In4Green Playbook

Green Transitions for Industrial Cities

URBACT
Co-funded by the European Union
Interreg
In4Green

It is an honour to present this playbook, developed within the framework of the URBACT In4Green network, an initiative that reflects the very essence of how European cities must work today, cooperating, sharing knowledge and building common solutions to shared challenges.

Avilés is a medium-sized, industrial, dynamic and deeply European city. We know that our challenges, the green transition, the competitiveness of our companies, talent attraction and the modernisation of our industrial areas, are also the challenges faced by many other cities across Europe. That is why we firmly believe in the importance of building strong networks with similar cities, learning from their experiences and contributing our own. When cities collaborate, progress multiplies.

Europe offers us a unique framework for this collaboration. Programmes like URBACT allow cities from different countries to share procedures, test new methodologies and generate more effective and realistic policies. Transnational cooperation is not an accessory, it is a strategic tool that helps us accelerate urban innovation, strengthen our local capacities and drive transformations that would otherwise be slower or more difficult.

This document synthesises more than two and a half years of work among ten European cities that share an industrial legacy and a common commitment to sustainability and modernisation. I would like to express my gratitude to all of them for their generosity and professionalism, and I would especially like to recognise the work of the Lead Expert, José Costero, whose expertise and ability to foster dialogue have turned inter-city exchange into useful and applicable knowledge.

I trust that this playbook will serve as a practical, inspiring and accessible guide for all cities seeking to move towards a greener, more competitive and more cooperative future. In Avilés, we will continue to champion this path, the path of a Europe that grows united, from the local to the shared.

Mariví Monteserín
Mayor of Avilés

The In4Green network set out to turn peer learning into something cities can use the next day. Over the past two and a half years, ten partner cities documented 49 good practices using a common template. As Lead Expert, I coordinated this collection and, together with partners, distilled it into a playbook: nine pathways with clear starter moves, common pitfalls to avoid and simple KPIs, plus ten concise snapshots—one per partner city.

That is the structure; the story is more human. I visited all ten cities and spent time with municipal teams, businesses, universities and civil society groups—on factory floors, in innovation hubs, council rooms and community spaces. I saw pride in industrial know-how, urgency about costs and carbon, and the creativity that appears when people are given a clear problem and the space to solve it. Partners were generous with their time and honest about constraints; that generosity is what turned notes into lessons.

This work was a team effort. I worked closely with the Lead Partner, the City of Avilés, whose steady coordination kept us moving, and with our URBACT Ad Hoc Experts, Eileen Crowley and Mar Santamaría, whose reviews and practical insights sharpened the content. Many more people contributed—local coordinators and technical staff in each city. To all of you: thank you.

The playbook is deliberately short and practical. Treat it as a menu: choose one pathway, identify one anchor project, and start—then review quarterly and scale what works. The views and any remaining errors are mine; the value comes from the collective effort behind every page.

My thanks to the URBACT IV Programme, co-financed by the European Regional Development Fund (ERDF) and the participating Member and Partner States, for enabling this collaboration. It has been a privilege to learn with you. I look forward to seeing how you adapt and improve these ideas in your own places.

Jose Costero

Lead Expert, In4Green URBACT Network

Credits & Contents

URBACT Co-funded by the European Union Interreg In4Green

1. Foreword — Why green transition matters for industrial cities

Industrial cities are at the heart of Europe's green transition. They concentrate jobs, skills and production, but also face specific challenges: legacy sites, energy-intensive uses, and the need to modernise infrastructure while keeping businesses competitive and communities on board. For many small and medium cities, the question is not *whether* to act, but *how* to start with the resources available.

This playbook offers a practical answer. It complements key European frameworks such as the **European Green Deal** (2019), the **EU Industrial Strategy** (updated 2021), and the **Circular Economy Action Plan** (2020), which all emphasise the dual need to decarbonise and modernise Europe's industrial base. For industrial cities, aligning local actions with these frameworks strengthens access to funding, coherence with national recovery and resilience plans, and visibility in European initiatives.

This playbook distils evidence from **49 good practices** shared by ten partner cities in the In4Green URBACT network. It does not aim to catalogue everything that exists. Instead, it turns what partners learned into **nine clear pathways** and a set of **starter moves** that any city can adapt. The focus is on implementation: governance arrangements that endure, services that reach SMEs, pilots that solve real problems, and simple indicators that track progress.

Three principles run through these pages:

Governance before gadgets.

Durable transition depends on a shared city direction, a compact delivery team, and a public—private table that meets regularly and takes decisions.

End-to-end thinking.

Whether in energy, circular economy or regeneration, results improve when actions connect across the chain: from supply to demand, from site planning to services, from pilots to adoption.

Places and people first.

Upgrading industrial areas, brownfields and heritage sites is not only about infrastructure; it is about creating better places to work and live, with benefits that are visible to residents and firms.

The playbook is written for **policymakers and municipal technical teams,** and for their partners in utilities, business associations, universities and civil society. It is designed for quick use: one page per pathway; short "how to start" steps; common pitfalls to avoid; and a small set of KPIs. Ten short **snapshots**—one per partner city—illustrate what these pathways look like in practice, without prescribing a single model.

No single city can do everything at once. The invitation here is to **choose one pathway,** identify **one anchor project**, and get started—then review quarterly, learn, and scale what works. Funding helps, but collaboration, sequencing and a clear value proposition for local firms are often the decisive factors.

This is a collective product. It reflects the work and learning of many teams who tested ideas, adapted them to local conditions and shared what they found. We hope it will help other industrial cities to move faster, make better choices, and deliver tangible benefits for their residents, workers and businesses—advancing Europe's green transition in a way that is practical, inclusive and grounded in real places.

