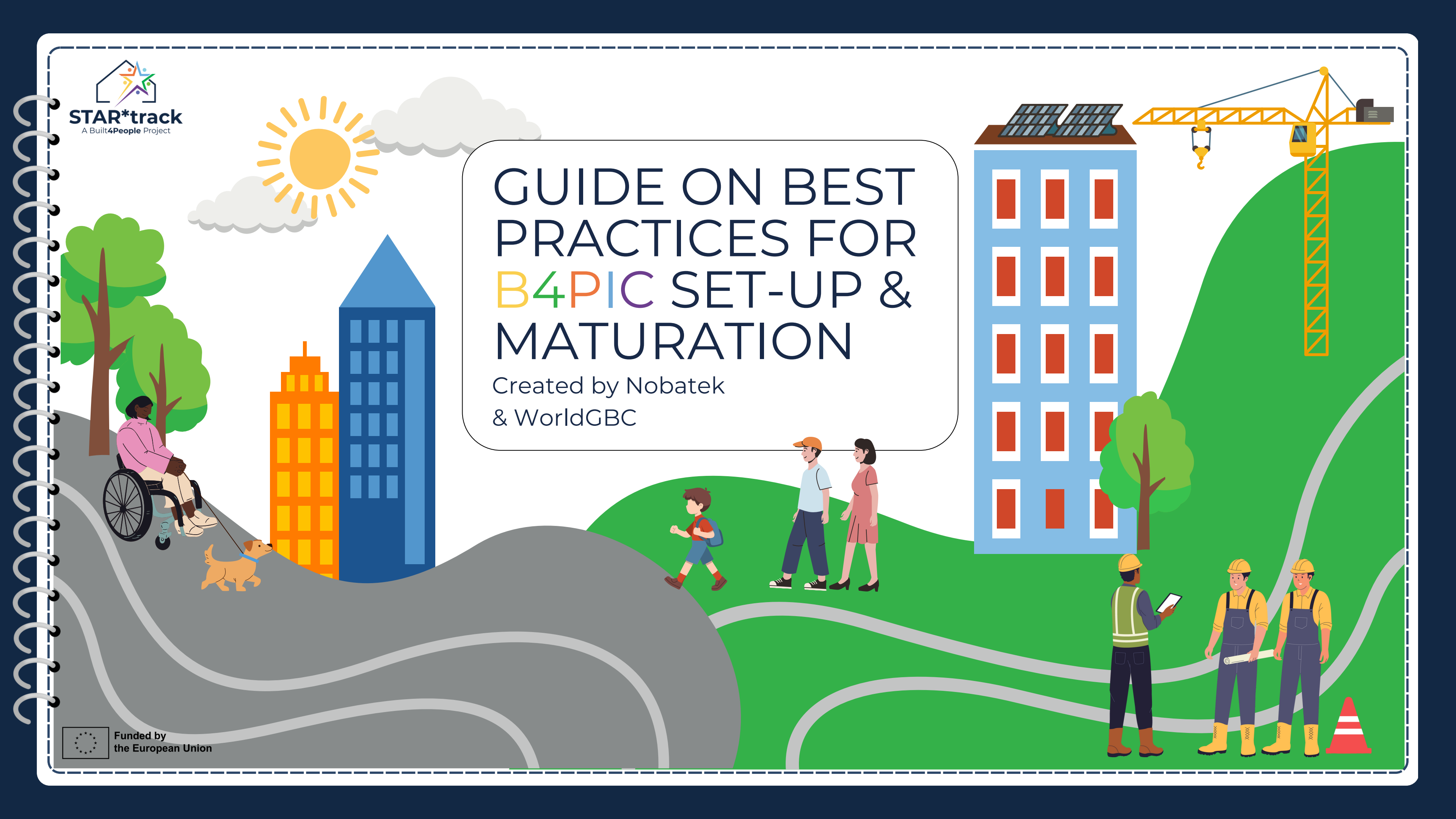


GUIDE ON BEST PRACTICES FOR B4PIC SET-UP & MATURATION

Created by Nobatek
& WorldGBC



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Members of the STAR*track consortium during the project's General Meeting in Greece, October 2024

Foreword

The Built4People Innovation Clusters (B4PICs) are key drivers to accelerate the innovation landscape within their specific regions. Together, they form the B4PIC Network that constitutes a community of interest and best practice working towards the market up-take of sustainable and people-centric products and solutions for the built environment.

The STAR*track project supports emerging B4PICs in their journey towards maturation. This includes support with respect to diversity of members, alignment with objectives and values of the Built4People public-private partnership and the New European Bauhaus, cross-sectoral and cross-border collaboration, and access to innovation experts and testing facilities.

This guide provides best practice examples from advanced B4PICs to help newcomers in the set-up and maturation of their prospective B4PIC.

Disclaimer

This document reflects only the authors' views. The European Climate, Infrastructure and Environment Executive Agency (CINEA) is not responsible for any use that may be made of the information it contains.

This booklet was published in October 2025.

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- **Built4People Innovation Clusters and B4PIC network**
- **Examples of best practice for maturation on six success factors**
 - **Diversity of Innovation Actors**
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 - **Cross-sectoral collaboration**
 - **National and European integration**
 - **cross-border collaboration**
 - **Facilitation of testing and demonstration**

Glossary

B4P Built4People

B4PIC Built4People Innovation Cluster

HE Horizon Europe

IC Innovation cluster

KPI Key performance indicator

LL Living labs

MKRL Market readiness level

MFRL Manufacturing readiness level

NEB New European Bauhaus

NEBULA New European Bauhaus unlocked through Built4People endorsed local actions

NGO Non-governmental organisation

OITB Open innovation test bed

R&I Research & innovation

RDI Research, development and innovation

RTO Research and technology organisation

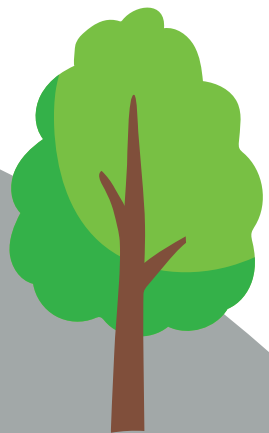
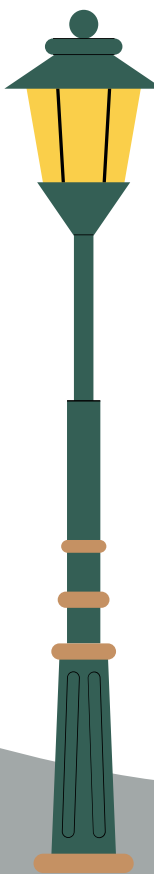
SF Success factor

SMEs Small and medium-sized enterprises

STAR*track Support and networks To Accelerate the construction and Renovation innovation track to market

TRL Technology readiness level

B4PICs and the Built4People Network



Why become a Built4People Innovation Cluster?

Many European regions count with innovation clusters that try to stimulate innovation of regional companies to create innovation based business opportunities and foster market uptake of sustainable products and solutions for the built environment. Often these innovation clusters are rather isolated and need better information on innovation trends, available funding and upcoming EU regulations.

Becoming a Built4People Innovation Cluster provides:



Better knowledge on finance regulation and available funding



Access to a community of interest and best practice



Training and tools to support impactful innovation



Skills and knowledge to increase members competitiveness



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the European Union

The journey towards becoming a B4PIC

A B4PIC starts from an existing regional innovation cluster that decides to engage in a maturation process on six success factors (SF) that are key for the successful development and market transfer of innovative, sustainable, and people-centric products and solutions.

