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Circular Economy and Innovation in Lombardy

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LOMBARDY IN A NUTSHELL



INHABITANTS > 10M
16% of Italian population

GDP ab 350 billions €
Ab. 21% of Italian GDP

ENTERPRISES ab 817k
1st Region for SMEs

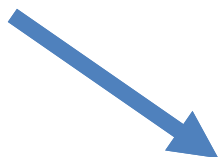
RESEARCHERS ab 27% of I
Private investments ab 28%



2 PILLARS, MANY OPPORTUNITIES

INNOVATION

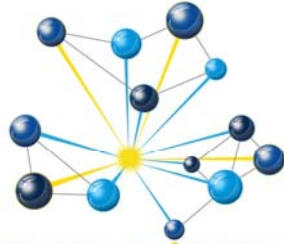
ENVIRONMENT



2 main lines of actions have been set-up in line with the regional strategy framework

tools to support establishment of **Enabling Environments** to facilitate the evolution of business into emerging industries
(Lombard Technological Clusters, Regional Open Innovation Platform)

Policy Mix – Direct Measures,
giving the companies a series of straightforward tools, supporting them in each life-cycle phase



VANGUARD INITIATIVE

New growth through smart specialisation



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Efficient and Sustainable Manufacturing

A Vanguard Initiative Pilot Project

Vision

The Vanguard Initiative Efficient and Sustainable Manufacturing (ESM) Pilot project addresses the development of a European network of pilot plants in the area of manufacturing efficiency and sustainability. It is aimed at sustaining the competitiveness of the European Manufacturing sector, by allowing the exploitation in Europe of innovative efficient technologies, methods, processes and standards in production, contributing to pollution and energy consumption reduction and facilitating smart usage of resources.



What's in it for me?

The ambition of the ESM pilot plants will be to address multiple enabling technologies in a systemic perspective, making available an infrastructure that is currently not existing, due to its complexity and to the high innovation level of the industrial applications for which it is conceived. These pilots will be open to companies, constituting a neutral and cooperative playground for cross-sectorial and interregional collaboration, facilitating the access to state of the art and newest process technologies to all European manufacturing environment.

Democases currently under development

- De- and Remanufacturing to recover and re-use functions and materials from End-Of-Life products
- Adaptive and intelligent manufacturing and assembly for personalised products and components

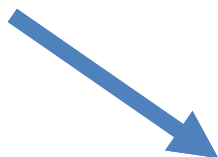
VANGUARD INITIATIVE



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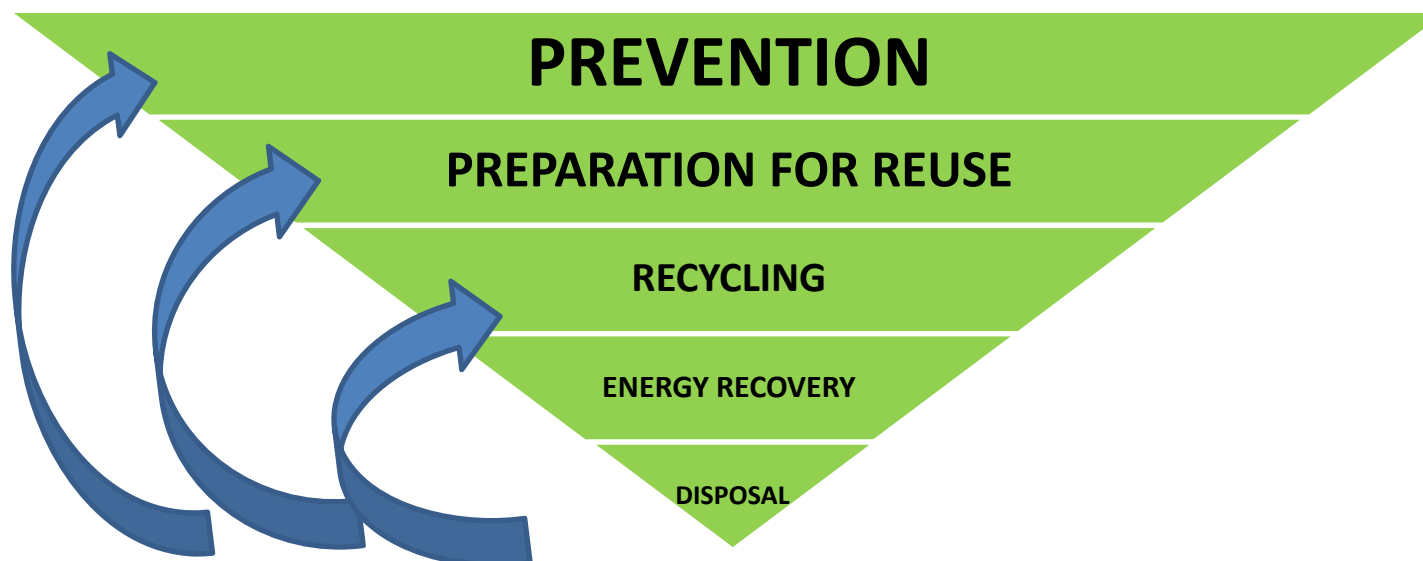
ENVIRONMENT





WASTE

PRGR
(2014)



INNOVATION



Regione
Lombardia

MUNICIPAL SOLID WASTE

Production 456,8 kg/ab - Separate collection 59%



Data 2015

RECYCLING

2011 >> 49,6
 2012 >> 51,2
 2013 >> 53,4
 2014 >> 56,0
 2015 >> 58,1



ENERGY RECOVERY

2011 >> 33
 2012 >> 31,7
 2013 >> 29
 2014 >> 27,5
 2015 >> 26,5



DISPOSAL

2011 >> 2,5
 2012 >> 1,4
 2013 >> 1,2
 2014 >> 1,0
 2015 >> 0,7



2020

Production 455,3 kg/ab - Separate collection 67%



INDUSTRIAL WASTE

WASTE	PRODUCTION	TREATMENT	% coverage
Asbestos	129,965.7	15,847.9	12%
Remediation waste	240,794.8	184,181.5	76%
Sludge	2,047,142.8	1,740,639.6	85%
Car fluff	81,974.0	21,032.6	26%
Weee	102,280.5	122,854.5	120%
Medical waste	27,605.6	25,098.8	91%
Vehicles	471,768.1	94,468.6	20%
Used oils	150,693.4	131,913.6	88%
Batteries	42,471.1	94,539.6	223%
C&D	8,574,349.2	8,530,122.5	99%
Ash - dross	590,266.5	518,419.6	88%

Data 2015



BUSINESS OPPORTUNITIES AND JOBS

- In Lombardy are located:



- 17.8% of the enterprises which have made an eco-investment 2011-2017 (>63.000)
- 25.5% green-jobs-GDP
- 81,600 new green hires expected in 2017
- 83% of the packaging recovery enterprises
- 58% of the WEEE recovery collective systems
- 21% of the enterprises for the waste transportation and site remediation

Sources: Green Italy report 2017; CCIAA Milano 2014



KEEP IN CONTACT!

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