URBACT Co-funded by the European Union Interreg In4Green

How to use this playbook (and start tomorrow)

2.

Who this is for

Municipal policymakers and technical teams in small and medium industrial cities—and their partners in utilities, business associations, universities and civil society.

What this is (and is not)

This is a practical synthesis of **49 good practices** from ten partners. It distils patterns, lessons and starting moves.

It is **not** a catalogue of projects or a funding application manual. For full project details, see Chapter 10 (links to all sheets).

How it is organised

Chapter 3 gives a quick panorama of the full set and the main takeaways.

Chapter 4 presents **nine pathways** (one page each) with: what the pathway solves, signals you are ready, three starter moves, pitfalls, and KPIs.

Chapter 5 provides **ten snapshots** (one per partner), showing how elements of the pathways look in practice.

Chapters 6—8 move from lessons to **recommendations** and a **first-90-days guide.**

Chapters 9—10 explain the method and point you to the complete set of sheets.

Quick start (three steps)

1. Read Chapter 3 to grasp the big picture.
2. Choose **one pathway** in Chapter 4 and **one anchor project** that fits your immediate local need.
3. Nominate **owners** (a small delivery team), set a **quarterly review** rhythm, and define **6—8 KPIs**—then use Chapters 7—8 to turn this into a 90-day plan.

Turning snapshots into action

Treat each snapshot as a **menu**, not a blueprint. Keep the intent; adapt the instruments.

Copy the **minimum viable version** first (a pilot with one or two anchor partners), then scale if it works.

Reuse the snapshot's **"how to replicate"** bullets and **pitfalls** to shape your local project brief.

Measuring progress (keep it simple)

Start with **6—8 KPIs** linked to your chosen pathway (see each pathway page).

Track quarterly; publish a short **public dashboard** to maintain momentum.

Combine **activity** indicators (projects launched, companies supported) with **outcome** indicators (energy saved, m^2 activated, circular tonnes reused).

Common roles you will need

A **political sponsor** (to unlock decisions).

A small **delivery unit** (to broker partners, manage permits, and keep the calendar).

Anchor partners (e.g., a hospital or school for energy pilots; a tech centre for circular pilots; a business association for SME services).

What success looks like in year one

One pathway **operational** (governance in place, KPIs live).

At least **one visible pilot** delivering benefits to residents or firms.

A **short portfolio** (no more than 10 projects) with owners and funding routes, reviewed quarterly.

Limitations and how to complement

The playbook summarises existing evidence from partners' sheets; it does not replace feasibility studies or legal due diligence.

For finance, procurement and permitting, work with your internal teams and national guidance.

For full technical details of each case, use Chapter 10.

How to reference and reuse

Please refer to this publication as the **In4Green Playbook** and cite the **partner city** when you adapt a snapshot locally.

For detailed sources and contacts, use Chapters 9—10.

3. A quick panorama of 49 good practices

This playbook distils **49** good practices gathered by ten partners. The overall message is simple: **green transition in industrial cities is less about single flagship projects and more about steady governance, practical coalitions with firms, and portfolios of doable actions.**

Key takeaways at a glance

- **Governance before gadgets.** Durable results come from a clear city vision, a delivery team with a mandate, and a public—private table that meets regularly.
- **Innovation that reaches SMEs.** Labs and hubs work when they offer concrete services, pilot routes and light purchasing paths for local firms.
- **Energy works end-to-end.** Plan generation, distribution and demand together—often around "anchor" users and buildings.
- **Circularity follows value chains.** Industrial symbiosis needs flow mapping, a broker and near-market pilots—not manifestos.
- **Places matter.** Repurposed brownfields and heritage assets can host the new economy while upgrading everyday public space.

Typical pairings we see

- **PPP + Innovation** — when hubs/services connect firms with pilots and markets.
- **Regeneration + Strategic planning** — when site projects sit inside a city strategy.
- **Circular + Innovation** — sector pilots with tech centres and business associations.

Where cities tend to start

- **Leveraging existing local assets** (brownfields, heritage, utilities) rather than building from scratch.
- **Using anchor institutions** (schools, hospitals, large employers) to de risk-pilots.

URBACT Co-funded by the European Union Interreg In4Green

What the numbers say (nine pathways)

Number of In4Green good practices identified in each pathway:

13 Strategic planning & territorial vision

7 Governance & participation (quadruple helix*)

10 Public—private collaboration & investment attraction

12 Innovation & R&D

9 Energy & climate (mitigation and adaptation)

6 Circular economy & industrial symbiosis

8 Urban/ industrial regeneration & heritage

2 Sustainable mobility

3 Sustainable industrial parks

*public, private, academia and citizen interest groups.

For pathway specific starter moves, see Chapter 4.

4. Nine pathways for green transition in industrial cities

Each pathway is structured for quick use: **what it solves, signals you're ready, three starter moves, pitfalls to avoid, suggested KPIs,** and **an example from the network (city).**

4.1. Strategic planning & territorial vision

What it solves

Fragmented efforts and "project shopping". Brings investments, land use, mobility, energy and economic development under one direction.

Signals you're ready

Political mandate for a 3—5-year roadmap; a cross-departmental team; basic baseline data.

Three starter moves

1. Adopt a one-page city vision with 3 goals and 8 KPIs.
2. Build a prioritised portfolio (no more than 20 projects) with owners and funding routes.
3. Create a quarterly review to re-sequence projects as funding opens.

Pitfalls to avoid

100-page plans no one reads; consultations without decisions.

