



Boosting Circular Systemic Solutions through
Virtual Regional Circular Economy Space

Social Innovation for and acceptance of circular systemic solutions

E U G r e e n W e e k 2 0 2 5 (O n l i n e) | 2 3 J u n e 2 0 2 5

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CSSBoost At a Glance

Boosting Circular Systemic Solutions through Virtual Regional Circular Economy Spaces

Topic CL6-2023-CircBio-02-1 – Circular Cities and Regions Initiative (CCRI)'s circular systemic solutions

Destination Circular economy and bioeconomy sectors

Coordinated by Technical University of Crete, Assoc. Prof. George Arampatzis



21 Partners



8 Countries



5 Pilot Cases



11,876,438€
9,190,319€ EU



3.5 years

*Started
June 2024*

Project Consortium



8 Universities & Research Centres



UNIVERSITÀ
POLITECNICA
DELLE MARCHE

IMPERIAL



6



3



6



2



1



1



1



1

6 Large Companies & SMEs



7 Regions, Networks & pilot partners



The Circular Shift: Powering EU's Regenerative Transformation



...a Europe not defined by **limits**, but by endless possibilities...

...a continent where '**waste**' becomes '**resource**', fueling innovation, resilient **economies** and **communities**...

...moving beyond theory, this future is generated through **Circular Systemic Solutions (CSS)**...

...and initiatives like the **Circular Cities and Regions Initiative (CCRI)** are catalysts in this journey

The CSSBoost Vision

*Boosting **Circular Systemic Solutions** through
Virtual Regional Circular Economy Spaces*



