CIRCULAR SPPC

CircularPSP Pitch Deck

Last update: May 2025

Procurers

ISTANBUL METROPOLITAN MUNICIPALITY · circular BERLIN · FORUM VIRIUM HELSINKI · SANDYFORD BUSINESS DISTRICT · MUNICÍPIO DE GUIMARÃES · Skupnost občin Slovenije *Association of Municipalities and Towns of Slovenia* · Swedish Association of Local Authorities and Regions

Supported by

empirica · RISE Research Institutes of Sweden · ReLondon · ENERGY EFFICIENCY in Industrial Processes · TAGES a way to innovation

Contents / Agenda

CircularPSP Common Challenge
Common challenges of cities to transition to Circular Economy

CE-solution
CircularPSP deploys AI and platform to transition to CE

CircularPSP Roadmap and attached efforts

PCP Process and core terms
PCPs create incentives in domains where mature solutions are missing and reduce risks for both procurers and suppliers to innovate
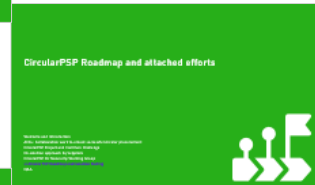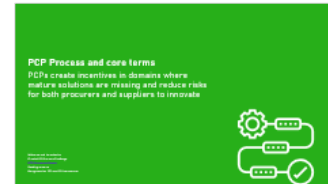
Background on PCP and PPI Instruments

CircularPSP Common Challenge

Common challenges of cities to transition to Circular Economy

Project

Leading Circular Cities are tackling a common challenge together

CIRCULAR PSPC

Istanbul, Turkey	**Guimarães,** Portugal
CircularBerlin, Germany	**City Network** Sweden
Helsinki, Finland	**City Network** Slovenia
Sandyford, Ireland	**ReLondon,** UK[1]

A wide-reaching Follower Network which will continue to grow

8 Procurers – 8 Countries
Representing 45 million citizens

Including leading circular cities and metropoles, as well as nationwide city networks

Invest €5.64 million in R&D
As part of a 3-phase pre-commercial competition

We co-developed the common challenge with city staff, validated by experts and industry stakeholders

Challenge Brief

[1] Associated Partner involved in all activities

Circular Economy (CE) is stalling

Circular economy is systemically complex and public organisations need new tools to leverage the potential

Circularity declined from 9.1% in 2018 to 7.2% in 2023[1]

Cities account for 75% resource consumption[2]

85% share of GDP in urban areas[3]

EU: €2 trillion yearly in public procurement (14% of GDP)[4]

250,000 public organisations[4]

221+ definitions of CE[6] and more indicators[7]

75 million employees[5]

Progress in vertical solutions with thousands available[8]

Known benefits for sustainability, economy and resilience

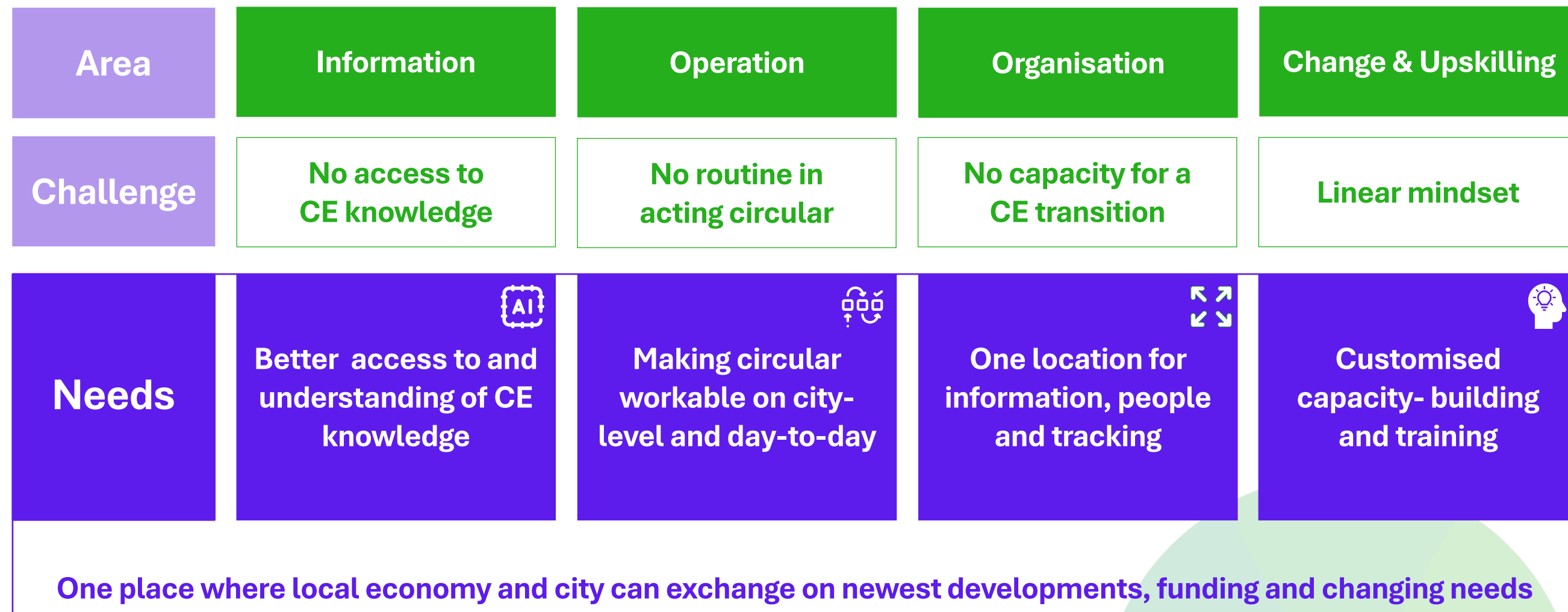**According to OECD, only 10% of cities have advanced on circular transition and urban policies[9]**

Europe needs new tools to leverage the potential and advance the transition towards a Circular Economy