Suggested KPIs

Share of funded projects; execution rate; CAPEX mobilised; CO_2 avoided per €.

Example from the network — Salerno, IT:

The city aligned an ERDF Sustainable Urban Development (PICS) programme with a coastal masterplan to phase investments and unlock regeneration areas.

4.2. Governance & participation (quadruple helix)

What it solves

Misaligned actors; slow delivery.

Signals you're ready

Industry/SME reps willing to sit at the table; a university/VT partner; a neutral convener in the city.

Four starter moves

1. Set up a 4H steering group with a simple charter and quarterly reviews.
2. Publish a public dashboard (6—8 KPIs).
3. Add a light escalation rule to unblock permits/contracts.
4. Appoint a trusted neutral broker (impartial facilitator/consultant) to manage exchanges, document decisions and action plans.

Pitfalls to avoid

Too many forums; "advice" without ownership.

Suggested KPIs

Issues resolved within 30 days; number of firms supported; meetings held vs. planned.

Example from the network — Avilés, ES:

A compact citywide economic development committee brings business, academia and the municipality together to prioritise actions every quarter.

4.3. Public—private collaboration & investment attraction

What it solves

Under-investment and slow firm decisions.

Signals you're ready

A clear value proposition (sites, skills, services) and a one-stop shop.

Three starter moves

1. Sign a 12-month umbrella Memorandum of Understanding with 3 anchor projects.
2. Launch a one-stop investor/service desk.
3. Start aftercare visits with the top 20 employers.

Pitfalls to avoid

Fancy branding without back-office reform.

Suggested KPIs

Licence times; € invested; repeat investments; jobs safeguarded/created

Example from the network — Bijelo Polje, ME:

By adopting the BFC SEE standard, the municipality built a predictable onestop interface for investors, speeding permits and aftercare.

URBACT Co-funded by the European Union Interreg In4Green

4.4. Social & Technological Innovation & R&D

What it solves

Pilots that never reach the market; SMEs left out.

Cities often struggle to turn research into practical impact. Innovation systems are too focused on technology and too weak on application. Municipalities need ways to connect SMEs, universities and industry to deliver technological breakthroughs that reach the market.

At the same time, industrial transition also requires social innovation: new business models, workforce skills and governance tools that make technology adoption possible and sustainable.

Signals you're ready

A sector focus and at least one tech/social innovation partner.

Four starter moves

1. Publish a call for pilots (2—3 themes) with shared labs/test facilities.
2. Offer mentoring + light procurement to buy/try the best pilots.
3. Set a 6—12-month adoption track with early clients.
4. Use public procurement to act as a first client: municipalities can buy from local innovators and SMEs, turning pilots into real contracts.

Pitfalls to avoid

"Lab museums" with no clients; vague, over-broad themes.

Avoid also overlooking the value of social innovation which is a key component of the green transition and ensuring nobody is left behind. This means new business models, workforce skills, and governance tools not only technology.

IP disputes or lack of knowledge-sharing agreements between SMEs and universities.

Suggested KPIs

Pilots launched/adopted; SMEs supported; € leveraged; TRL progress; Number of collaborations between SMEs and universities; Share of pilots that scale beyond the city.

Example from the network — Larissa, GR:

JOIST Innovation Park turned a former factory into a practical hub where startups and SMEs run challenge-driven pilots with university partners.

4.5. Energy & climate (mitigation and adaptation)

What it solves

High energy bills and climate risks.

Signals you're ready

Identified anchor loads; basic building data; a utility partner.

Three starter moves

1. Prepare an end-to-end heat/energy sketch (supply—grid—demand).
2. Bundle quick wins (audits, insulation, lighting) with one visible renewables/heat pilot.
3. Set standard connection terms for anchor users.

Pitfalls to avoid

Projects in isolation; ignoring building-side efficiency.

Suggested KPIs

MWh saved/produced; CO_2 avoided; connected load; payback time.

Example from the network — Solingen, DE:

A waste-to-energy plant feeds a district-heating starter loop for nearby anchor users, with phased network extensions as demand grows.

4.6. Circular economy & industrial symbiosis

What it solves

Wasted materials and costs; missed local markets.

Signals you're ready

A cluster of firms; a data-sharing agreement; a broker.

Five starter moves

1. Map material/energy flows (confidential but aggregable).
2. Launch a symphony of small deals: a symbiosis call with mini-grants.
3. Standardise by-product contracts (quality, liability, logistics).
4. Be aware of regulatory barriers: waste/by-product classification often blocks exchanges unless addressed with regional or national authorities.
5. Cities can also drive circular demand directly through procurement of reused and recycled products.

Pitfalls to avoid

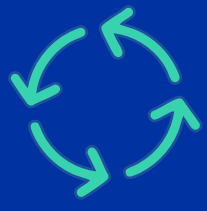
Manifestos without deals; over-complex platforms.

Suggested KPIs

Tonnes reused; CO_2 avoided through symbiosis deals; deals signed; € saved; new products from secondary materials.

Example from the network — Vila Nova de Famalicão, PT:

CITEVE and the BE@T programme help textile firms test circular materials and processes, moving pilots into marketable products.



4.7. Urban/industrial regeneration & heritage

What it solves

Underused sites and declining centres.

Signals you're ready

A site under control; options for interim use; nearby stakeholders engaged.

Three starter moves

1. Open a minimum viable place with temporary uses.
2. Phase the works and keep the site active.
3. Tie the site to the city economy (training, SMEs, culture).

Pitfalls to avoid

Big-bang projects with no early wins; costly rehab without uses.