The Challenge

Need for **sustainable resource use**

The Barriers

Technological, economic, social, governance

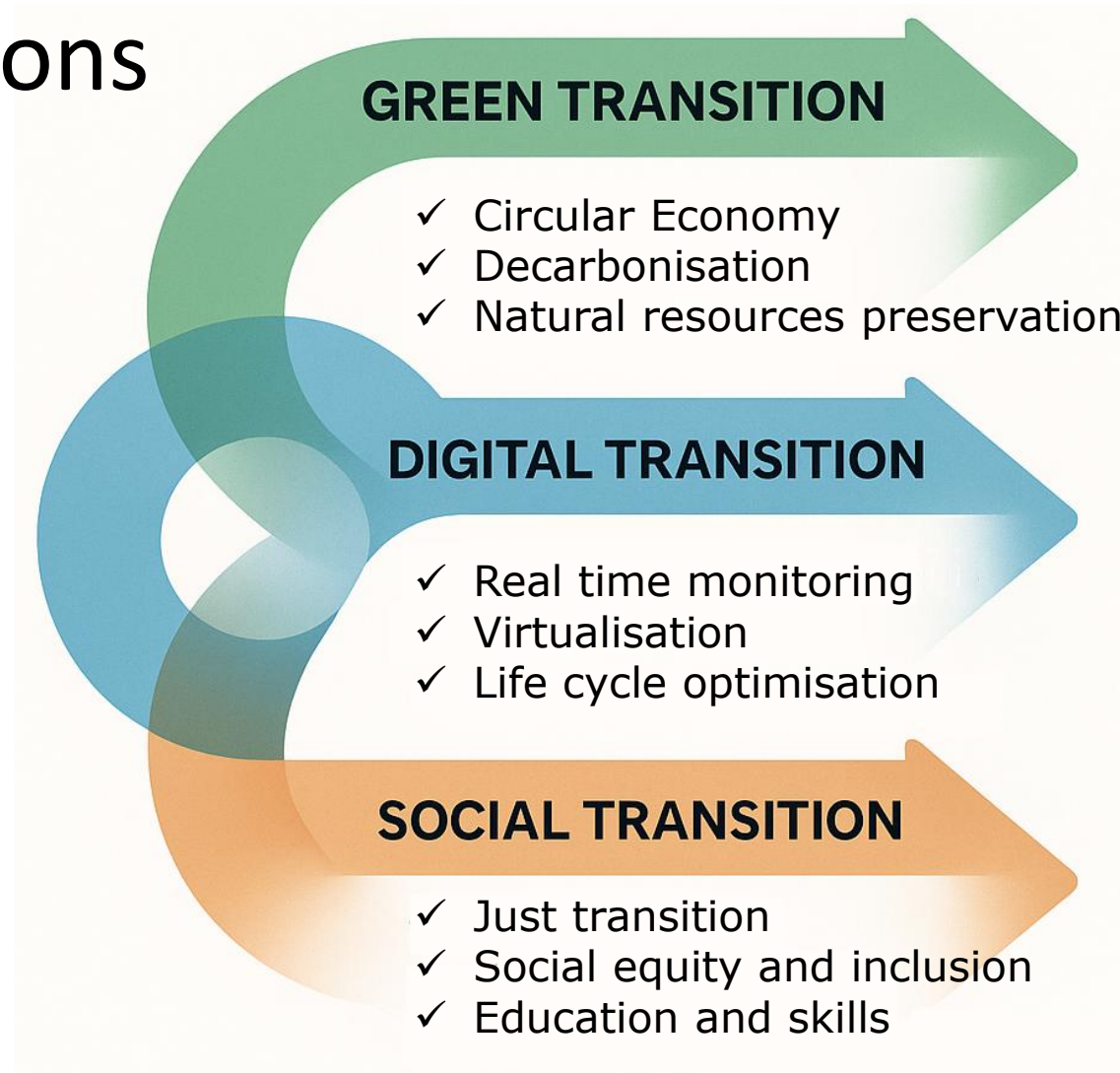
The goal

Boost the **transition** of **regions** to **Circular Economy** and Bioeconomy

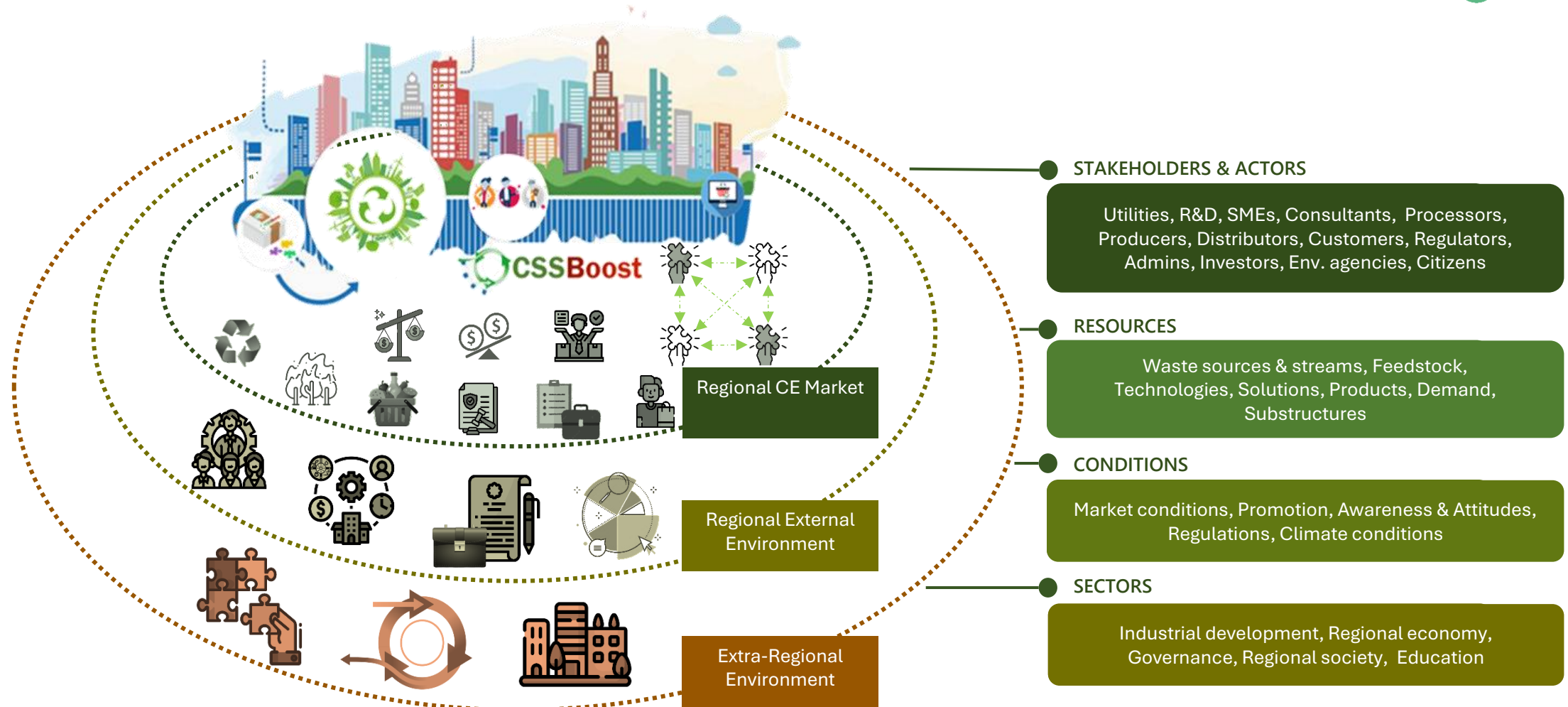
The project

Maximise adoption & impact of **CSSs**, overcoming barriers & risks, by applying it within an **enabling integrated environment**

