

#### **WHAT**

Present the Quebec circular economy framework along with the associated diagrams, circularity strategies, definitions and examples.

#### **WHO**

**Project Team.**

#### **WHY**

Explain the circular economy and the various strategies. Develop a common understanding of the circular economy by and with all the stakeholders.

#### **SPECIFIC ACTIVITY OBJECTIVES:**

- Have easy access to clear CE references.
- Acquire a general and common understanding of CE operating principles.
- Stimulate reflection for the activities to favour on a regional scale.
- Help integrate new stakeholders in a CE project.
- More easily identify the objectives for implementing circular activities and networks for all stakeholders and scales.

#### **HOW:**

- Review **Tool 1.3.2 – Diagrams, definitions and examples**.
- Complete **Tool 1.3.2 – Diagrams, definitions and examples** to include examples that fit the regional context that create a more tangible link with the target audiences.
- If required, provide training to the **Project Team** on CE principles and strategies (open online training, group coaching, self-learning).
- Organize information, awareness and education activities to enhance stakeholders' know-how and help them find their place in the circular economy. Use **Tool 1.3.2 – Diagrams, definitions and examples**.
- Update **Tool 1.3.2 – Diagrams, definitions and examples** with the new actions that will be set up when developing and implementing the roadmap.

#### *Tool to use*

**Tool 1.3.2 – Diagrams, definitions and examples**  
(available in French only)

**END OF STEP 1**

**GO TO STEP 2**

## STEP 2



---

# REGIONAL PROFILE

*To better understand our region's reality, we summarized and analyzed a wide range of data already available from local actors.*

Stéphanie Houde,  
Municipality of Chapais

# Map out the actors and initiatives in the ecosystem to acquire insight on them. Establish the starting point, the regional circular economy baseline.

The SECOND step of the initiative is the **REGIONAL PROFILE**. Carried out in close cooperation with the stakeholders identified in **Step 1 – Planning**, this assessment provides a better understanding of the reality in the field specific to each region. It describes the current situation, the potential for CE action, as well as the needs to be met to enable the transition.

## MAIN OBJECTIVES OF THE REGIONAL PROFILE:

1. Increase knowledge and understanding of the local ecosystem by identifying the key industry sectors and action areas as well as the stakeholders to be prioritized. Perform an analysis by area of activity to obtain results by value chain.
2. List current CE practices as well as past and future initiatives and those under development.
3. Identify obstacles and levers. Identify significant correlations.
4. Assess the potential for integrating new CE strategies by the stakeholders and prioritize the actions.
5. Identify stakeholder needs in order to facilitate the adoption of CE strategies.
6. Engage stakeholders around the roadmap project.
7. Guide the development of the roadmap that will be drafted in **Step 4 – Implementation**.

The assessment is done by the **Project Team** and approved by the **AC** or the **Leader**. The estimated duration is two months: one month to conduct the survey and another month to analyze the information.

The workload associated with this task is considered moderate to high, in particular as a result of the effort required to promote the questionnaire and conduct a systematic analysis of the responses.

The regional circular economy assessment is the tool that determines the baseline situation. This contact between the **Project Team** and its ecosystem consolidates the dialogue with the stakeholders. **This is a key moment in the relations to be established with the stakeholders.**





## STEP 2 – REGIONAL PROFILE Overview

### WHO

- Leader
- Project Team
- Advisory Committee
- Stakeholders

### WORKLOAD

2 months

### 2 ACTIVITIES

- 2.1 Consulting the stakeholders
- 2.2 Compiling and analyzing the results

### 2 TOOLS

- 2.1 Regional circular economy assessment questionnaire
- 2.2 *Regional circular economy assessment* report template

### ***Are any CE projects already under way in the region?***

*The **Project Team** will benefit from being informed and having exchanges with organizations already involved in CE initiatives, which provide valuable information on success factors and the pitfalls to avoid.*





## STEP 2 – REGIONAL PROFILE

### ON THE PART OF THE STAKEHOLDERS

#### Consulting the stakeholders

In keeping with the collaborative spirit of the roadmap, the stakeholders are involved at all stages of roadmap development. Everyone's time is valuable! **Here are some tips** for optimizing dissemination and the participation rate:

- Carefully choose the time period when the questionnaire is released. The availability of certain stakeholders varies depending on the season (e.g., fewer respondents during vacation time). Plan for more than one consultation period, depending on the target audience.
- Clearly define the consultation steps and timetable.
- Ensure there is a sufficient response time for techniques such as the questionnaire.
- Officially launch **Activity 2.1 – Consulting the stakeholders** to the stakeholders.
- Send out invitations to the partners so that they distribute them within their network. Avoid duplication by having a detailed and coordinated launch plan.
- Send a reminder during the consultation period.
- Convey the regional profile results to the entire ecosystem, and more specifically to the participating stakeholders.

### IN TERMS OF COMMUNICATION ACTIONS

#### Disseminate the report

A collective project such as the roadmap feeds on a sense of belonging in addition to contributing to it.

Present the regional profile results to the stakeholders and ecosystem. This follow-up demonstrates their contribution to the project. They will appreciate seeing the reflection of the community in which they are developing and participate in.

#### Customized approach

*Customize actions and increase channels and means of communication. Involve stakeholders in promoting the consultation.*

Situate the roadmap from the standpoint of inclusive and democratic governance.

This willingness is expressed starting with the consultation and consolidates the dialogue with the stakeholders.

To find out more

**Appendix III**

**Democratic Governance**







# Activity 2.1

## Consulting the stakeholders

### ACTIVITY 2.1

#### Consulting the stakeholders

##### WHAT

Consult the stakeholders that make up the ecosystem in order to gather data on the current state of the circular economy within the region and identify the potential for circularity.

##### WHO

Project Team.

##### WHY

Obtain information on the practices, goals and needs of the region and the organizations to transition to a circular economy. Include stakeholders early on as a cross-functional consideration to the roadmap.

##### SPECIFIC ACTIVITY OBJECTIVES:

- Initiate a dialogue with the stakeholders. Specify the role of the main stakeholders in the regional circular economy and promote the roadmap project.
- Identify stakeholders of interest or that are influential to involve in the roadmap.
- List current CE practices as well as past and future initiatives and those under development.
- Gain a better understanding of the history and conditions for the emergence of CE projects.
- Be aware of CE projects that may be associated with the roadmap or are likely to impact it.
- Identify the main regional resources that may be optimized by CE strategies.
- Identify concerns, obstacles and levers.
- Assess the organizations' interest in CE transition projects.

##### HOW:

- Refer to [Tool 1.2.1 – List of stakeholders](#) and [Tool 1.2.2 – Stakeholder engagement](#) to select the stakeholders to solicit.
- Use other collection techniques (see next page) in order to be inclusive and use varied sources.
- Adapt [Tool 2.1 – Regional circular economy assessment questionnaire](#) to the issues specific to the region.
- Disseminate and promote the different collection techniques among stakeholders.

##### Useful collection techniques throughout all the phases to:

- Consult the stakeholders and establish the baseline situation in PHASE 1.
- Update the profile following the progressive implementation of PHASE 2 roadmap actions.

##### Adapt to the stakeholders: target audiences with different needs

The questionnaire comes in two versions: one for the industrial, commercial and institutional (ICI) sector and a second version for economic development organizations (EDOs), including social economy enterprises.

Adapt the tools for the different target audiences and regional characteristics (e.g., including the considerations of regional organizations, the municipal sector and funders).

##### IMPORTANT: BLIND SPOTS!

Though located outside the region, some stakeholders provide products and services for a transition to a circular economy. Remember to include them in the consultation!

##### Tool to use

[Tool 2.1 – Regional circular economy assessment questionnaire](#)

##### Additional tools

[Tool 1.2.1 – List of stakeholders](#)

[Tool 1.2.2 – Stakeholder engagement](#) (available in French only)





## Activity 2.1

# Consulting the stakeholders

### REGIONAL ORGANIZATIONS

#### Circular economy expertise and role in the municipal sector

The regional CE profile of the industrial, commercial and institutional (ICI) sector and of economic development organizations (EDOs) is part of a regional political context that cannot be ignored.