CIRCULAR

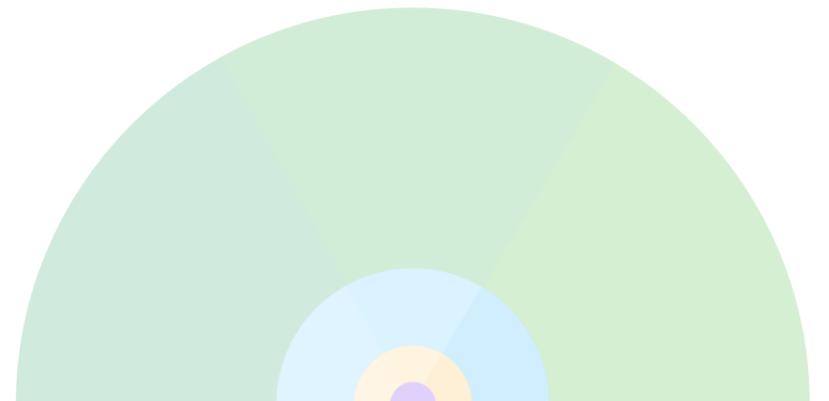1. Circle Economy (2024) | 2. UNEP (2019) | 3. CESifo Forum (2019) | 4. European Commission (2019) | 5. European Commission (2018) | 6. Kirchherr (2023) | 7. Fuertes Giné (2022) | 8. Lakatos (2021) | 9. OECD (2020)

Challenges to be resolved

CircularPSP identified four critical challenges areas cities cannot solve alone

Area	Information	Operation	Organisation	Change & Upskilling
Challenge	No access to CE knowledge	No routine in acting circular	No capacity for a CE transition	Linear mindset
Needs	Better access to and understanding of CE knowledge	Making circular workable on city-level and day-to-day	One location for information, people and tracking	Customised capacity- building and training

One place where local economy and city can exchange on newest developments, funding and changing needs

Ralf, 45

Little experience with Circular Economy (municipal worker)
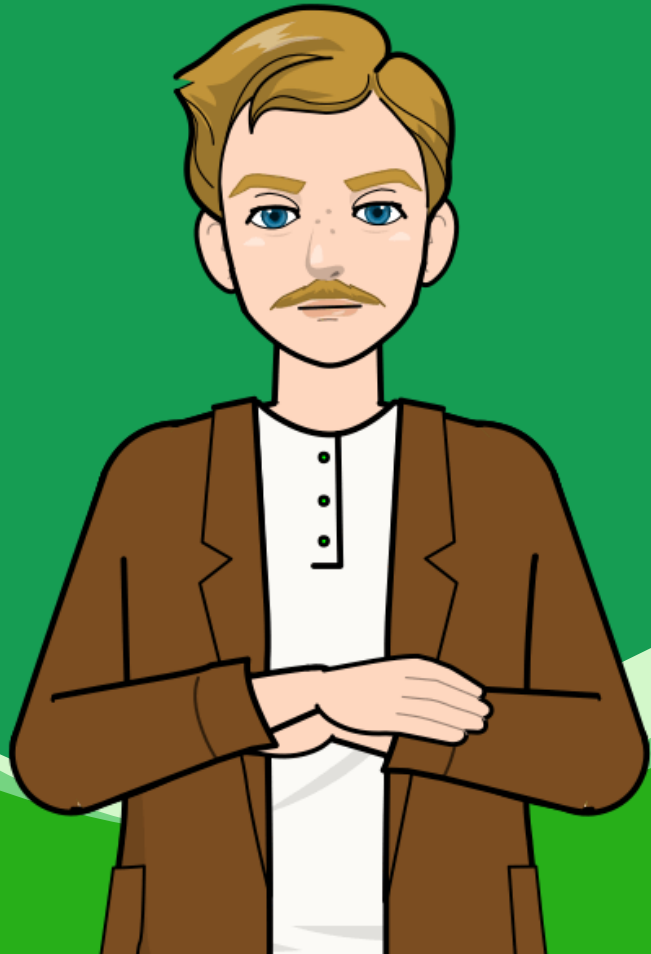
A specialised AI finds relevant solutions for me and summarises them in my language
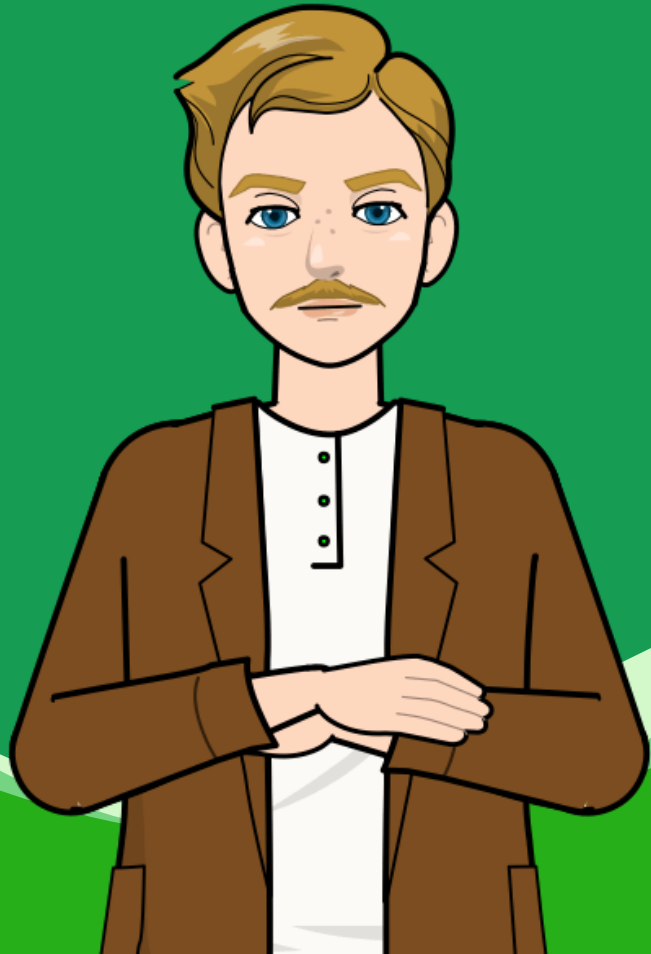
I've never done this before... how am I supposed to implement it?