Suggested KPIs

Footfall; m^2 activated; organisations involved; tenancy conversion rate.

Example from the network — Dąbrowa Górnicza, PL:

"Factory Full of Life" keeps a brownfield active through temporary uses while permanent works advance, building trust and footfall.

4.8. Sustainable mobility

What it solves

Access barriers to jobs and services; poor public realm.

Signals you're ready

One or two corridors with high impact; political cover for re-allocation.

Three starter moves

1. Deliver one complete street pilot.
2. Connect it to a greenway or a safe school/industrial commute.
3. Align construction with merchants and logistics windows.

Pitfalls to avoid

Isolated lanes; works that harm local business.

Suggested KPIs

Mode share on the corridor; injuries; retail vacancy; user satisfaction.

Example from the network — Navan, IE:

A public-realm and movement plan connects with a county greenway to shift short trips and improve safe access to services.

4.9. Sustainable industrial parks

What it solves

Heat islands, flooding, low amenity and piecemeal investor negotiations.

Signals you're ready

Park governance in place; upcoming leases or new plots.

Three starter moves

1. Adopt a short blue-green/energy code for the park.
2. Publish 2—3-page plot guidelines for investors.
3. Create shared services (waste, mobility hub, signage) and a faster permit lane for plots that exceed the code.

Pitfalls to avoid

Nice landscaping without maintenance; rules so complex they stall permits.

Suggested KPIs

Permeable/vegetated share; rainwater retained; average summer surface temperature; % of plots meeting the code.

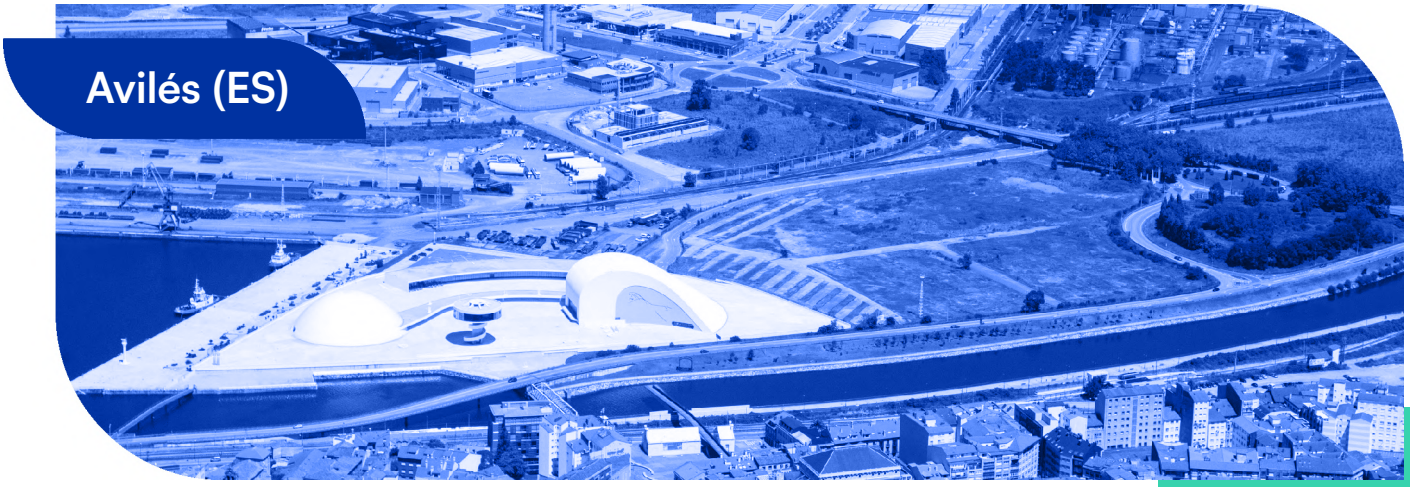
Example from the network — Žďár nad Sázavou, CZ:

A new industrial area is designed with blue-green infrastructure—storm-water retention, shade and permeable surfaces—under clear plot rules.

URBACT Co-funded by the European Union Interreg In4Green

Stories that inspire: 10 snapshots (one per partner city)

5.



Avilés (ES)

Public—private cooperation models for industrial transition

→ What they did

Avilés set up a stable cooperation architecture with industry, SMEs and other local actors (a sequence of city agreements) to steer investment, innovation and business-support services towards the industrial transition.

→ Why it matters

It turns "partnerships" into a delivery machine that lasts beyond projects and reaches real firms.

→ How to replicate (first 90 days)

1. Create a 4H steering group with 3 goals, 6—8 KPIs and quarterly reviews.
2. Define a minimum service offer for SMEs (sustainability/circularity checks + funding helpdesk).
3. Sign a 12-month umbrella MoU naming owners and 3 priority projects.

Tags

- Public—private collaboration
- Governance (quadruple helix)
- Innovation & SMEs

Pitfalls to avoid

Forums without a technical owner; too many committees.

Suggested indicators

Companies supported; projects launched; € mobilised (public/private).

Bijelo Polje (ME)

Business-Friendly Certification (BFC SEE): raising the standard for investors

→ What they did

Aligned municipal procedures with BFC standards to streamline permits, improve investor information and make services predictable.

→ Why it matters

Predictability and a single front door shift investor behaviour—also helping local SMEs.

→ How to replicate (first 90 days)

1. Run a quick gap analysis against a recognised checklist.
2. Set up a one-stop shop (digital + counter) with standard forms and service times.
3. Publish a simple public dashboard on licence times and enquiries.

Tags

Public—private collaboration & investment attraction

Governance

Strategic planning

Pitfalls to avoid

A new "shopfront" without back-office reform; treating certification as a trophy.

