CIRCULAR ECONOMY NETWORK

The state of the circular economy in Italy based on the European Action Plan

CAMILLE ANERIS
SUSTAINABLE DEVELOPMENT FOUNDATION

Milan, May 10th 2019

CIRCULAR ECONOMY NETWORK – LAUNCHED IN APRIL 2018

The Circular Economy Network (CEN) is a project that aims, in the wake of the European strategy, **to stimulate a profound change in our production system, moving from a linear economy to a circular model capable of supporting the social, ecological and climate challenges that arise from the green economy**, while at the same time increasing the competitiveness of Italian companies on international markets.

The CEN stems from an initiative by the Sustainable Development Foundation and **is open to all companies that intend to share these goals by taking concrete actions and commitments**. As of today, it counts 12 promoters and 30 members.

Members of the Circular Economy Network AgriBiom, AIRA, AIRP, Ancitelea, Ambiente spa, ANGAM, Assocarta, Assoreca, Assovetro, Castalia, Comieco, CONOE, CONOU, Corepla, Ecocerved, Ecomondo, Ecoped, Ecotyre, ERICA soc. coop., Ferrovie dello Stato, Fise Unicircular, Giunko, Mercatino, Officina dell'ambiente, Rubber Conversion, Sabox, Tramonto Antonio – Servizi per l'ambiente (Services for the environment), Specialised Polymers Industry

CIRCULAR ECONOMY NETWORK – OBJECTIVES

The work of the Circular Economy Network is based on some fundamentals:

- promoting, collecting and disseminating studies, researches and elaborations on circular economy;

- defining the key indicators for circularity and analyzing national performances;

- evaluating the main critical issues and barriers to be removed, indicating the possible solutions;

- developing strategies, policies and measures to be proposed to political decision makers, enabling a positive dialogue between the business world and institutions;

- enhancing and contributing to the dissemination of good practices and of the best techniques.

CIRCULAR ECONOMY NETWORK – MAIN ACTIVITIES

❖ **RESEARCH AND STUDY ACTIVITIES**

Elaboration and publication of the NATIONAL ANNUAL REPORT on circular economy

Realization and dissemination of thematic reports and insights on circular economy issues

❖ **ORGANISATION OF EVENTS**

National conference on Circular Economy

Discussion forums, workshops, training activities on the main topics related to circular economy

❖ **ENHANCEMENT OF BEST PRACTICES, AND INNOVATIVE TECHNOLOGIES AND APPROACHES**

Organization of the annual prize for circular economy companies

Dissemination of experiences and projects of the network members

❖ **DISSEMINATION OF ANALYSIS AND NEWS USING THE NETWORK WEBSITE AND THE OTHER INFORMATION CHANNELS**

REPORT ON CIRCULAR ECONOMY IN ITALY - 2019

The **first Report of the Circular Economy Network**, realized in collaboration with ENEA

Based on the structure of the *EU Action Plan for the Circular Economy,* the study provides an analysis and stocktaking of circular economy in Italy

34 indicators subdivided in the 5 areas defined in the action plan

- **PRODUCTION**

- **CONSUMPTION**

- **WASTE MANAGEMENT**

- **SECONDARY RAW MATERIALS**

- **INNOVATION AND INVESTMENTS**

The last section of the report focuses on an overall assessment of the Italian performances of circular economy, also compared to the other 4 most important European economies: France, Germany, Spain and the United Kingdom
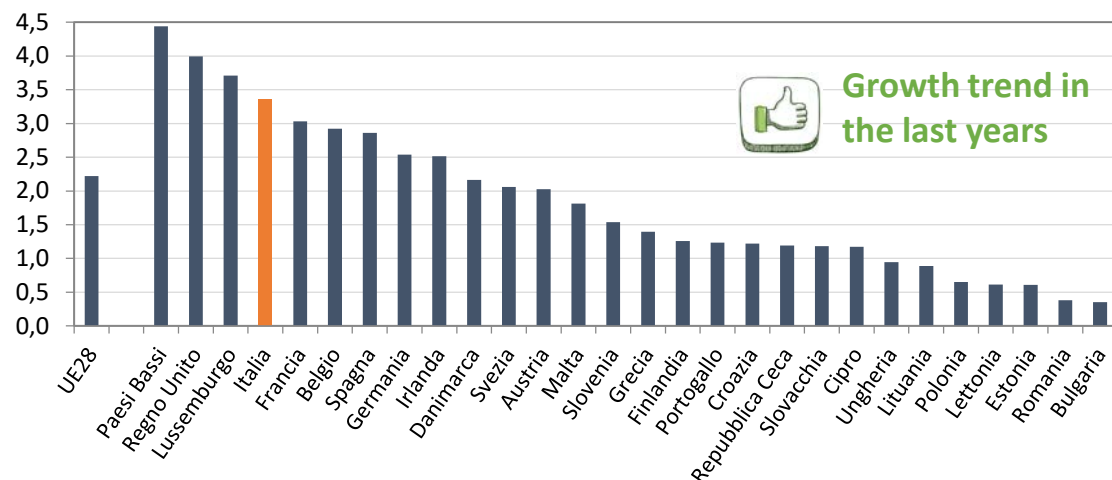
The report includes **10 proposals for the circular economy in Italy**

