Circular Solution: Roubaix, France

TISSEL: Low-Tech Circular Approaches for Regenerating Industrial Assets.

Source: Post | LinkedIn

Size:

99 507
inhabitants (2022)

GDP:

More developed region

Geographical information:

Western Europe

Urban-rural predominance:

Predominantly urban

Sectors:

- Construction and buildings
- Circular resource management
- Industrial symbiosis

Time frame:

2023 – 2025

Circular strategies:

- reduce
- reuse
- repair
- refurbish
- remanufacture
- recover

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More information:

Roubaix | Circular Cities and Regions Initiative

Published: December 2025

Circular Cities & Regions Initiative

European Commission

Key facts and figures

Under-used space

9,000 m²

reactivated in a site the size of

11,000 m²

7 companies operating on site

2 apprenticeship/ training centres

Jobs supported:

44 - 61

Essential upgrades delivered (2023–2024):

- electrical and smoke-extraction works;
- coworking and canteen opened;
- incubator/LivingLab in preparation.

Yearly rent baseline:

€140k

with **2,000 m²** still to lease to reach full operation

- Cross-department mobilisation in place;
- Structured investor dialogue initiated (June 2025)

Advisory in motion:

EIB-C3 workshops and **Green Assist** diagnostic to consolidate the plan and KPIs;

DEFINITE-CCRI delivered FIB (Financial Investment Baseline) /TIP (Technical Impact Potential) baselines and due-diligence materials to structure the investment

Service catalogue launched:

events | **shared services** | **logistics**

Solution overview

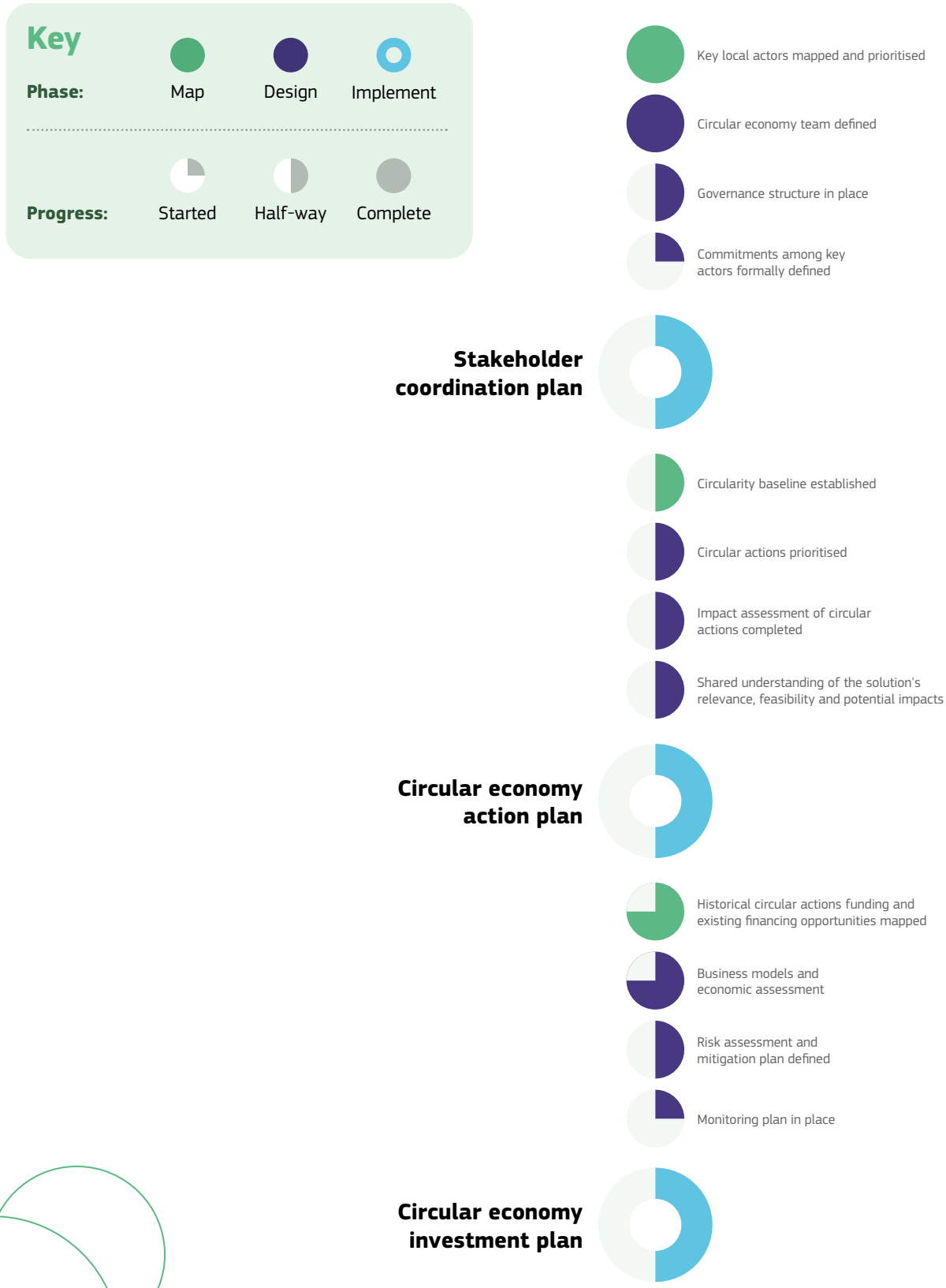
Roubaix is tackling vacancy in post-industrial buildings and persistent unemployment through circular urban regeneration driven by asset reuse. The approach focuses on low-tech, frugal upgrades that quickly transform under-used sites into affordable spaces for circular SMEs, skills training, and community activities. TISSEL, a former textile factory, serves as the flagship test bed. Through phased, light-touch renovation, the site was reactivated rapidly and now hosts businesses, training centres, coworking spaces, and a community restaurant that together anchor a growing circular ecosystem. This has supported early job creation, strengthened local partnerships, and mobilised departments across the city. Investor dialogue is now progressing to secure a long-term business model.