Regional organizations, municipalities, Regional County Municipalities (RCMs), agglomerations and metropolitan communities (MC) have considerable expertise that is related to the circular economy, such as local economic development and the environment (Quebec, *Municipal Powers Act*). Most of the regional organizations would thus like to be involved in developing and implementing the roadmap by acting as **Leader**, coordinating the initiative at a regional level, or actively taking part in the various committees. Other organizations, such as the *Fédération québécoise des municipalités* and the Federation of Canadian Municipalities, will also be involved in the initiative. **It is essential that these stakeholders be included. The Project Team must thus involve and consult the municipal sector.**

Under the *Environment Quality Act*, RCMs and MCs must, for instance, plan residual materials management within their boundaries by drawing up a municipal waste management plan. Regional residual materials management policies are thus reflected in the roadmap. The regional organizations' interest may be as specific as improving their recovery and reclamation performance with respect to the *Regulation Respecting Compensation for Municipal Services Provided to Recover and Reclaim Residual Materials* and the *Regulation Respecting the Charges Payable for the Disposal of Residual Materials*.

Several regional organizations are already providing services geared to the ICI sector and even to the construction, renovation and demolition (CRD) sector. Often developed jointly with local suppliers and co-financed with the different levels of government, these customized services aim at increasing the recovery and reclamation rate. They are part of an intelligent ecosystem where local infrastructures treat and process materials, thus retaining the value locally.

#### Obtaining existing content to add to the profile

Perform a literature review, take part in regional events, inquire about conclusions and lessons learned during related projects in order to obtain a profile that is representative of the ecosystem dynamics.



## Activity 2.1

# Consulting the stakeholders

### PUBLIC PARTICIPATION

#### **Consult the other stakeholders to be inclusive and use varied sources**

It is crucial to consult all regional stakeholders, and not only the organizations involved by the questionnaire, in order to identify the potential for circularity. Collection techniques suited to the public and to citizen groups as well as community organizations must also be set up to encourage public participation. Different approaches may be used to counter existing gaps between the projects and the community.

The desired level of public engagement and involvement ranging from information sharing to participation in the process must be considered (*Institut du Nouveau Monde*, no date).

For instance, public consultations may provide opinions and views on the key topics to be prioritized and forums can include representatives in order to bring together the various actors from the same value chain to challenge ideas and develop them.

#### **The wealth of the network contributes to engagement**

Each stakeholder has a unique view of the community. Consulting the stakeholders and progressively empowering them legitimizes the project toward taking action regionally. Target regional acceptability of the roadmap and promote diversity!

#### **Consult and dialogue differently with stakeholders, and consider new approaches!**

The questionnaire is one of many ways to gather data, but not the only way. To address the ecosystem from various angles, the **Project Team** can use new consultation and regional empowerment approaches.

#### *Expert tips*

**Set up a suggestion and comments box on the Leader's website.**

**Lead digital platforms that are open to everyone, both regional organizations and the public.**

**Set up individual interviews and discussion groups with stakeholders that show significant interest in the roadmap and would like to increase their involvement.**



## Activity 2.1

# Consulting the stakeholders

### MATERIAL FLOW ANALYSIS

Material flow analysis (MFA) is a method for quantifying the flows and stocks of resources in a given region (Brunner, 2004). The term “urban metabolism study” is also used when the analysis is done on a municipal scale. MFA identifies imported and incoming resources, and considers how they are used, stored (added to stocks), transformed, and their end of life after use (e.g., recycling, disposal, discharge into the environment).

Eurostat is one of the most widely used methodologies (European Union, 2018). However, it is difficult to apply in Quebec due to the lack of available data. With respect to Canada, information from various sources must be compiled that involves the use of materials, water and energy (Sahely, 2003).

MFA is an **advanced technique that provides an accurate picture of regional circularity**, but that requires adequate knowledge and resources. To execute it, it is recommended that specialists be consulted.

#### Examples of cities that carried out an MFA:

[Glasgow \(Scotland\)](#)

[Toronto \(Canada\)](#)



## Activity 2.2

# Compiling and analyzing the results

### ACTIVITY 2.2

#### Compiling and analyzing the results

##### WHAT

Analyze and interpret the data collection results in order to perform a regional assessment, draw conclusions, and disseminate the results in a report.

##### WHO

**Project Team**, presentation to the **Leader** and to the **AC**, dissemination to the ecosystem stakeholders.

##### WHY

Establish the CE baseline for the region. Provide justification for a roadmap through data (e.g., statistics).

##### SPECIFIC ACTIVITY OBJECTIVES:

- Summarize the gathered information and interpret the results.
- Specify stakeholder needs and expectations.
- Guide the analysis and strategic planning in **Step 3 – Vision and objectives**.
- Help prioritize actions when developing the roadmap in **Step 4 – Implementation**.

##### HOW:

- Adapt **Tool 2.2 – Regional circular economy assessment report template** by including a summary of the responses in the reserved sections of the questionnaire in **Activity 2.1 – Consulting the stakeholders**.
- Supplement the assessment and recommendations and have them validated by the **AC** and the selected stakeholders.
- Disseminate the regional circular economy assessment to the ecosystem stakeholders.
- Encourage feedback and reinforce stakeholder engagement.

##### WHAT NOT TO OVERLOOK!

The results and conclusions affect different stakeholders with highly variable knowledge of the circular economy.

Adapt the content and means of communication to adequately convey the messages and maintain stakeholder interest. Disseminate the report in the ecosystem to a wide audience, and more specifically to the stakeholders involved.

##### Expert tips

Anticipate reactions and maintain goodwill.

##### Tool to use

**Tool 2.2 – Regional circular economy assessment report template**

##### Additional tools

**Tool 1.2.1 – List of stakeholders**

**Tool 1.2.2 – Stakeholder engagement** (available in French only)

END OF STEP 2

GO TO STEP 3



## STEP 3

---



# VISION AND OBJECTIVES

*We are working toward the same goals!  
Elected officials, the government and our  
organizations are developing a shared  
vision of the circular economy.*

Stéphanie Houde,  
Municipality of Chapais



# Engage in strategic thinking with the aim of transitioning to a regional circular economy jointly with the stakeholders concerned. Set the objectives and follow-up indicators together.

The THIRD step in the process is called **VISION AND OBJECTIVES**. In this step, a regional vision of the roadmap is drawn up. **TSCs** are created by the **Project Team** and then involved in defining directions, objectives and circularity indicators that meet regional needs.

## MAIN GOALS OF THE VISION AND OBJECTIVES:

1. Establish the regional vision and strategic directions of the roadmap.
2. Create **TSCs**.
3. Set main general quantitative and qualitative objectives for the CE results to be achieved.
4. Determine the indicators to measure the achievement of the results.

The estimated duration is two months. The workload is considered moderate. At this step, more measured and introspective after plenty of data is collected in **Step 2 – Regional profile**, the **Project Team** translates the results of the regional assessment into directions for the region.

This analysis leads to a sought-after vision of the region that is cooperative and collaborative. The roadmap tree (Figure 6) shows how the vision guides the roadmap, from the strategic directions to the actions performed in the field. The objectives, defined jointly by the **Project Team** and the **TSCs**, state the results to be attained for the actions defined in **Step 4 – Implementation**.

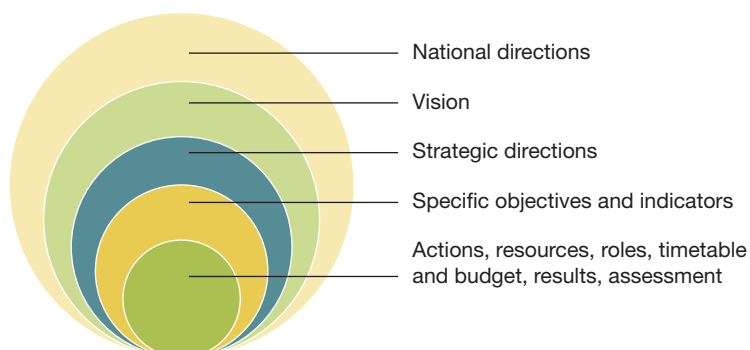


Figure 6 – Roadmap tree (HEC Montréal, 2014)





## STEP 3 – VISION AND OBJECTIVES

### Overview

#### WHO

- Project Team
- Technical Sub-committees
- Leader
- Advisory Committee
- Stakeholders

#### WORKLOAD

2 months

#### 3 ACTIVITIES

- 3.1 Engaging in strategic thinking
- 3.2 Setting up and facilitating Technical Sub-committees
- 3.3 Defining the objectives and indicators

#### 2 SUB-ACTIVITIES

- 3.3.1 Setting SMART objectives
- 3.3.2 Identifying circularity indicators

#### 3 TOOLS

- 3.1 Support for defining the vision and strategic directions
- 3.2 Creation of Technical Sub-committees
- 3.3 Template of SMART objectives and indicators



## STEP 3 – VISION AND OBJECTIVES

### ON THE PART OF THE STAKEHOLDERS

**Step 3 – Vision and objectives** collectively establishes the objectives and indicators that will guide the roadmap. This vision of the objectives and indicators that measure their attainment must be shared by all ecosystem stakeholders.