The platform provides a concrete step-by-step Workflow, including templates

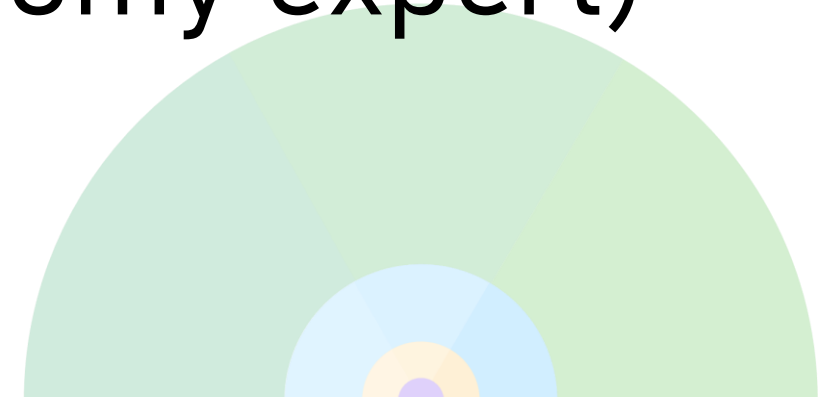I'm not familiar with this concept at all, and why should I?

The Workflow includes targeted training materials based on my personal experience

Anna, 38,
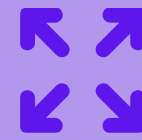A lot of experience with Circular Economy in Cities (Circular Economy expert)
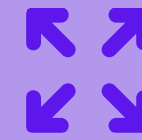
I wrote the circular strategy, but I have no way to help my colleagues

Help requests, ongoing workflows, and indicators are centrally accessible

CE-solution

CircularPSP deploys AI and platform to transition to CE
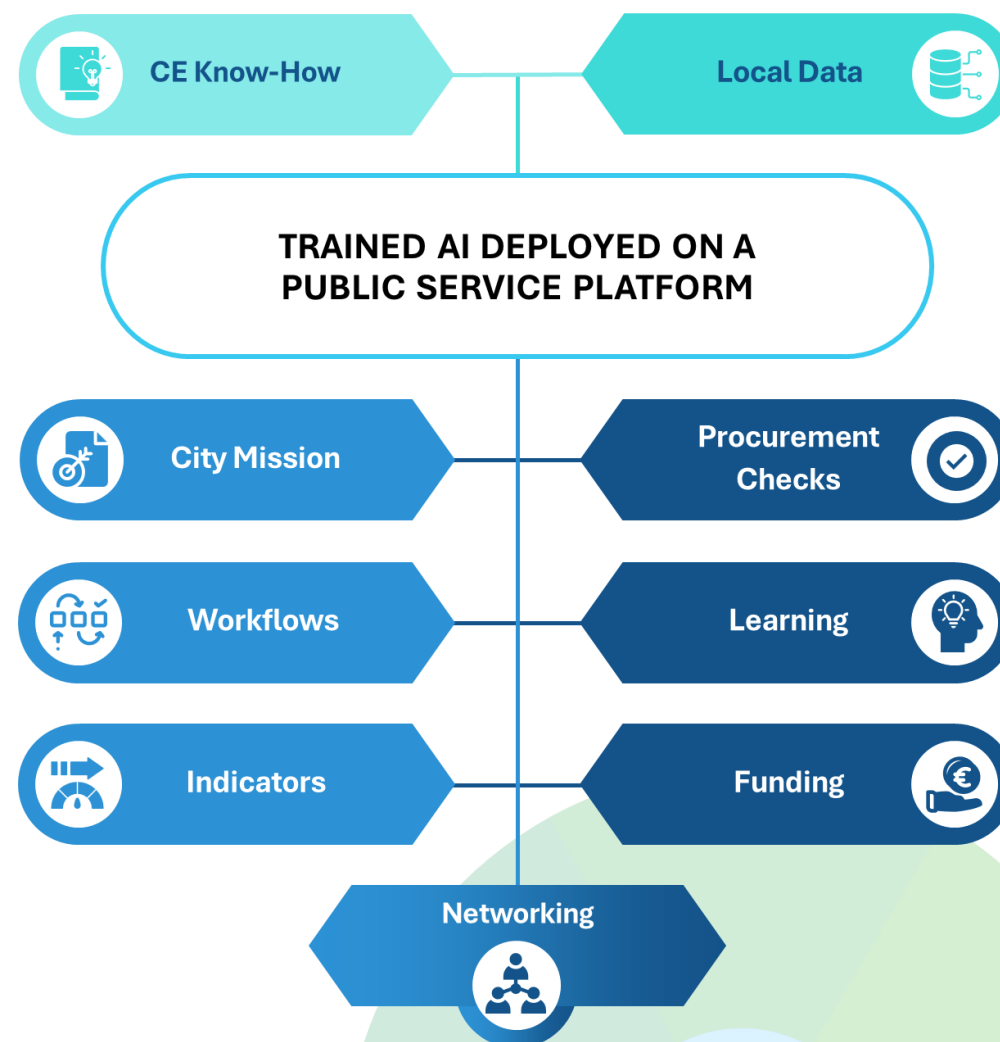
Innovation Procurement of AI and PSP