Innovation cluster

Group of built environment actors fostering innovation development, demonstration & uptake to market

Initial state: Prospective B4PIC

IC is preparing its charter and action plan in order to become a B4PIC

Maturation process: Emerging B4PIC

B4PIC is working on its action plan to mature on the 6 SF

Final State: Established B4PIC

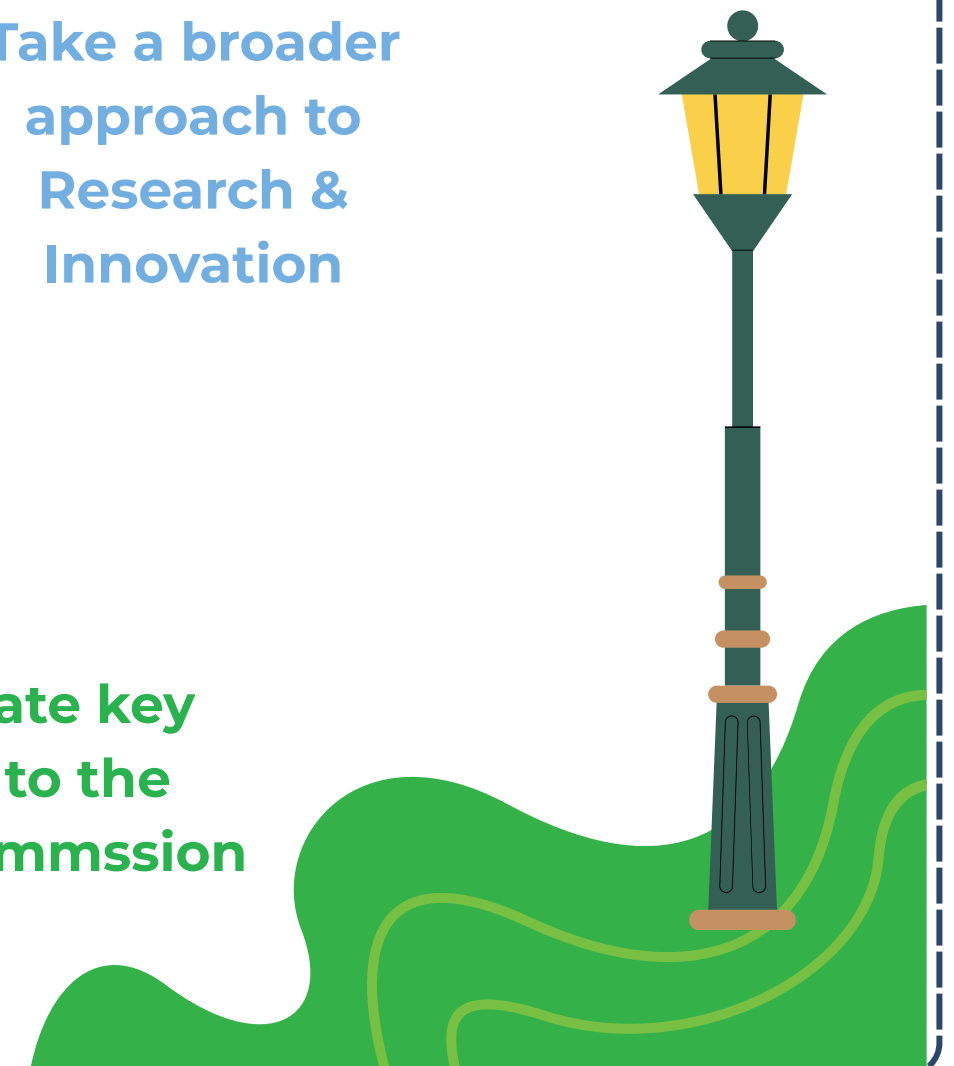
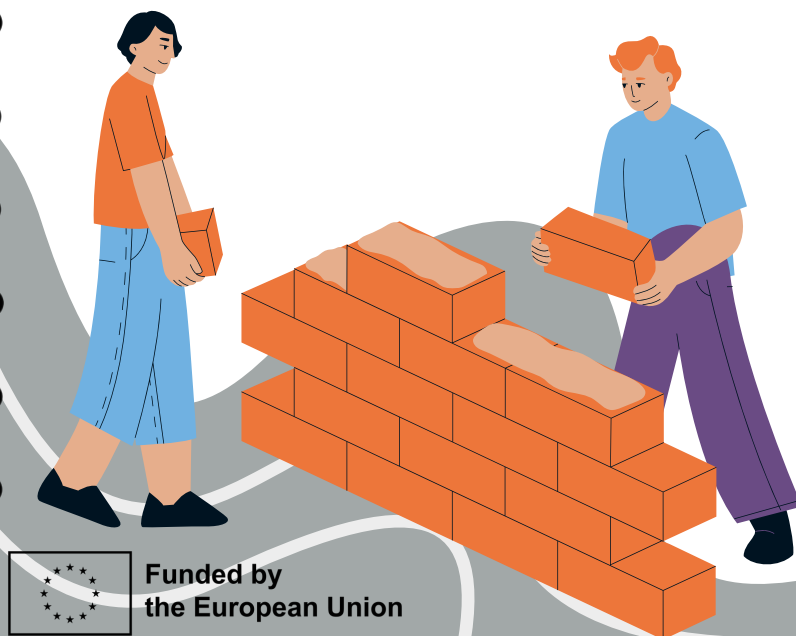
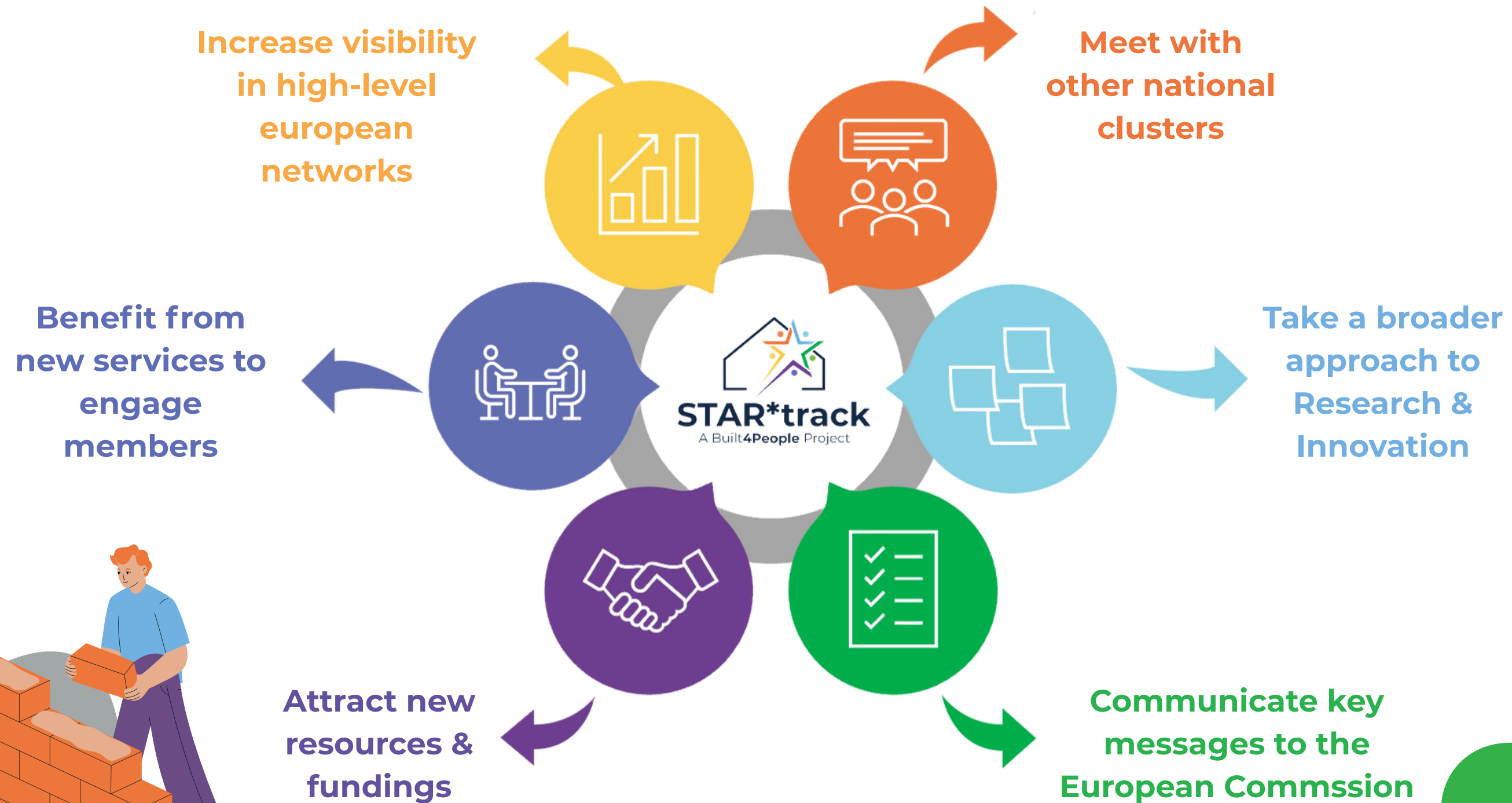


B4PIC MATURATION PROCESS



The Built4People Network

The Built4People Network constitutes a community of interest and best practice, allowing B4PIC managers to rapidly mature their B4PIC.



