

ALBA IULIA **SMART CITY**

the city where the future was born

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alba iulia **smart city**



What is #AlbaIuliaSmartCity?

- first smart city pilot project in Romania (launched in 2016);
- unique in RO, implemented by Alba Iulia Municipality in partnership with the Ministry of Communications and Information Society and private companies;
- focused on community: to convert modern technologies in order to improve the quality of life;
- focused on business environment: transforming the city to become more friendly with business environment | start-up launchpad;
- purpose: increasing economic efficiency, costs reduction, improving quality of life - a more livable city.

FUNDAMENTALS



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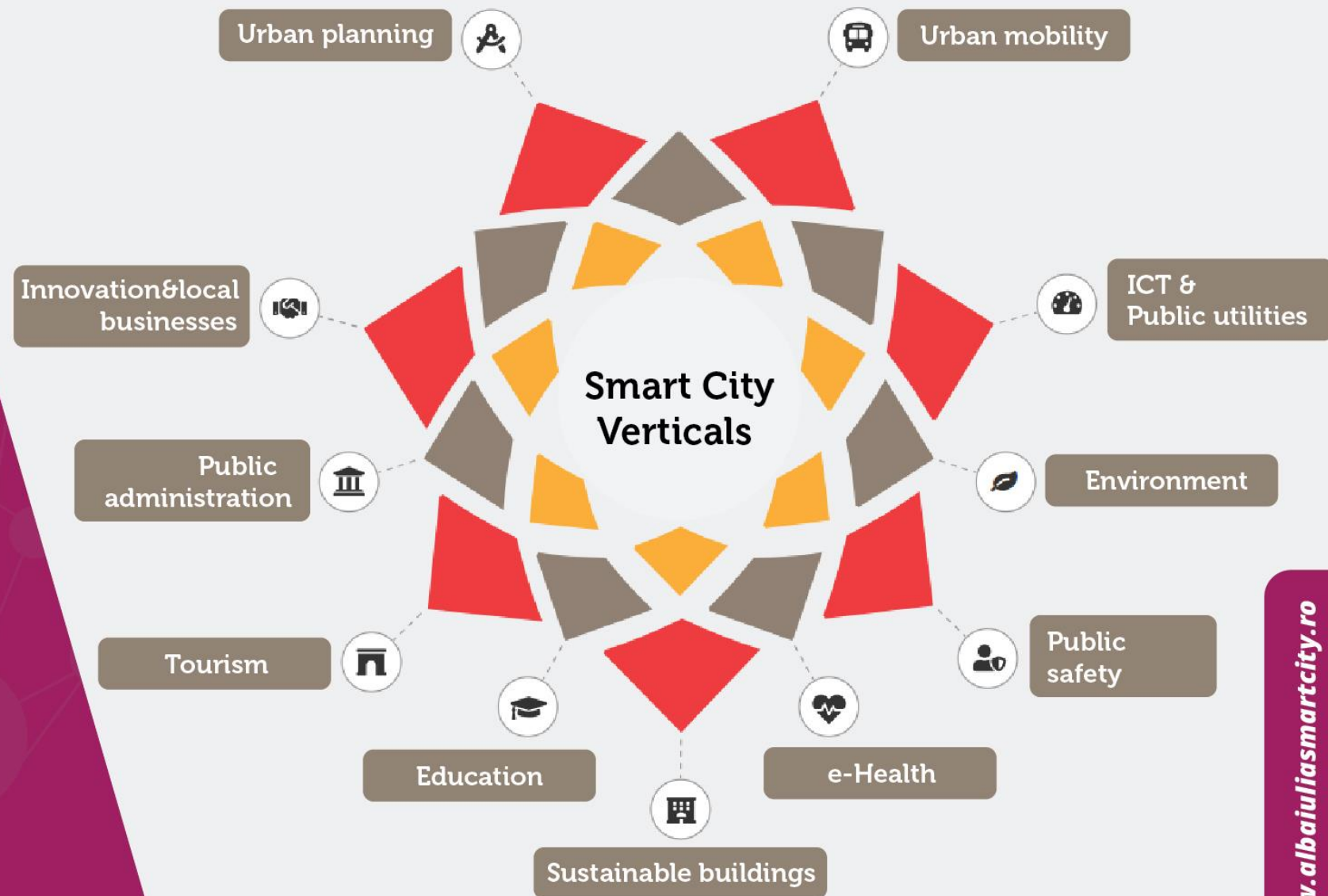
100 smart solutions

45 private companies involved

50% functional projects

e-Governance & digitalisation of public services

*Ready to launch first **open data** platform in Romania*





Many thanks to our partners!

