

February 17th, 2022

Building links between industrial and regional ecosystem to address the innovation challenge of circular economy

Circular economy and L.R. 16/2015

L.R. 16/2015

LINEAR ECONOMY



CIRCULAR ECONOMY



- L.R. 16/2015 sets legal provisions supporting:
- circular economy
 - prevention of waste production
 - reuse
 - recycling
 - waste sorting

Main legal provisions of L.R. 16/15

1. Establishment of a specific fund called «Fondo Incentivante», aimed at improving performances of municipalities, partially supported with regional resources;
2. Ratification of specific agreements aimed at promoting waste production prevention and industrialisation of waste recovery, allowing to pursue both economical development and lower environmental impacts
3. Guidelines for reuse centers
4. Institution of «Permanent forum for circular economy»
5. Introduction of a «pay as you throw» system in the whole regional territory by 2022
6. Establishment of «Regional list of by-products» and best practices for already existing supply chains
7. Waste traceability and open communication of data with «Chi li ha visti?» campaign

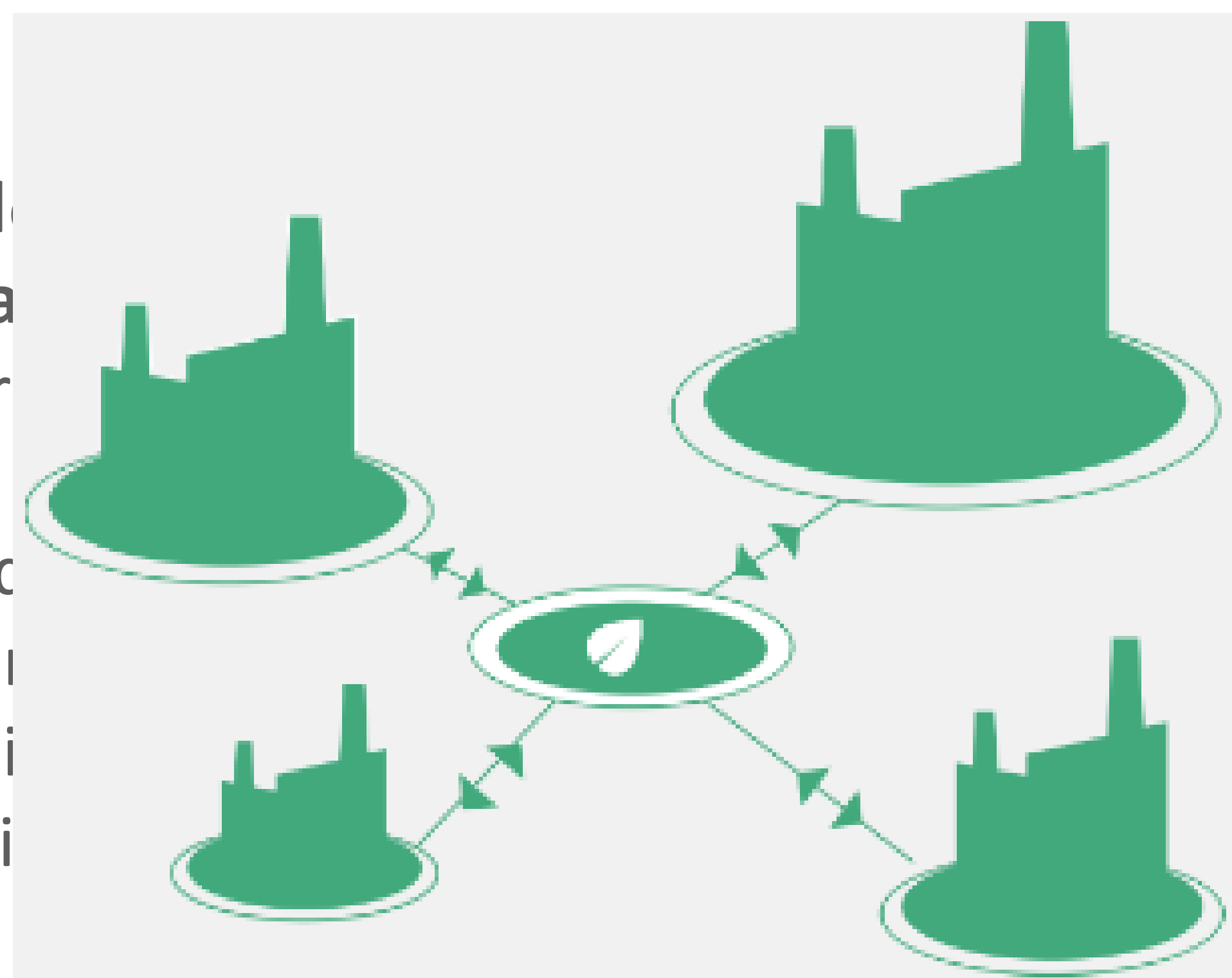
2. Prevention and industrialisation of waste recovery Agreements