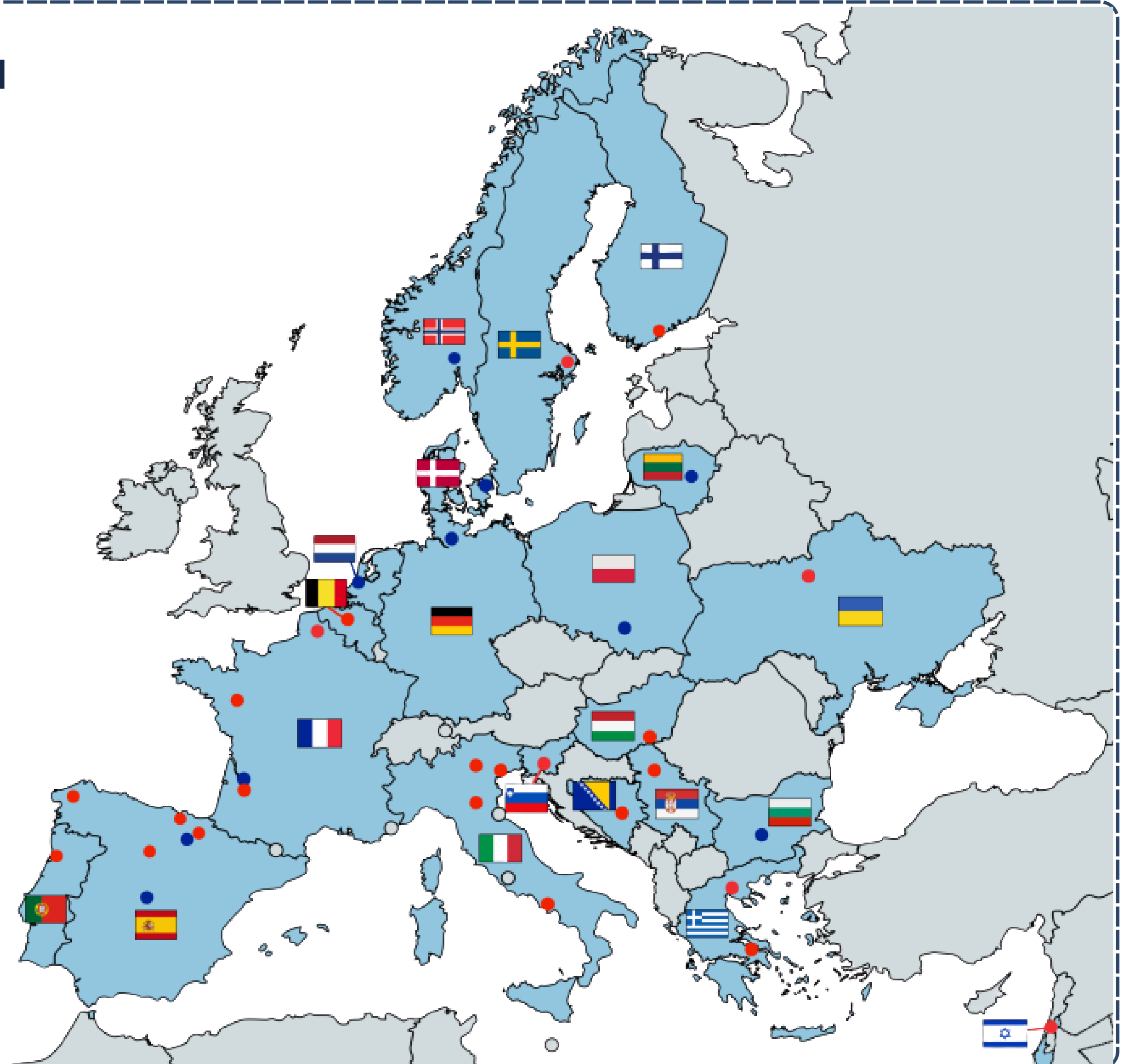
The current B4PIC Network geographical coverage

The Built4People Network constitutes a community of interest and best practice, allowing B4PIC managers to rapidly mature their B4PIC.

- Prospective B4PICs
- Emerging B4PICs

21
countries

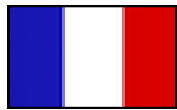
34
B4PICs



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Pametne stavbe in
dom z lesno verigo

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Why join the B4PIC Network?

- Easy access to information on European funding, including an innovation helpdesk.
- A community of interest and best practice facilitating European collaboration between B4PICs and their members.
- Enhanced visibility for cluster members and their innovative products and services at a European level.
- Facilitated access to testing and innovation experts and identification of demonstration sites via collaboration with Open Innovation Testbeds (Metabuilding Labs, iclimabuilt, MEZeroE).
- Access to tools tailored to understand the innovation process and strengthen skills related to the development of sustainable, people-centric and beautiful innovation.
- Exchange with policy makers and financiers to improve enabling conditions for market entry of innovative products and solutions.
- Overall, the B4PIC Network empowers the B4PICs and their members to innovate, connect, and grow within the European built environment.

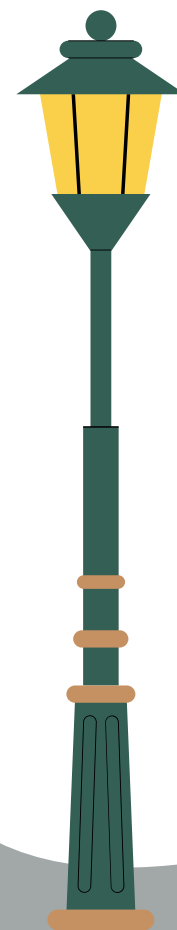


“The main added value of becoming a B4PIC is to represent the Greek construction value chain within the EU construction ecosystem. This role allows us to actively participate in strategic planning and utilize various tools and funding opportunities to support the sustainable development of our members.”

D. Andreouli from B4PIC- e-CODOMH Greece



Six lines of
maturation/success
factors



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Six maturation lines / success factors

An emerging B4PIC is requested to mature on 6 success factors important for well-functioning innovation ecosystems that foster innovation for the Built Environment and stimulate regional green business.