New solutions are needed to empower cities and municipal organisation to take the first circular step and then the next ...
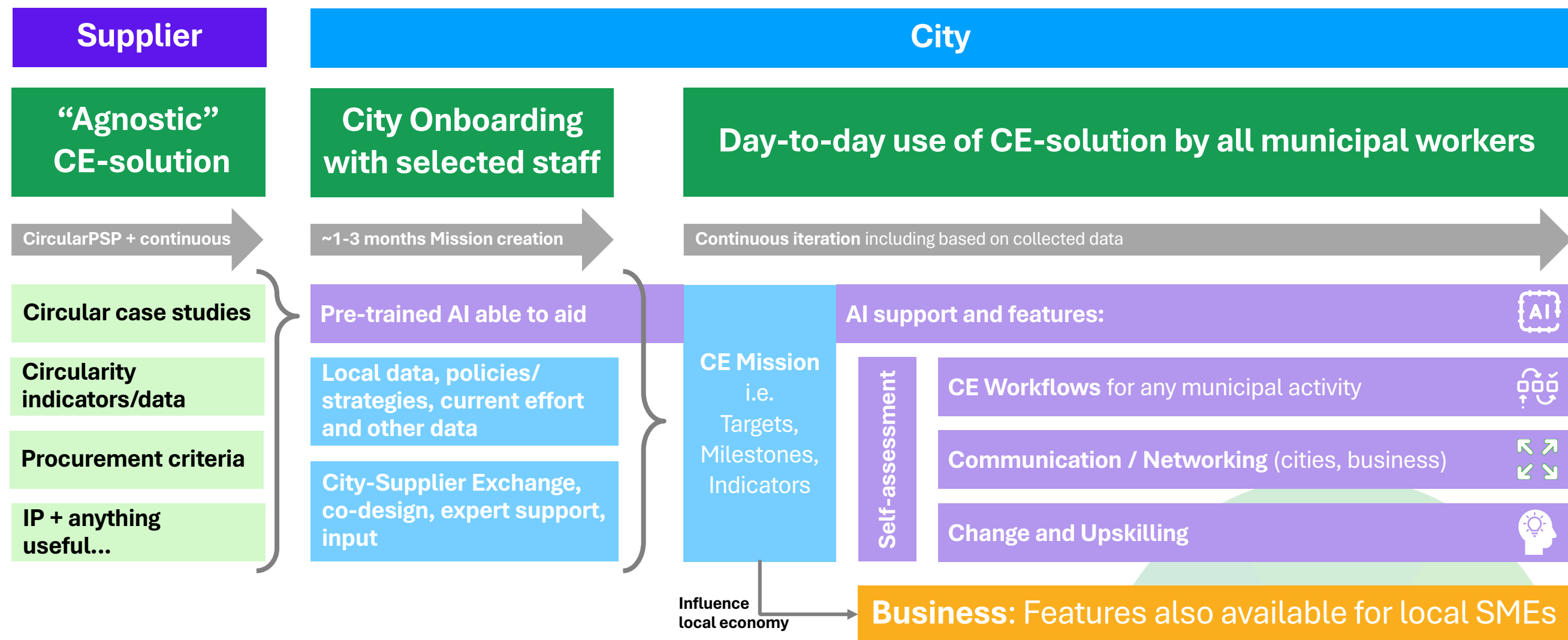
SOLUTION – VIDEO

THE SOLUTION STRUCTURE

Journey of solution implementation

A CE Mission is created during City Onboarding and afterwards implemented through e.g. Targets and Workflows

Supplier

City

"Agnostic" CE-solution

City Onboarding with selected staff

Day-to-day use of CE-solution by all municipal workers

CircularPSP + continuous

~1-3 months Mission creation

Continuous iteration including based on collected data

Circular case studies

Circularity indicators/data

Procurement criteria

IP + anything useful...

Pre-trained AI able to aid

Local data, policies/ strategies, current effort and other data

City-Supplier Exchange, co-design, expert support, input

CE Mission i.e. Targets, Milestones, Indicators

Self-assessment

AI support and features:

CE Workflows for any municipal activity

Communication / Networking (cities, business)

Change and Upskilling

Influence local economy

Business: Features also available for local SMEs

CE Taxonomy / Know-How – Open Access

The CE-solution is trained on our open access CE taxonomy, which collects sources and recommends core terminology
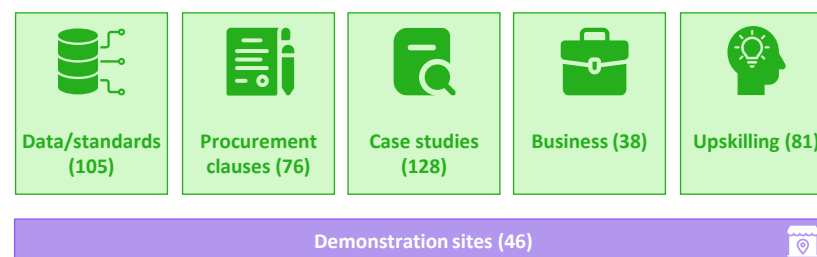
OPEN

▶ Iterative co-development process

▶ Open access

▶ Contributions welcome with many coming from competing Suppliers

White Paper

Analysis and consolidation of contributions

Publication of revised White Paper

Online edits and additions

Additional supplier contributions in offers

Wide invitation to Working Group Meeting

Working Documents

Revised Working Documents published including instructions

Presentation of White Paper, Open Discussion

Working Group Meetings

OUTPUT: DATA SOURCES

Extensive collection of data sources for AI training from websites, repositories etc.

▶ Includes 470+ sources

▶ Continuously maintained and extended

▶ Sources are categorised in:

Data/standards (105)	Procurement clauses (76)	Case studies (128)	Business (38)	Upskilling (81)

Demonstration sites (46)

OUTPUT: WHITE / POLICY PAPER

Prioritisation of external sources

▶ Reference to standardised terminology (e.g. ISO 59000, ISO 24000, CSRD)

▶ Mandatory functional term / specific taxonomies (e.g. TED Data CPV, NUTS)

▶ Additional sources in local context (e.g. German Waste hierarchy)

Outlines gaps in existing documentation and suggests harmonised and expanded terminology (where no standard exists)

▶ User and role definitions

▶ CE strategy definitions refined and ranked for R-level, based on UNEP circularity platform and ISO 59004