REPORT ON CIRCULAR
ECONOMY IN ITALY

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CIRCULAR
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CIRCULAR ECONOMY AND PRODUCTION

Growth trend in the last years

Resource Productivity [€/kg]: GDP/DMC (Domestic Material Consumption)

Resource productivity: in 2017 Italy ranked among the first European countries, with the greatest economic value generated per unit of consumption of material.

At purchasing power parity, every kg of resource consumed generates € 3 of GDP (European average: 2.24 €/kg).

Growth trend in the last years

Generation of waste per DMC [%]
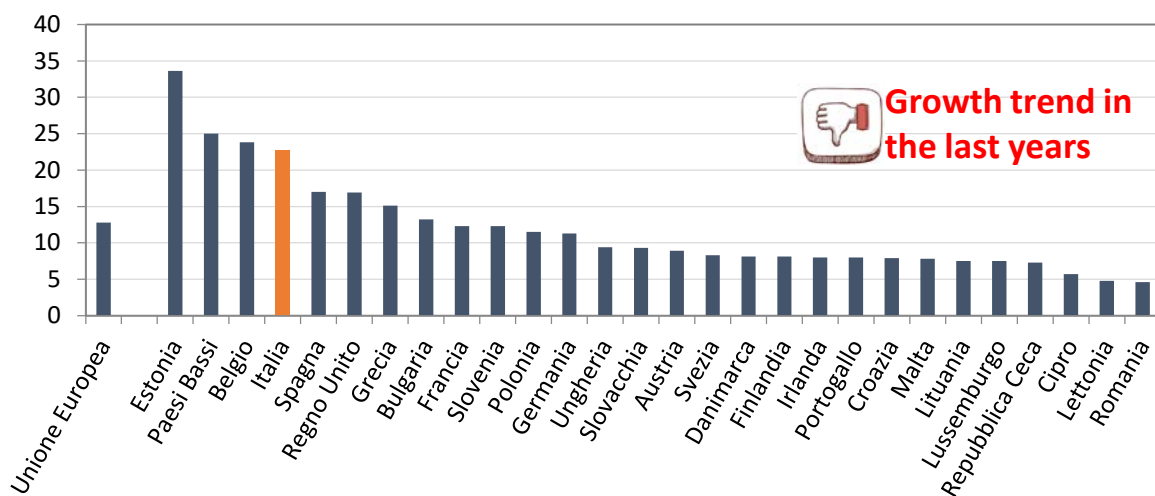
The analysis of **total waste production** (%) compared to DMC sees Italy achieving a value of 22.7% (European average: 12.8%). In the 2004-2014 period, the indicator grew considerably in Italy (+ 56%). Italy in 2014 had the worst performance compared to the 5 largest European economies.
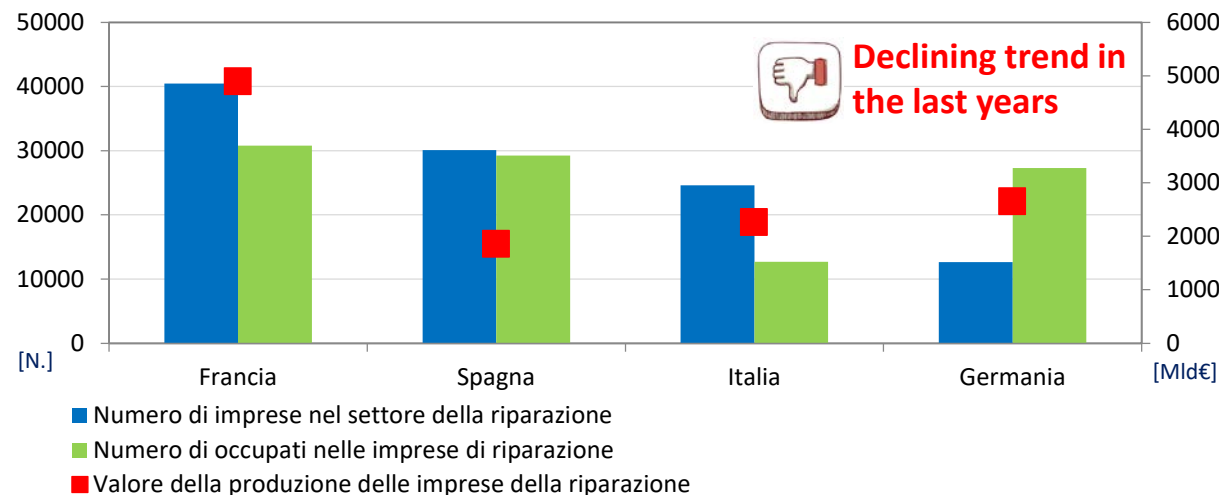
In this sector, considering the trend of the 8 indicators analysed, Italy ranks first in terms of circularity of production compared to the top 5 European economies, a stable position compared to last year.

