



Green Economy



 **Sviluppo Campania**

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THE GREEN ECONOMY SECTOR IN CAMPANIA



In Campania region has been designed and produced the **first electric bus in Italy** and we are among the most active regions in the country with more than 46 thousand companies investing in green technologies, almost the 9% of investments in Italy. In Campania, the green economy sector plays a strategic role for the development of the regional economy.

According to the GreenItaly 2022 Report by the Symbola Foundation and Unioncamere, Campania has 46,020 companies making eco-investments in the period 2017-2020.

The increasing focus on energy sustainability, the reuse of materials and resources are consolidated realities showing the way to the economy of the future.

The GreenItaly Report also highlights how the demand for work by companies in 2021 also confirms the need for more qualified and experienced professional figures for 'green jobs' compared to other professional figures, with **126,700 workers activated in 2021 in Campania**. Green jobs' are a strategic driver for the growth and development of modern businesses.

The report represents the entire green supply chain in Campania, from the manufacture of equipment and machinery for the production and management of energy, to activities concerning the waste cycle.





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ENTERPRISES





Tab. 1 – Distribution of enterprises. Green Economy Chain. Campania region. Years 2019-2021

Year	2019	2020	2021
Total	816	828	829

Source: data Infocamere 2021

The number of companies operating in the **Green Economy supply chain**, for the subcategories considered, **sees a slight increase in 2021**.

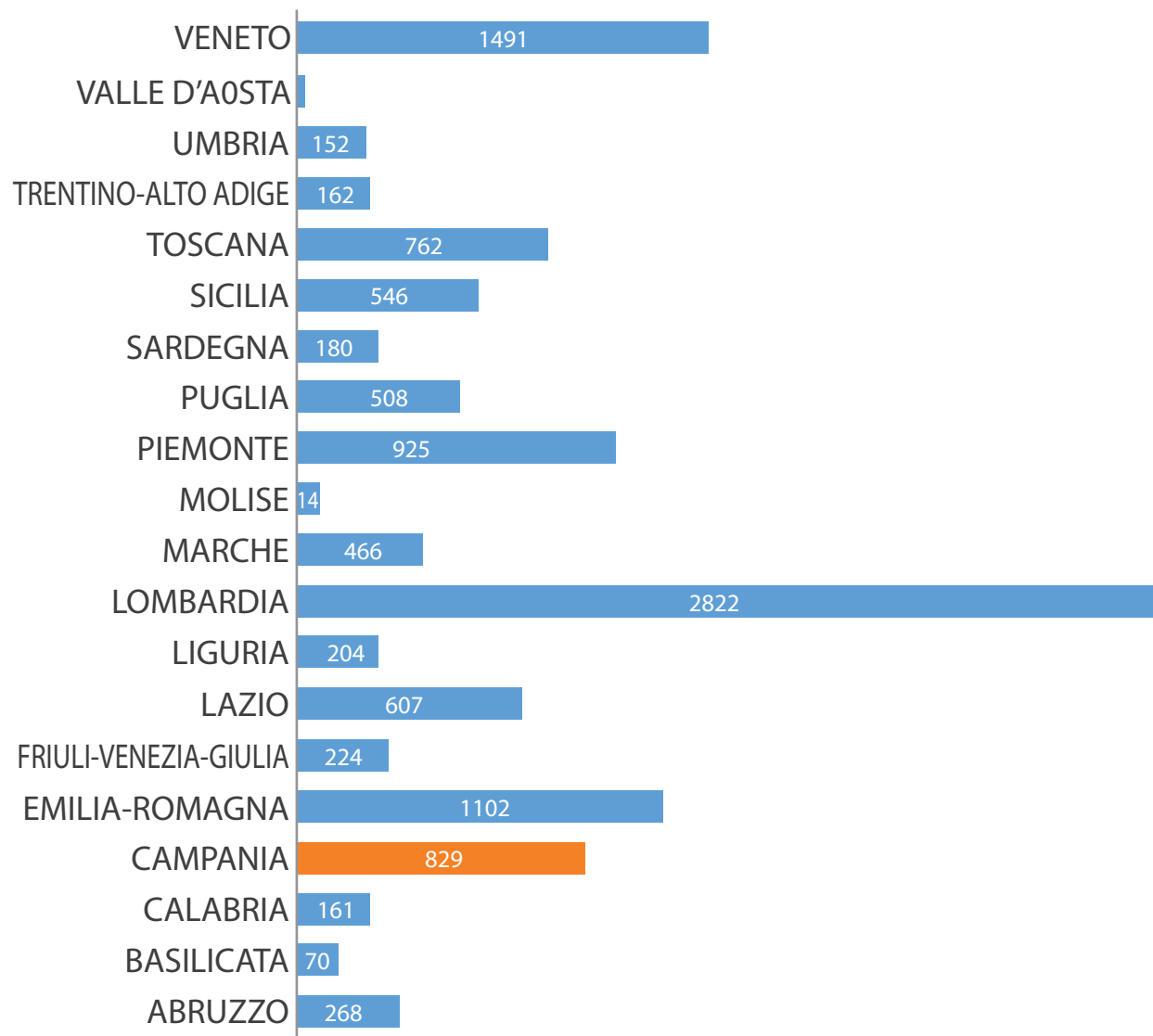
There is a majority of companies involved in the collection, treatment and disposal of waste and the reuse of materials.

