



Green transition in Emilia-Romagna Region – State-of-the-art

Innovation & Circular Economy

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Agenda



1. Financing Green Transition in Emilia- Romagna
2. Circular Economy transition in Emilia-Romagna
3. The internationalization of VET – towards green jobs

Financing Green Transition in Emilia- Romagna

Smart Specialization Strategy

- to identify objectives, priorities, actions capable of maximizing the effects of investments in research and innovation, by focusing resources on the specialization areas of each territory.
- linked to the approval of the ROP-ERDF, and to the objectives of the new EU Cohesion Policy 2021-2027 and Agenda 2030.



S3 2021 - 2027

- key challenges: **sustainability**, digitalization, social inclusion, well-being and quality of life, safety, transformation of the public administration, through the identification of cross-sectoral priority thematic areas
- 7 regional specialization production systems: Agri-food, Building and Construction, Mechatronics and Motor Engineering, Health and Wellness Industries, Cultural and Creative Industries, **Energy and Sustainable Development, Innovation in Services**

The priorities

		A smarter Europe	A greener Europe	A more connected Europe	A more social and inclusive Europe	A Europe closer to citizens
Industrial Specialization systems	Agri-food	<ol style="list-style-type: none"> 1. Clean, safe and accessible energy 2. Circular economy 3. Climate and natural resources (air, water and territory) 4. Blue growth 5. Innovation in materials 6. Digitalization, Artificial Intelligence, Big Data (firms and PA) 7. Manufacturing 4.0 and future evolutions 8. Connectivity of ground and space systems 9. Mobility and sustainable and innovative motor 10. Cities and communities of the future 11. Territorial heritage and regional identity: cultural heritage and contents, creative activities, tourism and Made in E-R products 12. Personal wellbeing, nutrition and lifestyles 13. Health 14. Social innovation and participation 15. Inclusion and social cohesion: education, work, territories 				
	Building and Construction					
	Mechatronics and Motor Engineering					
	Health and Wellness Industries					
	Cultural and Creative Industries					
	Energy and Sustainable Development					
	Innovation in Services					

Piano nazionale Ripresa e Resilienza (PNRR) – Recovery Plan

- The Plan is fully consistent with the six pillars of the Next Generation EU with regard to the investment shares envisaged for green (37%) and digital (20%) projects.
- The resources allocated in the Plan amount to 191.5 billion euros, divided into six missions:
 - Digitization, innovation, competitiveness and culture
 - Green revolution and ecological transition
 - Infrastructure for sustainable mobility
 - Education and research
 - Inclusion and cohesion
 - Health

An example, Climate Change - local impact

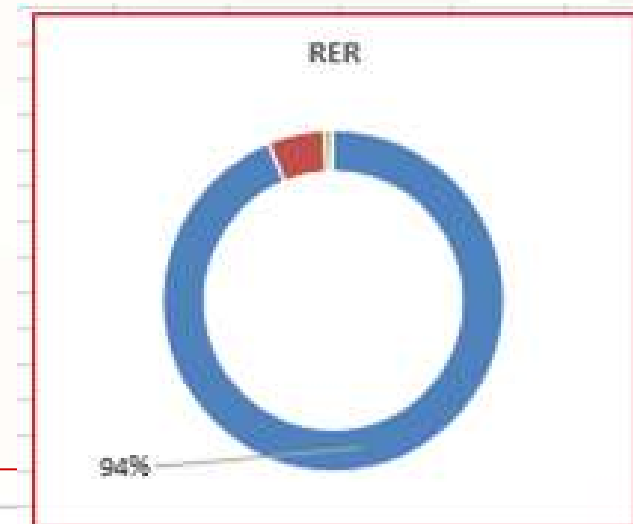
- ★ Agriculture
- ★ Manufacturing
- ★ Water and wastes
- ★ Energy
- ★ Transport
- ★ Building
- ★ ICT

Sectors mostly involved

- agriculture
- energy
- water and wastes
- transport

Impact “potential”
21% industries - 14 % labor force

- <10 addetti ("micro")
- <50 addetti ("piccole")
- <250 addetti ("medie")
- >=250 addetti ("grandi")



Circular Economy transition in Emilia- Romagna

CE Policies and strategies in Emilia-Romagna

- **Smart Specialization Strategy**

- The EC (industrial symbiosis) are considered transversal priorities of the regional smart specialization strategy

- **Regional law 16/2015** "Provisions to support the circular economy, the reduction of urban waste production, the re-use of end-of-life goods, separate collection and changes to the regional law 19 August 1996"

- Permanent forum for the circular economy

- Patto per il clima ed il lavoro (**Pledge for Climate and Labour**)

- Regional plan for energy management

- Regional plan for waste management (under revision)

- Regional plan for water management (under revision)

- **Plastic FreER regional strategy**

- Actions to limit the single use of plastic

- Regional green economy observatory

Emilia-Romagna Region, Technical Expert Group on Circular Economy



<https://www.art-er.it/2020/05/economia-circolare-accelerare-la-transizione-verso-un-nuovo-modello/>