CIRCULAR ECONOMY AND CONSUMPTION

Declining trend in te last years
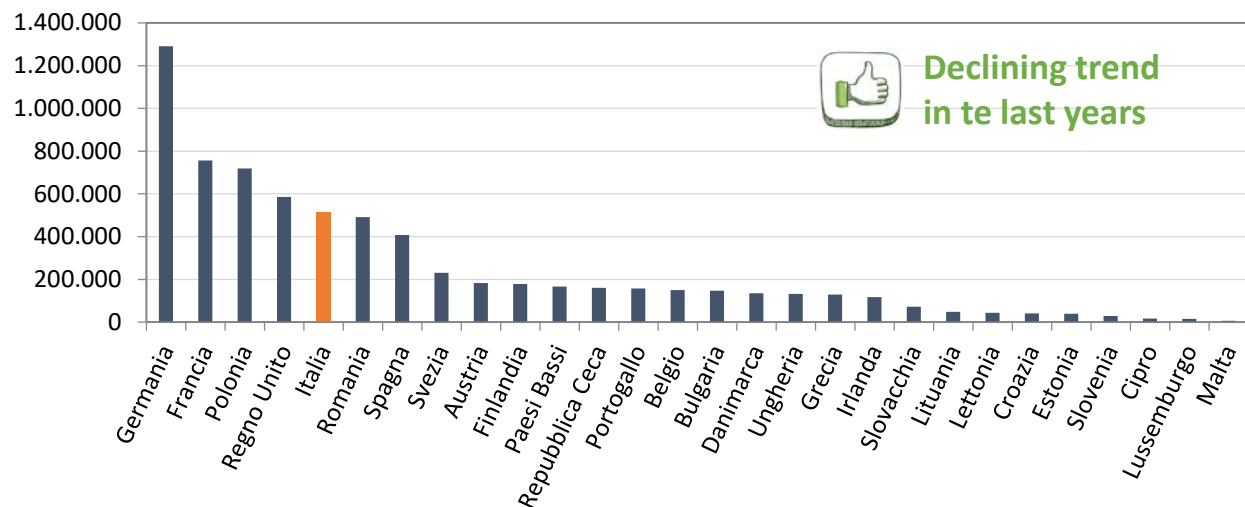
Domestic Material Consumption (DMC), kt, 2017

**Domestic Material Consumption** for Italy in 2017 accounted for 514 Mt, a 36% reduction in 9 years. Considering the last year of analysis, Italy, France, Spain and the United Kingdom all showed a trend reversal, recording a slight increase in consumption compared to previous years.