#### Developing what already exists

The roadmap does not need to propose mostly new targets. So that it can be implemented naturally, it will benefit from being rooted in what is already being done in the community. The roadmap is therefore an excellent tool for taking existing initiatives further.

**Tool 2.2 – Regional circular economy assessment report template** identifies current practices, regional strengths and weaknesses, and guides the initiatives to be put into place. In the burst of enthusiasm created by the project, defining impressive actions and objectives that make a mark is perfect. But to achieve this, the objectives must have graduated goals. Implementing objectives should enable the community to proceed one step at a time, starting with what is achievable and therefore validating.

#### Don't fear differences

Understanding how points of view and objectives differ avoids a possible rupture or disengagement. These different objectives may complete each other or should be sequential. Or perhaps they should merely be considered by area of activity.

In all cases, transparency and vision sharing among all areas of activity are key. It is beneficial to be upfront, discuss and analyze together the stressors that can create tension. A shared vision of the objectives (and their purpose) ensures that the parties will be brought together and the engagement around the project sustained.

#### **The circular economy implies significant collaboration among the various stakeholders**

*It is important to break up silos as much as possible to encourage change that energizes the community. Municipalities, for instance, benefit from serving as examples. The various services and departments may also set up CE objectives.*

*Educating and providing training to employees in-house with respect to CE is also a good idea.*

#### **The objectives will be more easily adopted if they are part of an existing movement.**

*Starting with accessible objectives make them easier to integrate.*

#### **Additional tool**

**Tool 2.2 – Regional circular economy assessment report template**





## STEP 3 – VISION AND OBJECTIVES

### IN TERMS OF COMMUNICATION ACTIONS

#### Power of the telephone

**Step 3 – Vision and objectives** is when the **TSCs** are created. People who are ready to get on board and share their vision need to be recruited. An initial workshop serving as an ice-breaker and to attract potential members will create interest in the roadmap. When organizing this step, it is important to recruit enough people and especially not forget anyone. You need to cast a wide net! The invitation email is an excellent way to establish initial contact and briefly present the process.

Once this initial action has been taken, never underestimate the power of a phone call to involve potential actors. This more human and concrete method gives the roadmap a face and creates more interest. From the perspective of potential committee members, this would make the invitation emails less impersonal.

#### Enhancing the vision and goals with concrete and inspiring examples

Sharing a vision, making sure it is fully understood, and that the persons involved adopt it: these are abstract concepts. To prevent them from being mere pious wishes, it is crucial to set up concrete means to achieve them.

In this respect, storytelling may prove to be a good ally and a simple and efficient tool. The idea is to put the vision into a story, bring it to life, and present inspiring initiatives. The stories must talk about the obstacles that were encountered along with the failures, since they are an integral part of the greatest achievements. This will create empathy for roadmap issues and provide vision from the inside.

Turning the vision into a story may help convey it, make it concrete, and thus contribute to its shared understanding. This method is appropriate both during facilitations and **TSC** meetings and individual conversations.

**When addressing stakeholders who think differently and do not spontaneously adopt the same goals, storytelling may increase the capacity to create solidarity among people.**

*This is sometimes what makes the difference between making a stakeholder aware of an issue and triggering a desire in them to take concrete action, to get involved.*



# Activity 3.1

## Engaging in strategic thinking

### ACTIVITY 3.1

#### Engaging in strategic thinking

##### WHAT

Situate the overall initiative over the long term by defining the desired regional situation within a few months for a pilot project to a few years for a more impactful roadmap.

##### WHO

Project Team, Leader and AC.

##### WHY

Embody the aspirations of the regional stakeholders in the vision and strategic directions. The strategic directions bridge the gap between the vision and the objectives defined in **Activity 3.3 – Defining the objectives and indicators**.

##### SPECIFIC ACTIVITY OBJECTIVES:

- Develop a vision statement and strategic directions.
- Basing the roadmap on true regional cooperation in the transition to a circular economy by integrating the results provided through the consultation of various regional stakeholders in **Step 2 – Regional profile**.
- Obtain the basis and references needed to develop the roadmap.

##### HOW:

- Refer to **Tool 3.1 – Support for defining the vision and strategic directions**.
- If needed, begin drafting the roadmap based on the desired timeframe and on the vision statements and the strategic directions that were drawn up. Refer to **Tool 4.1.2 – Regional circular economy roadmap template**.
- Communicate with the ecosystem and encourage feedback to ensure alignment with the regional vision.

##### A more impactful roadmap?

**Inspirational**, that makes a lasting impression and engages the stakeholders.

**Achievable**, that meets current and future objectives.

**Efficient**, that obtains results from the standpoint of responsible use of collective resources.

##### Is there a difference between the vision stated internally and the one identified by external actors?

*These many views of the purpose of the roadmap may at times appear irreconcilable. However, this gap drives reflection.*

##### Tool to use

**Tool 3.1 – Support for defining the vision and strategic directions** (available in French only)

##### Additional tool

**Step 2 – Regional Profile**





## Activity 3.2

# Setting up and facilitating Technical Sub-committees

### ACTIVITY 3.2

#### Setting up and facilitating Technical Sub-committees

##### WHAT

Create **TSCs** by strategic direction or area of activity to lead reflection and inform the **Project Team**.

##### WHO

**Project Team** and the stakeholders involved.

##### WHY

Consult the stakeholders involved by the strategic directions. Assign members' roles and responsibilities based on each member's interest and expertise.

##### SPECIFIC ACTIVITY OBJECTIVES:

- Encourage the participation of stakeholders to involve them in the **TSCs** that concern them.
- Identify the resources, objectives and deliverables of the **TSCs**.
- Identify, among the members, organizations with the expertise and legitimacy to carry the roadmap actions as **Committed Organizations**.

##### HOW:

- Consult **Tool 3.2 – Creation of Technical Sub-committees**. This tool ensures that **TSC** members meet the project needs.
- Establish the composition of a **TSC** for each strategic direction by referring to **Tool 1.2.1 – List of stakeholders**.
- Invite the stakeholders concerned to join the **TSCs**.

**TSCs, active stakeholders during PHASE 1 and PHASE 2!**

##### How many TSCs are needed?

The **TSCs** are not responsible for implementing roadmap actions. Assisted by the **Project Team**, they inform thinking in order to drive the directions toward the selection of concrete actions that will be carried by **Committed Organizations**.

In **Step 4 – Implementation**, some **TSC** members will be involved in the implementation by carrying roadmap actions: the **Committed Organizations**.

##### Tool to use

**Tool 3.2 – Creation of Technical Sub-committees** (available in French only)

##### Additional tool

**Tool 1.2.1 – List of stakeholders**







## Activity 3.3

# Defining the objectives and indicators

### SUB-ACTIVITY 3.3.1

#### Setting SMART objectives

##### WHAT

Set SMART objectives.

##### WHO

The **Project Team** and the **TSCs**, validation by the **Leader** and the **AC**.

##### WHY

Successfully achieve the CE transition. Define more concretely, through strategic directions, the objectives to attain by implementing the roadmap.

##### SPECIFIC ACTIVITY OBJECTIVES:

- Set circular economy SMART objectives.
- Use SMART objectives to help select actions that meet regional issues.
- Measure the progress of the roadmap implementation.

##### HOW:

- Refer to the list of CE objectives and strategies available in the first tab of **Tool 3.3 – Template of SMART objectives and indicators**.
- Preselect various CE strategies to favour according to the strategic directions in **Activity 3.1 – Engaging in strategic thinking**.
- Document the objectives associated with the strategies that have been retained by, for instance, evaluating the objectives from other CE initiatives already implemented in the region or elsewhere.
- Schedule a workshop with each **TSC** to identify and define different objectives by strategic priority.
- Have the objectives approved by the **Leader** and the **AC**.
- Complete the list of objectives in the second tab of **Tool 3.3 – Template of SMART objectives and indicators** by making sure to follow the SMART method.

##### What does SMART stand for?

A SMART objective is:

*Specific*

*Measurable*

*Achievable*

*Realistic*

*Time-bound*

##### Expert tips

*Optimize everyone's work time by simultaneously carrying out sub-activities 3.3.1 and 3.3.2.*

##### Tool to use

**Tool 3.3 – Template of SMART objectives and indicators**  
(available in French only)





## Activity 3.3

### Defining the objectives and indicators

#### SUB-ACTIVITY 3.3.2

##### Identifying circularity indicators

#### WHAT

Identify circularity indicators based on the objectives established in **Tool 3.3 – Template of SMART objectives and indicators**.