Suggested indicators

Processing times; enquiries handled; investor satisfaction.

Dąbrowa Górnicza (PL)

Factory Full of Life: from brownfield to civic engine

What they did

A former factory site is being transformed into a mixed civic and entrepreneurial quarter through phased activation, step-by-step construction and broad co-creation with residents, NGOs and businesses.

Why it matters

Delivers early visible wins while the larger project advances, building trust and momentum.

How to replicate (first 90 days)

1. Map quick-win areas and basic utilities for temporary uses.
2. Set up a place governance group with a 6-month action plan.
3. Launch a tactical programme (markets, cultural pop-ups, SME test spaces).

Tags

- Urban/industrial regeneration
- Governance & participation
- Public—private collaboration

Pitfalls to avoid

Big masterplans with no early activity; underestimating operations for temporary use.

Suggested indicators

Footfall; event days/month; new services operating on site.

Larissa (GR)

Joist Innovation Park: from factory to innovation ecosystem

→ What they did

Converted a former factory into a privately owned innovation park that hosts startups and SMEs, connects to universities and vocational training, and runs challenge-driven pilots with a circular/tech angle.

→ Why it matters

Shows how industrial assets can anchor the new local economy and attract talent.

→ How to replicate (first 90 days)

1. Audit available spaces; define a minimal viable set-up (co-working + light lab + challenges).
2. Secure three anchor partners (industry, university/VT, municipality) and a clear focus.
3. Launch a first pilot call with mentoring and public demos.

Tags

- Innovation & R&D
- Public—private collaboration
- Urban/industrial regeneration

Pitfalls to avoid

Space without services; weak governance and unclear selection criteria.

Suggested indicators

Startups/SMEs supported; pilots adopted; € raised; university—industry deals.

URBACT Co-funded by the European Union Interreg In4Green

Navan (IE)

Sustainable Energy Communities: local energy action at scale

→ What they did

Supports a county-wide network of Sustainable Energy Communities. Groups complete simple Energy Master Plans with expert help and deliver projects (e.g., solar, retrofits, behaviour change) across community buildings, SMEs and homes.

→ Why it matters

Turns climate goals into practical neighbourhood projects people can join.

→ How to replicate (first 90 days)

1. Create a local SEC helpdesk with templates and a short guide.
2. Recruit anchor partners (school, sports club, community centre).
3. Bundle quick wins with one visible renewables pilot and simple annual reporting.

Tags

Energy & climate

Governance & participation

Strategic planning

Pitfalls to avoid

Technical jargon; isolated pilots with no plan to scale.

Suggested indicators

Active groups; Master Plans completed; projects delivered; estimated energy/CO_2 savings.

Sabadell (ES)

Café Aventura: a pipeline for local entrepreneurs

→ What they did

A recurring municipal programme that scouts local talent, offers short, hands-on mentoring and culminates in a public pitch, connecting entrepreneurs with finance, corporates and the city's ecosystem.

→ Why it matters

Low-cost, high-visibility deal-flow—also for green and digital solutions.

→ How to replicate (first 90 days)

1. Publish a focused call (2—3 themes: energy, circularity, digital).
2. Run a 6—8-week pre-acceleration with clear graduation pitches.
3. Curate investors and corporates for demo day and broker follow-ups.

Tags

Support to SMEs & entrepreneurship

Governance & participation

Innovation & R&D

Pitfalls to avoid

Generic training without a real audience; one-off editions.

Suggested indicators

Teams accelerated; survival rate after 12 months; follow-on finance/contracts.

URBACT Co-funded by the European Union Interreg In4Green

Salerno (IT)

CLIC: circular reuse of heritage for a new local economy

→ What they did

Applied circular-economy thinking to heritage buildings and areas—testing new uses, business models and partnerships to bring underused assets back into productive life within a wider urban strategy.

→ Why it matters

Turns heritage from a cost into an engine for innovation, jobs and community life.

→ How to replicate (first 90 days)

1. Publish a public inventory of underused assets with basic data.
2. Launch a reuse call for community groups, startups and cultural actors.
3. Use simple temporary-use contracts with maintenance and impact reporting.

Tags

- Circular economy
- Urban/industrial regeneration
- Governance & participation

Pitfalls to avoid

Renovation before governance and business model are clear; over-protective rules.

Suggested indicators

Assets activated; m^2 reused; users/visitors; time from idea to opening.

Solingen (DE)

Turning waste into local heat: district energy from WtE

→ What they did

Links a waste-to-energy plant to a district-heating network supplying public buildings, housing and businesses, with phased expansion and joint planning by the utility, city and key customers.

→ Why it matters

Converts a waste challenge into reliable heat, cutting emissions and stabilising prices.

→ How to replicate (first 90 days)

1. Map anchor demand within 1—3 km.
2. Do a quick techno-economic sketch with the utility.
3. Set a governance set-up to agree connections, tariff principles and communications.

Tags

Energy & climate

Strategic planning

Public—private collaboration

Pitfalls to avoid

Over-promising early connections; ignoring building-side efficiency.

Suggested indicators

Connected load; annual heat delivered; CO_2 avoided; anchors connected.

URBACT Co-funded by the European Union Interreg In4Green

Vila Nova de Famalicão (PT)

From lab to market: CITEVE & BE@T for a circular textile cluster

→ What they did

Uses the national textile technology centre (CITEVE) and the BE@T project to help firms test circular materials, processes and business models—turning research into pilots and products across the value chain.

→ Why it matters

Shows how a traditional industrial base can move up the value chain through applied innovation.