Declining trend in the last years

- Numero di imprese nel settore della riparazione
- Numero di occupati nelle imprese di riparazione
- Valore della produzione delle imprese della riparazione

Repair sector [N. e Mld€]

Almost **25 000 companies** perform repairs on electronic goods, as well as on other personal possessions (clothing, footwear, watches, jewellery, furniture, etc.). In 2016 these companies generated **€ 2.2 billion** at a national level (- € 800 million compared to 2008). Workers in the repair companies operating in Italy in 2016 were over 12,000.

In terms of consumption, considering the trends of the 9 indicators analysed for circularity, Italy ranks third ahead of Germany.

CIRCULAR ECONOMY AND WASTE MANAGEMENT

Growth trend in the last years
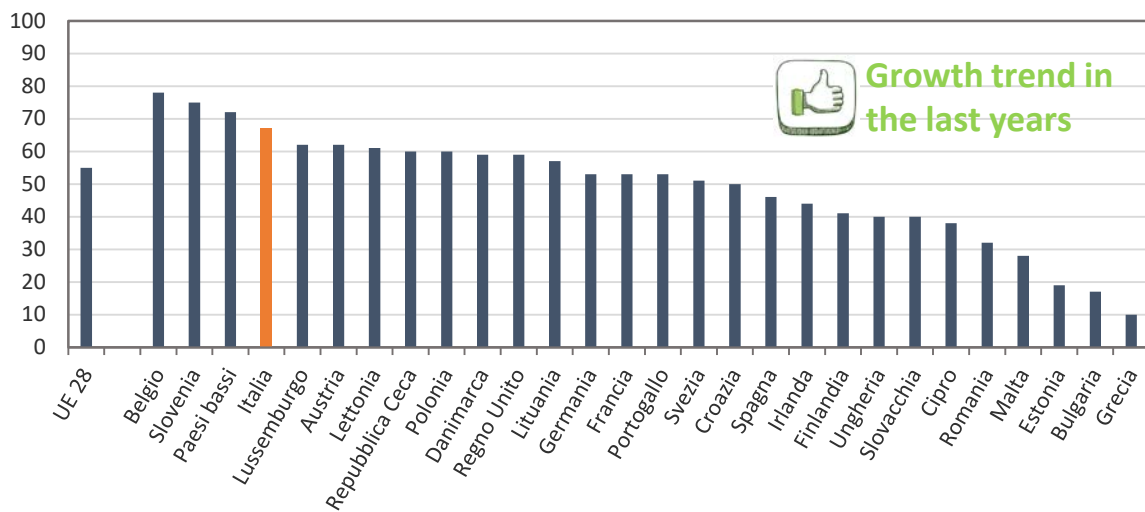
Recycling of domestically generated waste, 2014 [%]

In 2016, the **percentage of recycling of all waste** was 67%, a much higher percentage than the European average (55%), taking Italy to the first place compared to the main European economies.


Declining trend in the last years

2030
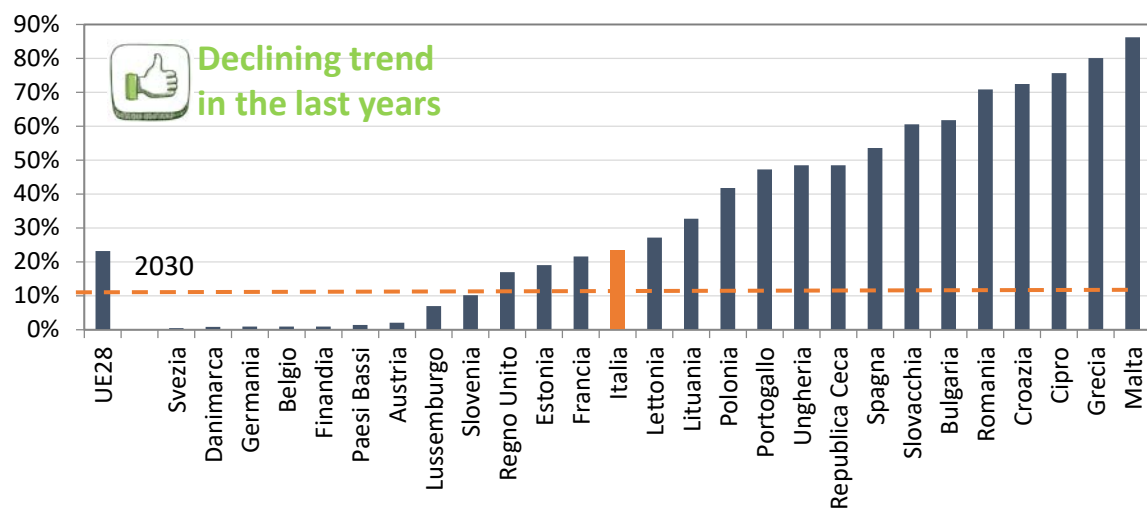
Municipal waste landfilled [%]