In parallel, Roubaix is developing Industrial Symbiosis to boost collaboration between local companies and communities, generating non-delocalisable jobs and increasing economic resilience through circular practices.

tives like home or community composting, organic fertiliser production, and even converting waste into energy. Guimarães is also taking proactive steps to spread awareness about the importance of preventing food waste among public schools, universities and citizens.

CCRI Methodology Step Completion Status:

The CCRI Methodology is a guidance tool for policy and decision-makers in local and regional government. It describes key activities and milestones in the successful development of a Circular Solution, divided into three phases – Map, Design, and Implement. The visual checklist provides an at-a-glance view of how Roubaix's circular solution is progressing towards these outputs.



Background and objectives

Policy context:

Roubaix's circular regeneration is anchored in a clear policy framework. Locally, the Circular Economy Strategy 2022–2026 sets objectives on awareness, business support and municipal leadership; the TISSEL site operationalises these by providing affordable space and visible demonstration.

This builds on the city's long-running Zero-Waste policy, active since 2014, which underpins the reuse and repair culture, and the community engagement vital to low-tech, frugal upgrades.

Regionally, Rev3 – the "Third Industrial Revolution" programme in Hauts-de-France – promotes circular production and green jobs, while the Communauté d'Écologie Industrielle et Territoriale (COM'EIT) network advances industrial and territorial ecology; both are reflected in Roubaix's clustering of circular small and medium-sized enterprises and materials-reuse efforts.

National levers complement this: ADEME – Agence de la transition écologique – supports circular renovation and energy actions, and Territoires Zéro Chômeur de Longue Durée aligns with the solution's inclusive employment pathways.

Problem:

TISSEL

Roubaix carries a large stock of vacant or under-used post-industrial buildings that are energy-inefficient and require costly safety and accessibility upgrades. This makes reuse financially challenging, particularly as the city cannot fund renovations alone and current rental income falls far short of the investment needed. At the same time, circular SMEs struggle to access affordable, long-term spaces to establish and grow their activities, slowing the growth of a local circular economy ecosystem.

Industrial Symbiosis

Roubaix continues to face high unemployment, requiring new models for local economic development. While its industrial heritage offers strong circular potential, businesses and communities lack structured mechanisms to collaborate and share resources. Without coordinated support for industrial symbiosis, opportunities to create non-delocalisable jobs and preserve materials remain largely unrealised — limiting both economic resilience and value creation in the region.