Innovation Cluster

Diversification of innovation actors needed to enable market up-take of innovative products and solutions

Alignment with B4P & NEB values & objectives to create a Built Environment in line with societal & business needs

Cross-sectoral collaboration to answer to climate related challenges in a coordinated and holistic way

National and European integration to enable bilateral exchange between regions and disseminate best practice

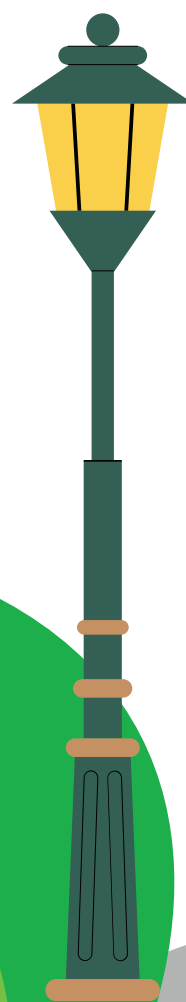
Cross-border collaboration to facilitate innovation and business in and between Euro regions

Facilitation of testing and demonstration to gain visibility, attract investment & change regulation



Built4People
Innovation Cluster

Success factor one:
Diversity of innovation
actors



Success factor one: Whole built environment innovation ecosystem

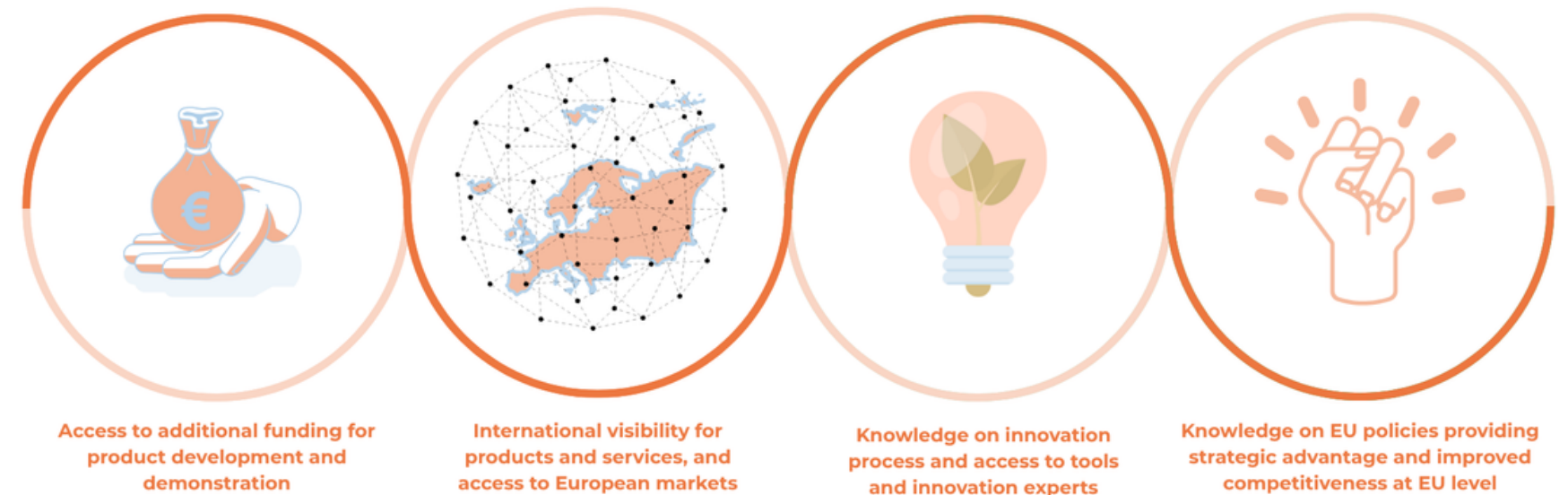
Understanding the concept:

To avoid innovation getting stuck at the end of the development process, a well-functioning innovation ecosystem needs to bring together different types of innovation actors from academia, business, public authorities, and civil society. Only when innovation ecosystems include “non-traditional” innovation actors like policy makers, certifiers, insurance companies, financiers, and/or civil society can enabling conditions be achieved that accelerate market uptake of innovative products and solutions.

How to cover the whole ecosystem?

Engaging the whole regional ecosystem requires mapping innovation stakeholders, including “non-traditional” ones, with respect to their roles, interests, and relevance. This first step must be completed by planned onboarding activities (bilateral meetings, regional events, webinars) that inform about the added value of joining a B4PIC tailored to different types of innovation actors.

Value proposition to onboard B4PIC members



“Adapt your message to your target audience. For example, Industrial actors are interested in pragmatism and efficiency, whereas investors are looking for return on investment, limitation of the risk and success factors.”

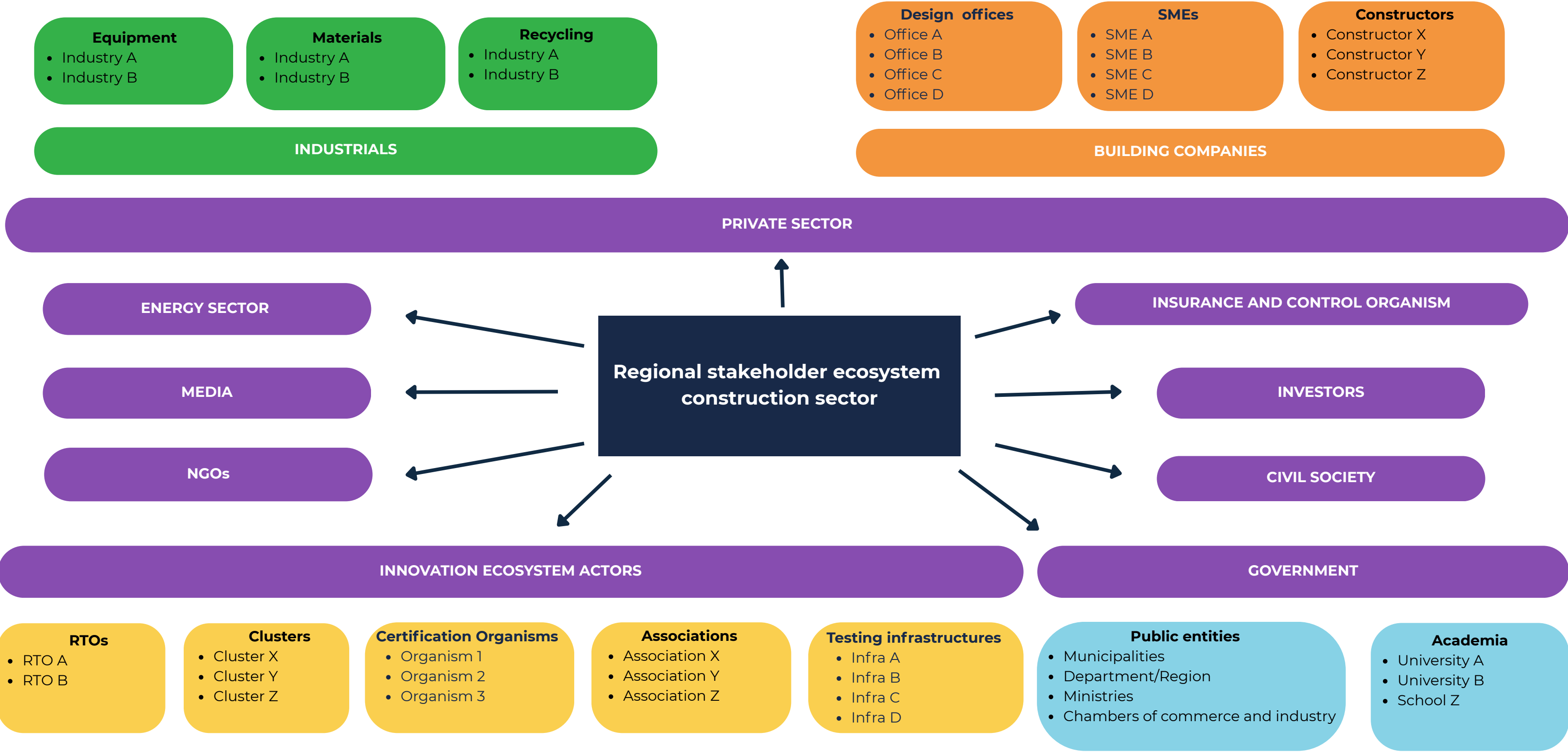
E. Musellec from B4PIC Odéys - France



“Work with the most interested stakeholders first and let the others follow.”