Landfill disposal for Italy is down to 25%, in line with the European average, but with still high values compared to other countries such as Germany, France and the United Kingdom.

Critical issues: the delays in some areas in urban waste management, a not always balanced geographical distribution of treatment plants, and the End of Waste emergency.

From the overall analysis of waste management performance, in terms of circularity, Italy ranks joint 1st with Germany.

CIRCULAR ECONOMY AND THE SECONDARY RAW MATERIAL

Growth trend in the last years
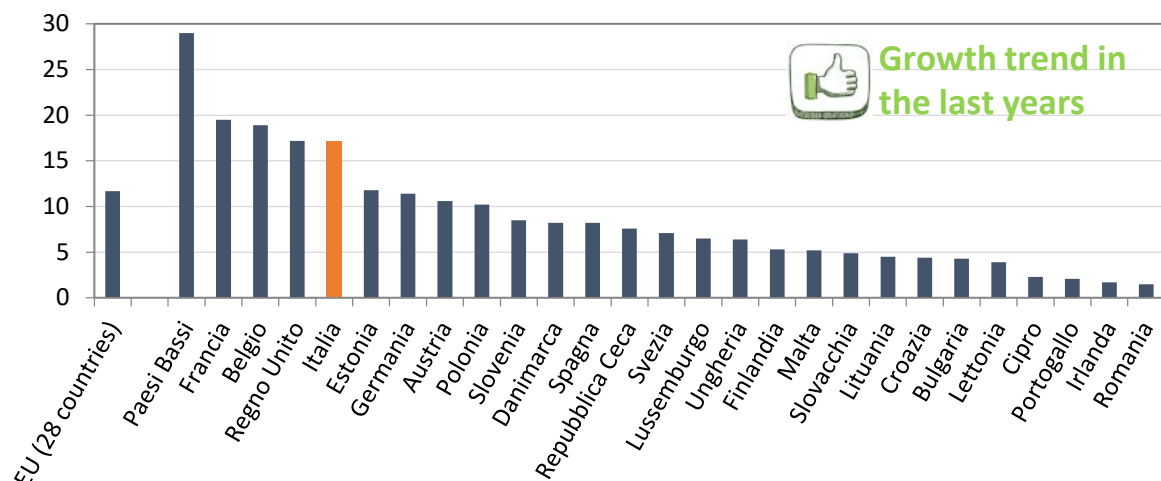
Rate of circular material use [%]

Export and import of recycled material in Italy [Kt]

Rate of circular material use: for Italy in 2016 equates to 17.1%. After a growth leading up to 2014, with a maximum rate value of 18.5%, there was a decrease in 2015 (16.6%), and a regrowth in 2016 (17,1%).

Balance between the export and import of recycled material: Italy imports 700.000t of material more than what it exports.

In 2017, 96.3 Mt of material was **recycled and re-injected within production cycles in Italy,** an amount higher than what was recycled nationally. This provides two signals:

- The Italian production system is capable of exploiting recycled material and that there is therefore a demand for it;
- We are not able to fully satisfy this demand through a greater exploitation of waste in our territory.

In this sector, considering the 4 indicators analysed, in terms of circularity Italy ranks third, one position down compared to the previous year.

