



basque ecodeign center

BASQUE
ECO
DESIGN
MEETING

2017

Euskalduna Jauregia
Bilbo, 2017ko irailaren 19 eta 20an
Palacio Euskalduna
Bilbao, 19/20 de septiembre de 2017
Euskalduna Conference Centre
Bilbao, 19th/20th September 2017

The Basque Country, an industrial symbiosis
and circular economy laboratory:
50 business projects, learnings and
recommendations

Ander Elgorriaga, Ihobe

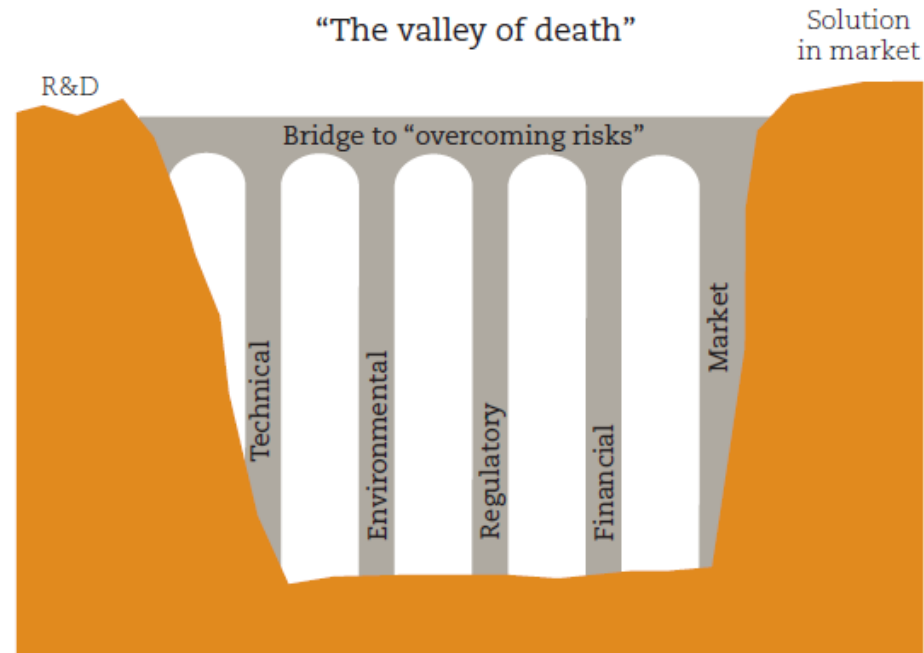


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GOBIERNO VASCO

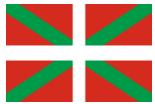


Why Demonstration Projects?

- The great RDI efforts in Circular Economy don't turn out into market solutions
- Financial aid is demanded for industrial and pre-industrial tests that confirm the environmental-economic-technical feasibility of innovative circular business lines
- Public-private collaboration is demanded to help overcoming barriers



