

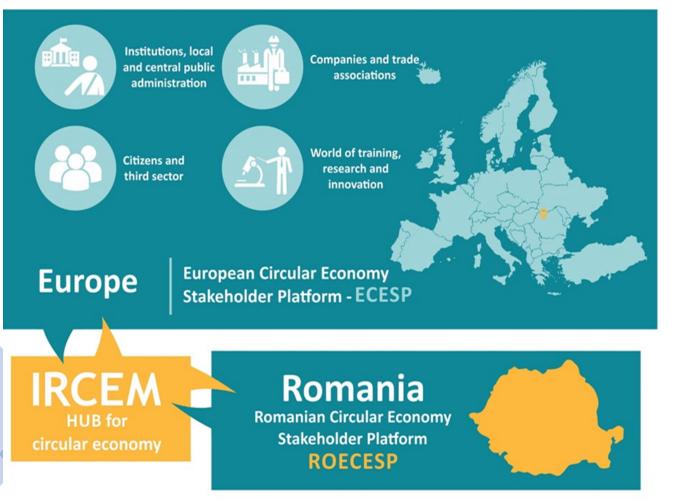
ALBA IULIA MUNICIPALITY IN TRANSITION TO THE CIRCULAR ECONOMY

23.03.2023

Sorin Dan Clinci Urban Regeneration Expert







Institute for Research in Circular Economy and Environment "Ernest Lupan" (IRCEM)

- Non-governmental organization formed as research-consultancy think tank, established in 2012 in Cluj-Napoca, Romania.
- IRCEM's mission is to mobilize individuals, organizations and institutions in the process of transition to a circular economy through the ecosystemic development of life on our planet under the influence of the three pillars: social, economic and natural.
- In 2017, IRCEM joined the coordination group of the European Circular Economy Stakeholder Platform (ECESP) founded by the European Economic and Social Committee of the European Commission.

SOME OF OUR PROJECTS





European Union European Regional Development Fund





Supporting the EU Mission "A Soil Deal for Europe" across national communities

To establish 100 Living Labs and Lighthouses





C-WASTE











ROADMAP FOR DEVELOPING A STRATEGY ON THE CIRCULAR ECONOMY IN ROMANIA 2030



Ministerul Mediului, Apelor și Pădurilor



Iceland IP Liechtenstein Norway Norway grants grants





Municipality of Alba Iulia Brief Presentation

- Municipality = urban locality that has a larger number of inhabitants, a developed industry, a significant contribution towards the economic, social-political and cultural-scientific life of the country, benefiting from an important housing fund and urban and household endowments, a complex network of education, health and cultural facilities
- Alba Iulia serves as the seat of Alba County in the west-central part of Romania.
- Located on the Mureş River in the historical region of Transylvania, it has a population of 74.917 (as of 2020)
- Area: 103.65 km²

©KikiVasilescu, CC BY-SA 4.0 <https://creativecommons.org/licenses/by-sa/4.0>, via WikimediaCommons



EURE: Effectiveness of Environmental Urban policies to improve Resources Efficiency

CONTEXT ...



The European Union's strategy for 2014-2020 has considerably strengthened the urban dimension of cohesion policy. According to Article 7.4 of the Regulation, Member States must allocate at least 5% of their European National Regional Development Fund (ERDF) to support integrated sustainable urban development strategies. In particular, this means *improving the quality of the urban environment and the efficiency of the environmental management* of EU urban areas.

For some cities, the fund *does not meet their expectations* and needs to design and implement an appropriate urban policy, especially in the field of environmental quality and resource efficiency.

On the one hand, small urban areas may not have access to these funds due to low population density. On the other hand, large urban areas may find it difficult to include **the principles of the circular economy** in their comprehensive urban development strategies.



EURE: Effectiveness of Environmental Urban policies to improve Resources Efficiency

CONTEXT ...



Cities are the "victims" of the most aggressive negative impact of the anomalies of an irrational economy: pollution, carbon emissions, waste accumulation, overcrowding, deteriorating quality of life, energy consumption

75% of natural resource consumption takes place in cities

Cities produce 50% of global waste and 60-80% of greenhouse gas emissions

Cities are where most materials are used and wasted and where buildings, vehicles and products are constantly underused.