The figure for the number of companies in the Green Economy sector in Campania is significant when compared to the national figure, as shown below: **Campania is the fifth largest Italian region in terms of the number of companies in the sector, first among those in the South and ahead of Toscana and Lazio.**



Fig. 1 – Distribution of Italian enterprises.
Green Economy Chain. Year 2021

**italian enterprises by
region. green economy
chain. year 2021**



Distribution by class of employees and value of production

Comparing company size, which we see reported below (distribution by class of employees and value of production), the numbers concerning the Green Economy sector in Campania show a consistent presence of micro enterprises, up to 9 employees; the percentage of 79% is, however, lower than other sectors.

On the other hand, as regards the distribution by value of production, almost all of the companies analysed have a turnover of up to 10 million euro (90% within 2.5 and 6% between 2.5 million and 10 million).



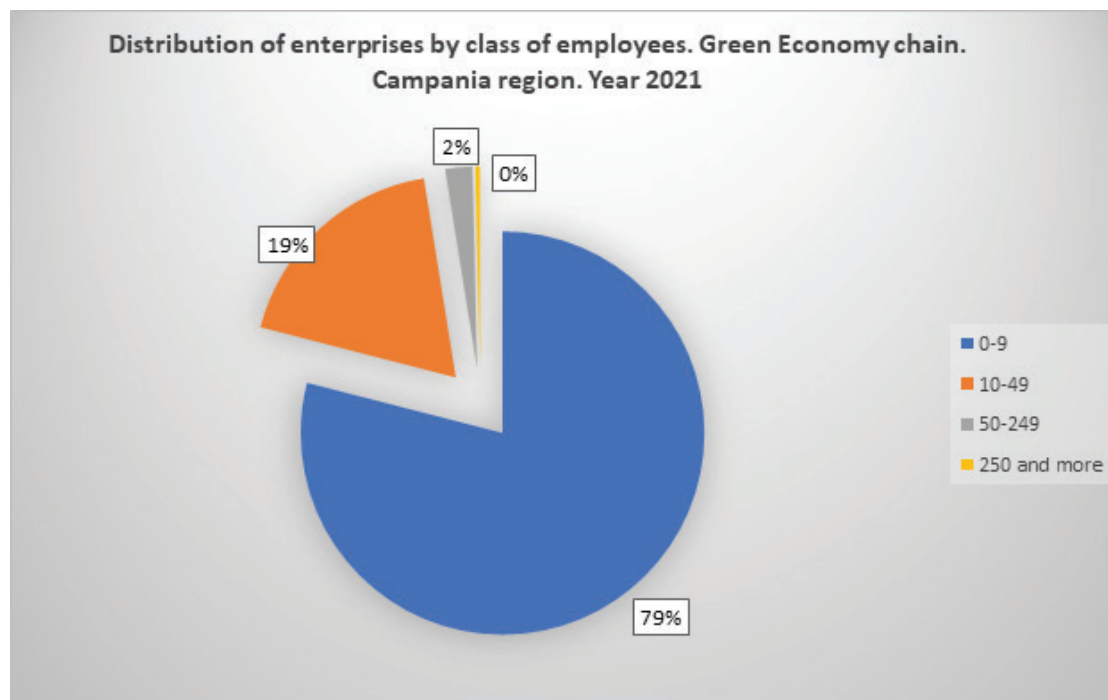


Tab. 2 – Distribution of enterprises by class¹ of employees. Green Economy chain. Campania region. Year 2021