Circular Economy Demonstration Projects



Bidea ekinez egina



Learning by doing



Se hace camino al andar



50 Circular Economy Demonstration Projects, concluded



BEM 2017, the opportunity to get to know several experiences

BEFESA

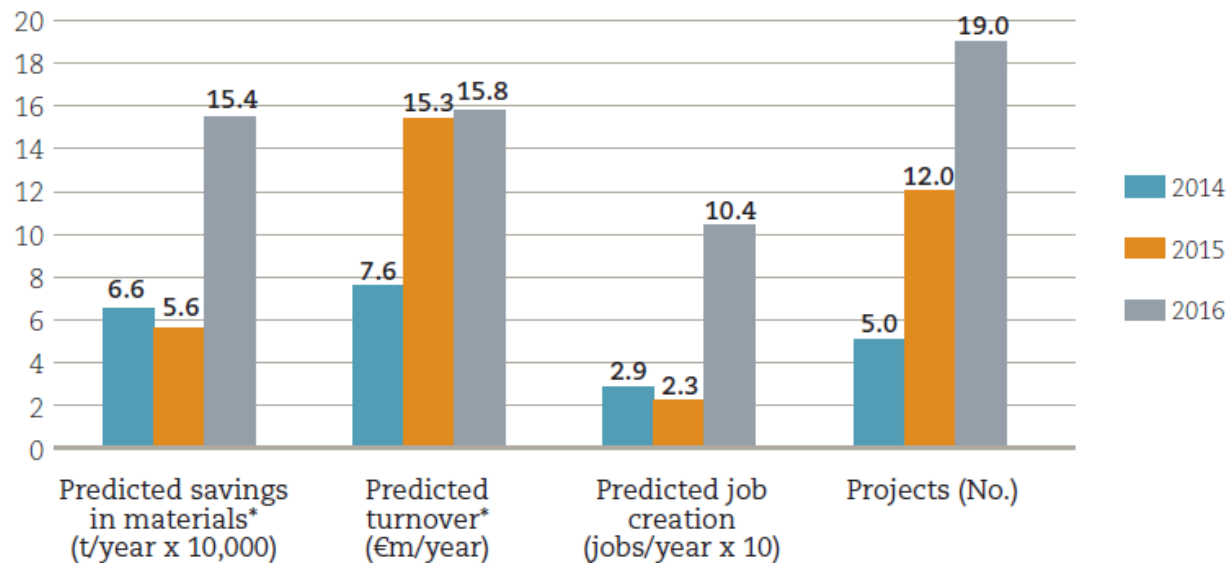
Befesa Aluminio S.L.



DIGIMET2013, S.L.



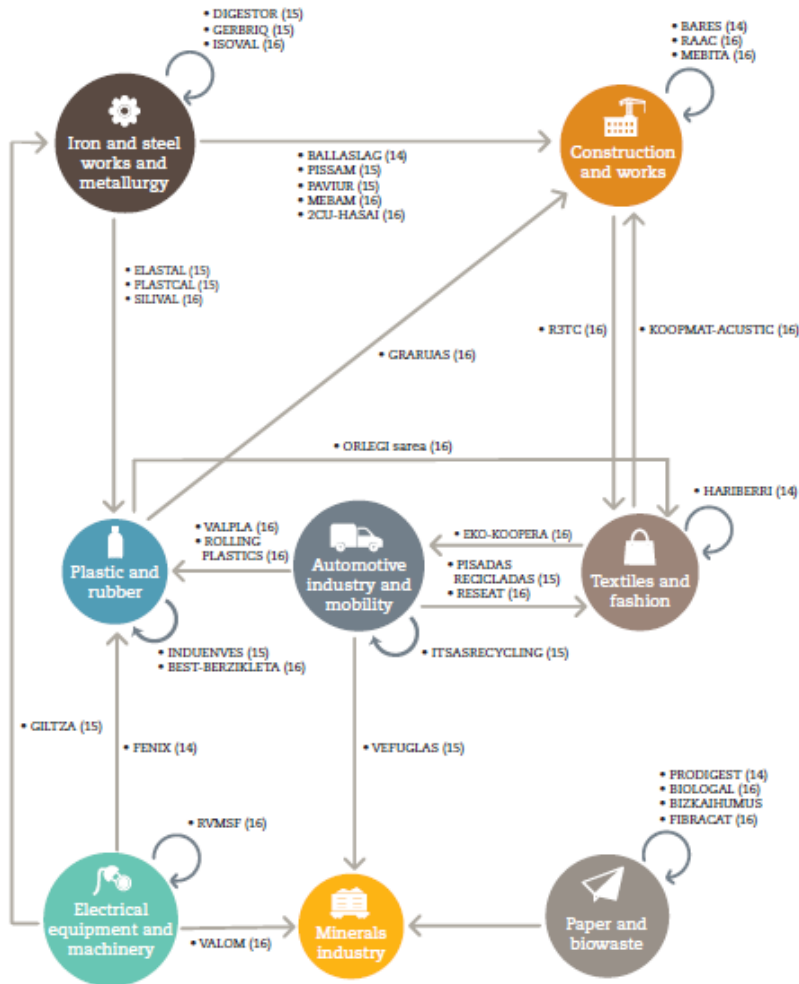
Demonstration projects accelerate Circular Economy