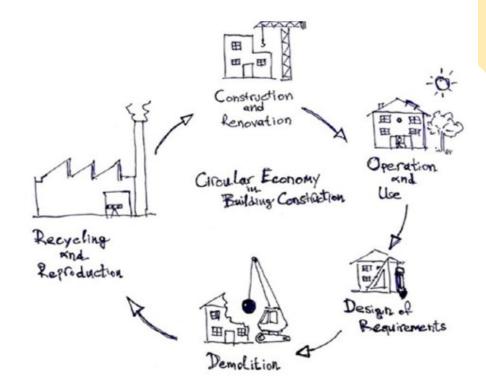
The need for change is increasingly evident, with cities acutely feeling the effects



Circular Economy in Alba Iulia

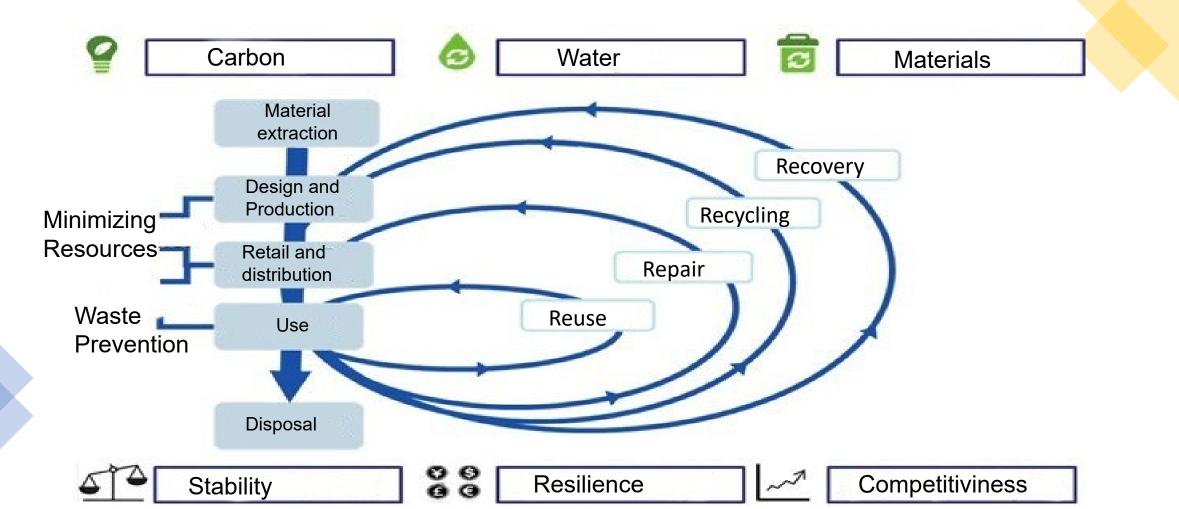
The circular economy offers an opportunity to respond to these challenges by rethinking the way we use materials, offering new ways to create value.

- 1) The circular economy is complex and aims to address all strategic sectors
- 2) CE must become a priority for departments within a public institution. Services dealing with environmental protection, industry, research, international cooperation can contribute to the integration of the CE concept within the institutions and in its area of action.
- 3) Circular change is fast-paced when economic actors and civil society are directly involved. An effective public policy on the circular economy needs the support of stakeholders: institutions, economic entities and civil society to maximize its benefits for the environment and the economy.
- 4) The construction sector needs to be aware of the need to change its management model in order to become a circular, respecting the new approach of "sustainable use of resources" provided for in the European Construction Products Regulation.