Class of Employees	Micro 0-9	Small 10-49	Medium 50-249	Large 250 - oltre	Total
Total for class	655	153	18	3	829

Source: data Infocamere 2021

Fig. 2 - Distribution of enterprises by class¹ of employees. Green Economy chain. Campania region. Year 2021



Source: data Infocamere 2021

¹ EU MPPI classification



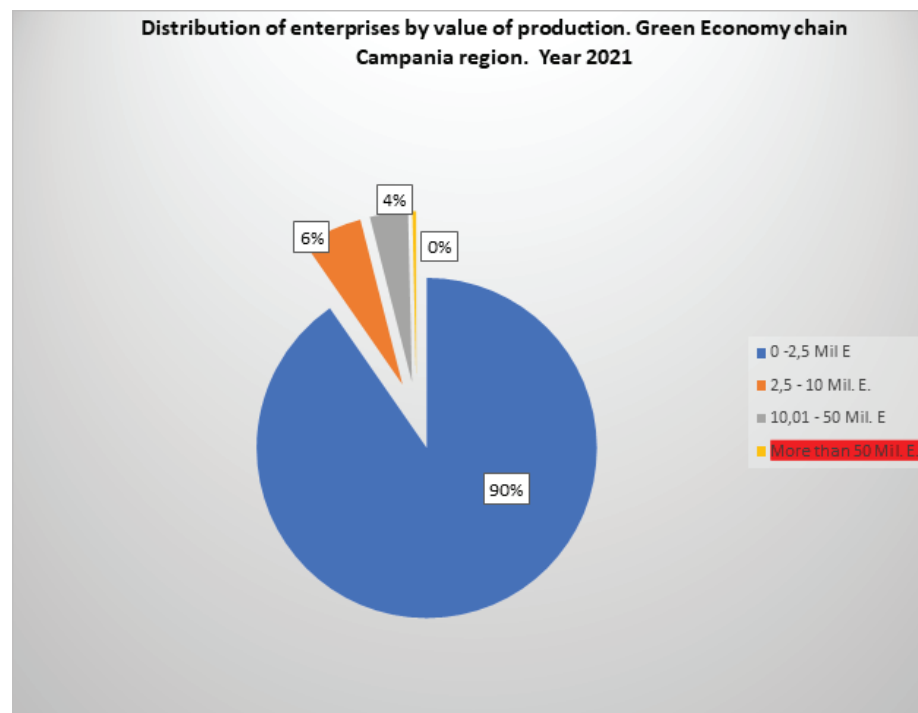


Tab. 3 - Distribution of enterprises by value of production. Green Economy chain. Campania region. Year 2021.

0 - 2,5 mil Euro	2,5 – 10 mil. Euro	10,01 -50 Mil. Euro	Oltre 50 mil Euro	Totale
749	47	30	3	829

Source: data Infocamere 2021

Fig. 3 - Distribution of enterprises by value of production. Green Economy chain. Campania region. Year 2021