- Excellent results in metal and construction sectors. Both are responsible for 45% of Basque Country's waste generation
- In case of 100% success, the 36 Demonstration Projects would save 276.000 ton/y of materials, increase turnover by 39 million €/year and create employment for 156 people
- Provisional results show 40% of project success or maketability

Most circular solutions aren't in the sector where waste is produced

2

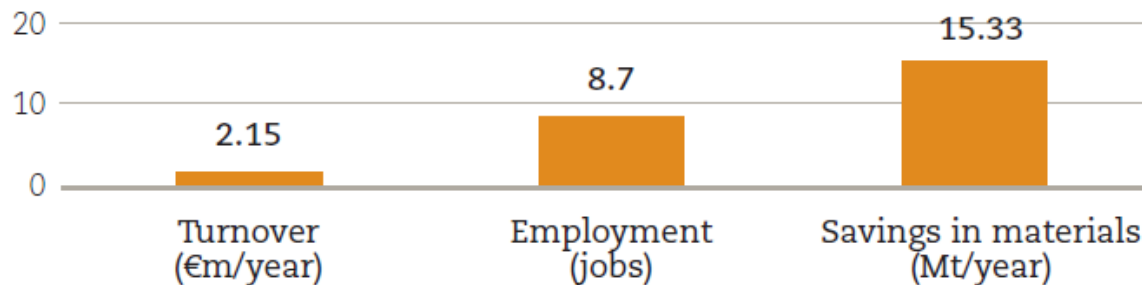


➤ 61% of the demonstration projects search for solutions in other value chains= Industrial Symbiosis

The cost-effectiveness ratio of the public contribution is high

3

Estimated results
(For each €100,000 of public aid)