I. Porres from B4PIC iCONS - Spain

Stakeholder map template



SFI: Whole built environment ecosystem

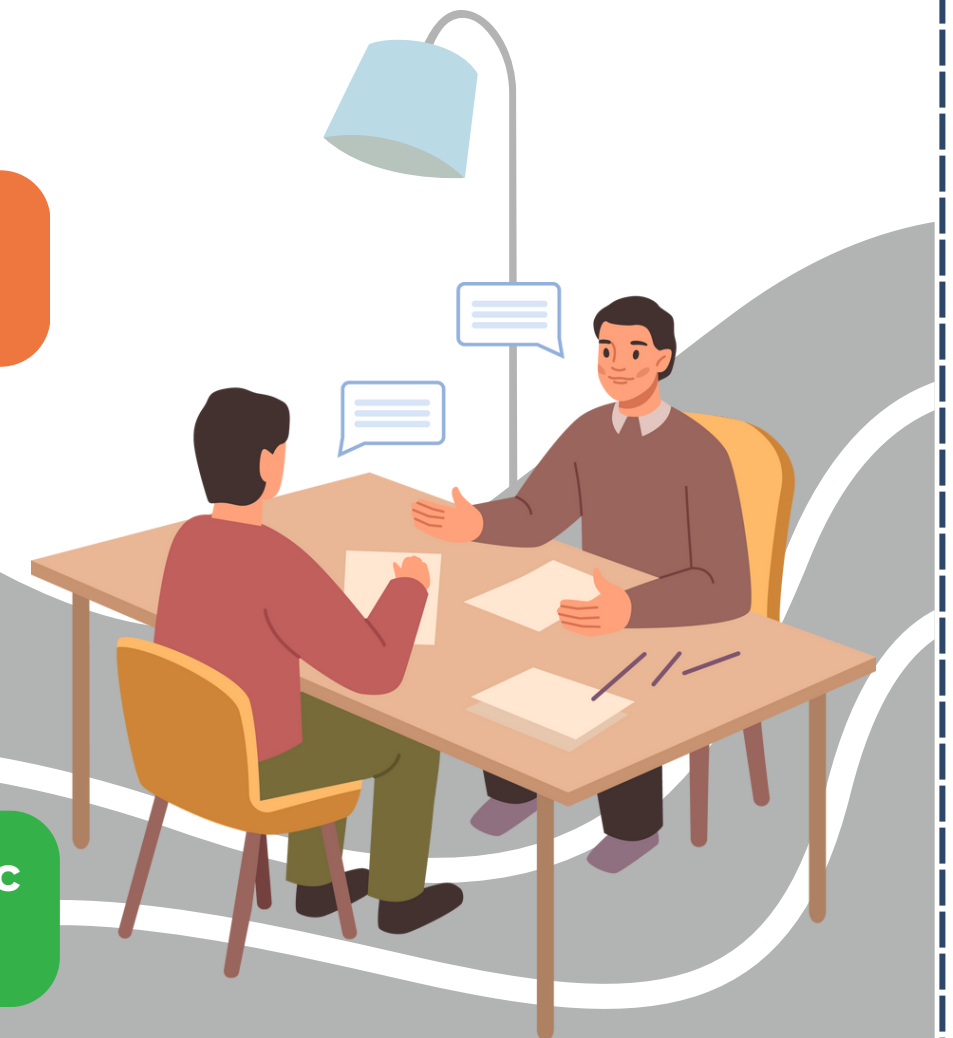
Level 1: B4PIC gathers stakeholders with similar professions

Stakeholder mapping to identify innovation actors

Level 2: B4PIC gathers stakeholders with a few distinct profiles but not the whole built environment

Regional workshop to attract relevant innovation actors

Level 3: B4PIC gathers stakeholders from research to industry, public authorities and citizen associations / NGO included



Success factor two:
Alignment with
Built4People objectives
and NEB values



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the European Union



Success factor two: Multi-objective innovation

Understanding the concept:

B4PICs and their network play an important role in supporting the Built4People public-private partnership in disseminating B4P objectives and New European Bauhaus (NEB) values and principles. Their proximity to product developers, architects, building owners, construction companies, and local governments makes B4PICs excellent ambassadors for promoting people-centric, sustainable, and beautiful products and solutions.

How to reach multi-objective innovation?

The KPIs to measure the impacts of B4PICs have been defined in coherence with the B4P objectives and the need for a B4PIC to consider them when defining its technological development roadmaps. This accelerates the push towards innovative products and solutions in line with B4PIC objectives at the regional/national level and allows benchmarking between B4PICs.



B4P Partnership objectives

General objectives :

Scientific

To generate holistic innovation towards sustainability

Economic

To revitalise the sector through decarbonisation and sustainability transition

Societal

To induce lasting behavioral change towards sustainable living

Specific objectives:

- A. Develop holistic solutions in a systemic approach
- B. Demonstrate overall performance in the life-cycle perspective
- C. Demonstrate clean energy transition potential
- D. Demonstrate sustainable, circular business and value chain
- E. Demonstrate affordability and cost-effectiveness
- F. Demonstrate no trade-offs on economy, comfort, health, functions, cultural heritage

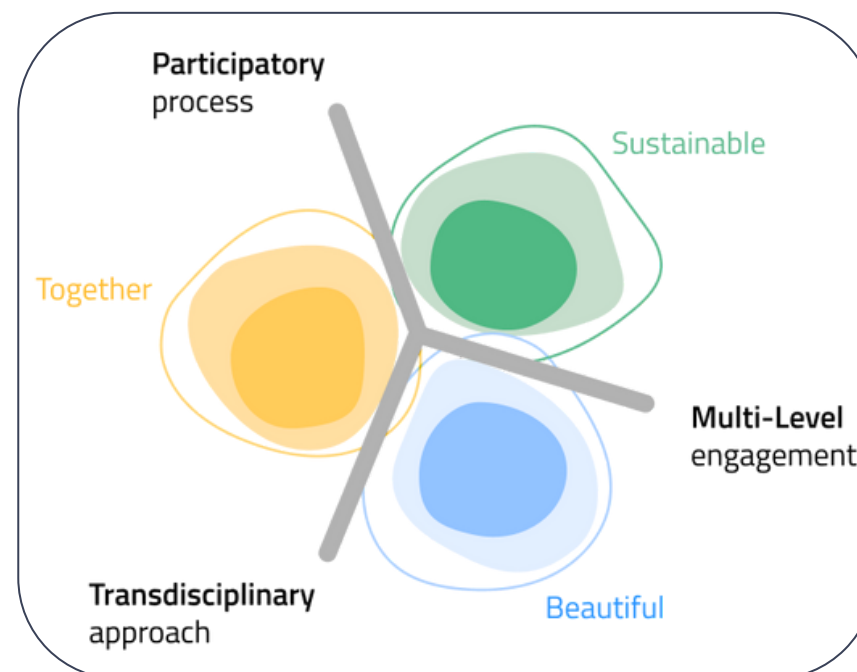


“The technological roadmap of a B4PIC should complement the existing cluster strategy and describe the objectives aligned with B4P partnership objectives that respond the needs of the cluster members. In this way a B4PIC supports its members to be better positioned at EU level. “
N. Ortiz Santiso from front-runner B4PIC BUILD:INN - Spain

NEB Advisors group

An alignment with the NEB values and principles can be best achieved by nominating a NEB Advisor in each B4PIC. The NEB advisors form a dedicated group that meets every two to three months to get first-hand in side on the NEB activities, best practice and related funding opportunities. They promote NEB values and principles towards the members of their B4PICs and beyond, aesthetics, and inclusion.

The NEB advisors group is hosted by the STAR*track project and open to NEB advisors even if not related to B4PICs. Participation in the NEB Advisors group helps strategic alignment with EU priorities, early insight into policy and innovation trends.



Support to understand the New European Bauhaus :

NEB handbook : <https://built4people.eu/wp-content/uploads/2023/10/New-European-Bauhaus-a-handbook.pdf>

Inspiring stories: https://built4people.eu/wp-content/uploads/2025/03/Booklet-of-published-inspiring-stories_R2M_MM_V10-compressed.pdf

Built4People website: <https://built4people.eu/the-new-european-bauhaus-advisors/>



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Statements of NEB Advisors



"I am proud to become a NEB advisor, aligning with the NEB initiative to integrate innovation, sustainability, aesthetics, and inclusivity into the construction ecosystem"

I aim to promote these principles and engage stakeholders through active collaboration and knowledge sharing, working towards a more sustainable built environment"

D.Andreouli B4PIC e-CODOMH - Greece



"The New European Bauhaus is a promising initiative that aligns perfectly with our value at Odéys. It provides a platform to integrate innovation, sustainability, and aesthetics in construction, thus enhancing climate resilience and quality of life. We are eager to continue to collaborate and contribute to this transformative initiative"

E.Musellec from front-runner cluster Odéys



"At iCONS, we are dedicated to bringing the NEB values, in which we deeply believe, to companies and industries. In doing so, we aim to make these values more real and present, creating a positive impact on society."