Source: data Infocamere 2021



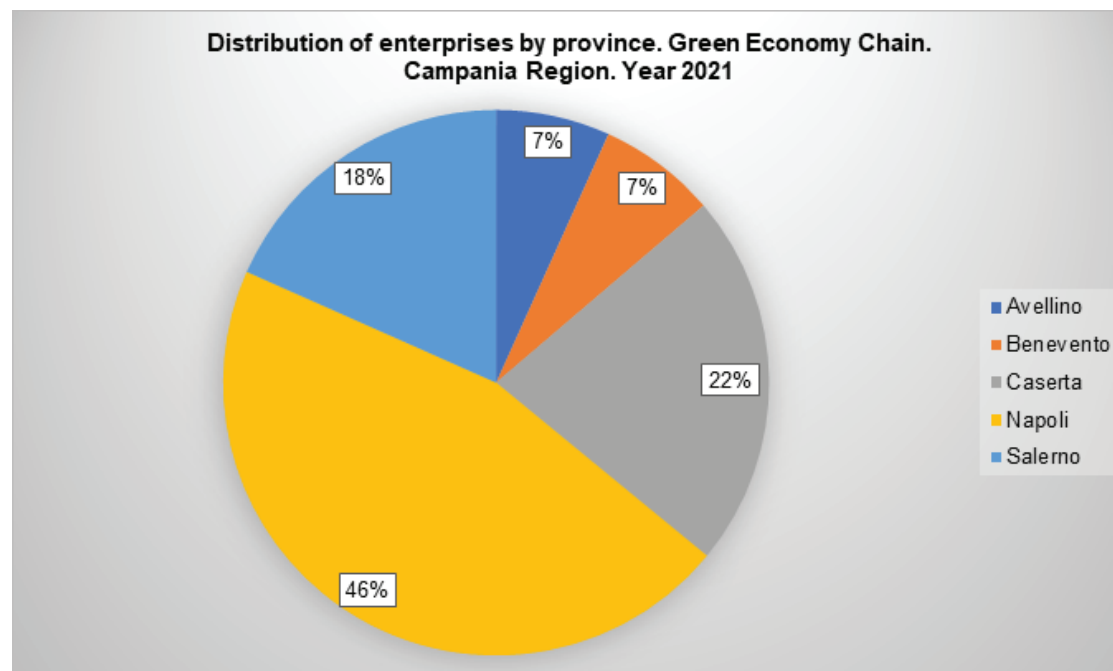


Tab. 4 - Distribution of enterprises by province. Green Economy Chain. Campania region. Year 2021

Avellino	Benevento	Caserta	Napoli	Salerno	Total
56	58	184	379	152	829

Source: data Infocamere 2021

Fig. 4 - Distribution of enterprises by province. Green Economy Chain. Campania region. Year 2021



Source: data Infocamere 2021

Naples (46%), Caserta (22%) and Salerno (18%) see the majority of companies operating in the Green Economy sector.





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INCENTIVES AND FINANCING²



² "Source: [incentivi.gov.it](https://www.incentivi.gov.it) / [mise.gov.it](https://www.mise.gov.it) / [invitalia.it](https://www.invitalia.it) - febbraio 2023"



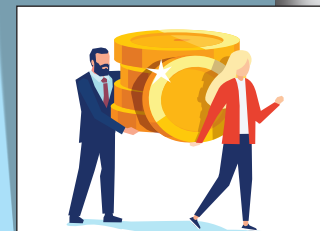
Non-repayable grants of up to 80% for the realisation of technology transfer and industrialisation projects. POR Campania ERDF 2014 - 2020. Priority Axis 3 - Competitiveness of the territory



It finances technology transfer and industrialisation projects promoted by micro, small and medium-sized enterprises in Campania, within the Specialisation Areas of RIS 3 Campania 2014-2020 relating to the following activities:

- **Industrial research and experimental development activities** aimed at the creation of prototypes, testing and validation of new or products
- **Industrialisation activities aimed at the economic** exploitation of the results of analyses and/or experimental work and/or planned investigations carried out by universities, research centres, R&D departments

New Sabatini Green (since 1st of January 2023)



Subsidy made available by the Ministry of Enterprise and Made in Italy. The Target is to facilitate companies' access to credit and increase the competitiveness of the production system. It supports investments to purchase or lease machinery, equipment, plant, capital goods, as well as software and digital technologies. As of 1 January 2023, the 'Sabatini Green' programme started supporting SMEs' investments in new facilities, plant and equipment, with low environmental impact, as part of programmes aimed at improving the eco-sustainability of products and production processes

**Contributions
Machinery 4.0
Ministry of
Economic
Development**

Credito di imposta Tax credit aimed at supporting companies investing in new tangible and intangible capital goods for the technological and digital transformation of production processes.

**Digital Export
Bonus MAECI
Ministry of Foreign
Affairs and ICE
Agency**

Non-repayable contribution aimed at supporting manufacturing micro and small enterprises in their internationalisation activities through digital solutions



**Development
Contracts**

Facilities for large-scale strategic programmes (at least EUR 20 million for industrial development and environmental protection and 7.5 million euro for processing and marketing of agricultural products for the agricultural product processing sector). Development Agreement implies a fast track for resources, a reduction in time and greater involvement of the administrations.

**Southern
Investment
Bonus 2023**

Tax credit in favour of companies purchasing new capital goods intended for production facilities located in southern regions. It is granted in the form of a tax credit ranging from up to 45% of the expenditure incurred, depending on the characteristics of the enterprises concerned and the area in which the production structure is located.