emp.onl/ce-taxo

emp.onl/ce-data

emp.onl/ce-paper

Testing and evaluation framework

Testing and evaluation is being conducted by three tester groups along two dimensions
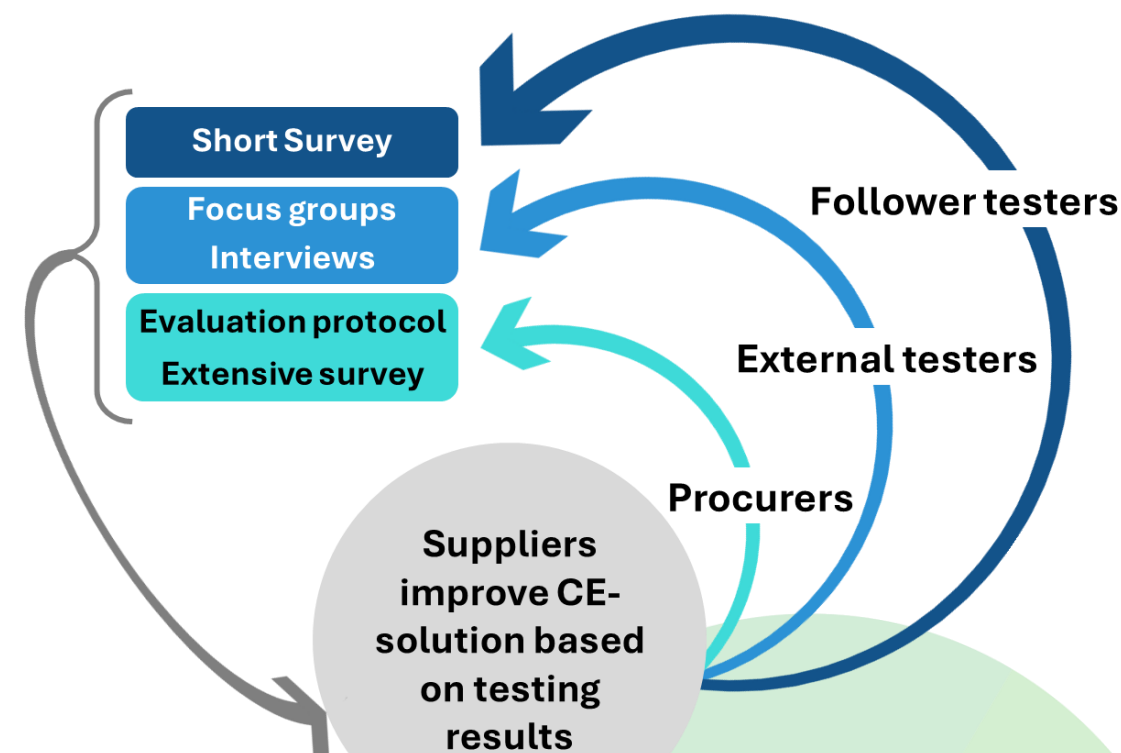
TESTING GROUPS

Three tester groups:

- Procurers
  - CircularPSP project testers
- External testers
  - Municipal departments and municipal-owned organisations
- Follower testers
  - Cities, ministries and other (governmental) organisations – from autumn onwards

Evaluation framework dimensions:

- User satisfaction
  - E.g. clarity, usability, accessibility
- Systemic impact
  - Ex ante: Viability, consistency and (local) relevance
  - Ex post: Pre-defined indicators like emission and waste reductions

TESTING AND EVALUATION LOOPS

CircularPSP Roadmap and attached efforts

CircularPSP competitive innovation procurement

Phase I
5 Suppliers

- CircularAI
- Metabolic
- SUPER CHARGE BEYONDLY
- VXT RESEARCH
- vcg.ai — VALUE CHAIN GENERATOR

Phase II
3 Suppliers

- CircularAI
- Metabolic
- vcg.ai — VALUE CHAIN GENERATOR

Phase III
2 Suppliers

?

First impacts implementing low-hanging fruit

Beyond

Cities and Followers choose preferred solution

Wide-scale uptake

Increasingly ambitious circular action

Solution design → Prototype testing → Real-life testing → Commercial deployment

---

Continuously: co-development with city staff, experts and suppliers

EU-wide uptake of CE

CircularPSP Follower Network

We have attracted 93 Followers, ranging from cities, ministries, projects to universities

HOW TO JOIN

WHAT TO EXPECT

Just enter your organisation's details on our [website](), we follow up

emp.onl/circular-join

Join our Follower Network

Leave your contact details!

Name *
First
Last

Email *

Organisation *

Website URL for Organisation *

Submit

Pre-Tender Phase
Event: December '23

with ICLEI **ICLEI** Local Governments for Sustainability

R&D - Phase I
Event: Sep '24

with CCRI Circular Cities & Regions Initiative

R&D - Phase II
Event: Jan '25

with ACR+ ACR+

Test - Phase III
July '25 + Jan '26

Final Event
Event: June '26

ANYTIME

- Common Challenge Brief can be downloaded from our website
- Ongoing CE Taxonomy working group on terminology and data sources (Join any time!)

- Presentation of CE-solution concepts and five winning Suppliers
- Insights into procurement clauses for AI

- **First prototypes of AI** from the remaining three Suppliers
- Update of **CE Taxonomy** & insights into AI procurement clauses

- Suppliers release pilot systems for **real-life testing**
- Get access and tutorial to test **two AIs and hosting platforms**

- Final event at which Suppliers **showcase the platform**
- CE Taxonomy Policy Paper (based on White Paper)

- **Share information** or events across the network via CircularPSP
- Organise **bilateral meeting** to discuss CE transition challenges

- EMAIL US: follower@circularpsp.eu; OR
- NO commitment. NO fees. Open to ANY organisation!

SCAN

Project

Follower

In autumn, we open public testing to Followers

BECOME A FOLLOWER!

- **EMAIL:** follower@circularpsp.eu
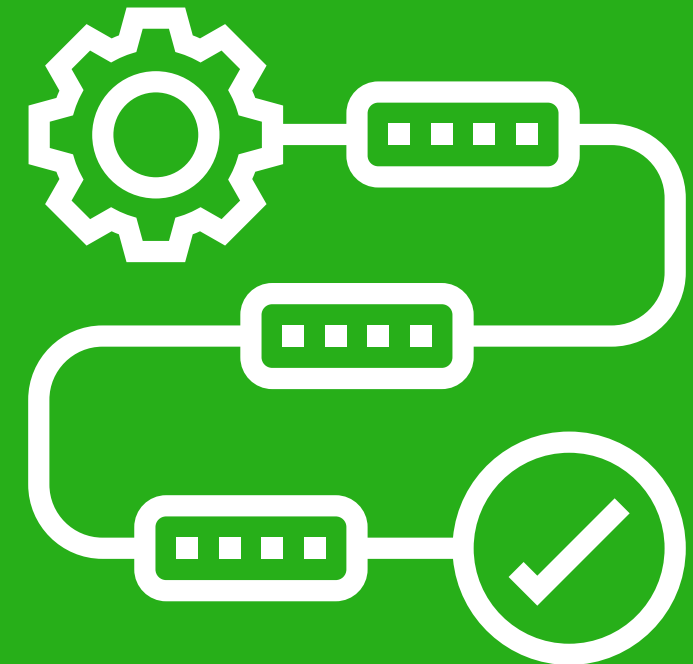- **NO commitment. NO fees. Open to public organisations!**