Connectivity&Mobility

- **Wi-Fi Hotspots**
- **LoRaWan NetWork**
- **Inductive sensors**
- **Smart metering**
- **City Analytics Platform**
- **Business Internet Security for Wi-Fi**
- **Intelligent Public lighting + LoRaWAN #IoT (dimming cappacity)**
- **PONY Car sharing**
- **City Parking app**
- **Parking Plus app**
- **Traffic&Pollution sensors**
- **Smart bicycles**
- **Video traffic monitoring**

SMART PROJECTS



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Administration

- **Smart city business case by Siemens**
- **Public procurement solution**
- **Online complaints app**
- **Budget analysis solution**
- **Budget incooms app**
- **Public barometer app**
- **Online wedding programming web app**
- **Apartments administration solution**
- **Digital signature**

SMART PROJECTS



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e-Government

- **Communicating with citizens** through beacons and e-Albalulia app to send messages for general community interests
- **Smart surveys** in 15 busses
- **Open data platform**
- **3 apps for direct complaints**
- **Public barometer app**
- **Pedestrian Traffic monitoring**
- **Parking solutions**
- **Digital signature**

SMART PROJECTS



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Education

- **Hyper Webinar**
- **HyperEdu, HyperTraining, Course Authoring Tool & HyperBook**
- **Edu for all**
- **Digital classroom (2 schools)**
- **Digital catalog (18 schools)**
- **Free access to secured online libraries**
- **Free secured Wi-Fi in two main colleges in Alba Iulia**
- **Moodle platform**

SMART PROJECTS



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e-Health

- **Hyper Med - medical collaborative platform**
- **Blood donation platform + app**
- **Pediatric Call Center**
- **Posture and mobility sensors for students (testing all the students is the fifth grade in Alba Iulia)**
- **Cardiac Age Testing**
- **Pulmonary Age Testing**
- **Educational Health Campaigns**

SMART PROJECTS



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Business

- **Hyper Events - business collaborative platform**
- **In cloud business administration**
- **Complete accounting platform, clients management etc.**
- **Suport&logistics for start-ups**
- **Hackathon (2017)**
- **Microsoft for Business**

SMART PROJECTS



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Energy & Environment

- **Charging station with solar panel**
- **Energy management logistics**
- **4 Public lighting solutions (1 with LoRaWAN)**
- **Mobile solution on 15 busses to measure air quality in Alba Iulia**
- **Thermodynamic solar system for water heating (testing the system in one nursery in Alba Iulia)**
- **RADON gas monitoring in 3 buildings**
- **Smart garden system**



Senzori:



Temperatură



Umiditate



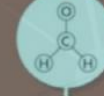
Presiune



Compuși organici volatili



Concentrația de CO2



Formaldehidă



Pulberi în suspensie



SMART PROJECTS



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Tourism

- **Wi-fi Hotspots**
- **Virtual guide for a museum in Alba Iulia**
(having the face of a roman emperor)
- **Virtual guide in Alba Iulia - e-AlbaIulia app** (Bluetooth+Beacons)
- **2 Guided tours and treasure hunt apps** (discovering authentic places and stories in the city)
- **City Analytics platform**
(to monitor incoming visitors)
- **Virtual tour in #AlbaCarolinaCitadel**
- **3D scanning of the city**
- **QR codes on 64 monuments**
- **Handwritten digital to physical printed Postal Cards app**



SMART PROJECTS



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EU funds

Post Pilot Mobility

20 km

road infrastructure
length

54

bus station

26 km

bicycle lanes

36 km

pedestrian areas

29 km

dedicated bus lanes

540

smart bikes (sharing
stations)