Grow in the South Fund



It provides for the acquisition of shareholdings, mainly minority shareholdings, in the risk capital of small and medium-sized enterprises with registered offices and operations in the eight regions of southern Italy: Abruzzo, Basilicata, Calabria, Campania, Molise, Apulia, Sardinia and Sicily.





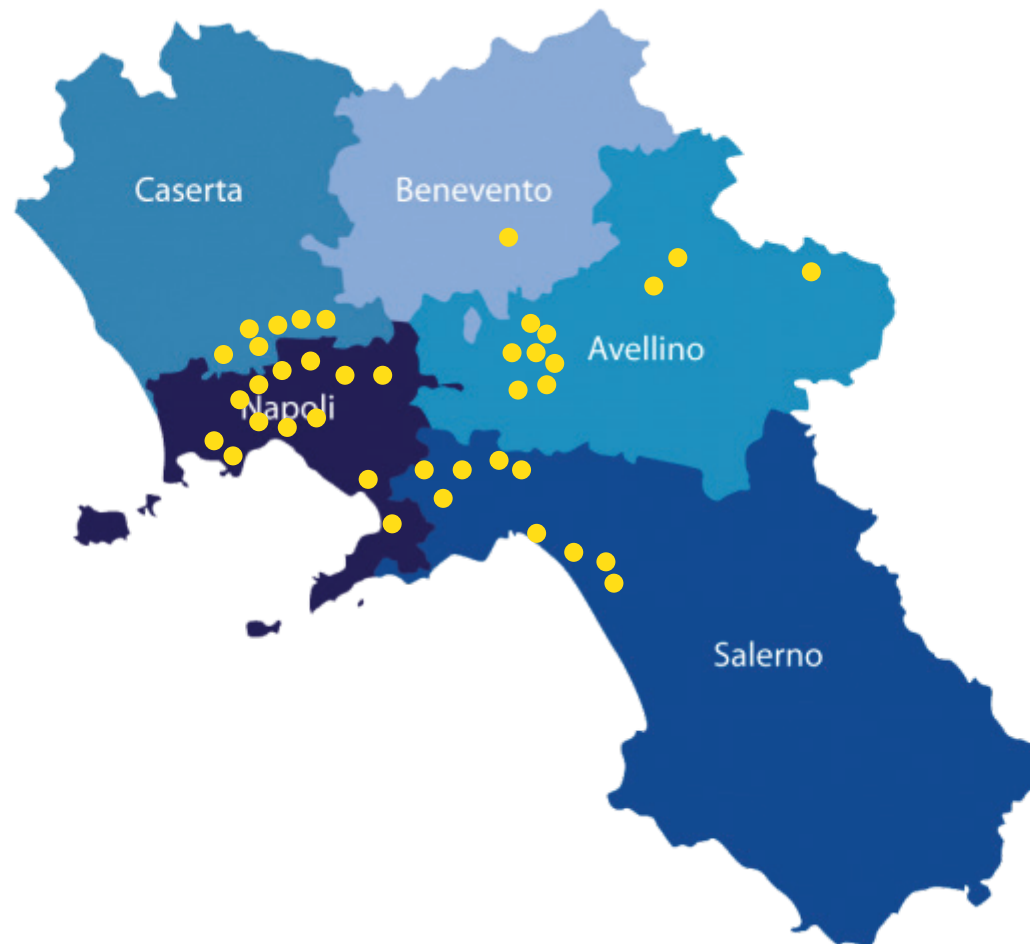
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THE ZES - SPECIAL ECONOMIC ZONE