Triple Transition of Cities and Regions



CE/CSS Ecosystem and Market

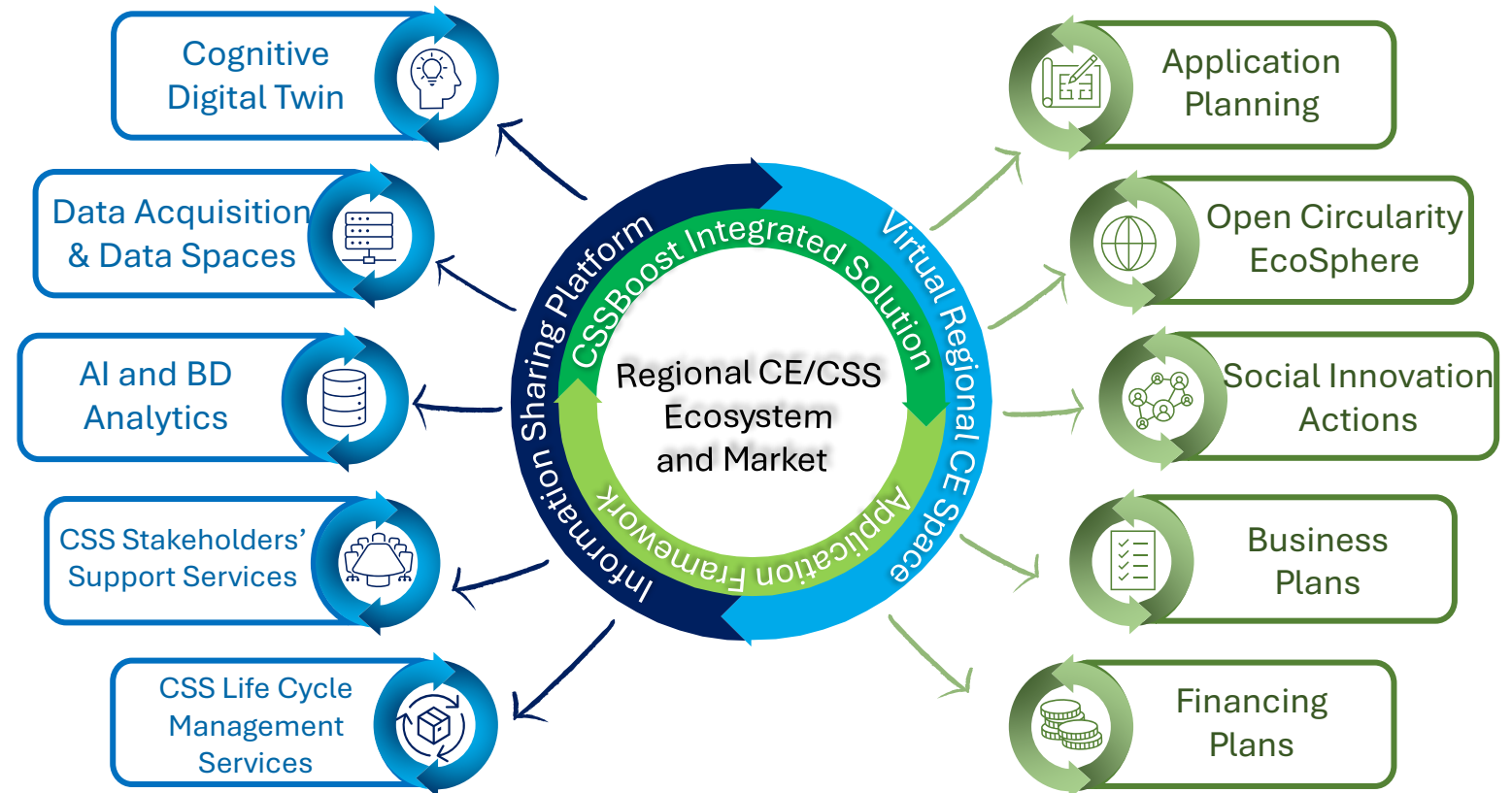


The Enabling Integrated Environment

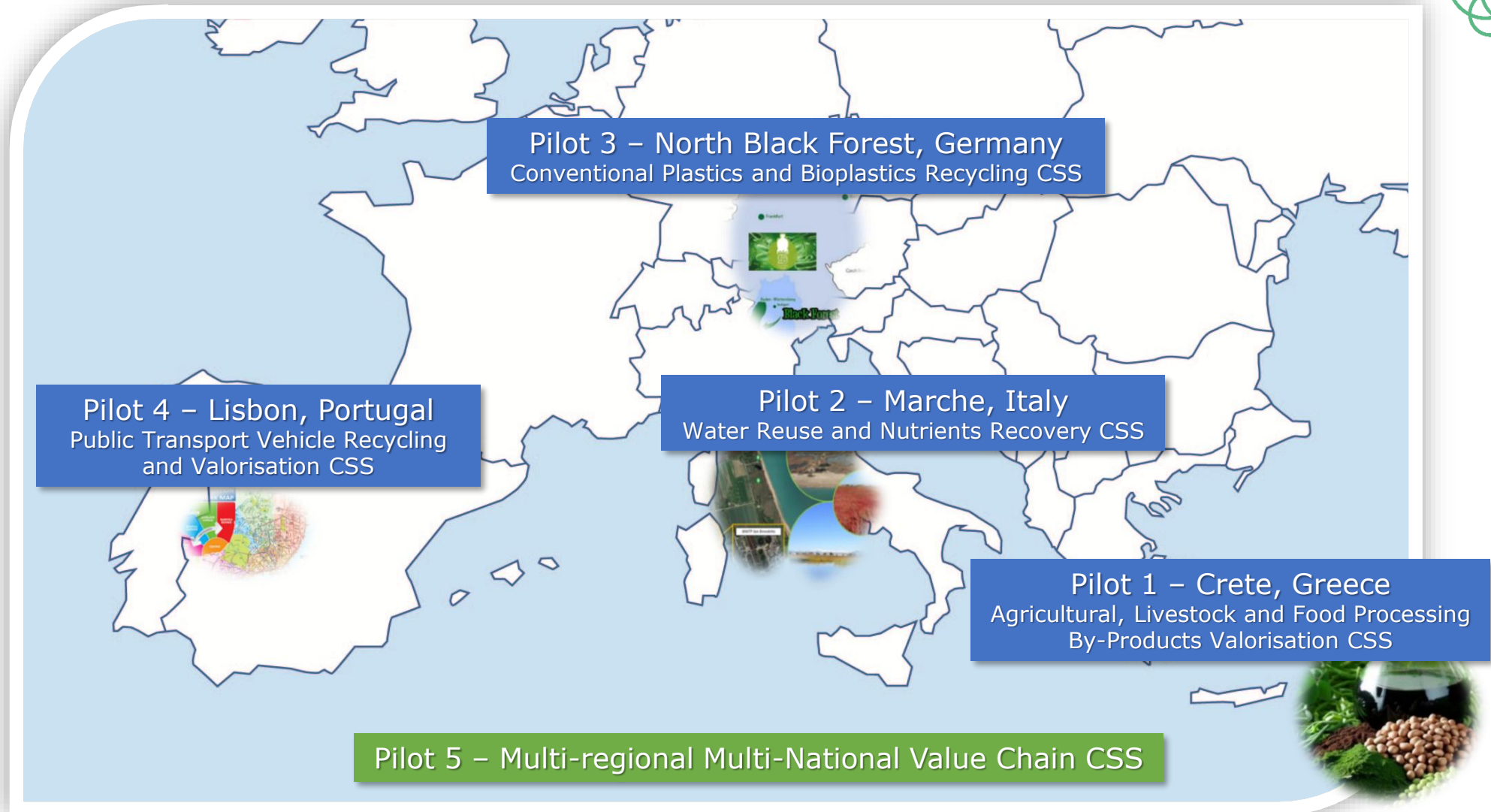
CSS Booster

- Open (physical) space of city, regional or multi-regional scope based on an ecosystem approach
 - CE Market
 - Internal Environment
 - External Environment
- Virtualisation
 - Dynamic monitoring
 - Digital Twinning
- Information Sharing Platform
 - Visualising
 - Understanding
 - Supporting