One of the application tools of Circular Economy is **Industrial Symbiosis**.

Industrial Symbiosis is the practice of **synergistic exchange of waste, by-products, water, energy**, and other materials and services **between companies** belonging to a more or less extended territorial context.

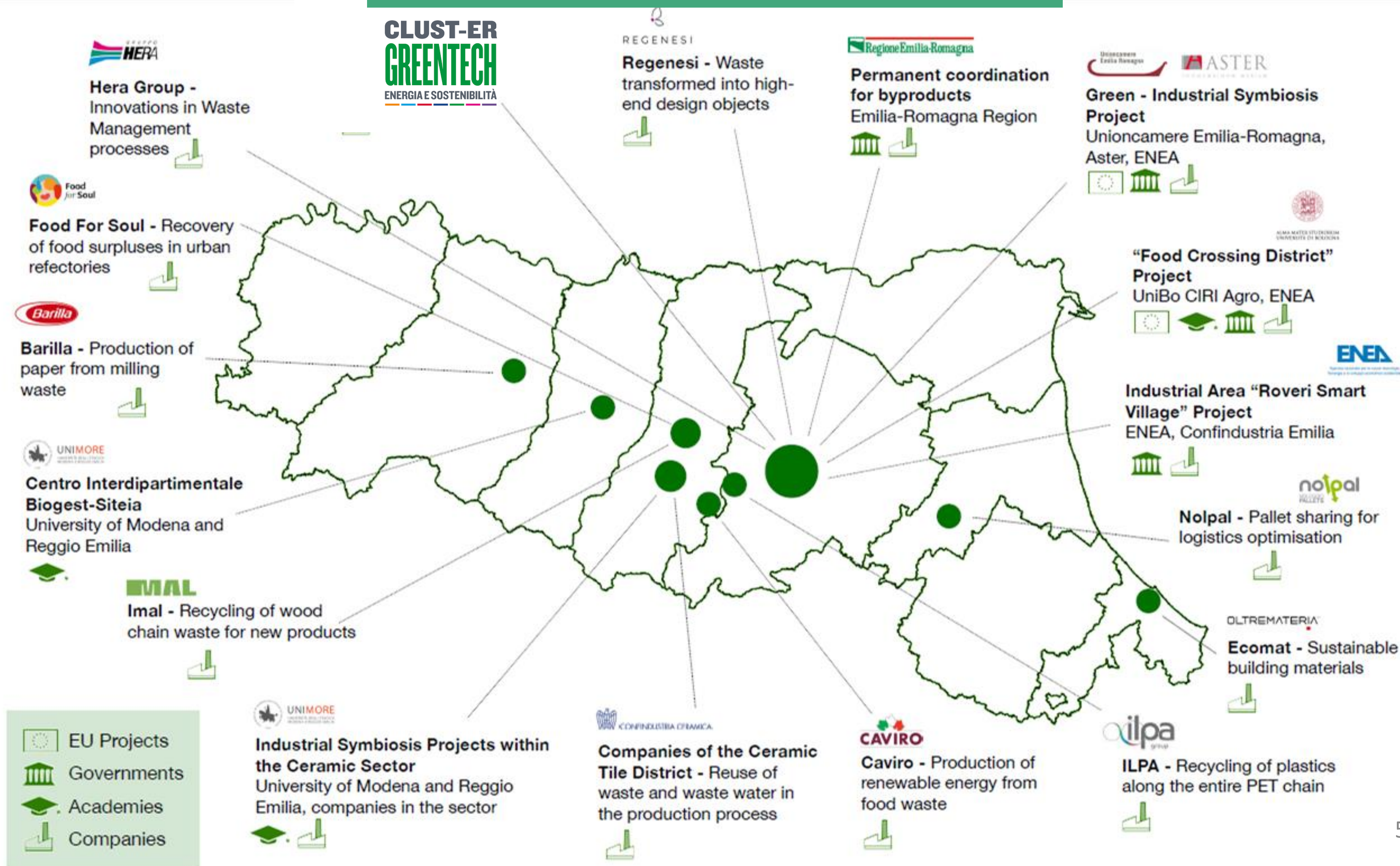
Key conditions for the implementation are the **collaboration** between companies, the **availability** of resources, the **proximity** between the actors and the **geographical** context.