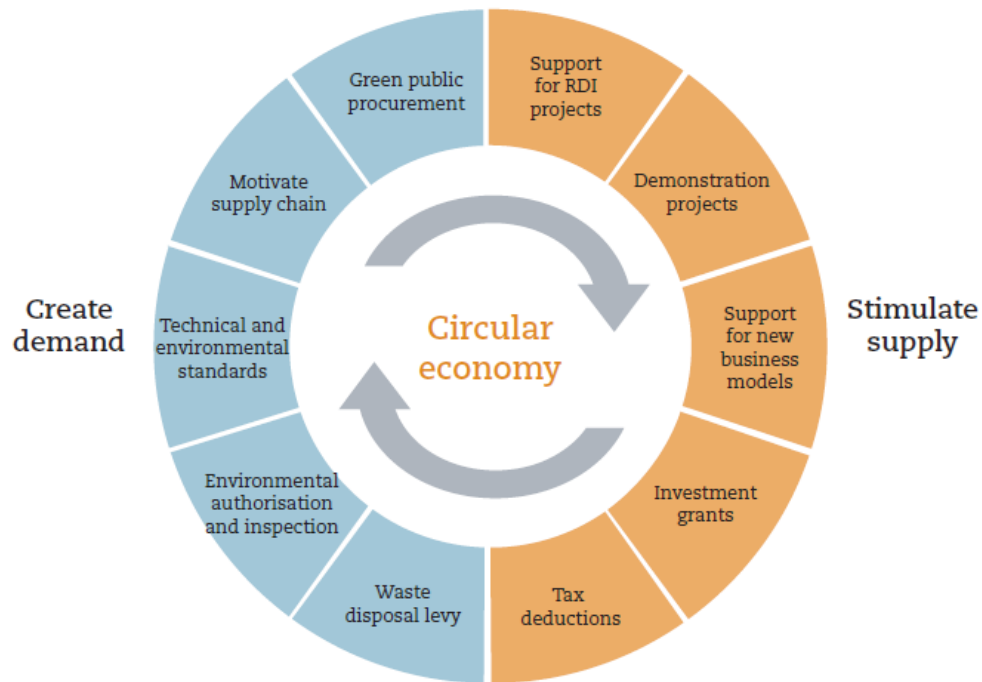
21 €
private yearly/
once € public

- The estimated cost-effectiveness ratio of the initiative is 21 euros annually generated in a company per public euro spent once

Public contribution to create demand is more necessary than stimulating demand

4

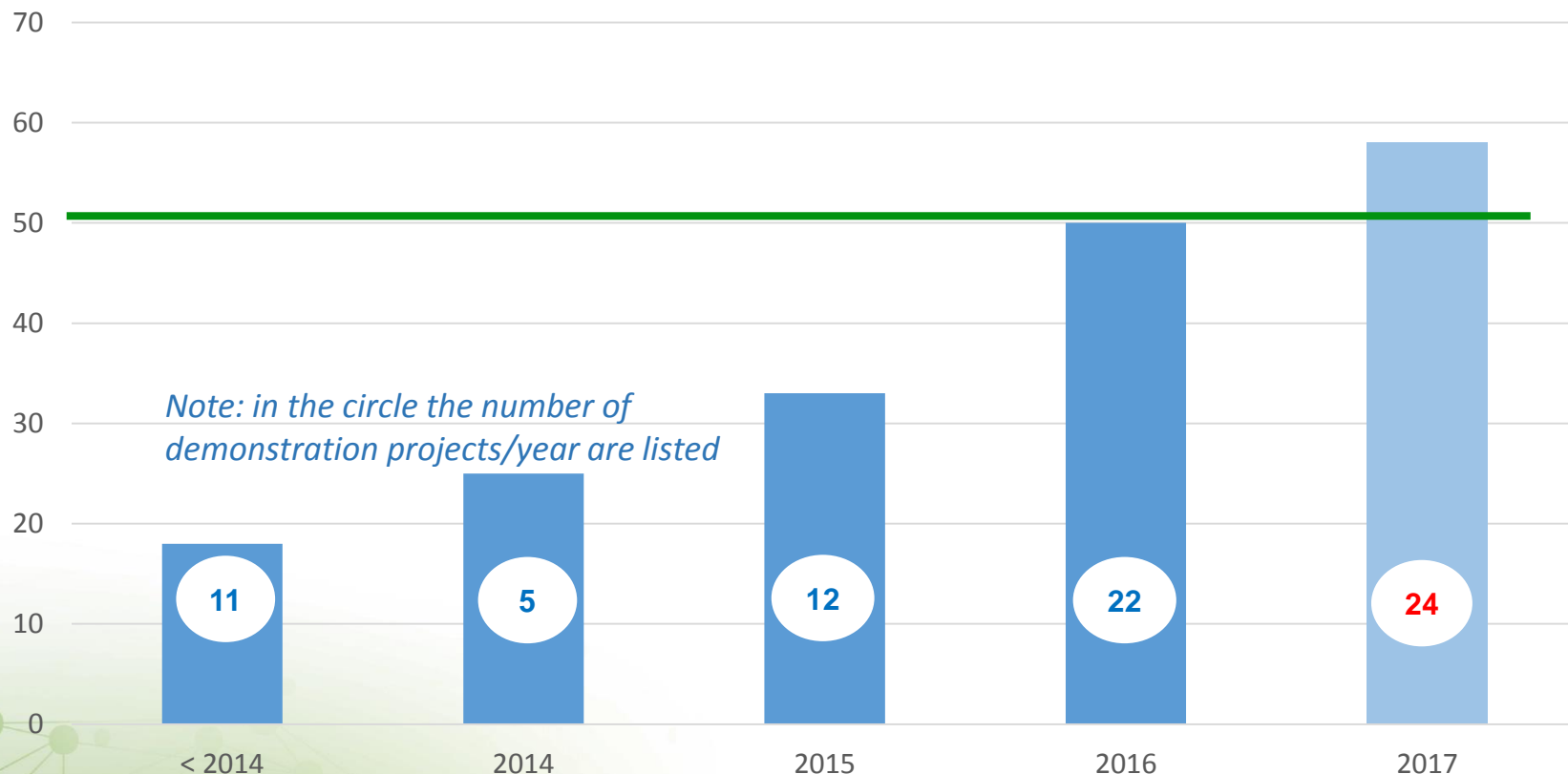
- 56% of the demonstration projects require intensive public-private partnership to reach markets (=success)
- The public contribution to create demand is valued in 17% of the projects
- Taxes, IPPC permits, Green Public Procurement, Waste Disposal Levy, Technical Standards and codesign of environmental legislation are the key demand creation instruments