CIRCULAR ECONOMY AND INNOVATION and INVESTMENTS



Eco-innovation input and output
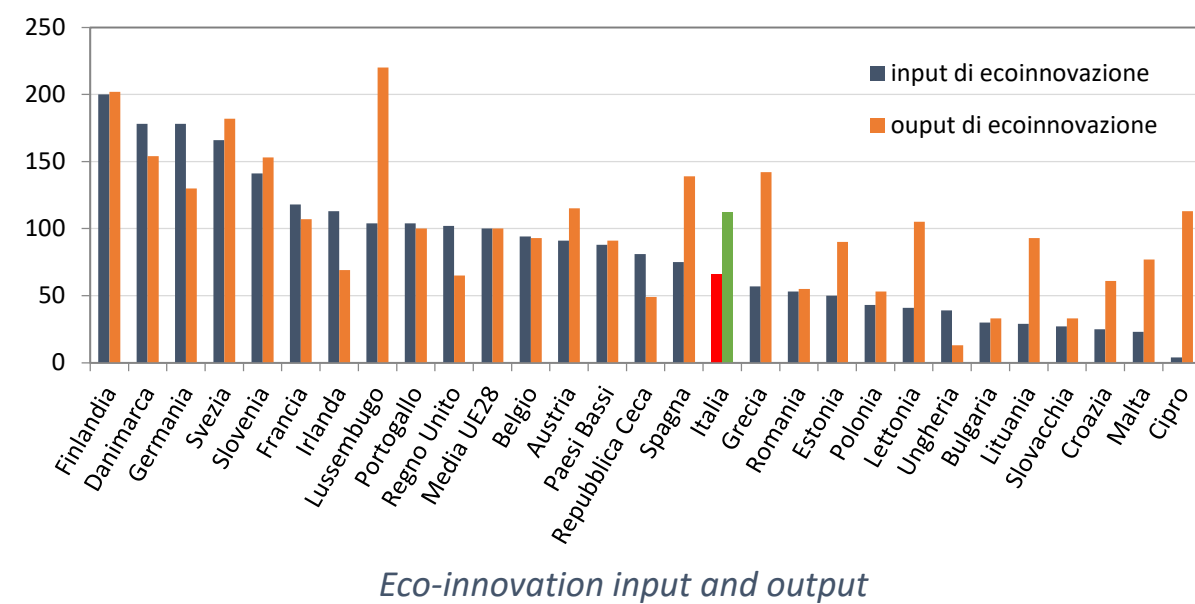
Eco-innovation input index: Italy takes a value three times lower than Germany and two times less than France, implicitly highlighting a low level of public financing and private investments in this sector, as well as a lack of workers actively employed in eco-innovative research and development. This limit is partially compensated by a satisfactory **eco-innovation output index**.

Employment in some sectors of Circular Economy [%]
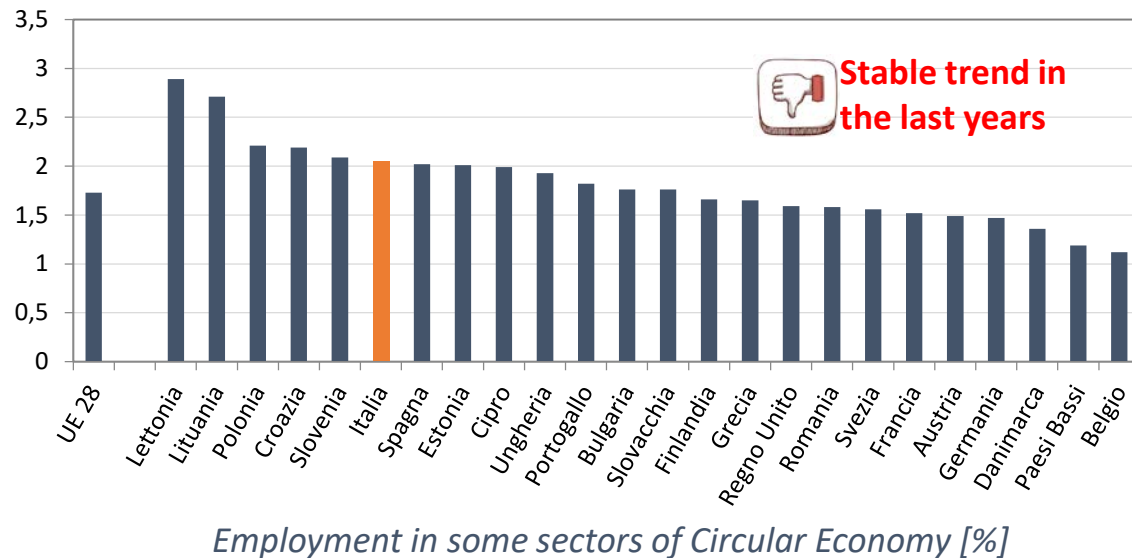
Employment in circular economy sectors: Italy ranks first with an employment rate of 2.05% as compared to the total employment.