Despite the acknowledged advantages, the implementation of Industrial Symbiosis requires the support of public authorities. The **TRIS** (Transition Region Interregional Support) project is designed to support the resource efficiency and the competitiveness of SMEs by implementing Industrial Symbiosis practices.



TRIS
Interreg Europe

Good practices on Circular Economy and Industrial Symbiosis in Emilia-Romagna



The process towards the Action Plan



Target Policy Instrument: Emilia-Romagna Waste Management Plan

**Key Stakeholders
on Industrial Symbiosis
and Circular Economy
in Emilia-Romagna**



**Engagement in
5 IS Lab Workshops
and Study Visits**



**Collection of good practices,
insights and ideas on new
actions to develop IS and CE**



**Creation of an
Action Plan
on Industrial Symbiosis**



Validated by:
- TRIS IS Lab stakeholders
in Emilia-Romagna
- TRIS partners

TRIS Action Plan in Emilia-Romagna

Action 1

Improving market opportunities for **plastic secondary raw materials** in Emilia-Romagna, including both the contributions from industrial residues and post consume materials.

Action 2

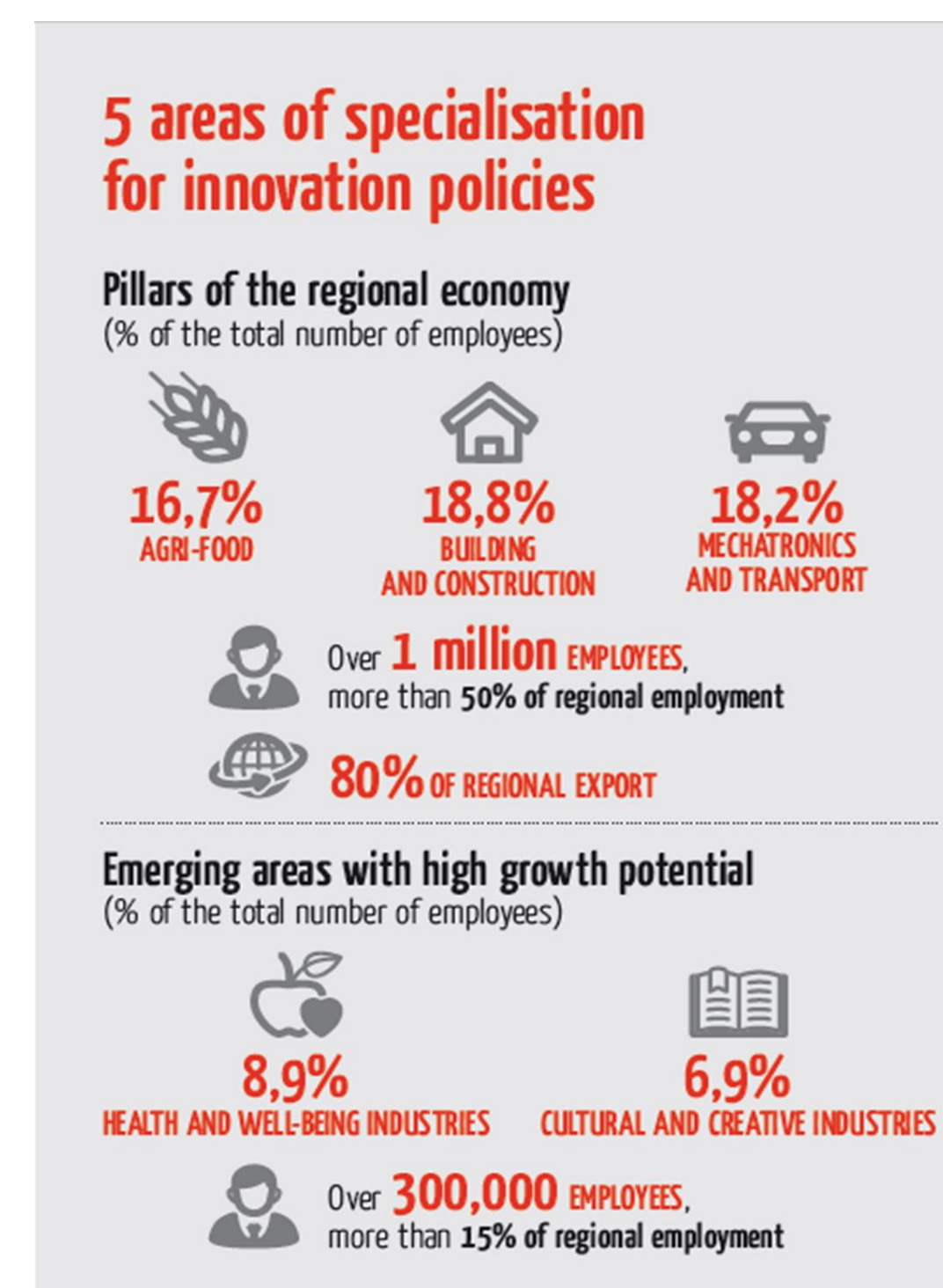
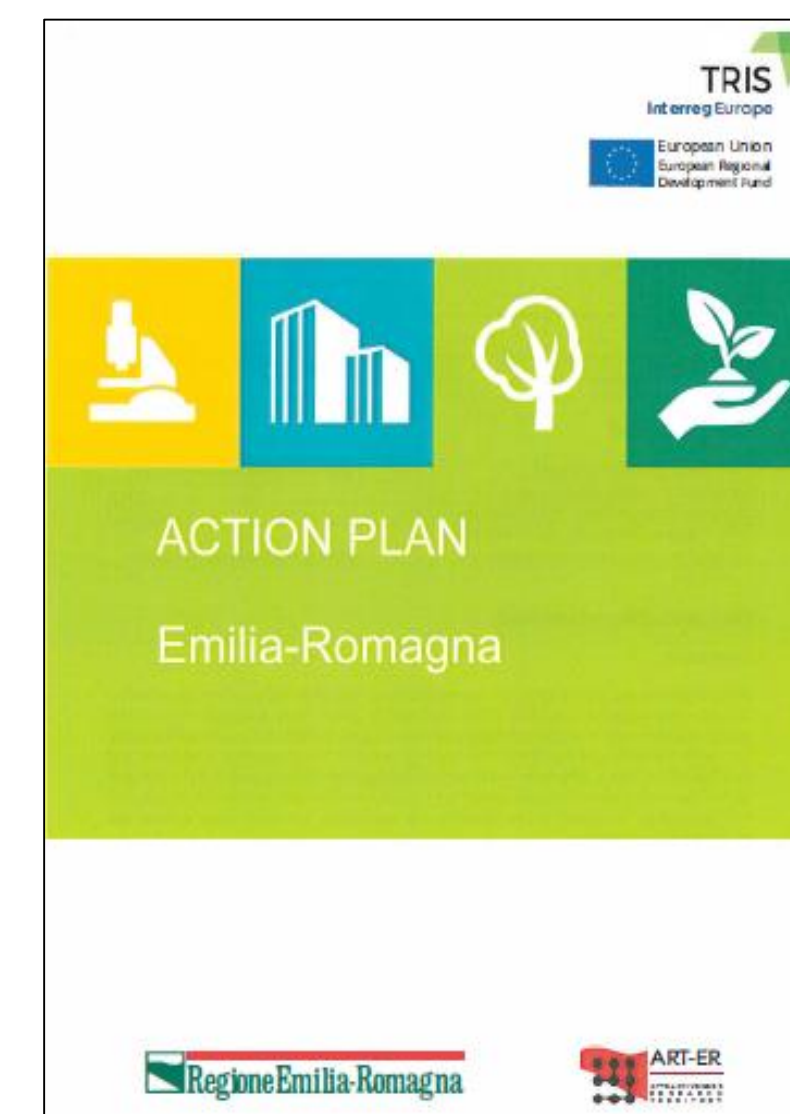
Implementation of **regional industrial symbiosis (IS)/circular economy (CE) projects** involving the 5 productive sectors identified in the Emilia-Romagna Smart Specialization Strategy