#### WHO

The **Project Team** and the **TSCs**, validation by the **Leader** and the **AC**.

#### WHY

Select CE-specific indicators used to measure the development of the process according to established objectives and to enhance the benefits.

#### SPECIFIC ACTIVITY OBJECTIVES:

- Measure the results of the roadmap implementation based on the established objectives.
- Facilitate communication on the roadmap benefits.
- Increase the regional ecosystem's awareness of the roadmap's relevance.

#### HOW:

- Refer to the list of circularity indicator examples available in the third tab of **Tool 3.3 – Template of SMART objectives and indicators**.
- Adapt the indicators based on the regional reality and anticipated capacity of the organizations to provide data. The detailed mechanisms of action reporting are to be created by the regional coordination as well as the **Committed Organizations** that will be carrying the roadmap actions in the field.
- Associate appropriate indicators with each objective. An indicator may meet more than one objective and several indicators may meet only one objective.
- Have the objectives approved by the **Leader** and the **AC**.
- Establish a baseline by identifying the first data in order to subsequently compare them.
- Update the timetable by adding tasks associated with data collection.

#### Tool to use

**Tool 3.3 – Template of SMART objectives and indicators**  
(available in French only)





## Activity 3.3

### Defining the objectives and indicators

#### CIRCULARITY INDICATORS

In an environmental management system, the control step is designed for self-measurement in order to confirm progress (International Organization for Standardization [ISO], 2021). To quantify the impact of a region that develops and implements a CE roadmap for the transition to that economic model, circularity indicators need to be defined.

There are over 50 systems of indicators around the world on scales ranging from a product to a region (Saidani, 2019).

If each system of indicators has its own methodology, it is generally understood that a system, such as a region, is “circular” if it implements CE practices, that is, reduces resource use, extends the life of products and components, and creates flow loops. Work is under way to standardize the circular economy measurement and assessment process (ISO, no date).

At the provincial level, the [\*Cadre conceptuel et indicateurs pour la mesure de l'économie verte\*](#) (conceptual framework and indicators for measuring the green economy) is based on indicators such as the consumption of materials, the recycling rate or the number of companies involved in industrial ecology to measure Quebec's progress (Institut de la statistique du Québec [ISQ], 2020).

An increasing number of authors point out that it is not enough to evaluate the circularity of a system and that the evaluation must, for instance, also include an environmental assessment (Moraga, 2019).

**To learn more about circularity indicators:**

[\*Cadre conceptuel et indicateurs pour la mesure de l'économie verte\*](#) (in French)

[\*Circular Transition Indicators\*](#)

[\*Circulytics\*](#)

[\*Indicateurs clés pour le suivi de l'économie circulaire\*](#) (in French)

[\*The Circularity Gap Report for Quebec\*](#)

[\*Référentiel ELIPSE\*](#) (in French)

[\*The Circular Economy in Cities and Regions\*](#)

END OF STEP 3

GO TO STEP 4



## STEP 4

---



# IMPLEMENTATION

*Roadmap actions have comprehensive objectives! In addition to cost reduction and residual materials management, they also include social aspects.*

# Collectively decide on the roadmap actions. Get organizations on board and engage the ecosystem in its implementation. Launch and disseminate the roadmap!

The FOURTH STEP of the methodology is **IMPLEMENTATION**. After analyzing the issues and needs, and then setting the directions and objectives, the **Project Team**, in close cooperation with the **TSCs**, draws up the roadmap actions to meet the regional directions. Selecting these actions is a pivotal activity: the region and the stakeholders determine what means they will use to achieve their circularity objectives.

This step is highly collaborative, definitely the most intense and longest, lasting about six months. The workload is considered to be high. Major efforts are required to channel the regional CE potential, facilitate the **TSCs**, and have stakeholders carry actions in the roadmap. To do so, the **Project Team** assists the region in prioritizing the actions to be included in the roadmap, in particular through continuous mechanisms involving stakeholder consultation, participation and engagement in the roadmap.

The period of time during which the actions are carried out in the roadmap varies from one region to another – from a few months to a few years, depending on the regional plan. The launch occurs continuously, based on the timetable established in **Activity 1.1 – Planning project management**. However, the timetable must be flexible. The roadmap is based on an approach that is flexible and centered on continuous improvement: the actions must evolve to adapt to changes in context. The iterative cycles between **Step 4 – Implementation** and **Step 5 – Assessment and ongoing development** consist in frequently assessing the progress of the actions in order to adjust them if needed.

## MAIN OBJECTIVES OF THE IMPLEMENTATION:

1. Structure and coordinate the development of the regional roadmap.
2. In collaboration with the **TSCs** and the **Committed Organizations**, define and prioritize the CE actions that enable the objectives defined in **Step 3 – Vision and objectives** to be achieved.
3. Involve and empower all the **Committed Organizations**. Transfer to them management of roadmap actions that concern them.
4. Discuss the sustainability modalities (e.g., responsibility for the regional coordination of roadmap implementation).
5. Draft the roadmap and have it validated by the **AC** and the **Committed Organizations**.
6. Launch and promote the roadmap in the ecosystem and to the general public.





## STEP 4 – IMPLEMENTATION Overview

### WHO

- Project Team
- Advisory Committee
- Technical Sub-committees
- Committed Organizations
- Ecosystem and general public

### WORKLOAD

6 months

### 2 ACTIVITIES

- 4.1 Developing the roadmap
- 4.2 Launching the roadmap

### 2 SUB-ACTIVITIES

- 4.1.1 Defining and prioritizing roadmap actions
- 4.1.2 Drafting the roadmap

### 3 TOOLS

- 4.1.1 Validation criteria and multicriteria matrix
- 4.1.2 Regional circular economy roadmap template
- 4.2 Roadmap launch toolkit







## STEP 4 – IMPLEMENTATION

### ON THE PART OF THE STAKEHOLDERS

#### An iterative approach

It is impossible to provide stakeholders with an immutable methodology to apply. On the contrary, the initiative involves constantly going back and forth between action and reflection: it is an iterative process. This back-and-forth process occurs repeatedly: initiating action, drawing lessons from it, adapting the action so that it can be initiated again, and so forth. This way of thinking about action has the advantage of placing the different actors at the heart of the process. They have in-depth knowledge of their own reality, and are therefore ideally suited to make proposals and give their opinion on their application. In so doing, these actions are most likely to be adopted by the community since they are generated by it.

#### The most efficient action is one that is achievable

At the time the process is started, the various actors must feel comfortable implementing a change. The action to be taken must be accessible and create a feeling of adequacy. Therefore, it cannot be overly ambitious. Improving an existing action is more likely to foster the adoption of the new practice. Avoid making any overly broad or ambiguous proposals (e.g., becoming greener), since it is difficult to know how and where to begin. The call to action must be very well defined and target concrete responses.

By combining these two aspects, not only does the initiative represent a good challenge, but it also creates a sense of satisfaction. Easily achieving an objective incites the actors to adopt the initiative and enthusiastically consider the next stages of the project.

#### Realistic actions and achievable objectives

Achieving an objective more easily would prompt stakeholders to adopt the roadmap.

This additional motivation encourages stakeholders to enthusiastically consider the other roadmap actions to be implemented.





## STEP 4 – IMPLEMENTATION

### IN TERMS OF COMMUNICATION ACTIONS

#### **Create a community of practice (and other networks and living labs!)**

With respect to internal communications, implementing the actions may benefit from a sharing tool among stakeholders: The community of practice. A community of practice is a place for discussion, feedback and the sharing of experience that enables everyone to benefit from everyone else's experiences. Such a platform can also include FAQs and inspirational stories.

The space represented by the community of practice is generally virtual, but in-person meetings are also possible. There are numerous benefits. In addition to helping members overcome challenges in a particularly friendly atmosphere, the community dispels the impression of having to deal with certain problems alone. By pooling information, members acquire experience and expertise on a given topic. It is important to anticipate the coordination of such a community.

#### **Need inspiration for a community of practice?**

Since 2014, the [Synergie Québec](#) network has been deployed province-wide. Many innovative initiatives are carried by organizations of all sizes. At the same time, research is done to define the barriers and levers of this new approach.





# Activity 4.1

## Developing the roadmap

### SUB-ACTIVITY 4.1.1

#### Defining and prioritizing roadmap actions

##### WHAT

Identify and prioritize roadmap actions through a collective, participatory, rigorous and transparent process. Empower the **Committed Organizations** in the actions that concern them.

##### WHO

Project Team, AC, TSCs and **Committed Organizations**.