→ How to replicate (first 90 days)

1. Name a sector focus and three circular challenges.
2. Broker an R&D alliance (tech centre + municipality + business association) with a pilot pipeline.
3. Publish a call for pilots with small grants and shared testing facilities.

Tags

Innovation & R&D

Circular economy

Support to local industry/SMEs

Pitfalls to avoid

Research with no route to market; overly broad themes.

Suggested indicators

Pilots launched/adopted; SMEs supported; € leveraged; materials recovered.

Žďár nad Sázavou (CZ)

Blue-green industrial park: climate-ready by design

→ What they did

Planned a new industrial area with blue-green infrastructure from day one: storm-water retention, permeable surfaces, shade and trees, and clear plot rules for efficient buildings and quality public space.

→ Why it matters

Industrial areas often overheat and flood; blue-green design makes them safer, cooler and more attractive to employers.

→ How to replicate (first 90 days)

1. Adopt a short blue-green/energy code for the park.
2. Publish 2—3 page plot guidelines for investors.
3. Set up shared services (waste points, mobility hub, wayfinding).

Tags

Sustainable industrial parks

Energy & climate

Strategic planning

Pitfalls to avoid

One-off landscaping without maintenance; complex rules that slow permits.

Suggested indicators

Permeable/vegetated share; rainwater retained; summer surface temperature.

What we learned: cross-cutting lessons

6.

These lessons distil what consistently works across **the nine pathways** and the **eleven snapshots.** They are framed for municipal leaders and technical teams who need clarity, not jargon.

1. Social innovation makes technology sticky

What we saw

Across good practices, projects that combined technology with new ways of working - skills retraining, governance platforms, business model changes - had higher uptake and stronger results. Where social innovation was absent, pilots often stalled or remained isolated.

Why it matters

Industrial transition is not only technical. Cities also need to build trust, capacity and buy-in among firms, workers and citizens. Social innovation creates the conditions for technology adoption and scaling, making investments more sustainable.

What this means for cities

Pair every technical project with a social innovation dimension. Connect R&D pilots to workforce upskilling. Test new governance and business models that make adoption easier. Use participatory processes to bring local actors on board early.

Watch-outs

Treating innovation as purely technological.

Ignoring workforce and community needs.

Overlooking institutional barriers like IP rules or siloed governance.

Pathways

Innovation & R&D

Governance & participation

Public—private collaboration

Circular economy & industrial symbiosis

2. Governance before gadgets

What we saw

Durable progress comes from **a compact governance set-up:** a city vision, a small delivery unit, and a public—private (4H) table that meets quarterly and takes decisions.

Why it matters

Without this "engine room", projects drift, partnerships thin out, and funding windows are missed.

What this means for cities (do next)

Mandate a **4H steering group** tied to the city strategy.

Give a **delivery unit** a practical toolbox: portfolio management, quick legal/procurement support, partner brokerage.

Watch-outs

Many committees ≠ governance. One empowered table is better than five talk shops.

Pathways

Strategic planning & territorial vision; Governance & participation; Public—private collaboration.

3. From projects to portfolios

What we saw

Cities that move faster treat transition as a **prioritised portfolio** (no more than 20 items) with owners, funding routes and quarterly resequencing.

Why it matters

Portfolios absorb uncertainty: when a call or permit slips, another project advances.

What this means for cities

Keep a **living portfolio** with clear entry/exit rules.

Pair each project with **one funding route and one owner.**

Match projects with potential **funding and financing entry points,** such as EU Cohesion Policy funds, the LIFE Programme, Horizon Europe funding, or the Just Transition Fund. Consider all funding streams including private, philanthropic and community based financing sources. Linking each portfolio item to at least one possible funding route increases readiness and credibility when opportunities arise.

Watch-outs

"Project shopping" (collecting ideas with no place in the sequence) leads to delays and diluted impact.

Pathways

Strategic planning; PPP & investment; Innovation & R&D.

4. Energy transition works end-to-end

What we saw

Results improve when **supply, grid and demand** are planned together—often around anchor users (public buildings, hospitals, large employers).

Why it matters

Generation without efficiency, or networks without anchor demand, underperform.

What this means for cities

Draft a **heat/energy sketch** that connects production, distribution and building upgrades.

Secure **letters of intent** with anchors before breaking ground.

Watch-outs

Over-promising early connections; ignoring building-side readiness.

Pathways

Energy & climate; Sustainable industrial parks; Strategic planning.

5. Circularity follows value chains (and needs a broker)

What we saw

Industrial symbiosis succeeds where there is **flow mapping,** a **trusted broker,** and **near-market pilots** with simple contracts for by-product exchange.

Why it matters

Circularity is a market, not a slogan. Deals need data, matchmaking and low transaction costs.

What this means for cities

Start with a **confidential flows inventory.**

Run periodic **symbiosis calls** with mini-grants and standard MoUs.

Watch-outs

Big platforms with no deals; complex liability clauses that kill exchanges.

Pathways

Circular economy & industrial symbiosis; Innovation & R&D; PPP & investment.

6. Places matter: regenerate for inclusive productive use

What we saw

Regeneration with **interim activation** and a clear path to **productive uses** (training, SMEs, innovation, culture) builds legitimacy and keeps sites alive during multi-year works.

Why it matters

Early, visible improvements create public trust and attract partners. Equity and inclusion are central to this principle. Industrial transition should be designed not only for new firms and investors but also for the existing workforce and residents. Cities can build legitimacy by integrating skills retraining programmes, supporting vulnerable groups to access new jobs, and ensuring that regeneration projects create visible benefits for local communities. Embedding these dimensions early avoids exclusion and strengthens long-term support for the transition.