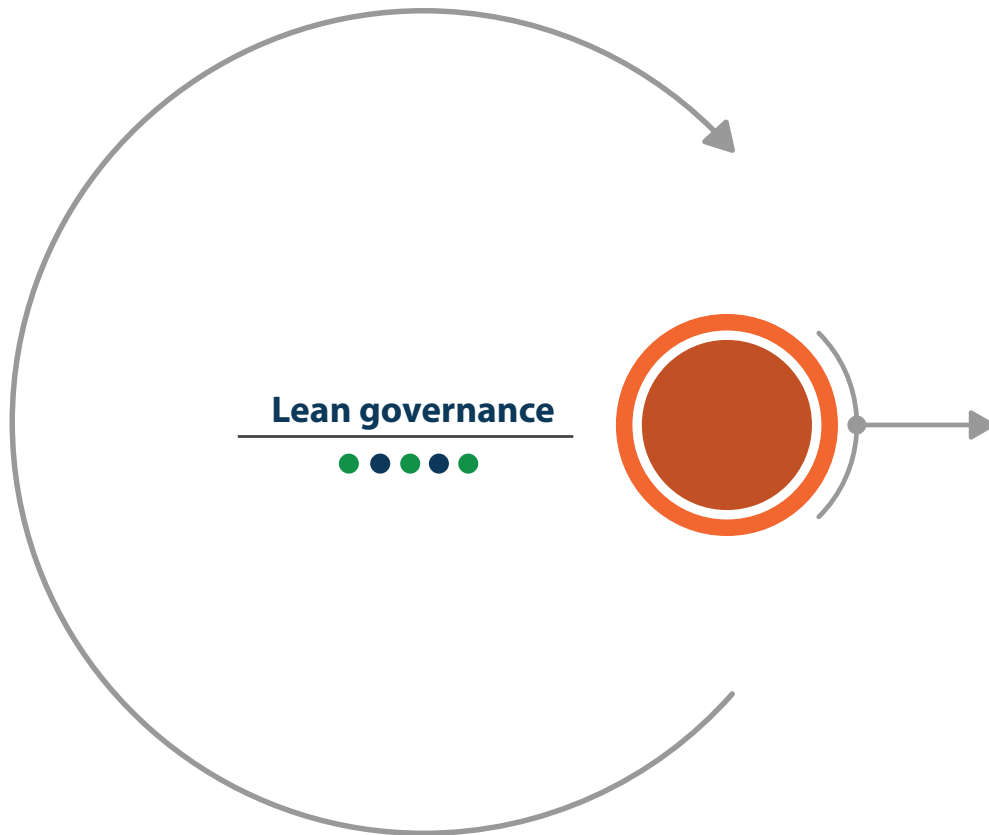
The ZES, **Campania's Special Economic Zone**, according to the Regional Strategic Plan, covers **37 of the 550 municipalities in the region**, an area populated by **2.043.800 inhabitants** (35% of the regional population), made up of **26 'strategic' areas** where there are production facilities, ports, interports, industrial development areas (ASI), and PIP areas.





