

Promoting resource efficiency and eco-innovation in Italian SMEs

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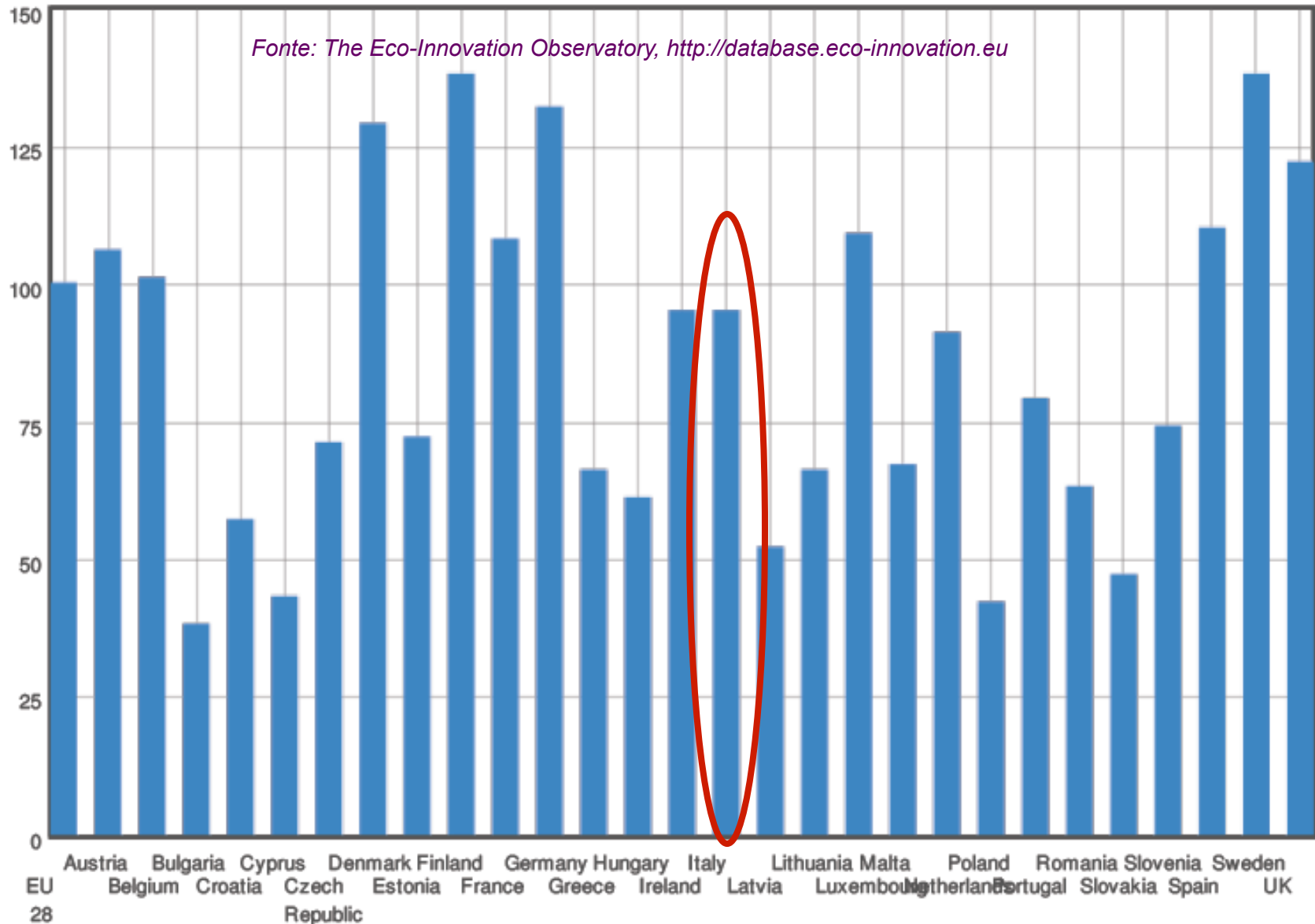
PRESOURCE Few info about ENEA

- Italian National Agency for New Technologies, Energy and Sustainable Economic Development
- Its mission is to foster the sustainable development of Italy by supporting and assisting the decoupling of prosperity and welfare growth from environmental impacts
- the Agency's activities are targeted to research, technology innovation and advanced services to public administrations, public and private enterprises, and citizens.
- ~2700 employees



- ENEA LCA and Eco-design laboratory is a well reputed team of 20 full-time researchers, grant holders and PhD students with multidisciplinary background.
- Its mission is R&D, application and **transfer** to the national system of method and tools for:
 - social, economic and environmental sustainability analysis based on life cycle approach;
 - product eco-innovation;
 - organisations and industrial area eco-management;
 - related international standards and certifications.

Eco-innovation performance in Europe (2013)



- >200.000 with 10 or more employees but only few hundred firms performed LCA studies
- LCA is the most powerful method for eco-innovation and environmental policy
 - Factor 1000 to exploit the full eco-innovation potential of Italian firms

PRESOURCE Eco-innovation determinants

Supply side factors	<ul style="list-style-type: none">• Technological and management capabilities.• Collaboration with research institutes, agencies and universities.• Access to external information and knowledge.• Size	Technology push
	<ul style="list-style-type: none">• Material prices• Energy prices	Cost-saving
Demand side factors	<ul style="list-style-type: none">• Market share• Market demand for green products.	Market pull
Environmental policy influences	<ul style="list-style-type: none">• Existing regulations• Expected future regulations• Access to existing subsidies and fiscal incentives.	Regulatory pull/push

Source: Á. Triguero-Cano et al (2013), "Drivers of different types of eco-innovation in European SMEs", Ecological Economics, 92, 25-33, Elsevier

What a research centre can do for the eco-innovation promotion

- Develop methods and tools tailored to the SMEs needs
- Develop high quality / low price databases
- Make them available to the market
- Rise the SMEs awareness

What ENEA LCA & Eco-design Lab is doing

The knowledge, methods and tools developed in R&D projects is transferred to enterprises by:

- Participation to transnational cooperation projects (**Central Europe, MED, bilateral programs**)
 - Sharing best practices, methods and tools; learning by others
- **LECOP**: laboratory of the Regional High Technology Network for industrial research
 - Industrial research projects with firms to cope with their specific eco-innovation problems
- Promotion of research spin-offs: **LCA-Lab; Ecoinnovazione srl**
 - consultancy services based on most advanced state of the art
- Rise the awareness promoting networks (**Rete Italiana LCA**) and participating to training and workshop targeted to key actors

LECOP - Research Laboratory for Environmental Assessment and Ecodesign embraces different approaches in environmental assessment, management and research:

- Air quality
- Integrated technologies for water resources management
- Life Cycle Assessment and Eco-design

Main research topics are the development of methods, models, tools and applications for the environmental assessment of systems, products and services.

The mission:

- *To support enterprises and public administrations in smart, sustainable and fair development.*

The product:

- *eco-innovation and sustainability consultancy based on life cycle approach and in line with the environmental international policies*

Key factors:

- consultancy based on innovative scientific multidisciplinary approaches
- analysis of strategic needs and integrated strategic planning
- tailored services
- **Direct linkages with ENEA:** knowledge, transfer and application of the most up-to-date methodological developments and initiatives.



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