Cyber-Physical System



Pilot Areas



Pilot #1 – Region of Crete, GR



Agricultural, Livestock and Food Processing By-Products Valorisation

3 Value Chains

- ❖ Fertiliser and materials for **soil improvement** produced using **biomass** from **livestock** production
- ❖ New types of **plant bio-stimulants**
- ❖ More **nutritious** (low glycemic index) versions of **bread** and other bakery products



4 Partners

MACC
CRETE, HMU,
TUC

Pilot #2 – Region of Marche, IT

Water Reuse and Nutrients Recovery CSS

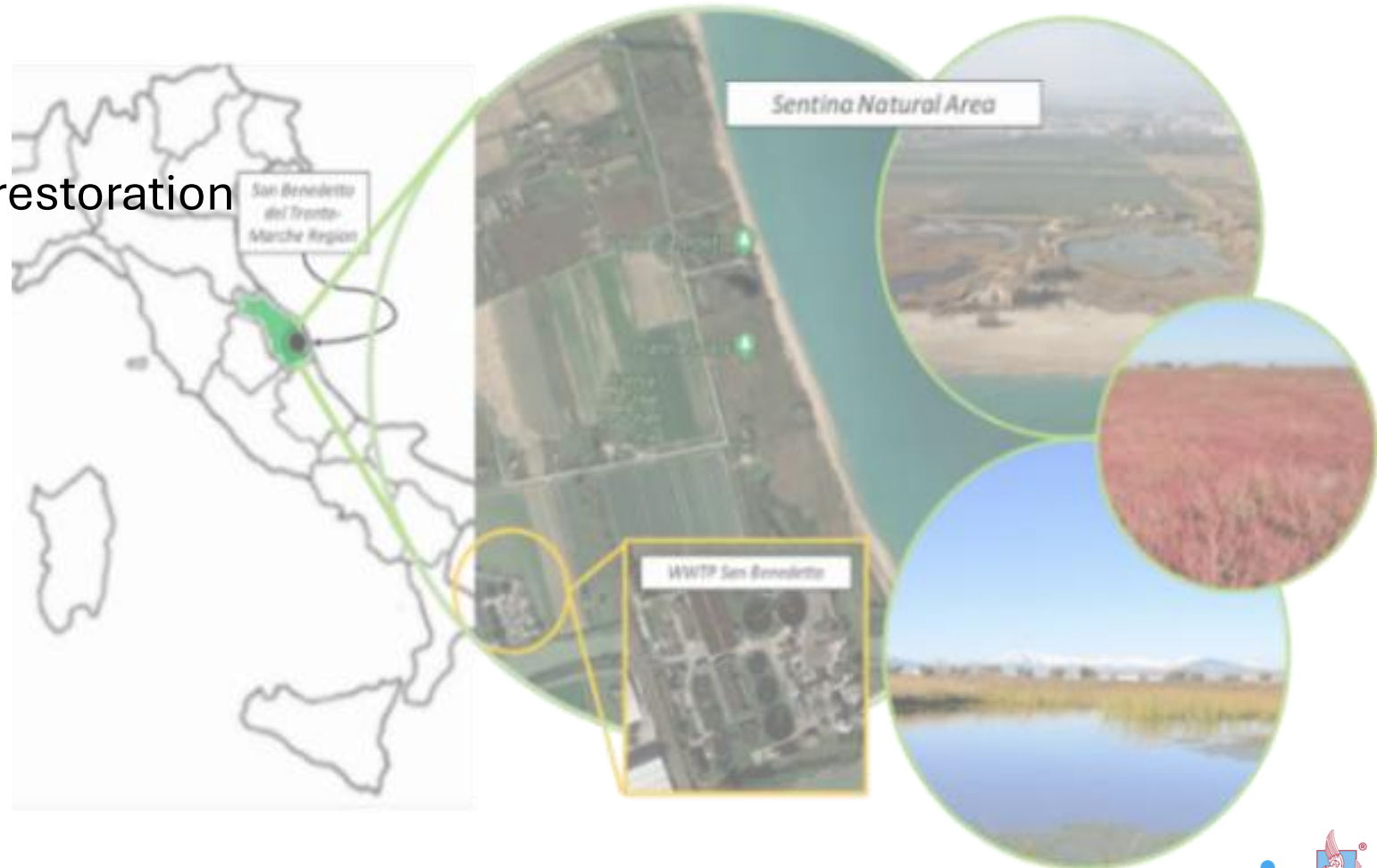


2 Value Chains

- ❖ Water for irrigation and nature restoration
- ❖ Nutrients for agriculture

3 Partners

UNIVPM,
UVIC, CIIP



Pilot #3 – North Black Forest, DE

Conventional Plastics & Bioplastics Recycling CSS



2 Value Chains

- ❖ Supporting a plastics-oriented value chain
- ❖ Establishing a digital product passport for eco-friendly products