Action 3

Awareness raising amongst regional stakeholders on Industrial Symbiosis

Action 4

Influencing National policies on Industrial Symbiosis



#PlasticFre-ER Regional Strategy

#Plastic-freeER



#PlasticFre-ER Regional Strategy, approved with DGR 2000/2019, aims at **reducing negative impacts of plastics** on the environment, with reference to regional territory.

It is intended to support an integrated system of measures to **encourage circular economy of plastics** (reusable materials, less waste and lower pressure on the environment), with particular **focus on marine and coastal system**.

It is made of **15 actions**, whose goal is to **affect people's life and habits**.

In order to be carried out, the **strategy must be contributed by all the stakeholders**: institutions, economical operators, associations and citizens.

At the heart of the Strategy we find the **Steering Committee**, coordinated by Regione Emilia-Romagna and **participated by the whole regional society** (institutions, industries, corporate and environmental associations and more)

6. Regional List of By-products

Considering the fact that by-products are regulated by national law, Regione Emilia-Romagna decided to create **a system to acknowledge the companies the compliance to good practices.**

Regional List of by-products: certification of compliance to good practices by the companies that decide to subscribe to the List

Main goal: prevention of waste production

Regional List of by-products is a tool meant to support:

- **Industries**, as it helps them prove the compliance to the law
- **Authority**, as it makes the whole process of monitoring and supervising easier

6. Regional List of By-products

Regional List of by-products is set up by RER

Characteristics of productive processes and by-products for supply chains identified by the permanent coordination are formalised by RER