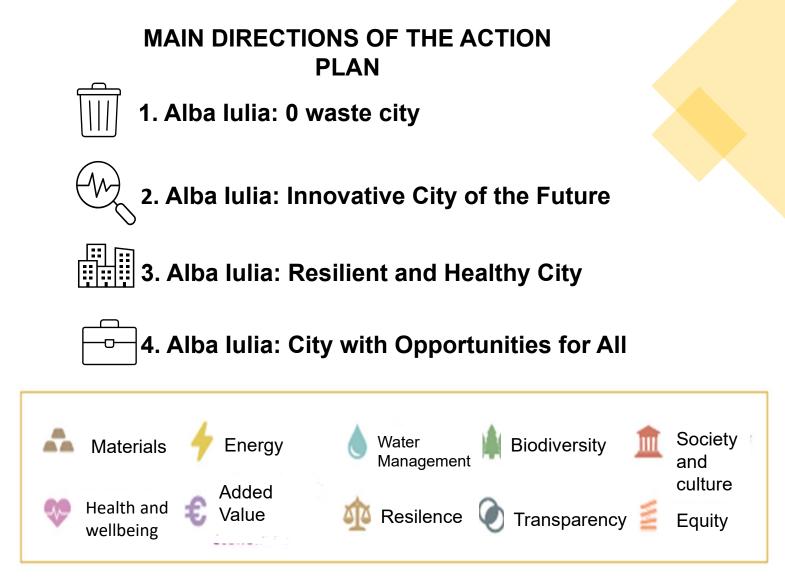


Directions of Interest on Circular Economy and Resource Efficiency in Alba Iulia











METHODOLOGY

00

- ✓ QUESTIONNAIRE
 ✓ PUBLIC CONSULTATIONS (FOCUS GROUPS)
- Analysis of the perception of citizens and all stakeholders in Alba Iulia on the development of the circular economy (waste management, sustainable urban mobility, urban regeneration, new jobs, etc.) in urban context, and identifying the main challenges facing the community.
- General questions regarding the circular economy in Alba Iulia Municipality:
 - Infrastructures that must undergo significant changes
 - Evaluation of the catalytic factors of the Circular Economy
 - Waste Management
 - Innovation, Competitiveness and Research
 - Important objectives for the development of resilience and the wellbeing of citizens
 - Important objectives for the creation of inclusive opportunities for citizens



1. Alba Iulia: 0 waste city

OBJECTIVES

1. Alba Iulia shall reduce the use a of landfills by 2030.

- 2. Alba Iulia minimizes annual GHG emissions by 40% compared to the reference value of 2008.
- 3. Alba Iulia recovers the maximum value from waste streams
- 4. Alba Iulia ensures that all nutrients in organic waste are returned to natural cycles
 - 5. Alba Iulia encourages circular companies
- 6. Alba Iulia improves the flow of information on waste between stakeholders and the city.

2. Alba Iulia: Innovative City of the Future

OBJECTIVES

- 1. Alba Iulia encourages cleantech startups (impact reduction technologies)
- 2. Alba Iulia is a regional leader in the development, testing and scaling of new technologies related to the circular economy.
- 3. Alba Iulia encourages innovation in sectors with intensive consumption of materials (production, logistics, transport and waste treatment)
- 4. Alba Iulia is a scaling place for the development and testing of innovative circular solutions
- 5. Alba lulia supports sustainable, circular research and development and innovation



3. Alba Iulia: Healthy and Resilient City	4. Alba Iulia: City with Opportunities for All
OBJECTIVES	OBJECTIVES
1. Alba Iulia has clean water and air and a low exposure to pollutants	 Alba-Iulia ensures that the unemployed have the right type of training / experience to access jobs related to circular economy
2. Alba Iulia has high quality and extensive green areas	2. Alba-Iulia provides employment opportunities for all.
3. Alba Iulia has resilient supply systems (food, energy, water, etc.)	3. Alba-Iulia offers significant jobs, related to the circular economy.
4. Alba Iulia ensures access to healthy food for all.	 Alba-Iulia ensures that circular economy strategies alleviate social inequalities.
5. Alba Iulia promotes social cohesion and strong communities	5. Alba-Iulia gives citizens the power to reduce material consumption and to reuse / recycle their materials and goods



Good Practice: Plasticircle Alba Iulia





The project "Improvement of the plastic packaging waste chain from a circular economy approach, is a project funded by the European Union under the European program HORIZON 2020.

The PlastiCircle project aims to develop and implement a holistic process to increase the recycling rates of packaging waste in Europe. This allows the reprocessing of plastic waste in the same value chain. This process envisages four axes:

- collection (to increase the amount of packaging collected),
- transport (to reduce the costs of recovered plastic),
- sorting (to increase the quality of recovered plastic)
- recovery by making value-added products, respectively: automotive components (e.g. engine covers / bumpers / dashboards), bituminous roofing membranes, asphalt sheets, roofing felt, street furniture (eg fences / benches / protective walls).



Good Practice: Plasticircle Alba Iulia

Social objectives

Information, involvement and awareness of citizens on how to properly recycle plastics and the importance of recycling for the environment, health and the economy;

Testing innovative collection methods (citizens' platform, smart containers, optimization of collection routes, driving style) capable of increasing the efficiency of plastic collection and recycling, as well as conclusions on the degree of adoption and use by citizens together with their suggestions that will be used in further developments of the waste collection processes in the municipality;

Economic Objectives

More than 26.8 million tons of plastic waste are produced each year in the European Union, recycling a percentage of only 29.7%. Thus, the main objective of the PlastiCircle project is to improve the circular economy of plastic (closing the plastic loop in Europe), which involves the development of a vast treatment process in order to reintroduce plastic obtained from plastic waste in its circuit, through the four pillars: collection, transport, sorting and recycling.





THANK YOU FOR YOUR ATTENTION!





Cluj-Napoca Architect Sorin Dan Clinci dan.clinci@ircem.ro www.ircem.ro

Project Partners:





EIXO ATLÂNTICO



Lubelskie









RĪGAS DOMES PILSĒTAS ATTĪSTĪBAS DEPARTAMENTS