6 Partners

CAS, MAG,
TZHORB,
WFG,
BWCOM,
KRUM



Pilot #4 – Region of Lisbon, PT

Public Transport Vehicle Recycling and Valorisation CSS



2 Value Chains

- ❖ Use of recyclable materials from public transport vehicles
- ❖ Material recovery at vehicle end-of-life disposal

3 Partners

PARTICLE,
CARRIS,
MOTON



Pilot #5 – Interregional, EU

Interregional Multi-National Value Chain CSS

1-4 In Concert Value Chains

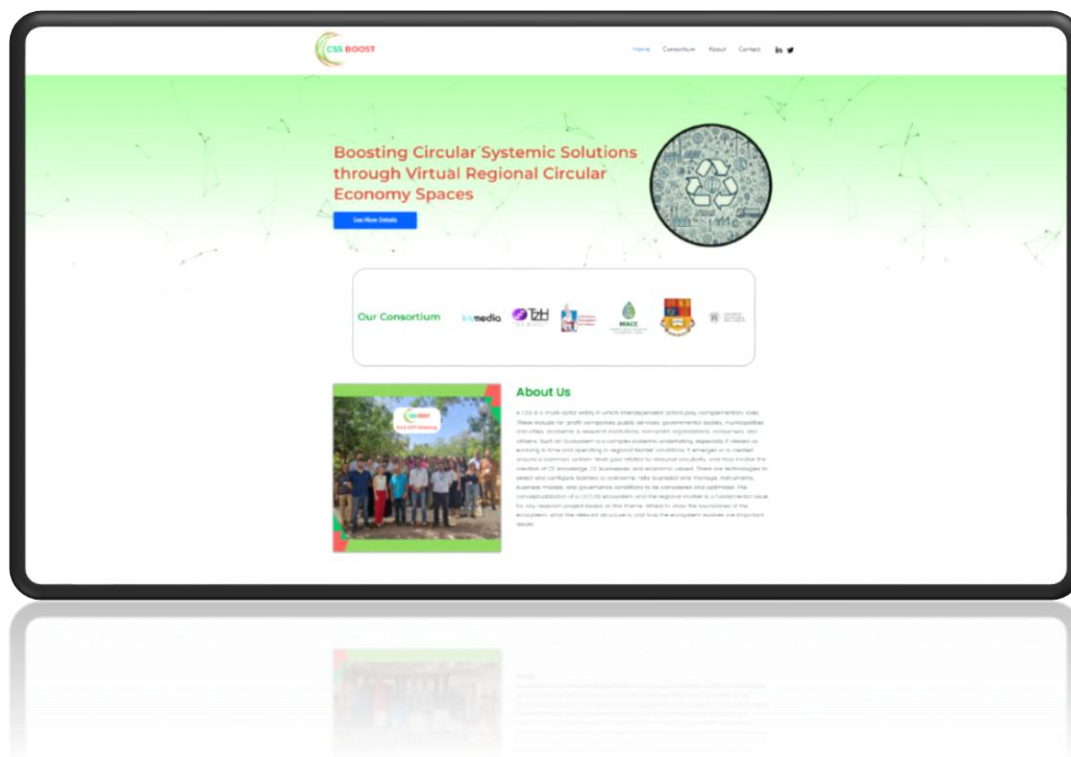
- ❖ Vehicles and batteries,
- ❖ Agriculture/agro-food/livestock,
- ❖ Wastewater, and,
- ❖ Plastics/bioplastics

5 Partners

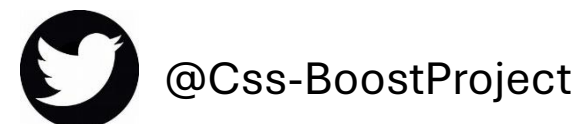
UVIC + 4 Pilot
Leaders: GR,
IT, DE, PT



Website and Social Media Channels



Visit Our Project Website : cssboost-project.eu



Thank You!

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