Í. Porres B4PIC iCONS- Spain

SF2: Multi-objectives

Level 1: B4PIC is focused on one type of objectives

Get training on B4P objectives &
appoint a NEB Advisor

Level 2: B4PIC addresses different groups of objectives

Elaborate a multi-objective B4PIC
technology roadmap

Level 3: B4PIC addresses a majority of the 7 B4P specific
objectives as well as NEB core values and actively promotes
them

Success factor three:
Cross-sectoral
collaboration



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Success factor three: Cross-sectoral

Understanding the concept:

In order to respond effectively to the climate and societal challenges that Europe faces today, innovation needs to be cross-sectoral, as monosystemic approaches are no longer valid to resolve complex problems. This is why B4PICs need to promote collaboration with other sectors to lay the foundation for cross-sectoral innovation, which can produce holistic technical solutions for the built environment.

How to become a cross-sectoral cluster?

The first step towards cross-sectoral collaboration is often stakeholder mapping, which highlights other sectors within a specific region that offer a high potential for collaboration. B4PICs gain, for example, from cross-sectoral collaboration with the ICT, recycling, additive manufacturing, and nature-based solutions sectors, as they provide new ideas and solutions that help to tackle the climate and societal challenges. The goal should be to integrate other sectors directly into the B4PIC as additional members or to establish long-term partnerships with them that result in collaboration between members and new business opportunities.

Analysis of synergies with additive manufacturing



Network of industrial symbiosis with automotive industry and circular design



Participation in innovation jurys and conferences related to renewable energy



“We engage in projects and strategic collaboration with entities representing other sectors and domains like the environment, ICT, or aerospace.”

N. Ortiz Santiso from front-runner B4PIC BUILD:INN, Spain



SF3: Cross-sectoral

Level 1: B4PIC is focused on one sector but is addressing multiple applications

Identify synergies with complementary sectors present in your region

Level 2: B4PIC is focused on one sector but has established first contacts with other sectors

Engage in joint road mapping leading to strategic collaboration

Level 3: B4PIC is focused on one sector but has started active collaboration with other sectors based on a joint strategic road map



Success factor four:
National and
European integration



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the European Union



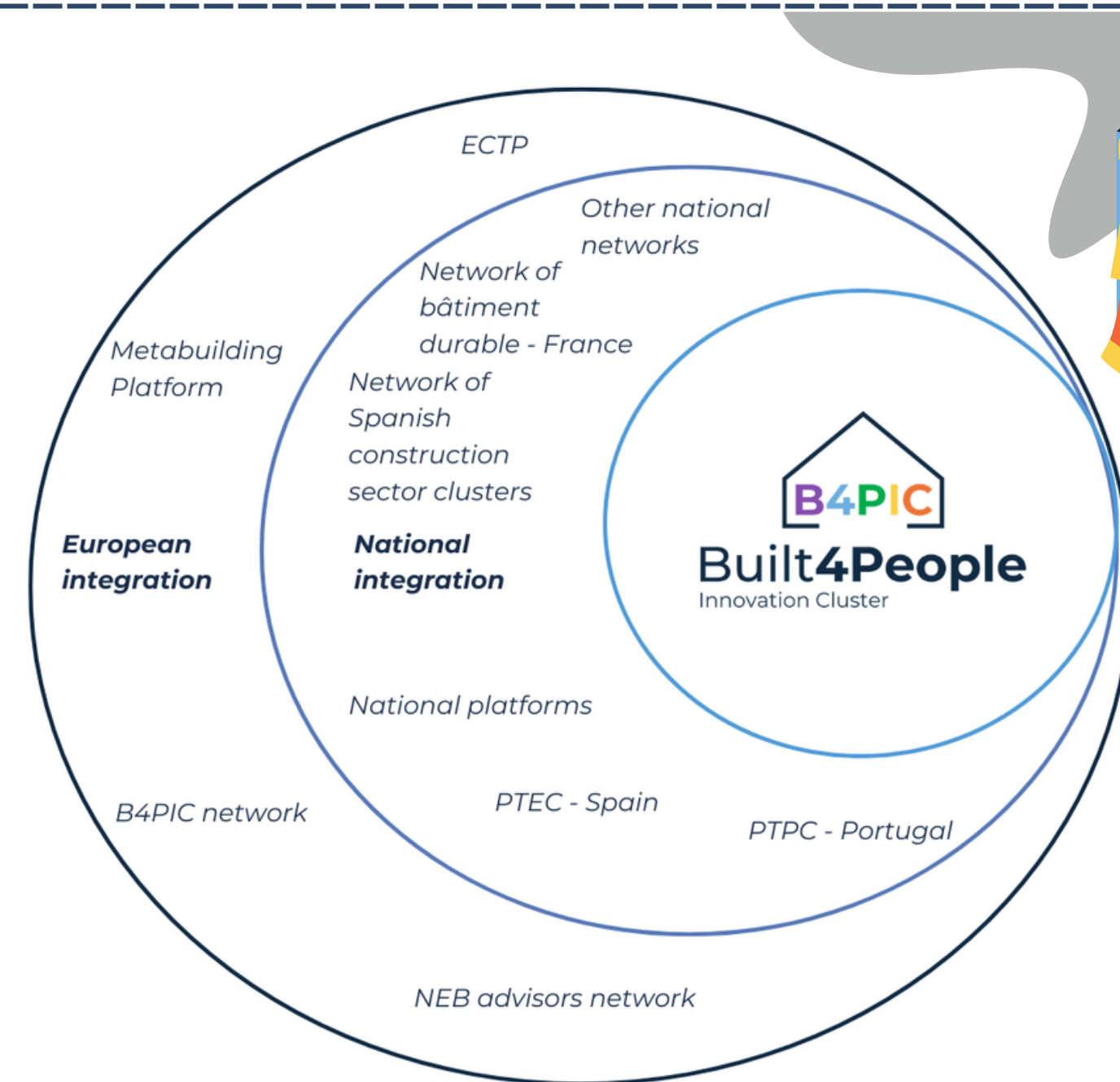
Success factor four: Locally anchored with national and European outreach

Understanding the concept:

It is crucial for the B4PICs to stay anchored at the local level to facilitate direct dialogue with the innovation actors in their region or country. However, their integration at national and European levels is also important to break down silos. It allows them to receive downstream information on the latest technologies and available funding, as well as upstream information on the needs of local innovation actors. This helps to disseminate results and best practices from B4P projects at the regional level and provides important feedback on needed policy changes to improve the conditions for the market introduction of innovative products and services.

How to expand at European scale?

B4PICs have multiple ways to connect at the national and European levels. The first step is their integration into the B4PIC and NEB advisor networks that constitute communities of interest and practice where B4PIC managers can exchange on how to stimulate interest in innovation uptake among companies and successfully promote innovative products and services. Furthermore, there are other ways to exchange and gain critical mass to be heard by policy makers, like integration into a national platform or the European Construction Technology Platform (ECTP).



We Build Denmark is an example of the integration of existing regional clusters at the national level, adapted to a small country. It has opted to become a B4PIC to strengthen Denmark's national and regional innovation ecosystems through its integration into a broader European framework."