Helsinki

RISE

Sweden

Sandyford

London

Berlin

EEIP empirica

Slovenia

Guimarães

Istanbul
TAGES

PCP Process and core terms
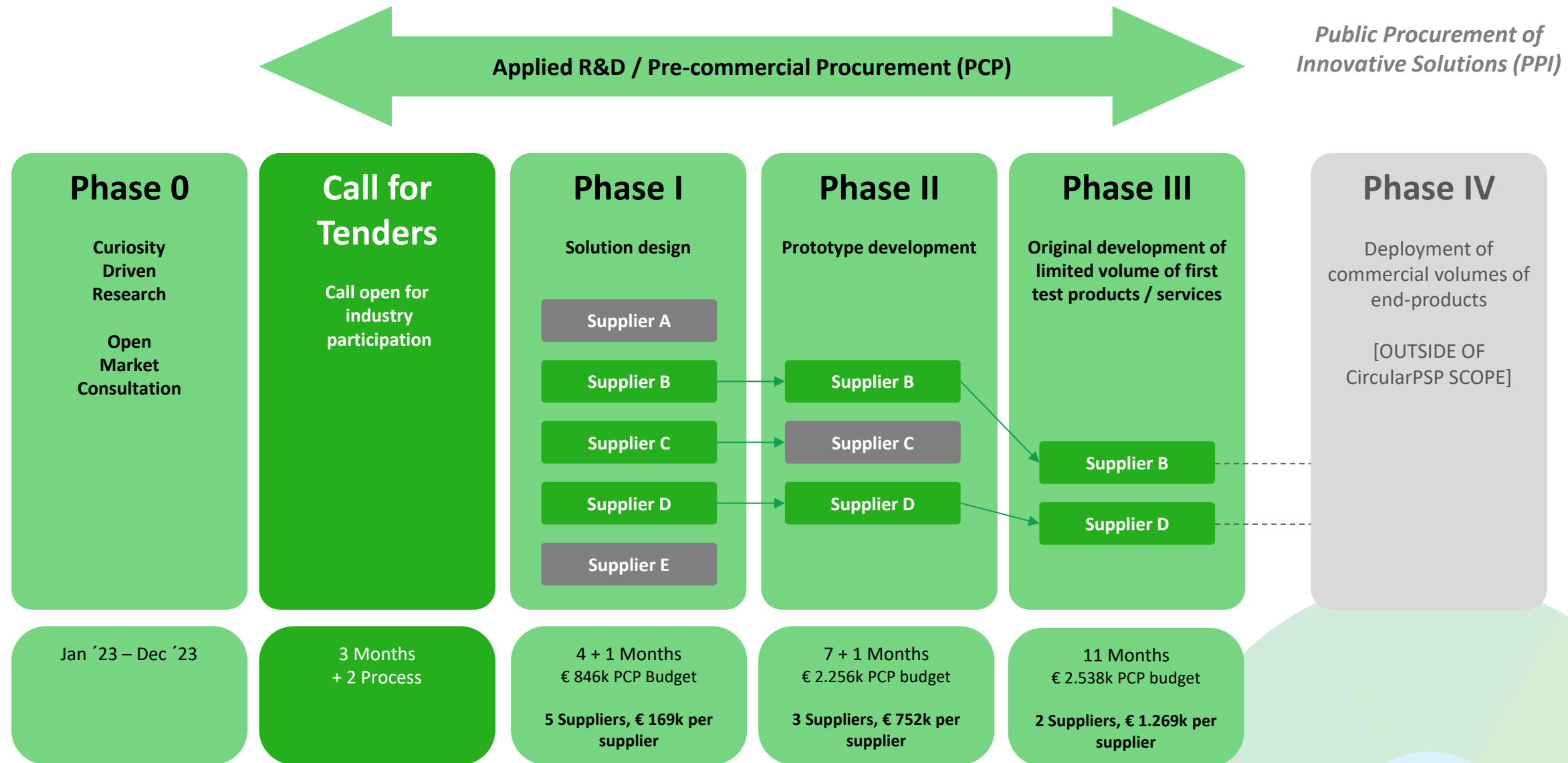
PCPs create incentives in domains where mature solutions are missing and reduce risks for both procurers and suppliers to innovate

PCP Structure

PCPs follow a multi-staged process to select the most suitable and promising innovation; R&D services are funded at all stages

Applied R&D / Pre-commercial Procurement (PCP)

Public Procurement of Innovative Solutions (PPI)

Phase 0	Call for Tenders	Phase I	Phase II	Phase III	Phase IV
Curiosity Driven Research	Call open for industry participation	Solution design	Prototype development	Original development of limited volume of first test products / services	Deployment of commercial volumes of end-products
Open Market Consultation		Supplier A			[OUTSIDE OF CircularPSP SCOPE]
		Supplier B →	Supplier B →	Supplier B	
		Supplier C →	Supplier C		
		Supplier D →	Supplier D →	Supplier D	
		Supplier E			
Jan ´23 – Dec ´23	3 Months + 2 Process	4 + 1 Months € 846k PCP Budget **5 Suppliers, € 169k per supplier**	7 + 1 Months € 2.256k PCP budget **3 Suppliers, € 752k per supplier**	11 Months € 2.538k PCP budget **2 Suppliers, € 1.269k per supplier**	

Funding principles

A PCP is a tender, not a grant

> **Financial offers are requested for each phase (up to the ceiling) – Note: no VAT applies**

> **The offer has to include all costs (including taxes if applicable)**

> **The payment is made based on the offered price …**

> **… after receipt of invoice and approval of work**

PCP Tendering | Core requirements for Suppliers

All core requirements are derived from the EU directive on competition

ELIGIBILITY CRITERIA

▶ Tender is restricted to entities **established in EU Member States and Horizon Europe Associated Countries***

- ▪ A minimum of 50% of the project R&D activities/budget must take place in the EU or Horizon Europe Associated Countries*****

▶ Tender is open to all **types of operators** (companies or other type of legal entities), regardless of their size or governance structure

▶ Both **single entity** or **joint tender offers** and subcontracting (consortia) are possible

▶ On-off award criteria can be considered as extension of selection criteria, if you are not able, you need a partner

▶ Participation in the open market consultation or this event is not a condition for submitting a tender

GENERAL REQUIREMENTS

Electronic Submission via e-mail

Submission deadline: 1 April 2024 – Istanbul Time(!)