Objectives:

- Activate and reuse existing buildings through staged, low-tech upgrades that make space safe and affordable for immediate use.
- Build local circular jobs and skills by hosting SMEs, training and community activities with clear inclusion goals.
- Integrate the circular economy hot spots into the local economic ecosystem to foster the economic regeneration of deprived neighbourhoods.
- Establish a long-term business model (fair rents and other viable options) to cover costs, attract co-funding, and enable replication at other suitable sites.

Stakeholders

TISSEL stakeholders:

Public Authorities | Private Sector

The City of Roubaix is owner of the TISSEL site and lead project authority. It drives the circular regeneration strategy and oversees cross-department coordination and replication through a dedicated Steering Committee. *Manufactures de Tissel* (site association) is the interim operator and animator of the **TISSEL hub** until 2027.

Advisory and technical partners include EU-level advisory such as Green Assist, and PDA-DEFINITE CCRI (Deal Engine).

Tenant enterprises anchor operations and inclusion: **La Vie est Belt, Recycle-Moi, Dagoma 3D, Les 3 Tricoteurs, Juin fait le Lin, Anti_fashion Project** and **Le Parpaing**; PRESRV (a construction-reuse platform) is considered as a future partner. Training and skills partners: **BTP-CFA (on-site apprenticeship training)** & *L'école de la Réparation*, strengthening local skills, employability and inclusion through hands-on learning.

Figure 1: tenants of the TISSEL hub. source: https://tissel.org/nos-habitants/

Industrial Symbiosis stakeholders:

Public Authorities | Private Sector | Funding & Advisory Bodies

ADEME, Région Hauts-de-France and Métropole Européenne de Lille co-finance ECOPAL, the local structure dedicated to industrial symbiosis in Roubaix. APESA acts as the technical and advisory partner, supporting the set-up and operational model. The Roubaix Employment Bureau *(Mission de l'Initiative et de l'Emploi)* connects long-term unemployed and disabled residents with circular-economy job opportunities emerging through industrial symbiosis.

The European Investment Bank's Circular City Centre (EIB-C3) facilitates cross-departmental workshops and supports the integration of circular economy practices across Roubaix's municipal administration (with support continuing beyond 2025).

Results and Impact

TISSEL

TISSEL has activated approximately 10,000 m² of formerly vacant industrial space since 2022, creating 60 jobs through seven companies and two apprenticeship centres. The phased light-renovation approach enabled rapid reactivation while keeping costs manageable, generating roughly €140k/year in rent with potential for growth as remaining floor area is leased and revenue diversification options (events, training, shared logistics) are developed. The hub provides inclusive employment pathways through partnerships with local employment services and free training offered by some tenants.

Investment readiness and governance structures have been strengthened to support replicability: PDA-DEFINITE CCRI delivered investment-readiness assessments (FIB and TIP) and due-diligence workshops, while Green Assist conducted SWOT analysis and facilitated investor dialogue. The association Manufactures de Tissel manages interim operations as the long-term model is being finalized. Environmental improvements are underway, with planned building-envelope upgrades, district-heating connection, and potential rooftop photovoltaics expected to significantly reduce operational energy use and emissions.

TISSELS's impact since 2022

60

Jobs Created

Employment opportunities across multiple sectors

- Logistics
- Circular manufacturing
- Material reuse

9 000m²

Space Reactivated

Industrial building refurbishment transforming infrastructure into a thriving circular hub

5 000+

Visitors Engaged

People reached through organised events, seminars and guided tours promoting circular practices

9

Circular Economy Actors

On-site stakeholders collaborating as part of a vibrant circular economy community

Industrial Symbiosis

Since 2022, Roubaix has built an engaged community of stakeholders around circular economy and industrial symbiosis, achieving tangible outcomes in networking, project development, and cross-border collaboration. Participation in the CCRI Thematic Working Group on Industrial Symbiosis increased the city's visibility at European level and enabled new partnerships, including collaborative applications for Horizon Europe funding. Building on lessons from the Interreg project Upcycle Your Waste, the city successfully secured the SyMBIOTe micro-project (Interreg France-Wallonie-Vlaanderen, 2025), which will develop concrete cross-border circular economy synergies and business matchmaking with Belgian partners. These achievements demonstrate Roubaix's capacity to translate local industrial symbiosis efforts into systemic, lasting partnerships that extend beyond municipal boundaries.