Joost Haugmark Jensen, prospective B4PIC We Build Denmark

SF4: Locally anchored with national and European outreach

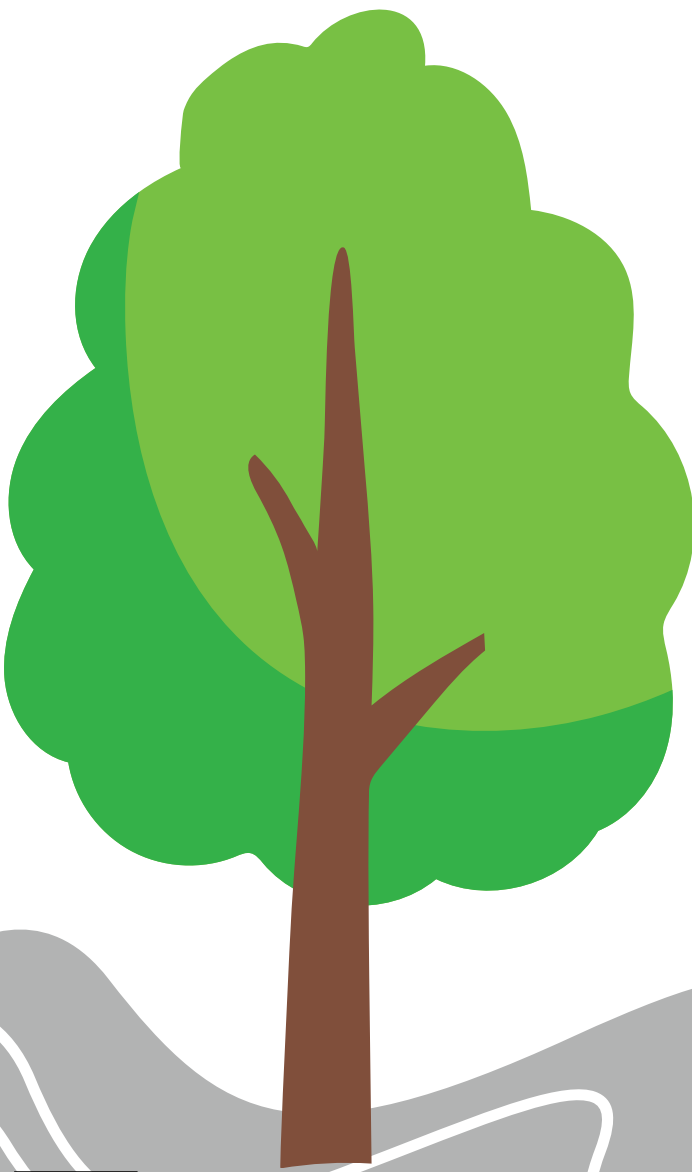
Level 1: B4PIC is active at a local/regional level, or in the case of a small country, at the national level

Search for synergies with B4PICs of neighbouring regions

Level 2: B4PIC is local/regional and collaborates with B4PICs of neighbouring regions

Join the B4PIC network and the NEB advisor network

Level 3: B4PIC is integrated into the national construction technology platform and actively participates in the B4PIC network and the NEB advisor network



Success factor five:
Cross-border
collaboration



Success factor five: Cross-border collaboration

Understanding the concept:

Cross-border collaboration between existing B4PICs is an excellent way to drive innovation activities in European regions that are aligned with the smart specialisation strategies of the concerned regions.

Cross-border collaboration allows B4PICs to learn from each other, open market opportunities for B4PIC members in the neighbouring region, and to jointly engage in innovation projects dedicated to the development of cross-regional activities financed through the Interreg program.

How to develop cross-border activities?

A way to actively foster cross-collaboration is the meta-clustering between existing B4PICs and the elaboration of a joint roadmap in line with the needs of the B4PIC members, the existing strategic roadmaps of each B4PIC, and the regional and, if applicable, European regional smart specialisation strategies. Joint workshops organised by the metacluster help to establish links between cluster members as a basis for R&D and business collaboration.



Working on a joint roadmap with Odéys (B4PIC from France) permitted to consolidate our strategy at the Euroregional scale. Moreover, thanks to the B4PIC network, BUILD:INN increased its links and partnerships with other countries such as Portugal. And not only for the building sector but also for transversal sectors.

N.Ortiz Santiso from front-runner B4PIC BUILD:INN - Spain



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Metacluster

Nouvelle-Aquitaine - Euskadi - Navarra

In 2024, the B4PICs Build:Inn and Odéys organised two joint workshops to inform their members about the EU funding that is easily accessible for SMEs and motivate collaboration between them.



Built4People Innovation Cluster Nouvelle-Aquitaine Euskadi Navarra

Working together to accelerate innovation in the construction sector

Cluster

BUILD:INN
BASQUE CONSTRUCTION CLUSTER

odéys
Cluster construction
et aménagement durables

iCONS
ICONS CLUSTER DE LA INDUSTRIALIZACIÓN
DE LA CONSTRUCCIÓN DE NAVARRA

During the second half of 2024, the Navarra cluster iCONS joined the metacluster, allowing joint road mapping, cross-learning and collaboration between the three B4PICs at a Euro regional level.

SF5: Cross-border collaboration

Level 1: B4PIC has no cross-border interactions

Search for and establish contacts with
B4PICs in neighbouring regions

Level 2: B4PIC has a few cross-border contacts and is actively
promoting interregional activities and/or programmes to its
members

Create a metacluster with
neighbouring B4PICs allowing
joint road mapping

Level 3: B4PIC has implemented at least one strategic relationship
with a B4PIC from a neighbouring region and engages in joint road
mapping



Success factor six:
Facilitation of testing
and demonstration

Success factor six: Access to testbeds and/or demonstration spaces

Understanding the concept:

SMEs that would like to engage in innovation face several difficulties that often make them abandon or not even begin the development of a new product and solution. The main difficulties encountered are:

- 1) poor knowledge on the innovation process itself
- 2) no knowledge about regulations and requirements with respect to innovative products
- 3) none or not enough engineers with an R&D background
- 4) no building to use for testing.

The close relation between B4PICs and Open Innovation Testbeds (OITBs) - networks of testing facilities - helps to overcome these issues and enables SMEs to engage in innovation.

How B4PICs increase access to testing infrastructure and R&D experts?

Strong links between B4PICs and OITBs help to increase the knowledge on the innovation process of B4PIC managers and members. This close collaboration facilitates the access of companies to innovation experts and testing infrastructure. Furthermore, a joint data base and dedicated support facilitate the identification of pilot buildings for testing and demonstration activities in controlled and real life conditions.

Access to services and experts to test materials & products in building envelopes