##### WHY

Guide the region in selecting the priority CE actions to be implemented. Validate the relevance and feasibility of the proposed actions using a list of criteria. Seek consensus and reconcile diverging views. Make sure that the proposed actions match the strategic directions and objectives of **Step 3 – Vision and objectives**. Ensure the sustainability and launch of the roadmap.

##### SPECIFIC ACTIVITY OBJECTIVES:

- Coordinate the selection of roadmap actions with the **TSCs**.
- Formulate actions precisely (e.g., description, required resources, funding, level of effort, budget, timeframe, reporting).
- Identify priority actions that enable objectives to be met, in line with the elements defined in **Step 3 – Vision and objectives**.
- Transfer to the **Committed Organizations** the responsibility of managing and implementing the actions that concern them.

##### HOW:

- Facilitate sessions with the **TSCs** to identify the actions and stakeholders to involve in their implementation (empowerment).
- Prioritize the actions and confirm their relevance and alignment with the regional strategic directions using **Tool 4.1.1 – Validation criteria and multicriteria matrix**.
- Have the selection of actions validated by the **AC**.
- Formally empower the **Committed Organizations** and have them commit to the actions that concern them.

##### IMPORTANT!

This step is especially intense and demanding. Joint development requires careful listening and synthesis on the part of the stakeholders.

##### WHO IS CARRYING OUT THE ROADMAP ACTIONS?

The **Committed Organizations** are in charge of implementing the actions.

They represent regional groups of stakeholders who include roadmap actions in their field practice.

##### INSPIRATION

**1,001 actions taken from other roadmaps**

The second tab in **Tool 4.1.1 – Validation criteria and multicriteria matrix** (available in French only) proposes examples of French-language roadmaps that have already been launched.

##### Tool to use

**Tool 4.1.1 – Validation criteria and multicriteria matrix** (available in French only)

##### Additional tools

**Tool 3.3 – Template of SMART objectives and indicators** (available in French only)

Appendix II  
Examples of Circular Economy Roadmaps





# Activity 4.1

## Developing the roadmap

### SUB-ACTIVITY 4.1.2

#### Drafting the roadmap

#### WHAT

Draft the roadmap. Include roadmap actions with their launch and implementation timetable in the same document.

#### WHO

Project Team, AC, TSCs and Committed Organizations.

#### WHY

Convey the roadmap using a clear, pragmatic and unifying language. Enable its acceptance by the stakeholders involved.

#### SPECIFIC ACTIVITY OBJECTIVES:

- Draft the roadmap.
- Observe and transmit the goals of the **Committed Organizations**.
  - IMPORTANT: The roadmap does not contain the implementation details for each action.
  - Each **Committed Organization** must produce a follow-up plan for each action it is responsible for implementing.

#### HOW:

- Avoid joint drafting. Facilitate work sessions with the **TSCs** and **Committed Organizations** to establish roadmap guidelines. Share the responsibility for creating the content and for drafting.
- Use and adapt **Tool 4.1.2 – Regional circular economy roadmap template**.
- During the drafting process, have the work validated by the **AC**, **TSCs** and **Committed Organizations**. Don't wait for the launch deadline! Changes and adjustments are always required.
- Add follow-up and validation mechanisms for some of the selected stakeholders to challenge the form and content.

#### *Tool to use*

**Tool 4.1.2 – Regional circular economy roadmap template**

#### *Additional tool*

**Tool 4.1.1 – Validation criteria and multicriteria matrix**  
(available in French only)





## Activity 4.2 Launching the roadmap

### ACTIVITY 4.2 Launching the roadmap

#### WHAT

Launch the regional CE roadmap to inform and engage all the stakeholders involved by the project by organizing a major event.

#### WHO

**Project Team**, in conjunction with internal and external communication personnel.

#### WHY

Convince regional stakeholders of the interest of the roadmap so that they can contribute to it in a consistent, collaborative and cooperative manner.

#### SPECIFIC ACTIVITY OBJECTIVES:

- Organize the roadmap launch.
- Develop and standardize the communication form and content related to the launch.
- Publicly release the roadmap.

#### HOW:

- Use **Tool 4.2 – Roadmap launch toolkit** to develop and standardize the communication content related to the launch according to a specific timetable.
- Plan the launch (e.g., determine the best time to hold the event, the location, the targets, the agenda, meal service for guests).
- Release the final version of the launch toolkit to the partners so that they can help promote the launch.
- Communicate the information and send out the official invitations.
- Carry out the launch (in person and/or virtually) and release the initiative (e.g., social networks, websites, microsites).
- Review the event to assess the community's receptiveness, recognize successes and offset any gaps and problems encountered.

#### **Aim higher than what was initially planned**

Be careful not to stay focused on a single element, but instead maintain a peripheral vision of the possibilities to avoid blind spots.

A winning attitude consists in broadening your horizons without assuming any interest on the stakeholders' part.

#### *Tool to use*

**Tool 4.2 – Roadmap launch toolkit** (available in French only)

END OF STEP 4

GO TO STEP 5



## STEP 5

---



# ASSESSMENT AND ONGOING DEVELOPMENT

*The roadmap must evolve.  
The roadmap is responsive, it adjusts  
and improves continuously.*

Natacha Beauchesne,  
City of Montréal



# Last step! Assess and revise the initiative in order to further develop the roadmap. Measure the benefits and disseminate the results. Engage even more stakeholders in the transition to a circular economy!

The FIFTH STEP, **ASSESSMENT AND ONGOING DEVELOPMENT**, includes activities associated with continuous improvement. These cross-functional activities apply to all phases and all stages of the methodology. The assessment provides an opportunity to make adjustments to adapt the roadmap to its context and more easily bring it in line with the directions and the regional projects under way.

In **PHASE 1**, when developing the roadmap, the assessment targets the joint creation of the plan. This enables the **Project Team** to adjust its methods and improve its regional coordination. This assessment also helps better determine the resources required to coordinate and lead the next phase of the roadmap.

In **PHASE 2**, the assessment process involves implementing the actions (status report, results, adjustments, re-planning). The roadmap is flexible and adaptive. It adapts to the context and optimizes the implementation of the actions in order to multiply the positive effects. As each of these actions is carried by **Committed Organizations** that are independent of each other, **regional coordination is crucial for general reporting and for roadmap follow-ups**.

## MAIN OBJECTIVES OF THE ASSESSMENT AND ONGOING DEVELOPMENT:

1. Set up a continuous improvement process to monitor the various roadmap phases and actions.
2. Assess whether the objectives were attained.
3. Evaluate the performance of governance and regional coordination, including assessment of the various committees.
4. Tailor the objectives and means to the regional dynamics.
5. Disseminate the results.
6. Continue developing the roadmap: empower new **Committed Organizations**, launch new actions and engage new stakeholders.





# STEP 5 – ASSESSMENT AND ONGOING DEVELOPMENT

## Overview

### WHO

- Project Team
- Advisory Committee
- Technical Sub-committees
- Committed Organizations

### WORKLOAD

Ongoing

And what about PHASE 1?

Two (2) months to assess the work of the Project Team in charge of developing and launching the roadmap.

### 1 ACTIVITY

5.1 Assessing and further developing the roadmap



## STEP 5 – ASSESSMENT AND ONGOING DEVELOPMENT

### ON THE PART OF THE STAKEHOLDERS

#### Feedback should not be feared

Even though the process is acknowledged as being valid, no one in the field is thrilled about the prospect of encountering obstacles. Keeping an open mind to experimentation is required without fear of making mistakes. Such an attitude, established at the start of the process, favours receptiveness to the assessment and turns feedback into a true continuous improvement tool, as it should be.

#### What should be assessed?

The objectives and indicators defined in **Step 3 – Vision and objectives** will be used to gauge the efficiency of the actions being implemented and measure circularity and its impact on the region as well as the fluidity of the process.

Feedback must also reflect the satisfaction of the stakeholders and their sense of having adopted the roadmap. Each step since the start of the process focuses part of the efforts on stakeholder engagement and **Step 5 – Assessment and ongoing development** should not be an exception.

**The iterative process gives an experimental dimension to the project.**

Do trial and error (and trial and success!).

The irritants encountered by the various actors and their sense of accomplishment as a result of the new proposed actions respectively threaten and ensure the success of their adoption of the roadmap, and therefore its longevity.