The new business projects already exceed the projects aimed at environmental issues!

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Circular Economy: % Demonstration Projects with new business line as main driver



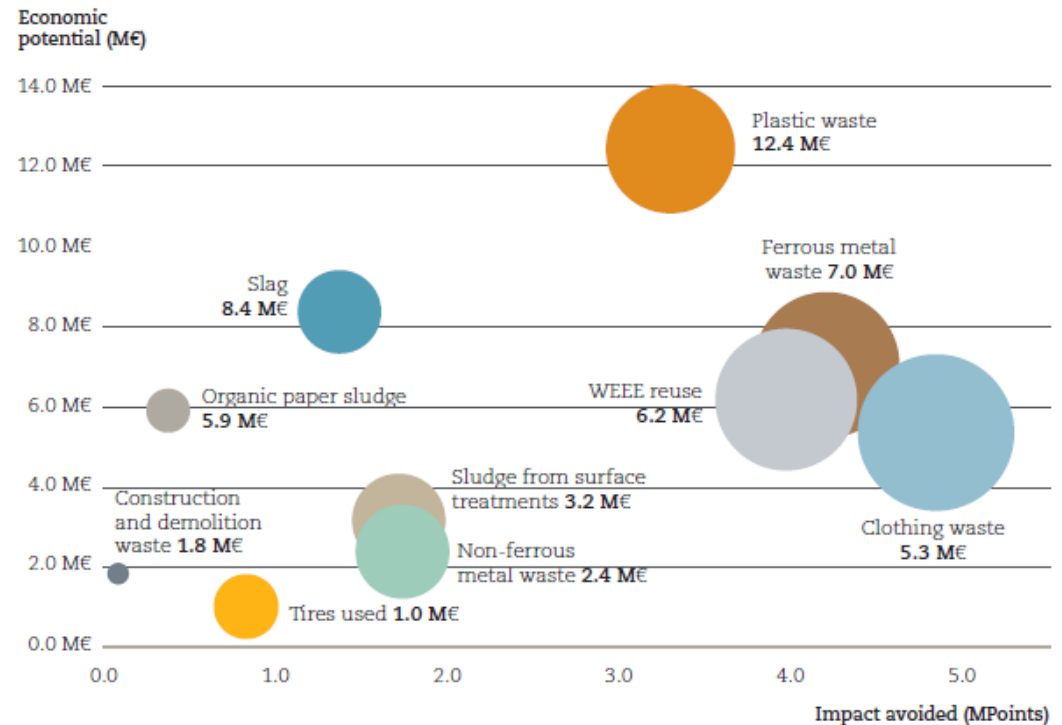
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A high waste volume doesn't mean a high LCA environmental impact!