Official language is English

IPR sharing, if suppliers do not exploit results

*List of HE Associated Countries: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/common/guidance/list-3rd-country-participation_horizon-euratom_en.pdf

Contract award | Project

For each of the three phases the same rules on contract, monitoring, payments and IPR apply

| One Lead Procurer | All contracts, invoices and payments go through the lead procurer who acts on behalf of all procurers |

| Contracting | **Framework agreement** with specific contracts in each phase |

| Monitoring | During each phase, contract implementation is **monitored periodically** and reviewed **against the expected outcomes** |

| Completion criteria | **Satisfactory completion** of milestones and deliverables: requirement for payment --- **Successful completion** permits entering next Phase |

| Intellectual property rights (IPRs) | Suppliers **keep ownership of the IPRs** attached to the results generated during the PCP implementation, but must exploit |

Framework Agreement (TD8) includes AI Clauses

We/you are one of the first users of AI Act compliant clauses

PUBLIC BUYERS COMMUNITY

▶ CircularPSP has joined two communities on the Public Buyers Platform (DG GROW):
  - Procurement of AI
  - Circular and Fair ICT Pact (CFIT)

CONTRACTUAL AI CLAUSES

▶ Drafted for public organisations wishing to procure an AI System

▶ Largely based on the AI Act*

▶ The Non-High Risk version applies to CircularPSP, incorporated in Framework Agreement

Procurement of AI Community

● PUBLIC BUYERS COMMUNITY

Model contractual clauses for the public procurement of Non-High-Risk AI ('MCC-AI-High-Light')

Version February 2025 – Procurement of Non-High-Risk AI

* Proposal for a Regulation of the European Parliament and of the Council laying down harmonised rules on artificial intelligence and amending certain union legislative acts, COM(2021)206 final.

Tender documents overview

We did our best to make it transparent and avoid duplication, however, it is a large contract and will be some effort

Phase	Description	Documents
Tender	Central documents on conditions, content and challenge	**TD1 Call for Tender (current document)** TD2 Challenge Brief (includes Annexes)
Proposal to be submitted	Administrative Forms to be filled by tenderers	TD3a Declaration of Honour - Exclusion Criteria TD3b Declaration of Honour – On/off Award Criteria TD4 Power of Attorney
	Application Templates to be filled by tenderers	TD5 Tender Application Template – Administrative TD6 Tender Application Template – Technical TD7 Tender Application Template – Financial
	Application Submission	TZ1 Tender submission zip-archive
Project	Contract Templates to be signed by successful contractors	TD8 PCP Framework Agreement TD9 PCP Specific contract for Phase I-II-III

Sufficient for interested parties.

It should be extensively streamlined but if you have questions or ideas, please let us know

Though TD1 contains key terms, there is more detail here

# The Challenge = tender: TD2

The Challenge is structured along the Award Criteria as is the tender/proposal you are going to write

Call for tender TD1

(Weighted) Award Criteria

1 Technical criterion

T1 – Overall approach to CE-solution

T2 – Information

...

Section 3.4 and 3.5 include:

➢ Maximum points
➢ Thresholds & weights
➢ Assessment scheme
➢ Formulas

Challenge brief TD2

Challenge Brief

1 Technical criterion

T1 – Overall approach to CE-solution

T2 – Information

...

Challenge Brief includes:

➢ Challenge description for each criterion
➢ Minimum requirements as Must or in bold (in bullet lists)
➢ Aspects relevant for assessment
➢ Annexes

Tender Application Template TD6

Tender Application Template

1 Technical criterion

T1 – Overall approach to CE-solution

T2 – Information

...

Tender Application Template includes:

➢ Pre-defined sections, sub-headings and some standardised tables
➢ Notes on content expected

The project: TD1 Section 2.1

Table 1 (of TD1) describes the progress on R&D documented in the deliverables depicted below
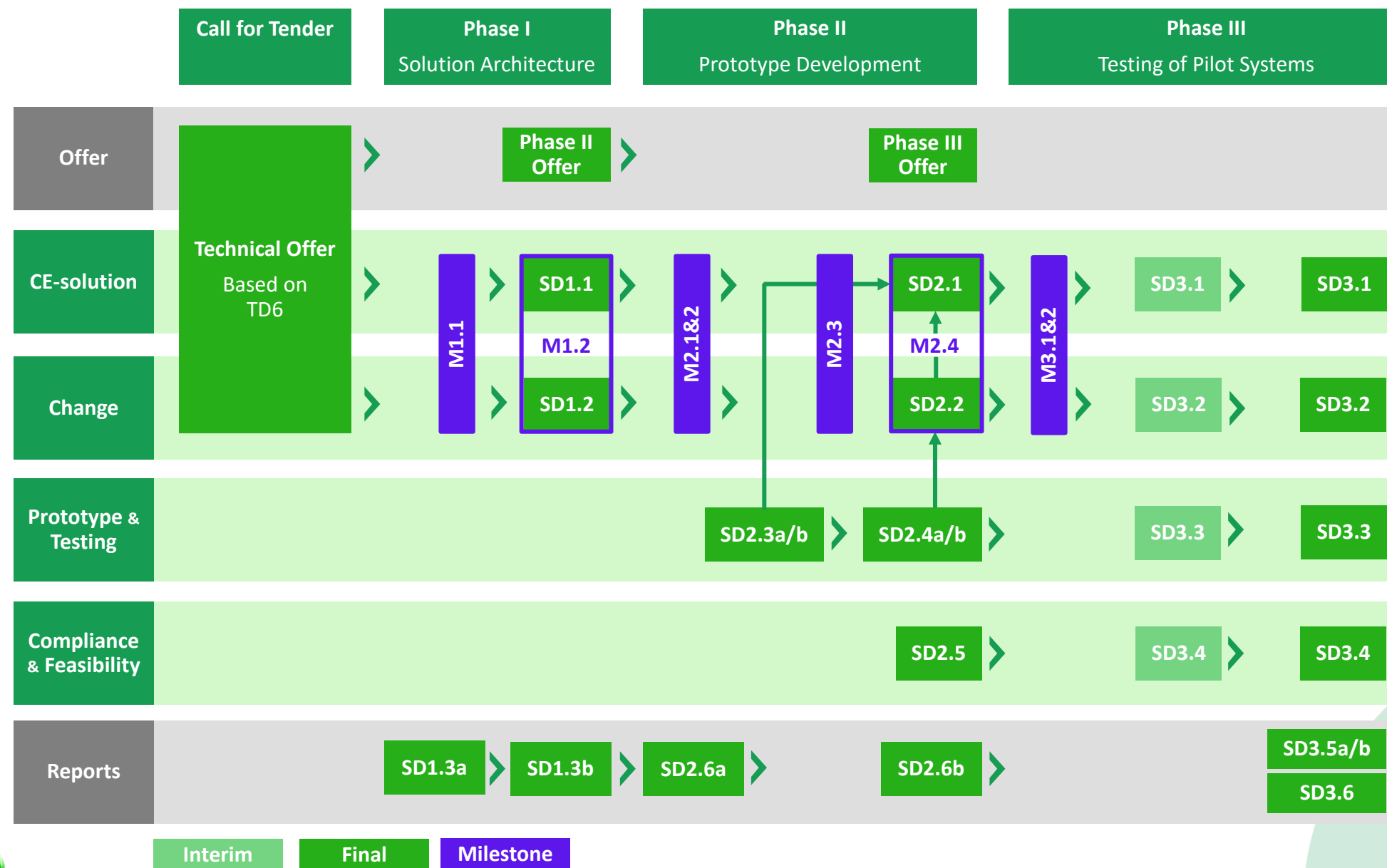
Graphic represents evolution of key documents to be delivered