What this means for cities

Open a **minimum viable place** (temporary uses + site governance).

Pre-agree t**enancy pathways** from temporary to permanent for the best performers.

Pair regeneration with skills retraining and inclusive job pathways so local workers and communities benefit directly.

Watch-outs

“Big bang” rehabs with no interim life; beautiful buildings without a business model.

Pathways

Urban/industrial regeneration & heritage; Strategic planning; (often) Sustainable mobility.

7. Services that SMEs actually use

What we saw

Innovation reaches the economy when hubs and parks offer **concrete services:** diagnostics, mentoring, access to labs, pilot adoption, and help with funding and procurement.

Why it matters

SMEs lack time and bandwidth. Clear services convert interest into projects.

What this means for cities

Define three flagship services and measure uptake each quarter.

Use **light procurement** to “buy/try” local pilots in public assets.

Plan from the outset how successful pilots can scale beyond the City. For example, by connecting with regional clusters, national platforms or cross-city alliances.

Watch-outs

“Lab museums” with no clients; broad innovation themes no one can act on.

Pathways

Innovation & R&D; PPP & investment; Governance & participation.

8. Procurement is a silent accelerator

What we saw

Adding **green/innovation criteria** to a handful of contracts each year creates a **first market** for new solutions and raises standards across suppliers.

Why it matters

Procurement shapes demand at scale, especially in smaller markets.

What this means for cities

Pick **five contracts** per year (works, goods, services) to include outcome-based green/innovation criteria.

Pair criteria with **vendor briefings** so SMEs know how to bid.

Watch-outs

Over-complex scoring that deters SMEs; criteria with no link to outcomes.

Pathways

Innovation & R&D; Energy & climate; Circular economy.

9. Measure little, often—and learn

What we saw

Quarterly reviews using **6—8 KPIs** keep teams aligned and allow rapid course correction.

Why it matters

Big dashboards gather dust; small sets of indicators change behaviour.

What this means for cities

Publish a **public dashboard** (visible, not perfect).

Track both **activity** (projects launched, firms supported) and **outcomes** (MWh saved, m^2 activated, tonnes reused).

Watch-outs

KPI inflation; collecting data no one uses to decide.

Pathways

All nine (it is the glue across them).

10. Sequence partnerships as carefully as projects

What we saw

The order in which you bring partners on board (utility, landowner, tech centre, business association, community anchor) often determines speed.

Why it matters

Wrong sequencing creates vetoes or late redesigns.

What this means for cities (do next)

Map **who must agree first** for each pathway.

Use **letters of intent** to hold alignment through budget cycles.

Watch-outs

Announcing partnerships before roles are clear; missing the "anchor" that unlocks others.

Pathways

Governance & participation; PPP & investment; Energy & climate; Regeneration.

11. Small incentives, big leverage

What we saw

Modest **grants, guarantees or fast-track permits** unlock private action when tied to clear standards (e.g., blue-green codes in industrial parks).

Why it matters

These incentives signal commitment and predictability attracting private investment without heavy subsidies. When cities set clear rules and send consistent signals, businesses invest more confidently—often multiplying the impact of modest public support.

What this means for cities

Offer a **fast-track l**ane or fee reductions for projects that **exceed** baseline standards.

Publish standards as **short checklists** to cut negotiation time.

Watch-outs

Incentives with unclear criteria; slow approvals that negate the benefit.

Pathways

Sustainable industrial parks; Strategic planning; PPP & investment.

Putting the lessons to work

Choose one or two lessons as city “rules of the game” (e.g., quarterly portfolio reviews; five innovative procurements per year).

Tie them to your first 90 days plan and to one of the nine pathways.

Review quarterly, retire what does not work, and scale what does—keeping the transition practical, visible and jointly owned.

Making results visible early - through communication of quick wins and tangible benefits - strengthens political backing and helps sustain momentum with local stakeholders.

7. From lessons to action: recommendations

For policymakers

1. **Mandate a compact governance set-up.** Name a 4H steering group, a delivery team, and a quarterly review ritual.
2. **Back one sector focus.** Concentrate resources on the strongest local value chain for visible results.
3. **Tie budgets to a portfolio.** Pre-approve a short list of projects and link each to funding routes and owners.
4. **Use procurement as an accelerator.** Add green/innovation criteria in 5 key contracts each year.
5. **De-risk first movers.** Offer small grants, guarantees or faster permits for pilots that meet city goals.
6. **Make success visible.** Public dashboards and site visits keep momentum and political support high.

For technical teams

1. **Publish a one-page plan + 8 KPIs.** Keep evaluation simple and regular (quarterly).
2. **Design services that SMEs actually use.** Diagnostics, mentoring, pilot adoption and a funding helpdesk.
3. **Plan energy end-to-end.** Pair generation with building efficiency and anchor connections.
4. **Broker circular deals.** Start with a flows inventory, then run a small symbiosis call every 6 months.
5. **Keep sites active during works.** Interim uses build trust and inform permanent designs.
6. **Document "how-tos".** For each highlighted practice, publish 3 steps to start and 2 pitfalls to avoid.

First 90 days guide

8.

Weeks 1—2: Set the frame

- Appoint the **4H steering group** and a small delivery team.
- Approve a **one-page city vision** (3 goals, 8 KPIs) and a 12-month review calendar.

Weeks 3—4: Choose where to start

- Pick **one pathway** and one **sector focus.**
- Draft a **starter portfolio** (no more than 10 projects) with owners and funding routes.