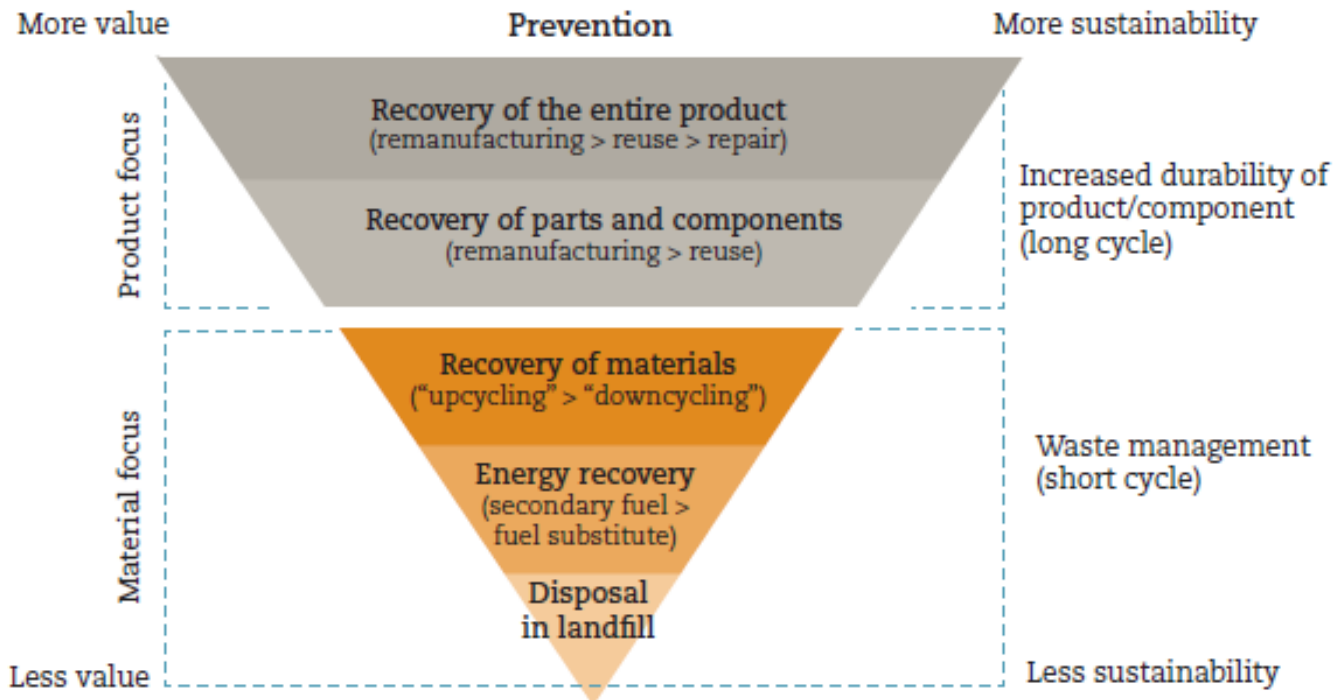
- Plastic, metal and textile waste lead LCA environmental impact and suppose 80% of wasted economic value
- 42% of the Demonstration Projects already take a Life Cycle approach