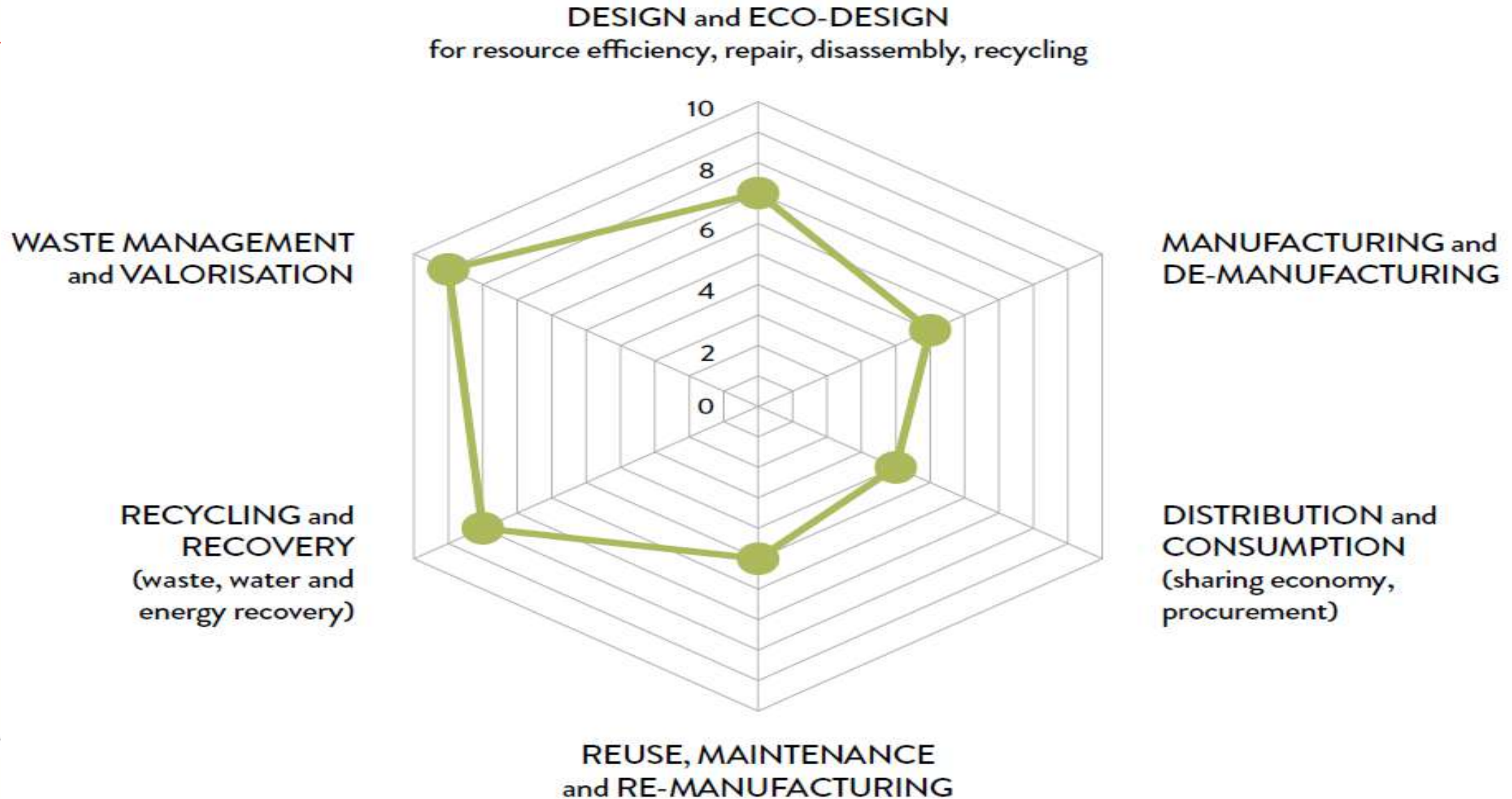
To investigate available competences, strategic objectives, ongoing transition processes, enhancement of the existing, obstacles and opportunities.

To define future strategies and innovation policies having social-economic from a circular and sustainable perspective.

