

SPOKE 2. GREEN TECNOLOGIES



**Spoke management and
coordination**
RM1 Leader: UniTo



**Spoke Ecosystem's engagement
and development**
RM2 Leader: Environment Park



Spoke Research Booster
RM3 Leader: UNITO



Spoke Competence Booster
RM4 Leader: UNIPV



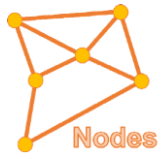
Spoke Innovation Booster
RM5 Leader: POLITO



Spoke Acceleration Booster
RM6 Leader: UNINSUBRIA



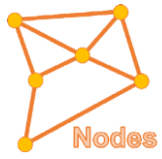
**Spoke Monitoring, evaluation
and impact**
RM7 Leader: UNITO



Spoke 2 Green Tech

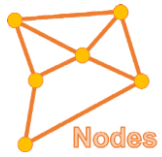
The implementation of the activities of the Spoke "GREEN TECHNOLOGIES AND SUSTAINABLE INDUSTRY" leverages on the strengths already existing in the territory in interdisciplinary areas, such as:

- **Green Chemistry**
- **Sustainable Energy**
- **Materials Science**
- **Bioeconomy**



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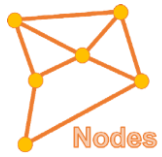
The aim of Spoke2 is the implementation and application of **Circular Economy approaches** both to upstream and downstream processes to implement industrial green processes and at the same time to reduce, reuse and exploit in added value applications **industrial, agricultural and civil effluents, together with mineral wastes.**



Spoke 2 Green Tech

The overall Spoke 2 research lines will focus on **five main interconnected sectors/systems**:

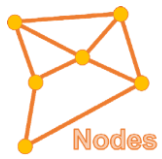
- construction
- agroindustry
- chemical industry
- (industrial and civil) waste water treatment
- municipal waste treatment



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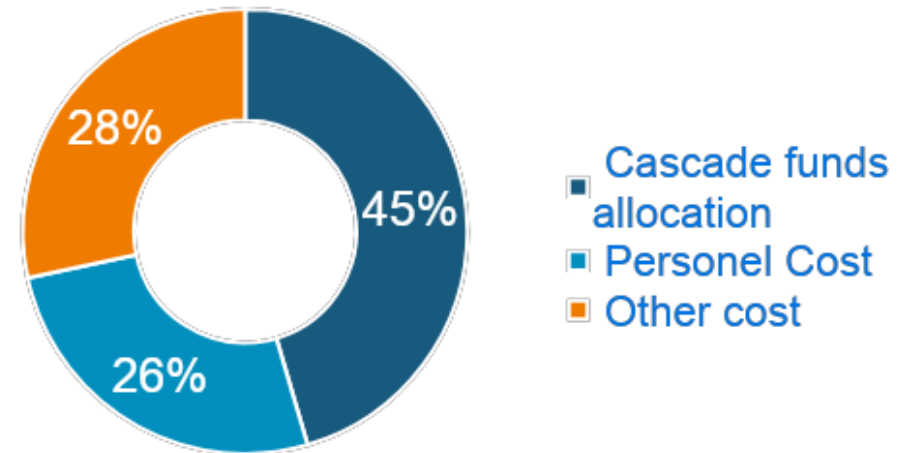
The effluents to be tackled for reduction, reuse and conversion are:

- Mineral and construction and demolition waste
- Organic municipal waste and residues from thermal treatment of unrecyclable municipal waste
- Solid and liquid effluents from agriculture
- Post-consumer polymer waste for reuse in chemical industry
- Waste water
- CO₂ emissions from industry (Carbon Capture Use Storage).



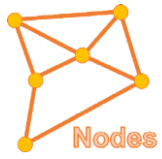
Budget Spoke 2 Green Tech

SPOKE 2 GREEN TECHNOLOGIES AND SUSTAINABLE INDUSTRY	
Cascade funds allocation*	€ 8.289.045
Personnel Cost	€ 4.775.171
Other cost	€ 5.170.092



TOTALE: €18.234.308

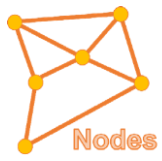
*ogni università gestisce i propri bandi a cascata per RTDA/tecnologi



Spoke 2 Green Tech

Set-up of a specific interactive e-portal to boost circular economy and industrial symbiosis in the NODES territories

- to manage supply needs/recycled products availability
- to put in contact companies (recycled products producers and companies who could need secondary raw materials for their activities)
- to store information on material flows
- data treatment to detect potential exchanges of waste and service mutualisation
- a dynamic/live by-product and waste flow analyses on a map



Bandi a cascata



Finanziamento	Voucher	Contratti/voucher per PhD
Sostegno finanziario per lo sviluppo di progetti di collaborazione tra aziende per iniziative di trasferimento tecnologico	Sostegno finanziario per l'attivazione di corsi di formazione, accesso alle infrastrutture e/o servizi di supporto	Sostegno finanziario per l'assunzione di ricercatori e tecnologi per lo svolgimento di attività specifiche
Per imprese (soprattutto PMI), Spin-off universitari	Per imprese (soprattutto PMI)	Ricercatori e tecnologi, Lavoratori di PMI, Dottorati industriali
PoC Accademici: 70-300k€ PoC Industriali: 70-300k€ Durata: 6-18 mesi	Per servizi supporto: max 50k € Per corsi: max 2k €	Costi annuali per ricercatori e tecnologi e dottorati industriali Max finanziamento per aziende: 60k€ per due anni
Per aziende	Per aziende	borsa di studio Per università

Lancio Call
[Marzo 2023]

3 cut-off date
[Maggio 2023
- Ottobre 2023
- Aprile 2024]

Termine delle
attività
finanziate
[Luglio 2025]