www.metabuilding.com



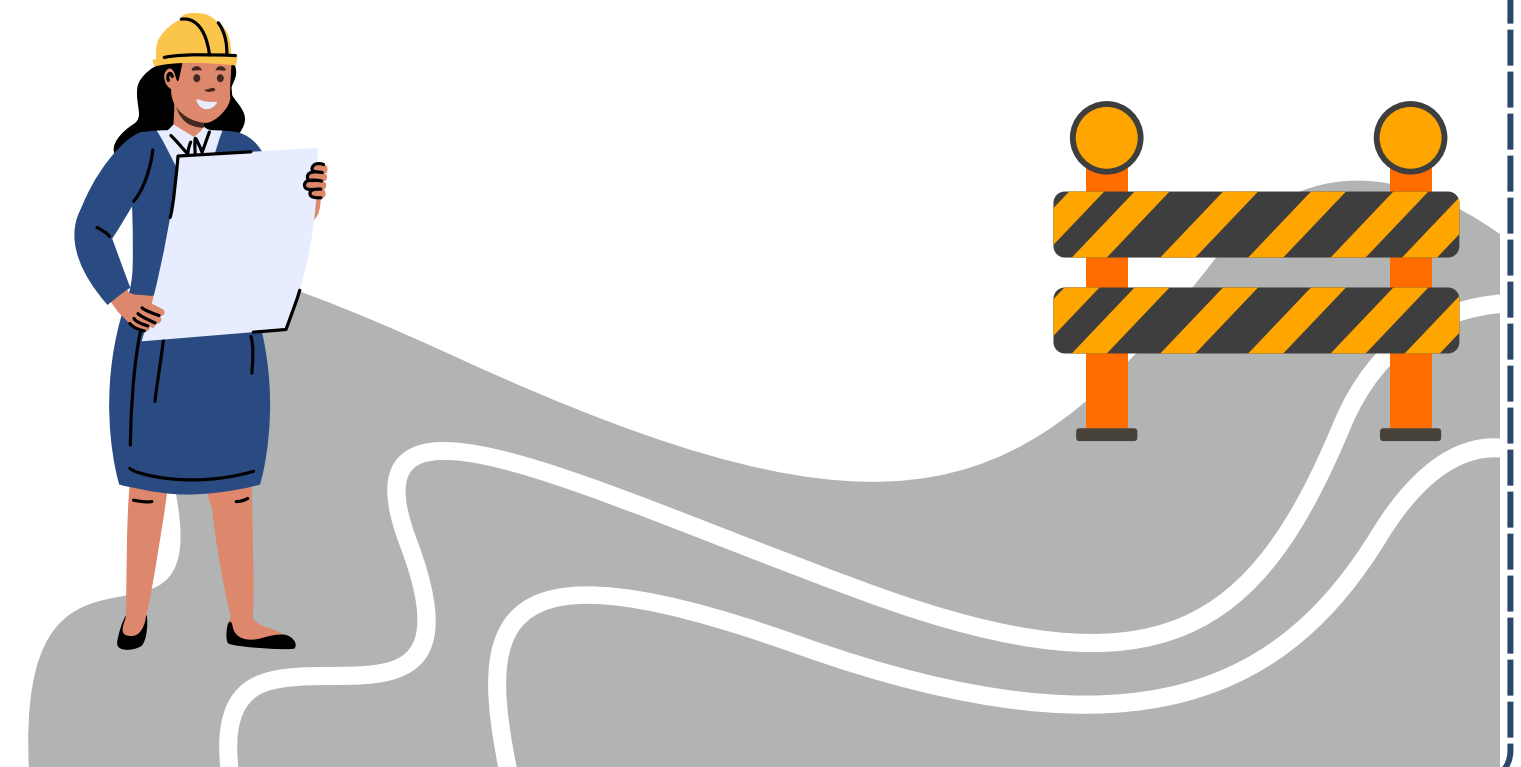
www.mezeroe-platform.eu

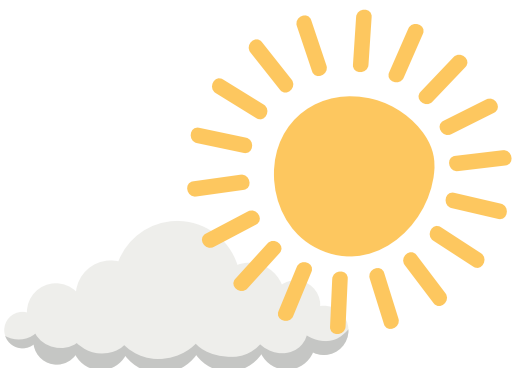


www.iclimabuilt.eu

Demonstration site locator >

<https://www.metabuilding.com/searchBuildingAssets>





SF6: Access to testbeds and demonstration spaces

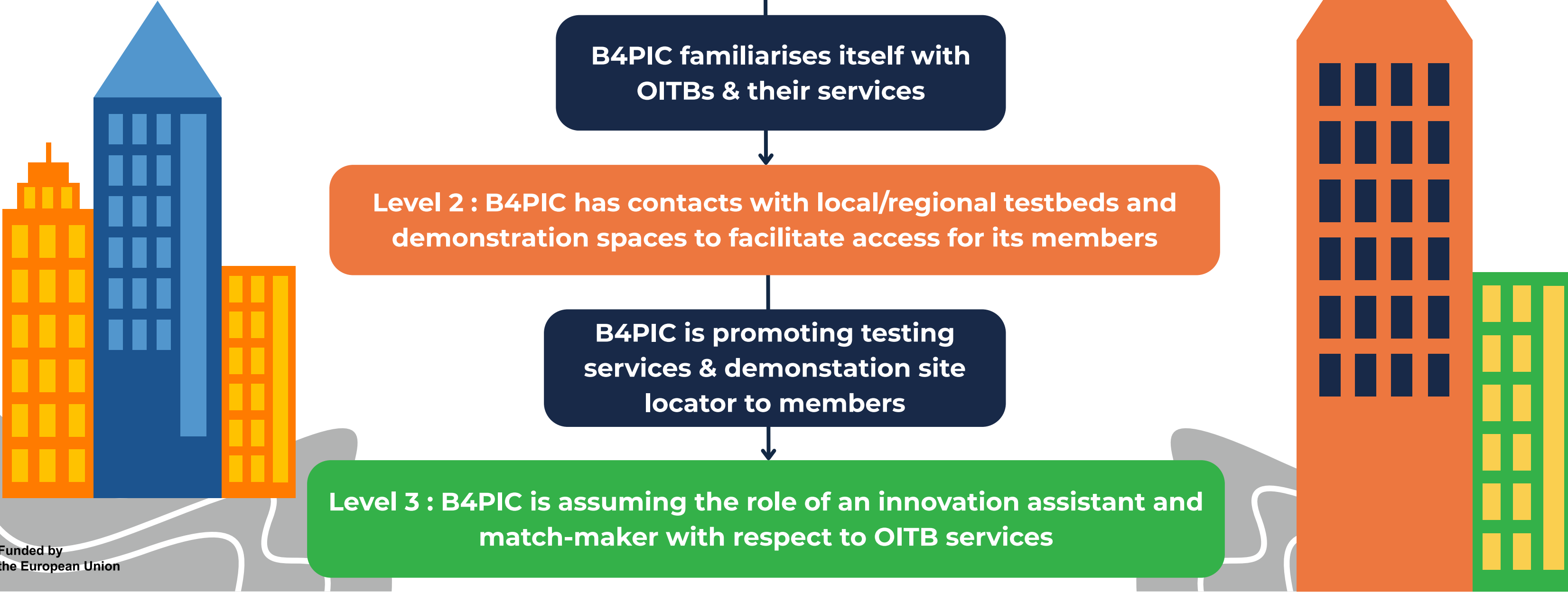
Level 1: B4PIC has no connection to testbeds and demonstration spaces

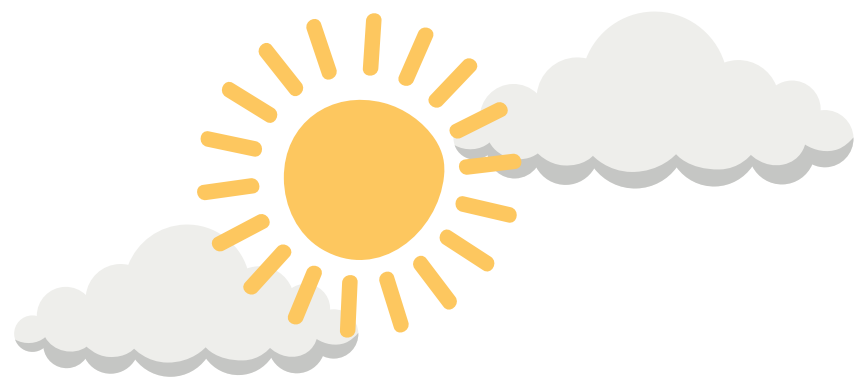
B4PIC familiarises itself with OITBs & their services

Level 2 : B4PIC has contacts with local/regional testbeds and demonstration spaces to facilitate access for its members

B4PIC is promoting testing services & demonstration site locator to members

Level 3 : B4PIC is assuming the role of an innovation assistant and match-maker with respect to OITB services





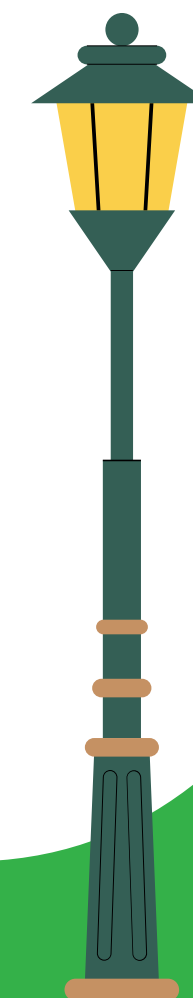
STAR*track

A Built**4**People Project

<https://built4people.eu/startrack-project/>

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