**The assessment is only effective if turned into an improvement tool.**





## STEP 5 – ASSESSMENT AND ONGOING DEVELOPMENT

### IN TERMS OF COMMUNICATION ACTIONS

#### Identify a channel to ensure feedback

The information must be chosen carefully based on a specific audience in order to remain relevant in their eyes. Starting with **Step 1 – Planning**, in order to avoid any confusion among the parties, a single channel exclusively designed to share feedback must be determined. The channel that is chosen will depend on the context. However, it is important to not have multiple platforms. The location where feedback is to be submitted and viewed must be clearly defined.

#### Risk of overwhelming the stakeholders

The implementation process is based on collaboration and transparency, but the latter must not take the form of all-out, excessive communication. Stakeholders must not be solicited over and over. A multitude of poorly targeted contacts end up adversely affecting how the message is received.

A clear and simple message, formulated specifically based on specific recipients and delivered in a timely manner, is preferable. Which is why it is important to adequately plan communications and draw up the mailing list by category.

#### And what about communicating the results?

It is always crucial to make sure that the roadmap is transparent and to maintain stakeholder engagement.

#### Three questions should guide planning of the transmission:

*What will be disseminated?  
To whom?  
Through which channel?*





# Activity 5.1

## Assessing and further developing the roadmap

### ACTIVITY 5.1

#### Assessing and further developing the roadmap

##### WHAT

Carry out regular follow-ups for continuous improvement of the implementation of the regional roadmap.

##### WHO

**Project Team, TSCs and Committed Organizations**, with the support of the **AC**.

##### WHY

Contribute to the sustainability of the roadmap.

##### SPECIFIC ACTIVITY OBJECTIVES:

- Determine the roadmap follow-up mechanisms.
- Include the assessment and ongoing development process throughout the project.

##### HOW:

- Inquire about the various possible follow-up mechanisms and the continuous improvement process.
- Determine the follow-up mechanisms for assessing coordination and governance.
- Determine the follow-up mechanisms for assessing action implementation.
- Include the mechanisms in the Toolkit's four other steps.
- Draw up a schedule for the assessments and include them in the timetable.
- Review the assessments based on the established procedures (e.g., annual review of roadmap follow-up actions) and disseminate the results.
- Further develop the roadmap through successive iterations.

#### How can the follow-up and assessment be included in the other steps?

For instance, by systematically including a feedback component in the **TSC** agenda in order to create an attitude that is open to trials, feedback and continuous improvement.

If a space for a community of practice has been created, this is also an excellent place where to celebrate trials and errors. This encourages interaction and the sharing of experiences to better collectively reflect on how to respond to obstacles. This back-and-forth reflection between the parties is a form of assessment conducted by and for the stakeholders.

#### Theory of small steps

In the renowned **Kaizen Methodology** (Imai, 1992), change is gradual and iterative, and it engages all the stakeholders concerned in searching for and implementing solutions. The Toolkit can be easily tailored to the goals and means of regional projects.

#### Additional tool

Use all the tools in the Toolkit to update **planning**, the **profile**, the **vision and objectives**, and the **implementation** of the roadmap.





## Activity 5.1

### Assessing and further developing the roadmap

#### DEFINE THE FOLLOW-UP MECHANISMS

##### Define the follow-up mechanisms

Regarding coordination and governance: the scope and level of progress of the actions and decisions of the **Project Team** must be assessed. For instance, the Organisation for Economic Co-operation and Development (OECD) proposes a 12-dimension model with several aspects to assess (OECD, 2020).

Regarding the implementation of roadmap actions: as a result of the objectives and indicators, as well as the baseline, defined in **Step 3 – Vision and objectives**, an iterative continuous improvement process can be implemented using follow-up mechanisms.

“All regional projects must involve a follow-up and assessment to determine the effectiveness of the measures that were implemented, their efficiency and the relevance of the actions carried out to respond to the issues” (Commissariat général au développement durable, 2014).

##### Frequency of assessments

A regular assessment, especially for objectives with a long-term scope, enables systematic change to be applied. The assessment timetable may differ depending on the aim: improve roadmap implementation; analyze the benefits; anticipate upgrades (Agence de l’environnement et de la maîtrise de l’énergie, 2014). Once the actions have been implemented, a regular assessment with a set time limit is essential for the regional review (Järvinen and Sinervo, 2020).

#### Why assess the roadmap project?

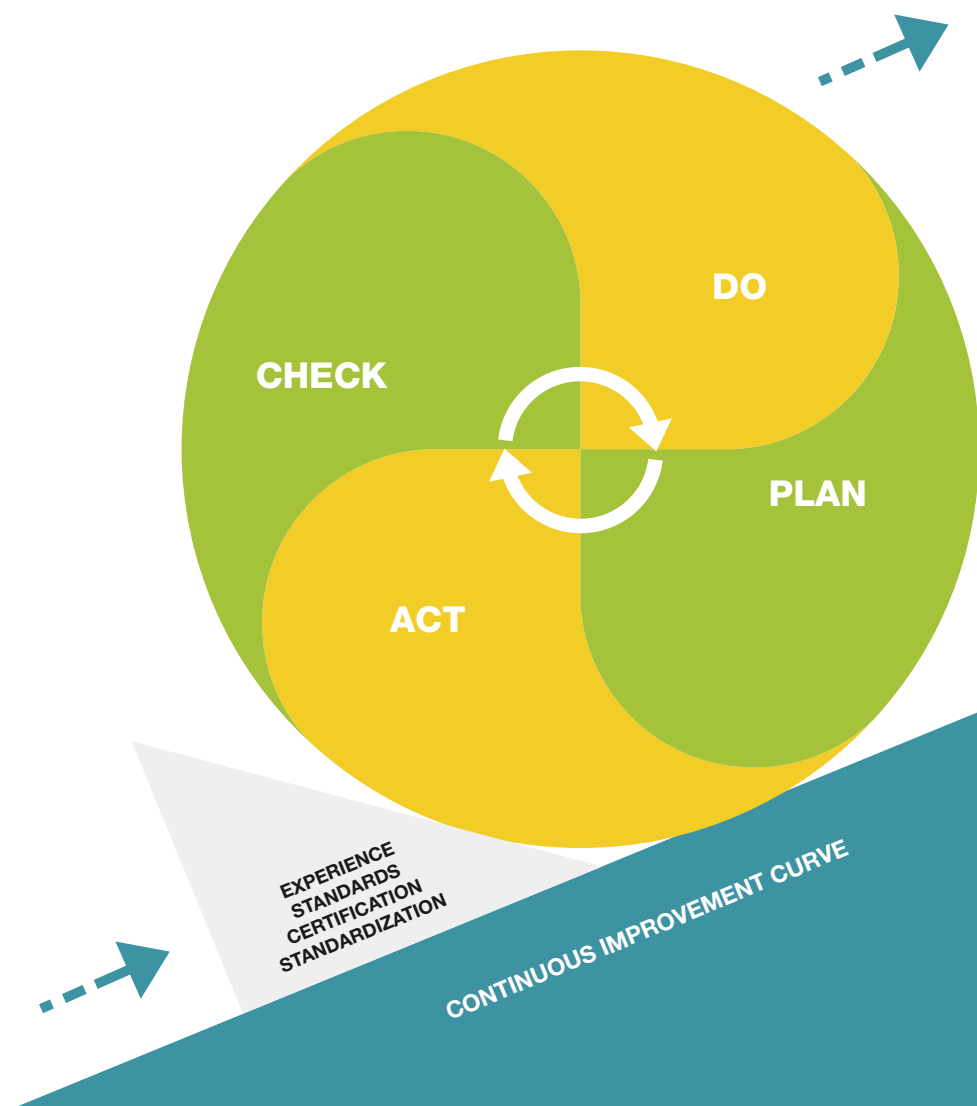
To ensure that it is being carried out properly and to readjust the roadmap elements if needed (e.g., objectives and associated indicators, actions) based on the region’s response.





## Activity 5.1

### Assessing and further developing the roadmap



**Figure 7** – Continuous improvement process (Deming Cycle)

**END OF STEP 5**

**MOVE AHEAD IN CONTINUOUS  
IMPROVEMENT MODE**

## IT'S ALWAYS THE RIGHT TIME!

With the goal of bringing together numerous actors in a region in view of transitioning to a circular economy, the Toolkit proposes a simple method consisting of two phases and five steps. Essentially iterative because of its versatile methodological guide, the Toolkit includes adaptable tools for co-creating the development and implementation of a regional CE roadmap.

In PHASE 1, the **Leader** and its team develop and launch the roadmap. However, they are not alone: the **AC**, the stakeholders concerned, the **TSCs** and the **Committed Organizations** are also involved and work closely with the **Project Team**. This synergy is made possible through the alignment of all the parties' objectives. This alignment is well-considered, wanted, so that the region can develop gradually, in line with the initiatives that are already under way.