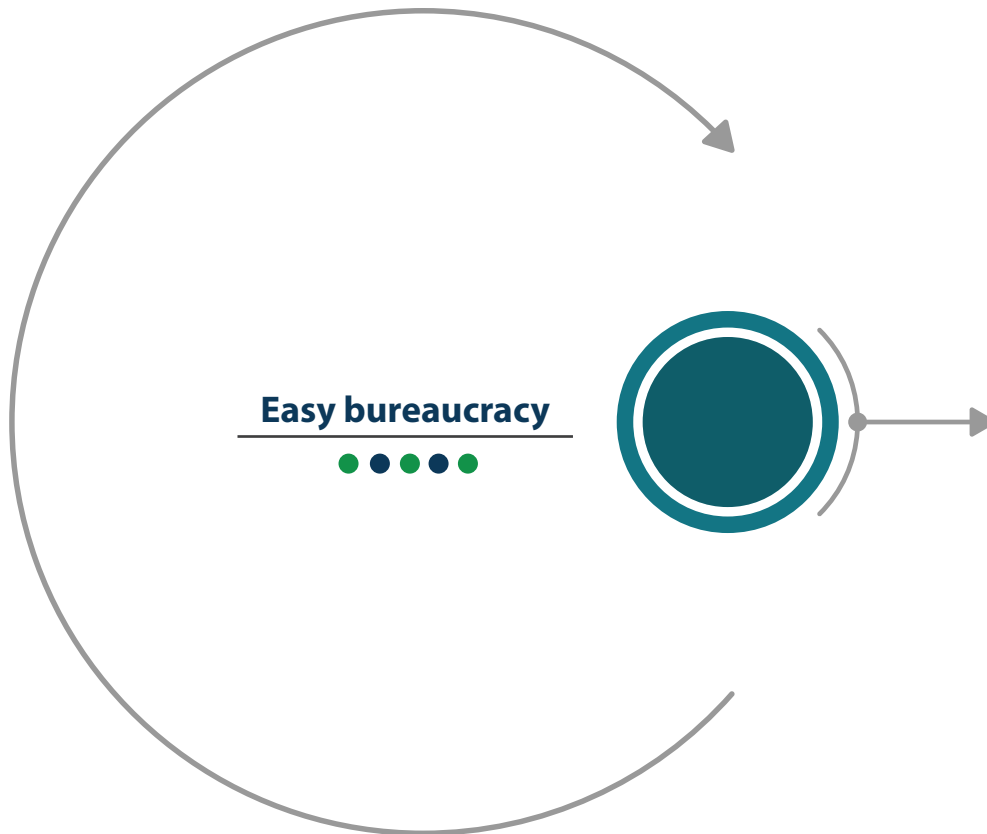
BENEFITS SETTLEMENT IN ZES

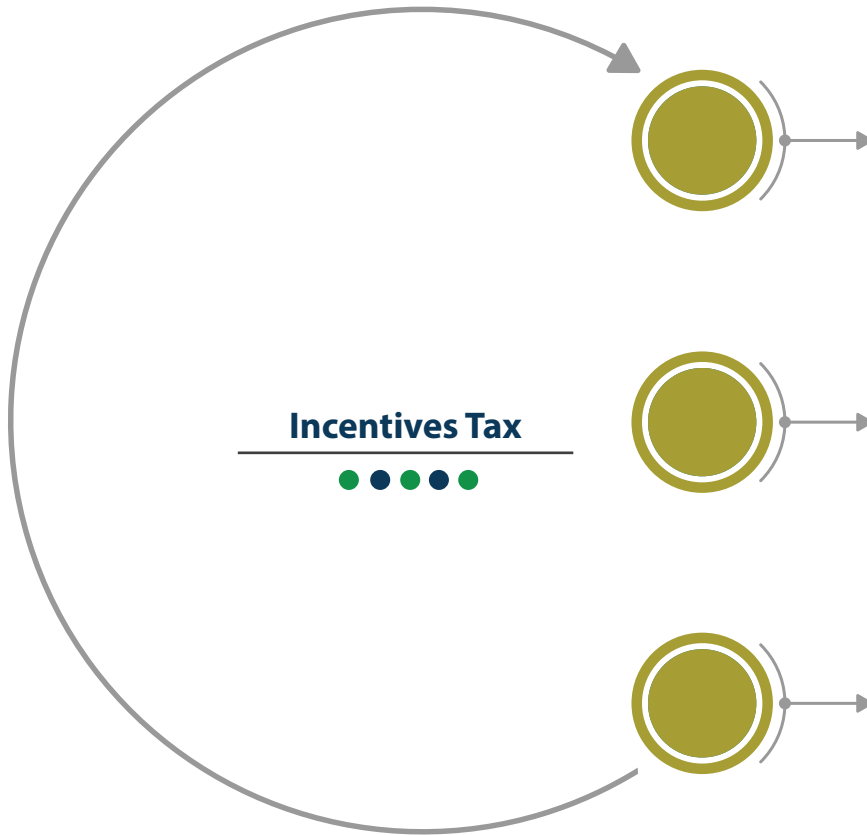




The ZES is managed by an Extraordinary Commissioner with special powers as the main interlocutor for investments.







25% credit of the investment (productive and real estate), for large companies, 35 per cent for medium-sized companies and 45 per cent for small companies, up to EUR 100 million for productive investments and investments in real estate, (also through leasing contracts);

Income tax for activity in ZES reduced by 50%, starting from the tax period in which a new activity is undertaken and for the following six tax periods;

Partial contribution exemption for private sector employers for the period 2021-2029. The relief is 30% of social security contributions payable until 31 December 2025; 20% of social security contributions payable for the years 2026 and 2027; 10% of social security contributions payable for the years 2028 and 2029.





IMPORT/EXPORT. FILIERA GREEN ECONOMY. REGIONE CAMPANIA. ANNO 2021



The total value (Tab 4 and Fig. 5) of exports 2021 of the Campania region in the Green Economy sector for the product classes taken into consideration is **413.7 mln euro**, a strong increase (+65.5%) compared to 2020 (249.8 mln euro).



Imports are worth almost 502 million euro, slightly down, and the trade balance is negative, since imports are worth 88.3 million euro more than exports.