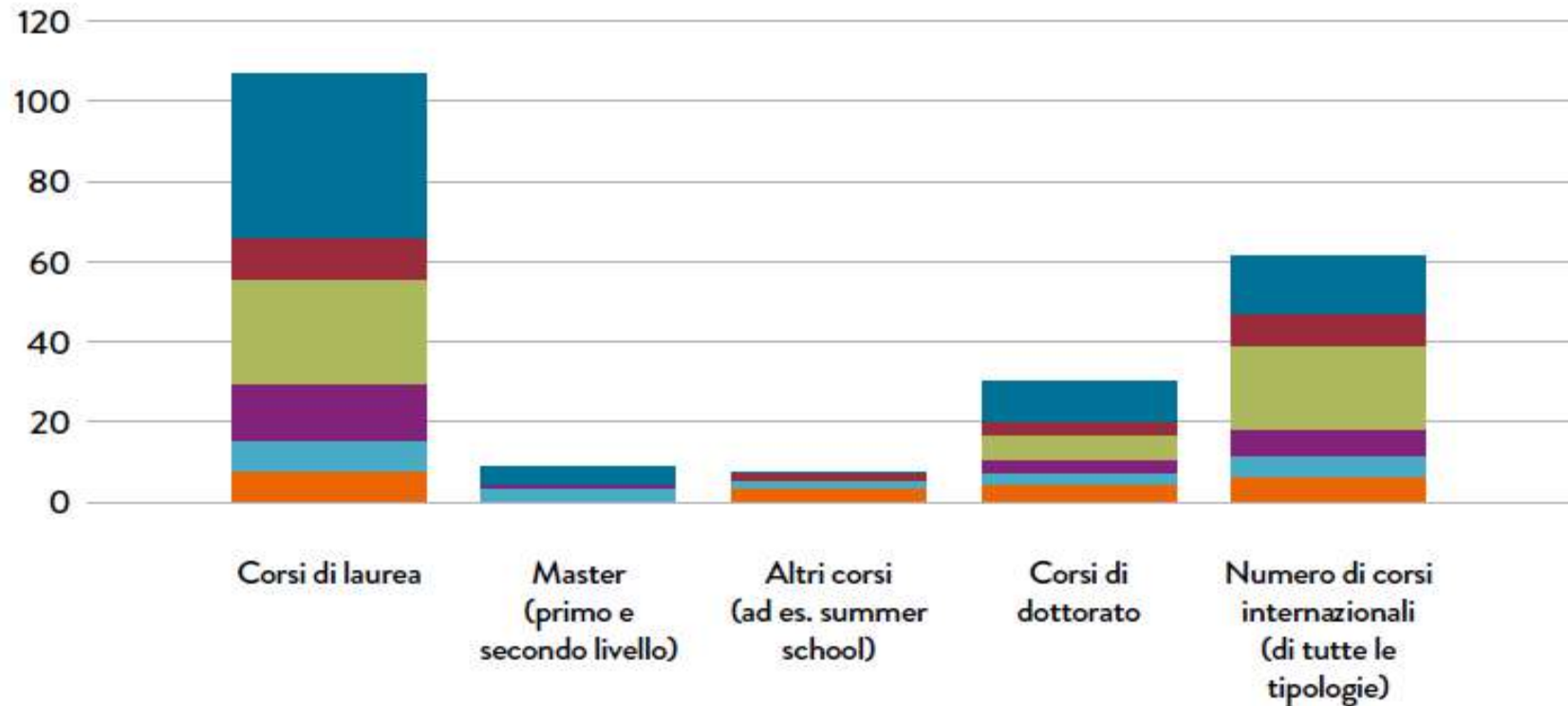
Topics of *Accelerare la transizione verso una economia circolare*

1. Legislative framework and strategic positioning in the European, national and regional levels
2. **Financial instruments**
3. **Evaluation criteria and creditworthiness**
4. Technical-scientific-methodological **skills**
5. Needs of the productive system
6. Existing enhancement and **good practices**
7. New demonstration actions (plastics/packaging and textiles/fashion)

Regional radar of competences



Regional high education system



- DESIGN and ECO-DESIGN for resource efficiency, repair, disassembly, recycling
- MANUFACTURING and DE-MANUFACTURING
- DISTRIBUTION and CONSUMPTION (sharing economy, procurement)
- REUSE, MAINTENANCE and RE-MANUFACTURING
- RECYCLING and RECOVERY (waste, water and energy recovery)
- WASTE MANAGEMENT and VALORISATION

- 106 Degrees
- 9 Masters (I, II level)
- 8 summer schools
- 30 PhD courses
- 61 International

Best practice map



The internationalization of VET – towards green jobs

International training offer



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JUNIOR EXPERT IN CIRCULAR ECONOMY

IFTS Circular Society, an EIT Raw Material project aims at testing a model of an international 4° EQF level course in Circular Economy

International training offer

European project “Spire Sais - Skills Alliance for Industrial Symbiosis: a cross sectorial blueprint for a sustainable process industry”

Skills intelligence: a regional pilot project to promote data driven system to define regional education and training offer



International student mobility

A regional program which includes services and initiatives aimed at attracting and retaining **international talents** in Emilia-Romagna



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international talents
EMILIA-ROMAGNA

MOVING TO

SETTING UP

LIVING IN

GET INVOLVED

International networks



SCIENCE | BUSINESS[®]

Delegation of



in Brussels

International cooperation

EU CoVE initiative

to spread vocational excellence where VET is an integrative part of **skills ecosystems**, contributing to **regional development**, innovation, inclusion, and **smart specialisation strategies**





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