TD1 Table 1 describes the progress on CE-solution (i.e. AI, Workflows, Platform, Change)

Background on PCP and PPI Instruments

Pre-Commercial Procurement vs. Traditional Public Procurement

Pre-Commercial-Procurements (PCP) create a new, competitive market for Research and Development (R&D) services and development

PRE-COMMERCIAL PROCUREMENT	TRADITIONAL PROCUREMENT
Joint Procurement (Buyers Group)	**Individual Procurement** (single department)
High degree of innovation / R&D effort required	**Low degree** of solutions' innovation
Prototype development: medium-/long-term	**Mature product/service:** immediate/short-term
Competitive development: several suppliers	**Single contract:** one supplier
New IPR – Risk/Benefit-sharing	Often based on existing **IPR**
Special legal framework in H2020/WTO	**National public procurement** rules apply
Development in multiple phases	**Development in one phase**
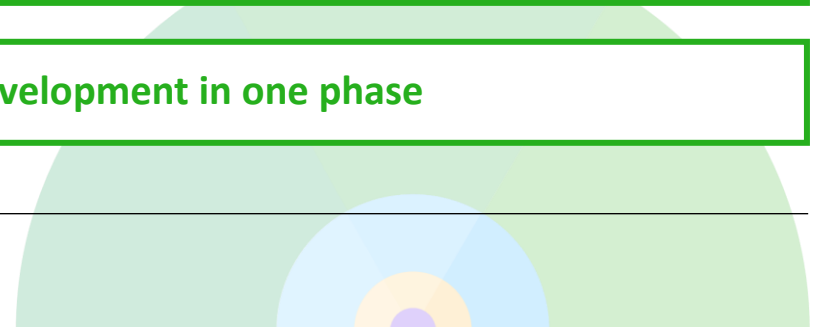
What is a Pre-Commercial Procurement (PCP)?

Core features

WHAT IS A PRE-COMMERCIAL PROCUREMENT (PCP)?		WHAT ARE THE BENEFITS FOR SUPPLIERS
Instrument for public procurement of R&D services		**Create opportunities for companies** to gain leadership in new markets
Public procurers act as demanding customers		**Provides a large enough demand** to incentivise industry to invest in wide commercialisation
Tool for innovation (EC sees the need but no offer on market)		**Development in stages** and testing of innovative ideas under **real world conditions**
Risk-benefit sharing under market conditions		Suppliers retain **IPR ownership**, procurers gains access under limited conditions
Interact closely with eight procurers operating 21,000 buildings		**Visibility on EU-Level**
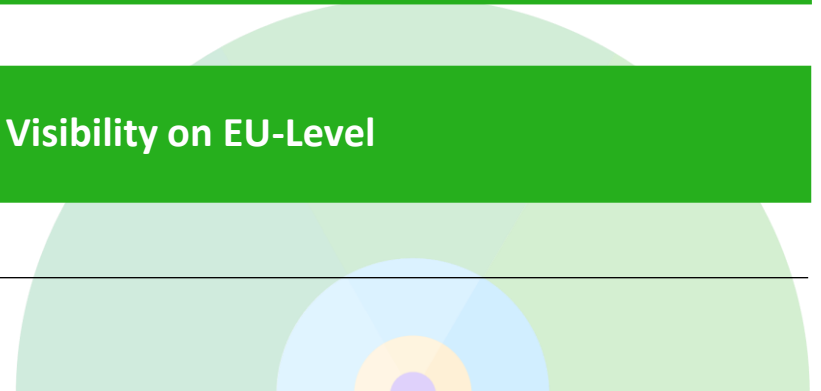
Further information on PCPs

PCP references (selection)

Modalities and Horizon Annexes	https://ec.europa.eu/digital-single-market/en/node/69634
Official EC PCP FAQ	https://ec.europa.eu/newsroom/dae/document.cfm?doc_id=16995
PCP Project List	https://ec.europa.eu/digital-single-market/en/eu-funded-projects-implementing-pre-commercial-procurements-pcp-or-public-procurement-innovative
Legal Basis for PCPs	**Communication** https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52007DC0799
	Directive 2014/24 https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014L0024

Georg Vogt

circularpsp.eu

CircularPSP

emp.onl/ce-news

emp.onl/ce-vid

Join Follower Network!   emp.onl/ce-join