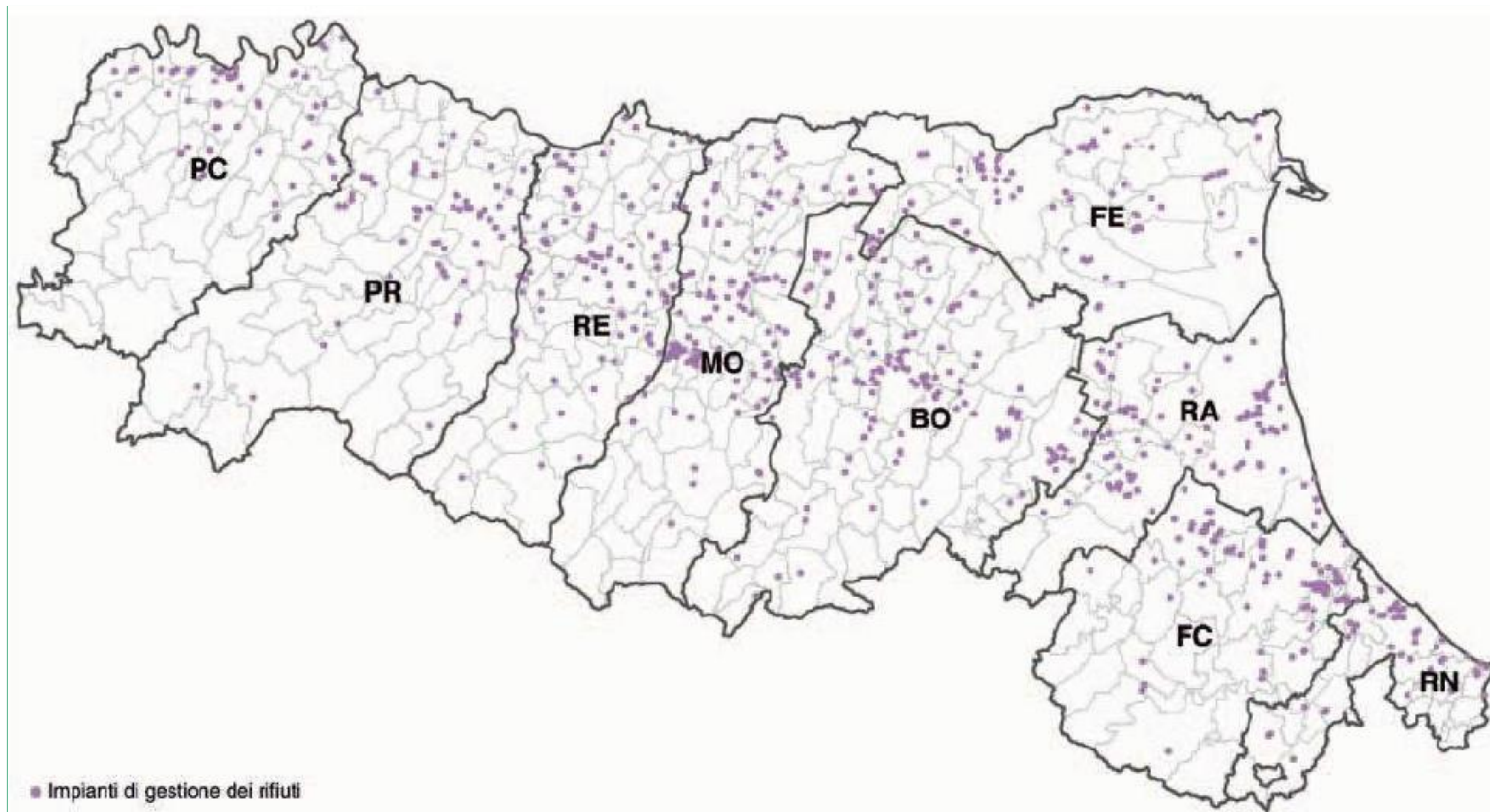
Companies can ask to subscribe the Regional List if the productive process and its originated substances/objects respect the established parameters and legal provisions

Subscription is voluntary

Once a year, Companies must send a report to RER with the information about by-products that originated from their productive process

A certificate of enrollment to the Regional List of by-products is released to the Company by RER