In PHASE 2, the **Project Team** responsible for regional coordination of roadmap implementation assists the **Committed Organizations** and manages the project regionally. The benefits for the region are measured and the path of improvement continues until the time the roadmap is carried out. The rest still has to be written.

The methodology for the Toolkit consists of five steps: **PLANNING**, **REGIONAL PROFILE**, **VISION AND OBJECTIVES**, **IMPLEMENTATION** and **ASSESSMENT AND ONGOING DEVELOPMENT**. These steps cover the main objectives for carrying out the CE transition, but the procedure is not the be-all and end-all. The actual participation of the stakeholders and communications are powerful means for stakeholder engagement. One of the roadmap's strengths lies in creating regional synergies in order to reconcile the objectives and the actions of the stakeholders.

As living, and measurable, witnesses to the beneficial effects of circularity, these networks enable parallel progress in several directions. They increase the economic, environmental and social benefits, in addition to extending the scope of the roadmap to another level.

And the roadmap is the regional method of operation.

# REFERENCES

---

**AGENCE DE L'ENVIRONNEMENT ET DE LA MAÎTRISE DE L'ÉNERGIE (ADEME).** 2014.

*Guide méthodologique du développement des stratégies régionales d'économie circulaire en France*  
[www.ademe.fr/guide-methodologique-developpement-strategies-regionales-deconomie-circulaire-france](http://www.ademe.fr/guide-methodologique-developpement-strategies-regionales-deconomie-circulaire-france)

**BRUNNER, P. H. and RECHBERGER, H.** 2004.

*Practical Handbook of Material Flow Analysis.* Boca Raton, FL: CRC/Lewis.

**BUREAU D'AUDIENCES PUBLIQUES SUR L'ENVIRONNEMENT (BAPE).** 2022.

*Rapport d'enquête et d'audience publique no 364 – L'état des lieux et la gestion des résidus ultimes*  
<https://www.bape.gouv.qc.ca/fr/dossiers/etat-lieux-et-gestion-residus-ultimes/>

**CIRCLE ECONOMY and RECYC-QUÉBEC.** 2021.

*The Circularity Gap Report 2021, p. 19*

<https://www.recyc-quebec.gouv.qc.ca/sites/default/files/documents/rapport-indice-circularite-en.pdf>

**COMMISSARIAT GÉNÉRAL AU DÉVELOPPEMENT DURABLE.** 2014.

*Écologie industrielle et territoriale: le guide pour agir dans les territoires*

<http://temis.documentation.developpement-durable.gouv.fr/docs/Temis/0081/Temis-0081346/21823.pdf#>

**DAGENAIS, B.** 1998.

*Le plan de communication: l'art de séduire ou de convaincre les autres*

[https://books.google.ca/books?id=4hAdWMsFpUUC&printsec=frontcover&dq=bernard+dagenais&hl=en&sa=X&redir\\_esc=y#v=onepage&q=bernard%20dagenais&f=false](https://books.google.ca/books?id=4hAdWMsFpUUC&printsec=frontcover&dq=bernard+dagenais&hl=en&sa=X&redir_esc=y#v=onepage&q=bernard%20dagenais&f=false)

**DUBÉ, P. et al.** 2014.

*Le livre blanc des Living Labs*

[www.montreal-invivo.com/wp-content/uploads/2019/12/livre-blanc-liv-umvelt-final-mai-2014.pdf](http://www.montreal-invivo.com/wp-content/uploads/2019/12/livre-blanc-liv-umvelt-final-mai-2014.pdf)

**EUROPEAN UNION.** 2018.

*Economy-wide Material Flow Accounts Handbook*

<https://ec.europa.eu/eurostat/documents/3859598/9117556/KS-GQ-18-006-EN-N.pdf/b621b8ce-2792-47ff-9d10-067d2b8aac4b?t=1537260841000>

**HEC MONTRÉAL, Groupe de recherche sur les organismes à but non lucratif, communautaires ou culturels.** 2014.

*Exemple de canevas d'un plan d'action.*

[https://ideos.hec.ca/wp-content/uploads/2021/03/Canevas-de-plan-daction\\_12-mai-2014.pdf](https://ideos.hec.ca/wp-content/uploads/2021/03/Canevas-de-plan-daction_12-mai-2014.pdf)

**INSTITUT DE LA STATISTIQUE DU QUÉBEC (ISQ).** 2020.

*Cadre conceptuel et indicateurs pour la mesure de l'économie verte*

[www.quebeccirculaire.org/data/sources/users/2401/cadre-indicateurs-economie-verte.pdf](http://www.quebeccirculaire.org/data/sources/users/2401/cadre-indicateurs-economie-verte.pdf)

**INSTITUT DU NOUVEAU MONDE.** No date.

*Les échelles de la participation publique*

<https://inm.qc.ca/les-echelles-de-la-participation-publique>

**JÄRVINEN, L. and SINERVO, R.** 2020.

*How to Create a National Circular Economy Road Map: A Guide to Making the Change Happen*

<https://media.sitra.fi/2020/09/02171513/how-to-create-a-national-circular-economy-road-map.pdf>

**LABORATOIRE EN INNOVATION OUVERTE (LLIO) DU CÉGEP DE RIVIÈRE-DU-LOUP.** 2021.

*Animation-facilitation-rédaction: encadrés de réflexion sur les parties prenantes, la communication, les facteurs de succès, et les aspects à éviter.*

**MORAGA, G.** 2019.

*Circular Economy Indicators: What Do They Measure?*

[www.sciencedirect.com/science/article/pii/S092134491930151X](http://www.sciencedirect.com/science/article/pii/S092134491930151X)

**ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT (OECD).** 2020.

*The Circular Economy in Cities and Regions: Synthesis Report*

[www.oecd-ilibrary.org/sites/10ac6ae4-en/index.html?itemId=/content/publication/10ac6ae4-en](http://www.oecd-ilibrary.org/sites/10ac6ae4-en/index.html?itemId=/content/publication/10ac6ae4-en)

**INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO).** 2021.

ISO 14001:2015. *Environmental management systems – Requirements with guidance for use*

<https://www.iso.org/standard/60857.html>

**INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO).** No date.

ISO/TC 323. *Circular Economy.*

<https://www.iso.org/committee/7203984.html>

**PROJECT MANAGEMENT INSTITUTE.** 2022.

*A Guide to the Project Management Body of Knowledge (PMBOK® Guide)*

[www.pmi.org/pmbok-guide-standards/foundational/pmbok](http://www.pmi.org/pmbok-guide-standards/foundational/pmbok)

**QUÉBEC CIRCULAIRE.** 2019.

[www.quebeccirculaire.org](http://www.quebeccirculaire.org)

**RECYC-QUÉBEC.** 2019.

*Handout: Linear economy and Circular economy*

<https://www.recyc-quebec.gouv.qc.ca/sites/default/files/documents/feuilleton-economie-lineaire-circulaire-english-version.pdf>

**SAHELY, H. R. et al.** 2003.

*Estimating the Urban Metabolism of Canadian Cities: Greater Toronto Area Case Study.*

Canadian Journal of Civil Engineering, 30(2), pp. 468-483.

<https://doi.org/10.1139/I02-105>

**SAIDANI, M. et al.** 2019.

*A Taxonomy of Circular Economy Indicators*

[www.sciencedirect.com/science/article/abs/pii/S0959652618330221](http://www.sciencedirect.com/science/article/abs/pii/S0959652618330221)

# BIBLIOGRAPHY

---

**BEAUCHEMIN, S.** et al. 2021.

*Méthodologie pour la conception et la mise en œuvre de feuilles de route régionales en économie circulaire au Québec.* Project submitted to Hélène Gervais for the course “ENV832 – Économie circulaire appliquée” part of a post-graduate program in environmental management at Université de Sherbrooke

**COMMISSARIAT GÉNÉRAL AU DÉVELOPPEMENT DURABLE.** 2014.

*Écologie industrielle et territoriale: le guide pour agir dans les territoires*

<http://temis.documentation.developpement-durable.gouv.fr/docs/Temis/0081/Temis-0081346/21823.pdf#>

**CONSEIL DU PATRONAT DU QUÉBEC** et al. 2018.

*Circular Economy in Quebec: Economic Opportunities and Impacts*

<https://www.cpq.qc.ca/workspace/uploads/files/circular-economy-in-quebec-study.pdf>

**ESPON** et al. 2016.

*Pathways to a Circular Economy in Cities and Regions: A Policy Brief Addressed to Policy Makers from European Cities and Regions*

[www.espon.eu/sites/default/files/attachments/Policy\\_brief\\_on\\_Circular\\_economy\\_FINAL\\_0.pdf](http://www.espon.eu/sites/default/files/attachments/Policy_brief_on_Circular_economy_FINAL_0.pdf)

**GOVERNMENT OF QUEBEC.**

*Municipal Powers Act, C-47.1*

<https://www.legisquebec.gouv.qc.ca/en/tdm/cs/C-47.1>

**GOVERNMENT OF QUEBEC.**

*Regulation Respecting Compensation for Municipal Services Provided to Recover and Reclaim Residual Materials, c. Q-2, r. 10.*

<https://www.legisquebec.gouv.qc.ca/en/document/cr/Q-2,%20r.%2010>

**GOVERNMENT OF QUEBEC.**

*Regulation Respecting the Charges Payable for the Disposal of Residual Materials, c. Q-2, r. 43.*

<https://www.legisquebec.gouv.qc.ca/en/document/cr/q-2,%20r.%2043>

**IMAI, M.** 1992.

*Kaizen: la clé de la compétitivité japonaise.* Eyrolles. 272 p.