In the overall assessment of the performances linked to investments and employment referring to circular economy, Italy ranks second, after Germany.
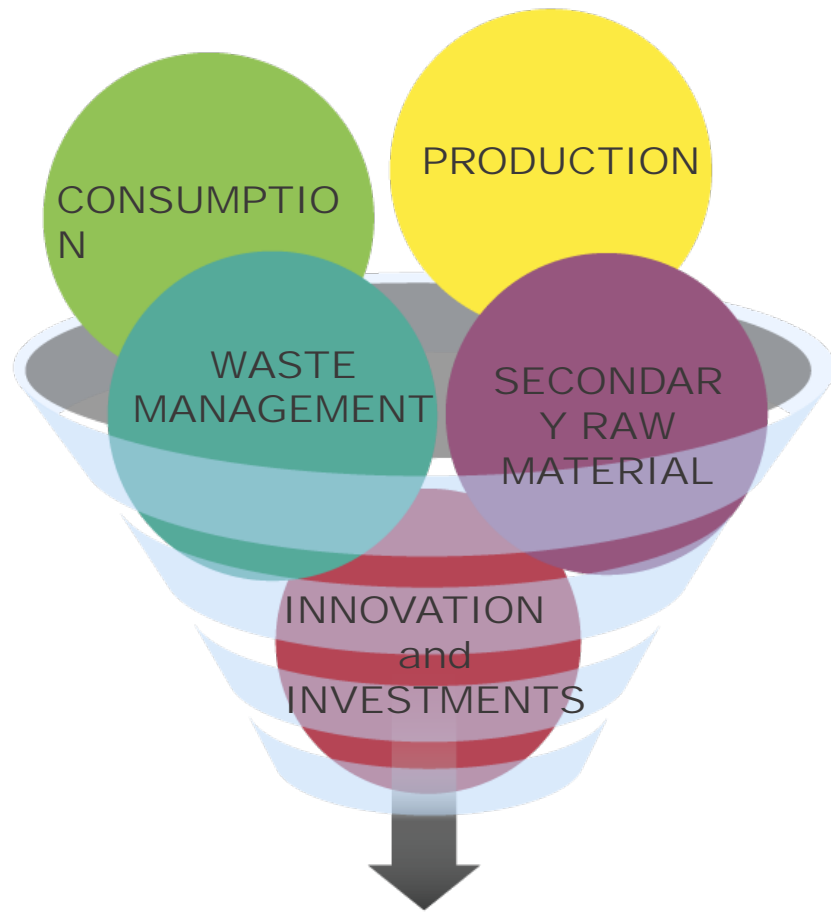
OVERALL CIRCULARITY INDEX

Inlcuded countries: **ITALY, GERMANY, FRANCE, SPAIN AND THE UNITED KINGDOM**

Through the assignment of scores to the results achieved by individual countries, according to their performances, a **summary index** was created for each sector analyzed.

In order to give a full assessment, the **overall national circularity index** was created as the sum of the scores achieved by the indices calculated for each area.

For a better analysis of the trend over the time, the indices have been calculated and compared for the last two available years.

OVERALL CIRCULARITY INDEX

CLASSIFICATION OF THE 5 MAIN EUROPEAN COUNTRIES AND COMPARISON WITH THE 2018 PERFOMANCE INDEX

		2019	VARIAZIONE RISPETTO AL 2018
1	ITALIA	103	⟷
2	REGNO UNITO	90	⟷
3	GERMANIA	88	⟷
4	FRANCIA	87	⟷
5	SPAGNA	81	⟷

Based on the methodology used, comparing the 5 most important European economies, **Italy is the top performer in terms of circular economy implementation**, ahead of the United Kingdom, France, Germany and Spain (in this order).

While Italy's position has remained unchanged compared to the previous year, **there are some small signs of a slowdown which must be taken into account.**

CIRCULAR ECONOMY NETWORK

THANK YOU FOR YOUR ATTENTION!

The full report can be downloaded from:
www.circulareconomynetwork.it
www.fondazionesvilupposostenibile.org