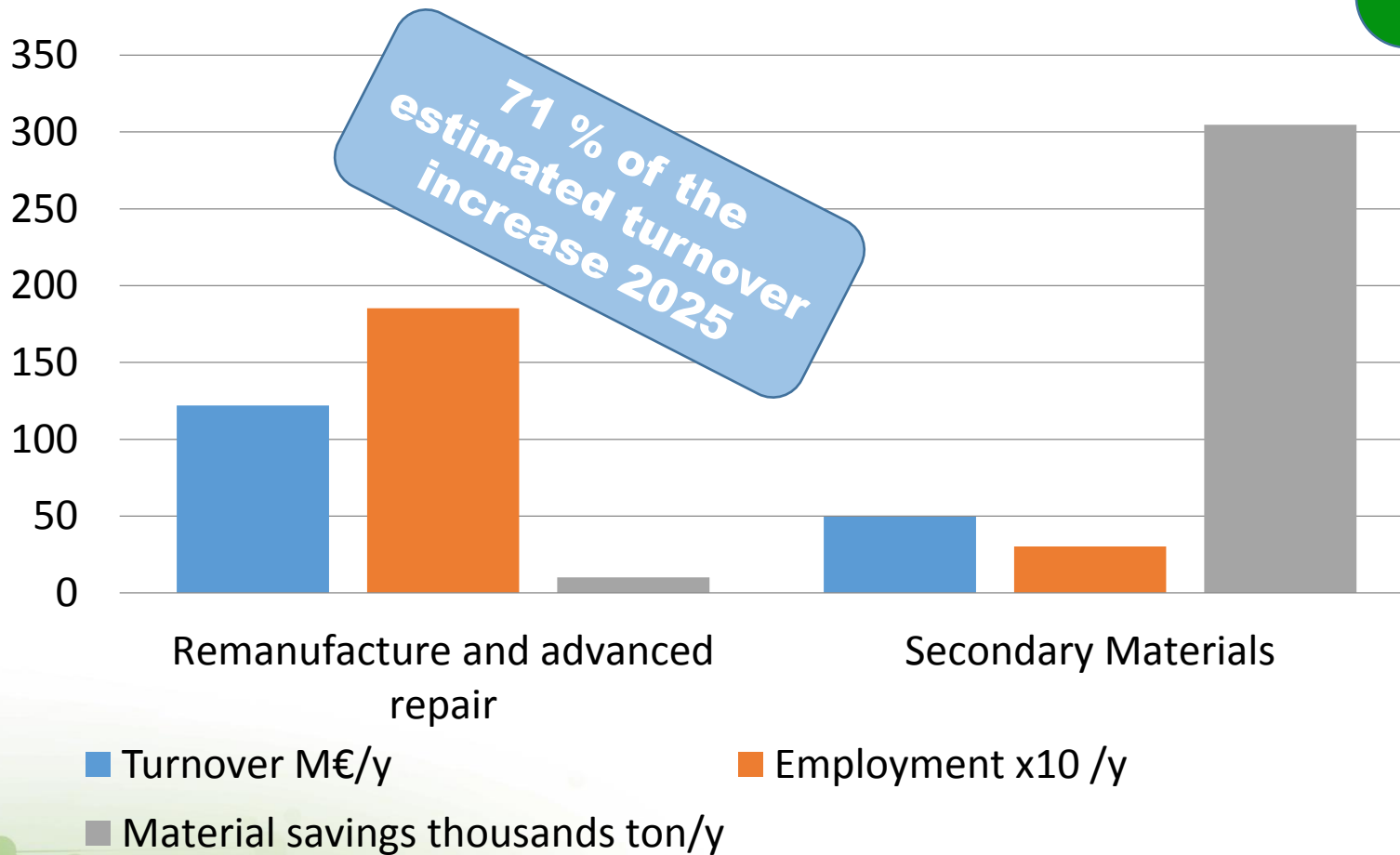
Prevention is Ecodesign and best available techniques = the real priorities