**INSTITUT DU NOUVEAU MONDE.** No date.

*Boîte à outils*

<https://inm.qc.ca/boite-a-outils>

**JÄRVINEN, L.** and **SINERVO, R.** 2020.

*How to Create a National Circular Economy Road Map: A Guide to Making the Change Happen*

<https://media.sitra.fi/2020/09/02171513/how-to-create-a-national-circular-economy-road-map.pdf>

**LISODE.** 2017.

*Guide de concertation territoriale et de facilitation*

[www.lisode.com/wp-content/uploads/2017/02/Lisode\\_Guide\\_concertation.pdf](http://www.lisode.com/wp-content/uploads/2017/02/Lisode_Guide_concertation.pdf)

**OPÉRATION VEILLE ET SOUTIEN STRATÉGIQUES (OVSS).** No date.

*Participation citoyenne*

<https://operationvss.ca/enjeux-de-transformation/participation-citoyenne>

**ORÉE.** 2018.

*Mode d'emploi pour mettre en œuvre la feuille de route en économie circulaire*

[www.quebeccirculaire.org/data/sources/users/11/2018frecmodeemploi.pdf](http://www.quebeccirculaire.org/data/sources/users/11/2018frecmodeemploi.pdf)

**SAUVÉ,** S. et al. 2016.

*L'économie circulaire: une transition incontournable.* Les Presses de l'Université de Montréal,  
Collection Libre Accès.

<https://books.openedition.org/pum/4151>



# APPENDIX I

---

## CONSULTATION AND VALIDATION COMMITTEE MEMBERS

### **Natacha Beauchesne**

Economic Development Commissioner, Service du développement économique – Direction de la mise en valeur des pôles économiques – City of Montréal

In June 2020, the City of Montréal agreed to develop and implement a CE roadmap to position CE as a regional economic development tool as well as implement a regulatory and operational framework that favours the transition.

The City of Montréal is a partner of the Fondation circular economy fund, in conjunction with RECYC-QUÉBEC, which is the first investment fund specialized in CE in Canada. Montréal was also chosen to take part in the first Canadian Circular Cities and Regions cohort.

Montréal, through the economic development organization PME MTL-Est-de-l'Île, also carries Synergie Montréal, a symbiosis that is a member of Synergie Québec. The City of Montréal also supports MontrealCirculaire.org, the CE reference platform in Montréal. Ms. Beauchesne took part in CE knowledge sharing as part of a pilot project.

### **Antoni Daigle**

Circular Economy Coordinator  
Synergie Estrie / Sherbrooke Innopole

Synergie Estrie is a key CE actor in the Eastern Townships region. The project is headed by the economic development organizations affiliated with the region's RCMs. Since 2018, Sherbrooke Innopole has been given the mandate to carry industrial symbiosis and step up the deployment of the various CE strategies in Sherbrooke.

Together with the City of Sherbrooke, Synergie Estrie is working on integrating CE in the municipal government's vision and planning tools. In this respect, the City of Sherbrooke is one of 15 local governments that was selected in Canada in 2021 to participate in the Canadian Circular Cities and Regions Initiative, a Peer-to-Peer Network. This project is an initiative of the National Zero Waste Council, the Federation of Canadian Municipalities, the Recycling Council of Alberta and RECYC-QUÉBEC.

## **Stéphanie Houde**

Strategic Development Assistant and Project Lead for Economic Development Corporation Projects – Municipality of Chapais

The Corporation and its network of actors contribute to the sustainable growth of Chapais, a municipality with a population of 1,600 north of the 49th parallel. The municipality is involved in innovative industrial development that is based on the symbiosis of industrial activities and the circular use of agro-forestry resources. Ms. Houde has specifically helped determine the communication elements to apply to ensure stakeholder engagement.

## **Elodie Morandini**

Coordinator and Circular Economy Officer  
Conseil régional de l'environnement de Laval

The CRE de Laval provides its expertise in several fields, from energy transition, with Chantier Laval ZéN, to the protection of natural environments, including mobility and residual materials management. Having already worked on the issue of CE roadmaps, Ms. Morandini shared her experience on the steps of the methodology and the applicability of the proposed tools.

## **Noémie Raby-Chassé**

Circular Economy Consultation Officer  
Conseil régional de l'environnement de la Montérégie (CREM)

CREM leads “Symbiose agroalimentaire Montérégie,” a CE project that is a member of Synergie Québec that goes beyond the food sector. In 2021, CREM launched a regional CE roadmap project, and the experience it acquired shed more light on the challenges involved in engaging stakeholders.

## **ACKNOWLEDGMENTS**

The Production team along with the Consultation and Validation Committee would like to recognize the contribution of Sabrina Beauchemin, Béatrice Côté, Marie-Joëlle Lainé, Julie Larivière and Elodie Morandini. During the course of their studies at Université de Sherbrooke, they conducted a preliminary study on the methodology involved in developing and implementing a regional CE roadmap.

*Méthodologie pour la conception et la mise en œuvre de feuilles de route régionales en économie circulaire au Québec*  
(BEAUCHEMIN et al., 2021).

# APPENDIX II

---

## EXAMPLES OF CIRCULAR ECONOMY ROADMAPS IMPLEMENTED IN OTHER AREAS

### **Communities of Alberta, Canada**

[\*Circular Communities Project\*](#)

### **Amsterdam, Netherlands**

[\*Amsterdam Circular: A Vision and Roadmap for the City and Region\*](#)

[\*City of Amsterdam Policy: Circular Economy\*](#)

### **Finland**

[\*Leading the Cycle: Finnish Road Map to a Circular Economy 2016-2025\*](#)

[\*The Critical Move: Finland's Road Map to the Circular Economy 2.0\*](#)

### **France**

[\*La feuille de route pour l'économie circulaire\*](#)

[\*50 mesures pour une économie 100% circulaire\*](#)

# APPENDIX III

## DEMOCRATIC GOVERNANCE

### WHAT IS IT?

Governance is a concept that addresses the allocation of roles and responsibilities within an organization or councils grouping various stakeholders. It refers to the “rules and formal or informal collective processes through which the actors involved take part in decision-making and implementing actions.” When decision-making processes are based on participation and partnership strategies and simultaneously target collective learning, governance can be deemed to be democratic. Certain principles, such as that of “one voice, one vote,” protect these democratic processes.

### HOW DOES IT RELATE TO THE ROADMAP?

Using democratic processes and involving stakeholders is the basis for creating strong and lasting partnerships. It also consists in bringing together and consolidating an increasingly larger ecosystem with increased awareness and proactive in the gradual transition to a circular economy.

This is all the more true in a regional strategy, since collaboration among stakeholders is an essential condition for successful circularity loops. The implementation of the roadmap is enabled by a collaborative co-construction approach.

### REFLECTION AND APPLICATION SUGGESTIONS:

- Take each stakeholder’s experience into account.
- Focus on cooperation rather than competition.
- Favour methods of participation (e.g., consultation, cooperation, co-construction, inclusion of stakeholders in decision-making, assessment of the strategy and results by the community).
- Capitalize on each stakeholder’s strengths: real-life experiences of enterprises and organizations according to their area of activity; consultation capacities of federations and representative bodies such as regional environmental councils; potential for regulation/standardization and leader of public administration best practices; along with theoretical and scientific knowledge of various research and support organizations.

#### To learn more

[\*Boîte à outils: Gouvernance démocratique\*, CSMO-ÉSAC](#)

[\*Guide for Analysis of Social Economy Enterprises\*, RISQ](#)