Figure 2: example of resources-matchmaking synergy implemented

Circular Matchmakings

Resources-matchmaking workshops held

- 450+ potential synergies identified between SMEs
- 70+ synergies successfully implemented

Creation of Structure

IS approach transferred from Circular Economy Department to external structure

External structure now drives Industrial Symbiosis throughout local economic ecosystem

Partnership

European project applications to expand IS

- 2 proposals currently under review
- 1 proposal selected, starting in 2026

Market readiness/business model:

TISSEL

Today, the hub relies mainly on tenant rents, with small-scale tests of venue hire, training and shared services. For the long term, Roubaix could consider the following possibilities:

- **Co-operative operation:** the City, tenants, and partners co-own the site, with any surplus reinvested in operations.
- **Semi-public operation:** a Publicly-led company runs the site, with SME involvement.
- **Managed-lease / management contract:** the City retains ownership while an operator runs the site according to agreed service targets.
- **Private/public initial major investor:** an investor takes over ownership, partially or fully, with a memorandum of understanding to preserve the circular economy approaches and support for circular SMEs embedded in the Tissel project.

A 3-5-year plan (works, rent policy, scenarios and cash-flow) is being compiled by the City, using the Green Assist business-plan template and KPI set, and drawing on DEFINITE-CCRI (FIB/TIP) baselines and inputs to guide funder discussions.

Success story

To transform TISSEL from a promising pilot into a bankable circular-regeneration project, Roubaix received tailored project-development support from **DEFINITE-CCRI**. The team produced a concise, evidence-based investment pack including: a clear **financial baseline** (income and expenditure), an **impact brief** (jobs created, materials reused, energy performance), and a one-page summary capturing the project's value and business case.

The pack also outlined practical options for **ownership and operations**, a phased refurbishment plan with associated costs, and an early risk analysis with proposed mitigation measures – delivering a strong, coherent story to engage funders.

During an on-site meeting, a major public investor progressed from general interest to concrete discussions on co-funding terms, expected returns and revenue models to explore. The presence of a single cross-disciplinary advisory team – legal, financial and technical – helped **sharpen the investment case and accelerate decision-making**.

Challenges and Lessons Learnt

Enablers to implementation

- **Political:** Clear mandate for circular, low-tech regeneration embedded in the City's Circular Systemic Solution, giving projects top-level backing.
- **Governance:** A dedicated Ecological Transition Department coordinates departments and partners on various projects, reinforced by support from EU advisers (CCRI, EIB-C3, DEFINITE CCRI, Green Assist) and national bodies (ADEME, Region Hauts-de-France, MEL).
- **Economic/Financial:** A first capital planning overview and active dialogue with a public initial major investor open pathway for co-funding of TISSEL.
- **Technical:** Phased, low-tech compliance works unlocked early occupation and learning for TISSEL, while preparing building envelope and energy upgrades.
- **Legal/Structuring:** Defined routes give actionable options to select a long-term operator and allocate responsibilities for TISSEL, and to establish governance for the IS dedicated structure.

Barriers to implementation

- **Governance:** Projects with diverse stakeholders can suffer from unclear responsibilities, weakening partners commitment. For industrial symbiosis structures, attracting a sufficient number of members can be challenging.
- **Organisational:** Starting without a single coordinator and shared action log fosters siloed work and duplication. Naming one lead team early keeps pace, coherence, and accountability.
- **Economic/Financial:** Investors hesitate without clear medium- to long-term plans, visible public co-funders, and simple proof of demand (e.g., short letters from tenants). SMEs and neighbouring local authorities need reassurance of tangible benefits from joining industrial symbiosis structures.
- **Technical:** Old industrial buildings can hide compliance issues and retrofit surprises. Early audits and phased planning around occupants are vital to avoid costly stoppages.
- **Data & Evidence:** Launching without a simple baseline and KPIs weakens the investment story. A minimal set of indicators , established on day one and updated regularly, helps build credibility.
- **Market/Service:** Untested service lines (such as events, training, shared logistics for TISSEL; support on specific waste streams for industrial symbiosis) create revenue uncertainty. Testing pilot services, tracking uptake, and scaling only when demand is proven provides a way forward.