The circular economy and the hierarchy of waste

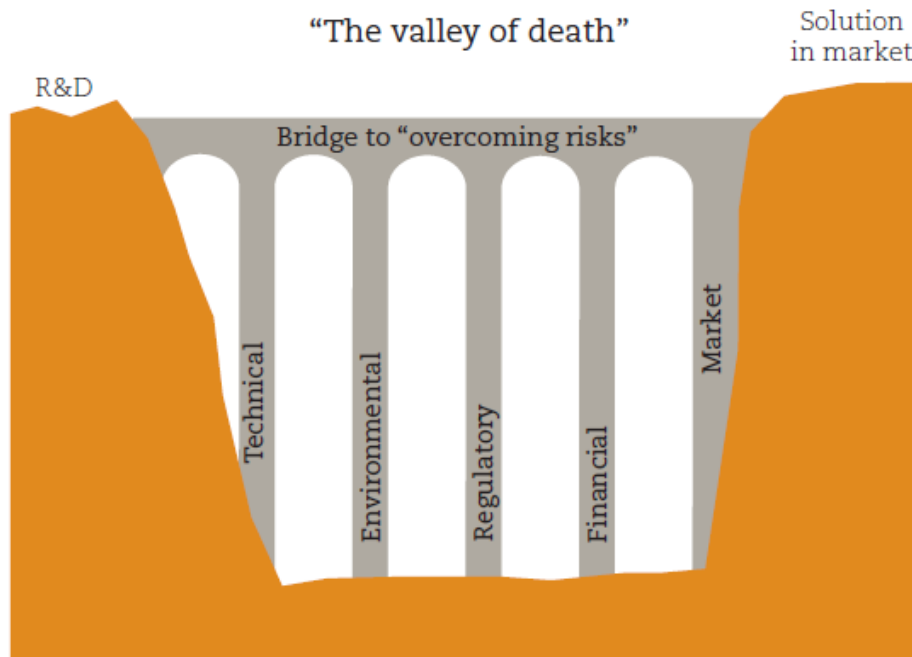


Product and component recovery may create more value than material recovery by 2025 in the Basque Country



An individual follow up of each concluded project is necessary

8



- One year projects often don't reach the market. Therefore, their results are monitored 3 years more
- Now the public contribution to create demand is only valued in 17% of the projects

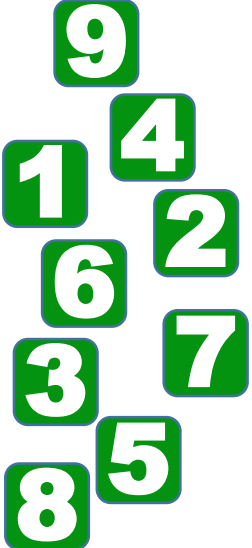
Ecodesign is the cost-effectivest Circular Economy preventive solution

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- 80% of the environmental impacts are defined in the design phase
- Ecodesign not only reduces material amount in products and facilitates sustainable and secondary materials uptake. More relevant is increasing DURABILITY, which also needs new business models (servitization)



SUMMARY

- 
1. **Driving Demonstration Projects with agility and industry proximity is cost-effective**
21 € annually private turnover/€ public
 2. **Contributing to create demand for circular products and materials is the big unresolved matter**
 3. **Prioritizing the product focus (remanufacture and advanced repair) versus the materials focus will allow to create more employment and turnover of circular business (at least 75 times more per tonne)**

Eskerrik asko

Thanks

Gracias

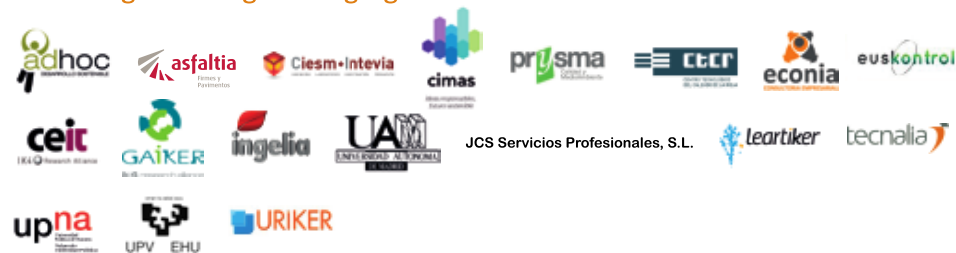
Leaders



Partners in the Value Chain



Knowledge and Engineering Agents



Clusters, Associations and Public Administrations





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BETTER PRODUCTS AND
SERVICES FOR A NEW
CIRCULAR ECONOMY

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ERRONKA GARBIA
ENVIRONMENTALLY SUSTAINABLE EVENT