Weeks 5—6: Put services in place

- Launch a **company helpdesk** (sustainability/circularity checks + funding).
- Publish **pilot calls** (2—3 themes) or an investor **one-stop shop.**

Weeks 7—8: Launch visible pilots

- Start **one quick-win** (audits/insulation/lighting or interim use on a site).
- Sign **letters of intent** with 2—3 **anchor users** (energy/circular pilots).

Weeks 9—10: Lock governance and rules

- Approve a short **blue-green/energy code** (if a park is in scope).
- Add **green/innovation criteria** to 5 coming contracts.

Weeks 11—12: Measure and communicate

- Publish a **public dashboard** (the 8 KPIs).
- Run a **site visit/demo day** for stakeholders; announce the next pilot cycle.

9. Method & sources

Purpose and scope

This playbook synthesises **49 good practices** collected by ten partner cities in the In4Green URBACT network. It converts evidence into nine pathways, cross-cutting lessons and starter moves for municipal use.

Data origin

Primary source: the partners' **In4Green URBACT Network Good Practice Sheets,** completed using a common template (general data, description, lessons learned, transfer potential, contacts).

The content reflects what partners reported; no new primary research was undertaken.

Processing steps

1. Ingestion & cleaning consolidated the partner files; removed internal codes from titles (e.g., "GP5 …"); harmonised titles in sentence case.

2. Deduplication earlier duplicates were resolved; the present dataset contains **49 unique practices.**

3. Normalisation aligned terminology (e.g., public—private collaboration, industrial symbiosis) and avoided partner-specific acronyms in the public text.

4. Evidence distillation extracted problem statements, mechanisms, and outcomes where stated in the sheets.

Taxonomy (nine pathways) and classification rules

Pathways used: (1) Strategic planning & territorial vision; (2) Governance & participation (quadruple helix); (3) Public—private collaboration & investment attraction; (4) Innovation & R&D; (5) Energy & climate; (6) Circular economy & industrial symbiosis; (7) Urban/industrial regeneration & heritage; (8) Sustainable mobility; (9) Sustainable industrial parks.

Multiple assignment allowed: each practice can belong to **up to 2—3 pathways** when justified.

Primary/secondary: where relevant, one pathway is considered primary (dominant intent) and one secondary (enabling or co-benefit).

Consistency checks: assignments were cross-checked against the sheet narrative and lessons learned to avoid superficial tagging.

Snapshot selection (Chapter 5)

Balance: one snapshot per partner city (ten total).

Criteria: replicability, clarity of mechanism, diversity across pathways/sectors, and ability to illustrate a practical "how to start".

Editing: titles lightly adjusted for clarity; no quotes; descriptions kept short and non-technical.

How to read the counts

Category counts in **Chapter 3** indicate **how many practices touch each pathway,** not exclusive membership.

Because of multiple assignment, totals across categories exceed 49 (they reflect **70 assignments** across 49 practices).

Combinations listed represent the **most frequent pairings** observed.

Quality assurance

Line-by-line checks against the partner sheets for accuracy of scope and mechanisms.

Homogenised language (international English) and avoided over-claiming where evidence was partial.

Kept a maximum of 2—3 categories per practice to reduce noise and overfitting.

Limitations (and how to complement)

The sheets vary in detail and timing; not all include comparable metrics (costs, impact).

Contexts differ (legal, market, utility governance), so **transfer requires local feasibility checks.**

This is not a statistical evaluation nor a cost—benefit analysis; it summarises **what partners reported worked.**

For finance, procurement and permitting specifics, use national guidance and internal procedures.

For a deeper dive, consult the **full sheets** listed in **Chapter 10** .

Reuse and citation

Please refer to this publication as the **In4Green Playbook.** When adapting a snapshot, **cite the partner city** and consult the corresponding sheet.

All content derives from partner-provided materials within the URBACT framework; no personal data are included beyond institutional contacts in the original sheets.

Capitalisation & transfer

This playbook supports programme capitalisation and transfer (peer reviews, transfer workshops and future calls) by providing ready-to-use pathway pages, starter moves and indicators.

Where to find all sheets and resources

10.

Link to the full set of good practice sheets and to URBACT resources.

Credits & Acknowledgements

About In4Green

The In4Green network brings together ten small and medium industrial cities to accelerate the green transition through practical cooperation, exchange and transfer. This playbook synthesises the good practices shared by partners and turns them into pathways, lessons and starter moves for implementation.

Authorship and editorial

Text authored by **Jose Costero,** Lead Expert, with editorial support and review from URBACT experts **Eileen Crowley** and **Mar Santamaría.** The content builds on inputs from the ten partner cities and their local teams.

Programme and funding note

This publication was developed within the URBACT IV Programme, co-financed by the European Regional Development Fund (ERDF) and by the Programme's participating Member and Partner States.

For links to the full set of good practice sheets and related resources, see *Chapter 10.*

Network partners

Avilés (ES) • Bijelo Polje (ME) • Dąbrowa Górnicza (PL) • Larissa (GR) • Navan (IE) • Sabadell (ES) • Salerno (IT) • Solingen (DE) • Vila Nova de Famalicão (PT) • Žďár nad Sázavou (CZ).

Design and production

Design and layout by **Abside Studio,** commissioned by the **City of Avilés,** which funded the graphic design of this publication.

Acknowledgements

We thank the municipal teams, businesses, universities and civil society organisations in the partner cities for sharing their knowledge and experience. Their contributions made this playbook possible.

Disclaimer

URBACT Co-funded by the European Union Interreg In4Green

URBACT

Co-funded by
the European Union
Interreg

In4Green