31

charging stations

900

trees&vegetation

13

electric busses

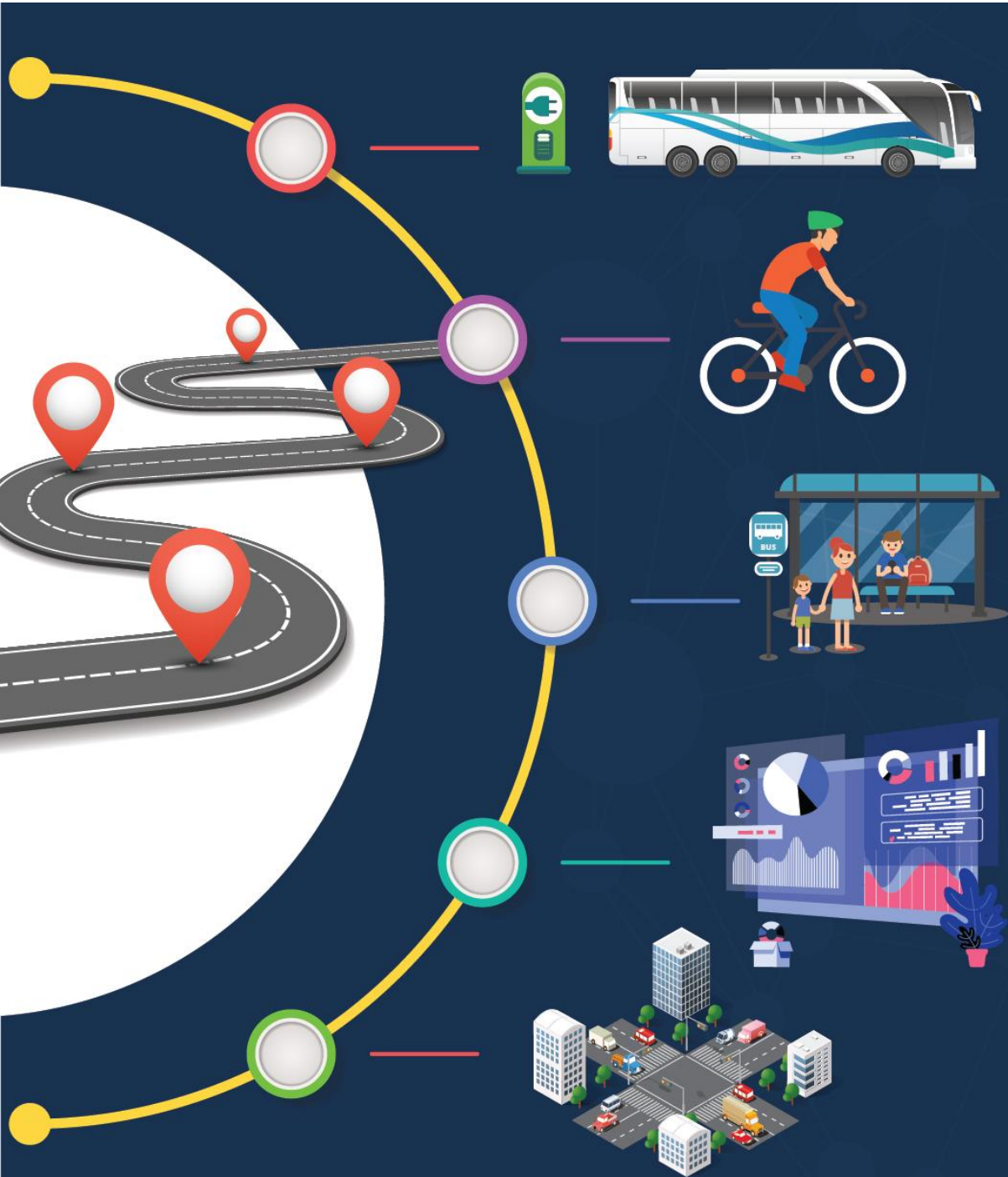
4,5% CO₂

emissions reduction

42

million Euro

mobility projects



Post Pilot Mobility

13

*electric
busses*



4

*quick
charging
stations*

+

13

*slow
charging
stations*

+

5

*normal&quick
charging
stations*



9,3 mil. €

4114

LEDs

2753

new poles

232

photovoltaic panels

132 km

smart lighting system

50%

consumption decrease

50%

CO₂ decrease

11

million Euro



Smart public lighting

200 streets

**In cloud
monitoring
sensors**

**Smart pedestrian
crossings**
presence sensors

EU funds

Post Pilot Mobility

Intelligent administration

● ***Alba Iulia - Digital public administration***

- *electronic platform for digital services*
- *smartphone app*
- *digital workflows and processes within the town hall*
- *electronic identity for citizens*
- *electronic permits*
- *direct communication with the citizens from the platform*

● ***Alba Iulia Mun. - Intelligent administration***

- *SUMP development for 2021-2030*
- *Smart City strategy elaboration*
- *Participatory budgeting platform (online and offline)*
- *Public barometer*



Other smart projects

- **Children`s Museum**
- **Nursery - new smart building in Ampoi II neighborhood**
- **Remotely Building System Management**
- **Energy efficiency - rehabilitation of residential buildings**
- **Intelligent energetic system within Elderly Day Center**
- **Energy efficiency system within "Liceul Sportiv"**
- **Thermal rehabilitation - "Alexandru Domșa" High School**
- **400 beacons all over the city to communicate with citizens**
- **Digital catalog in 2 main colleges in Alba Iulia**
- **5G Victory project**
- **Smart living hub - Digital literacy & Learn to Code, Google grant within Digital Nation Program**





THERMO



+CITYXCHANGE



LOCARBO
Interreg Europe



Social Green
Interreg Europe



EURE
Interreg Europe

Thank you!

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