

# **SMACITE**

Boosting the technical and non-technical skills and competences of smart cities technicians and engineers

# WP3: Learning resources for the upskilling/reskilling of Smart Cities technicians and engineers

D3.4 Learning resources for green skills development

#### **Final Version**



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#### **DELIVERABLE FACTSHEET**

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#### **DELIVERABLE HISTORY**

Version	Name	Partner	Date	Comments
0.1	William Tullio, Francesco Bruno, Stefano Antona, Annalisa Rizzo	APRO	13/01/2025	Draft for review
0.2	Jokin Goioaga Inés López	TXORIERRI UAH	22/01/2025	Main structure and main content of the introductory parts
1.0	Francesco Bruno, Annalisa Rizzo	APRO	28/01/2025	Final edition

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#### **PROJECT SUMMARY**

The project aims to address the skills gap of Smart Cities technicians and engineers, by designing and testing a vocational education and training program that is based on a novel and multi-disciplinary curriculum combining digital skills on Smart Cities enabling technologies, with soft, entrepreneurship and green skills.

The expected project outputs are:

- A Smart Cities competences map and ESCO-compliant Smart Cities job profiles.
- A Smart Cities curriculum combining both technical and non-technical skills and competences and promoting personalized learning pathways.
- Learning resources for Smart Cities enabling technologies and for building the soft, entrepreneurship and green skills of Smart Cities technicians and Engineers.
- A diagnostic tool to identify personalized learning pathways.
- A MOOC for Smart Cities enabling technologies.
- Virtual Worlds for building the soft, green and entrepreneurship skills of Smart Cities technicians and engineers.

The main project beneficiaries are Smart Cities technician and engineers either from the public sector (i.e. municipalities) or enterprises providing Smart Cities solutions, as well as HEI and VET students interested in Smart Cities.

The curriculum will be tested through 4 national pilots in Greece, Bulgaria, Spain and Italy with at least 160 trainees. The certification of the skills and competences will follow a two-fold approach: (a) using micro-credentials to recognize the knowledge and skills gained through the successful completion of each online training module at the MOOC and Virtual Worlds and (b) designing the "Smart Cities Specialization Certification" that will be awarded to those passing online certifications exams with e-proctoring after the completion of the training modules.

The project will create an ecosystem for the co-design and co-development of an innovative curriculum and technology-enhanced learning tools for the upskilling/reskilling of Smart Cities technicians and engineers.





### **1** Introduction

This deliverable is a set of Open Educational Resources in the format of texts, short videos, and presentations for building the green skills of Smart Cities technicians and engineers.

#### 1.1 Structure of the deliverable

The deliverable is divided into 2 main sections.

- Section 1 introduces the deliverable. More specifically, Section 1.1 describes the structure of the deliverable, Section 1.2 outlines the target audience and finally Section 1.3 outlines the dependencies with other WPs and deliverables and finally.
- **Section 2** compiles the set of the developed Open Educational Resources.

#### **1.2 Target audience**

The target audience of the deliverable includes the following stakeholders:

- The SMACITE granting authority.
- The SMACITE participating organizations (the project coordinator and the project
- partners).
- The SMACITE project stakeholders.
- Educators and trainers in the field of green skills.
- Learners (i.e Smart Cities Engineers and Technicians) interested in building their green skills.

#### **1.3 Dependencies with other WPs and deliverables**

The deliverable D4.3 has direct connections with the following WPs and deliverables:

- **D2.2 The SMACITE curriculum for Smart Cities** of WP2: this deliverable describes the SMACITE curriculum.
- **D4.2 MOOC for Smart Cities** of WP4: this deliverable describes the SMACITE MOOC.





#### **2** Open Educational Resources for green skills

The complete set of the Open Educational Resources developed for green skills development is available at this **link**.

It includes documents for each module of the course that are complemented by presentations and videos. Moreover, a project has been developed.

More specifically, it includes the following resources:

- Documents
  - Module 1\_Circular Economy
  - Module 2\_Energy Conservation
  - Module 3\_Waste management
- Presentations
  - Module 1\_Application of Life Cycle Assessment in Smart City
  - Module 2\_Energy Management planning in smart cities
  - o Module 3\_Brief introduction to EU legislation on waste management
  - Module 3\_Sustainable waste management
  - Module 3\_The Value of Waste
- Videos
  - Module 1\_Application of Life Cycle Assessment in Smart City
  - Module 2\_Energy Management planning in smart cities
  - Module 3\_Brief introduction to EU legislation on waste management
  - Module 3\_Sustainable waste management
  - Module 3\_The Value of Waste
- Project
  - Green skills final project



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