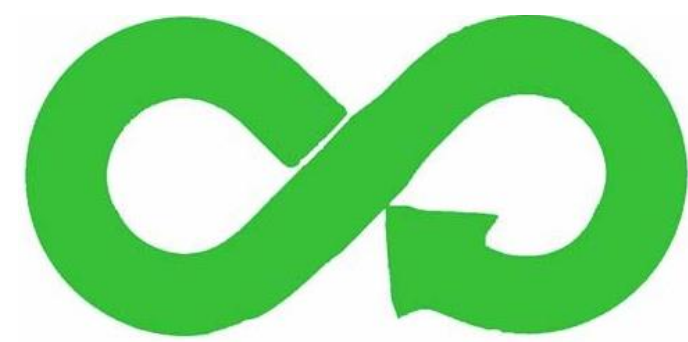
Future challenges



N° of facilities:
1358

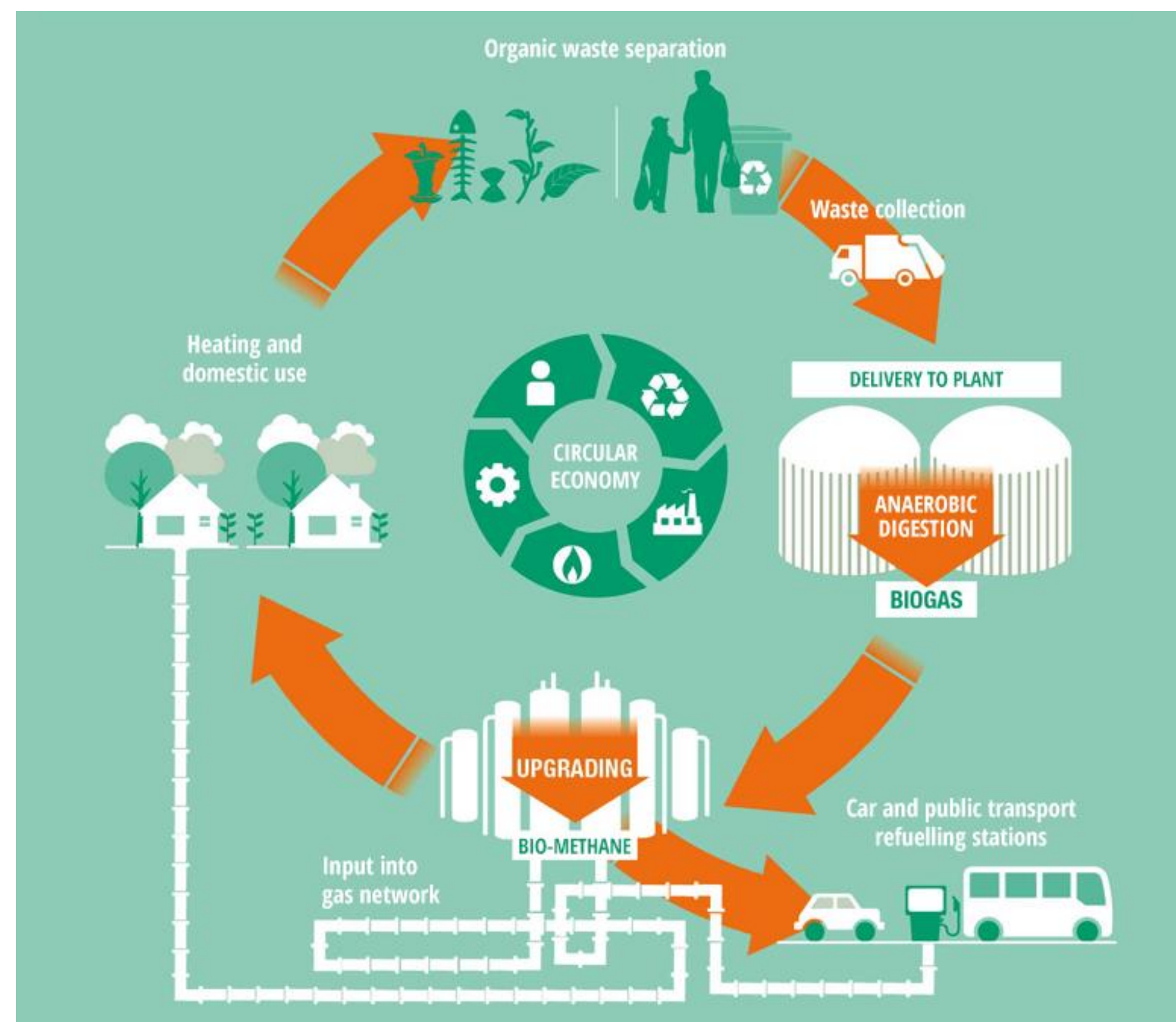
Waste treatment:
≈ 17 Mt in 2019

Future challenges

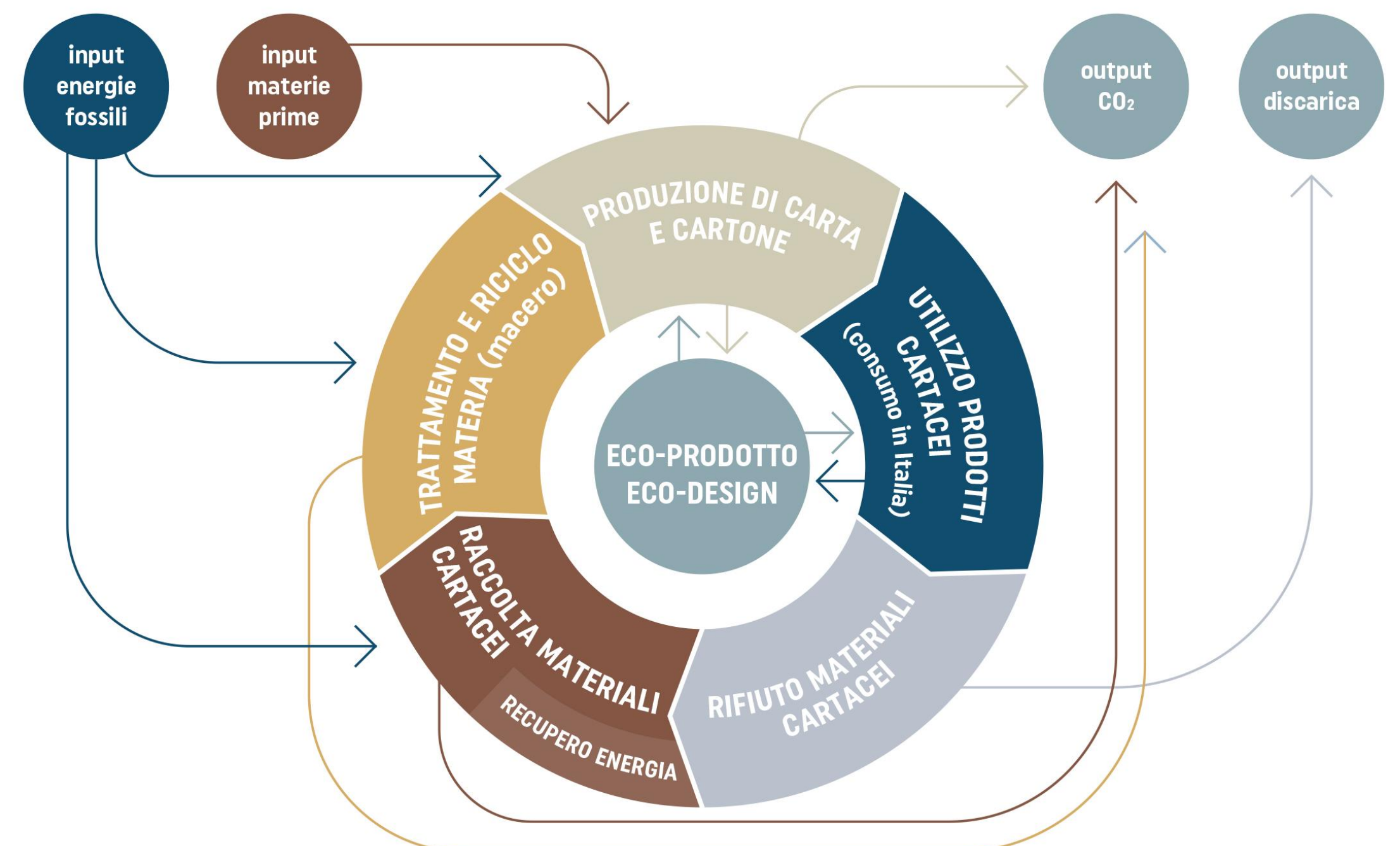


Closing the loop: waste sorting and recycling

Organic waste → Biomethane



Paper/cardboard → Paper/cardboard



Future challenges



Closing the loop: waste sorting and recycling

Glass → Glass



Future challenges



Closing the loop: waste sorting and recycling

Plastics → ...



Textile → ...



Future challenges



Closing the loop: simplification

3 key words:

- Symbiosis
- Reuse
- Communication

We must encourage **symbiosis** among different kinds of industries in order to **put in touch** demand and supply (one's waste can be another one's raw material); make **reuse** easier and more attractive by simplifying procedures.

"The goods of today are the
resources of tomorrow at
yesterday's resource prices."

Walter Stahel



Thanks for your attention

Emilia-Romagna. Il futuro lo facciamo insieme.