Lessons learnt

- **Early Action & Momentum:** Opening space with light, low-tech works builds confidence and demonstrates progress early. Momentum is maintained when long-term choices about ownership, operation, and a simple 3-5 year plan are defined early.
- **Clear, Concrete Communication:** Conversations with partners and funders move faster with concise, tangible narratives covering what will be fixed, how it will be financed, and what success looks like. This should be backed by costed works, fair rent policies, basic cash-flow scenarios, risk assessments, and short letters from tenants and public co-funders. For industrial symbiosis, communicating benefits clearly to potential members, supported by concrete examples, KPIs, and feasibility studies, helps reassure partners about the business model.
- **Tangible Evidence:** Opening spaces early and organizing short, focused site visits with tenants, accompanied by summaries of what works, indicative costs, simple indicators, makes the case concrete and provides evidence for replication on other sites.
- **Coordination & Institutional Support:** Mobilizing multiple municipal departments on a regular rhythm, with a coordination team and shared action list, unlocks faster decisions than siloed exchanges and build shared ownership. Strong backing from institutional partners and elected representatives is highly needed, adding value in engaging new partners for industrial symbiosis initiatives.

Tips for replication

What to replicate?

1. The combined use of **phased, compliance-first activation** with a **simple 3-5 year plan** (costed works, scenarios, rent policy) and **impact/finance baselines** to test technical feasibility and funding together.
2. A clear **governance structure** anchored in an early choice of long-term operator (co-operative or semi-public company), an **appointed municipal coordinator**, and a one-page **"who-does-what"** note to align departments and partners.
3. A **stepwise deployment path**: open part of the building, organize **short site visits** with tenants, and provide a **one-page brief** (what works, indicative costs, 3–4 KPIs) to lay the ground for replication on other under-used sites.
4. An **investor-ready pack from day one**: consolidate all key material into a single bundle (executive summary note, **10-year plan** with 2–3 scenarios, fair rent policy, basic KPIs, short letters of interest) and review it **on site** with public co-funders and mission-driven investors to agree conditions and next steps.

Who can replicate this?

TISSEL

- Medium-sized, post-industrial towns with **empty factories or warehouses** and a goal to create **local jobs** in the circular economy.
- Cities that can **secure a building** and do **basic, low-cost safety fixes first**, then plan more substantial upgrades over time while **keeping rents affordable**.
- Places with **active small businesses and training providers** that can quickly use shared space for **repair, reuse and upcycling**.
- Local authorities which are able to **bring several departments around one table** and prepare a **clear multi-year roadmap** (works, budget, timeline) plus a **one-page funder brief** to engage public and impact investors.
- Private stakeholders with financial and technical means can be highly inspired by this type of project. For example, Tissel Carihem (PRESVR) got inspired by Tissel, a city-led project.

Industrial Symbiosis

- Local authorities willing to work closely with institutional partners and neighbouring local authorities and higher-level administrative authorities (regional, national and EU).

What ingredients are needed to replicate it?

TISSEL

- **Secure control of a suitable building**, conduct early safety/condition checks (fire, electrical, accessibility, asbestos), and reopen part of the site with phased low-tech works while detailed upgrades are designed.
- **Decide early who owns and who operates** the hub (co-operative, semi-public company, or management contract), appoint a **single municipal coordinator**, and align roles with a short **"who-does-what"** note before procurement.
- **Prepare a clear multi-year roadmap** (works, budget, timeline) and a one-page funder brief with a few simple indicators and short letters of interest, use focused site visits to present, test and refine the offer.
- **Set a basic monitoring baseline from day one** (space in use, jobs/inclusion, reuse and energy measures), check permits and reuse rules early with regulators, and match available funds to needs using a simple mix of grants for studies and loans for works.

Industrial Symbiosis

- **Prepare a clear multi-year roadmap** (works, budget, timeline) and a one-page funder brief with a few simple indicators.
- **Ensure strong political and higher-level administrative support** to unlock technical, governance and financial challenges.

Resources or contacts available to help?

- Green Assist deliverables for replication potential.
- Overview Roubaix's DEFINITE CCRI profile
- DEFINITE CCRI Circularity Tool