Tab. 5 - Import-Export value. Green Economy Chain. Campania region. Year 2017 – 2021

	IMPORT					TREND IMPORT 2020-21	EXPORT					TREND EXPORT 2020-21	BALANCE IMPORT/EXPORT 2021
	2017	2018	2019	2020	2021		2017	2018	2019	2020	2021		
TOTAL	529.931.935	404.332.814	445.516.331	510.331.021	501.976.006	▼	509.721.341	513.729.400	624.361.999	249.826.190	413.691.860	▲	-88.281.145

Source: Coeweb Istat Data Warehouse foreign trade statistics. Cumulative data 2021



Fig. 5 – Import-Export value. Green Economy Chain. Campania region. Year 2017 – 2021



Source: Coeweb Istat Data Warehouse foreign trade statistics. Cumulative data 2021





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TRAINING AND INNOVATION FOR THE GREEN ECONOMY IN CAMPANIA





UNIVERSITÀ



University of Naples 'Federico II

Master's Degree "Aster Biocirce" Bioeconomy in the Circular Economy

Master's degree with an interdisciplinary programme, offered together with 3 Universities (Bologna, Milano Bicocca, Turin), 4 non-academic partners (Intesa Sanpaolo, Novamont SpA, GFBiochemicals SpA, and PTP Science Park in Lodi), and 2 Italian Technological Clusters (Cluster SPRING and Cluster CLAN agrifood).

It offers an extensive training programme for professionals interested in working in the biobased goods and services industry using biological resources and biotechnological processes. The programme enables professionals to learn about all aspects of the production and marketing of biobased products using state-of-the-art technologies.

According to statistics published on the reference website, masterbiocirce.com, the Master's participants are 73% unemployed and 27% employed. Within a month, 91% of them are working. Of these, 80% receive a permanent contract, and 90% remain in Italy.

Unisob Napoli

Interdepartmental degree course in Business Economics and Green Economy

It aims to train people capable of operating in the corporate world, through a sound knowledge of the main management techniques and the ability to understand the changing economic environment. The unifying element of the training path is the study of economic, financial, social and environmental sustainability profiles.



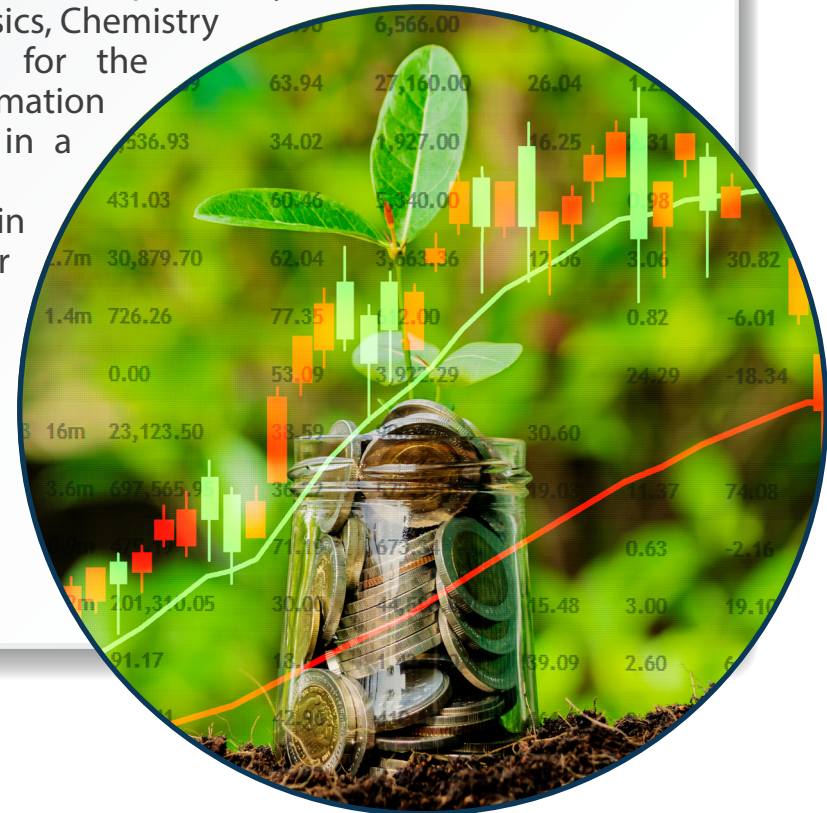
University of Salerno

Three-year degree course in Science and Nanotechnology for Sustainability (SNS)

This is an innovative multidisciplinary training proposal that is unique in Italy.

Through the acquisition of knowledge in the fields of Physics, Chemistry and Technology disciplines, students develop skills for the management of resources and processes for the transformation and valorisation of raw materials and their products in a sustainable manner.

This degree course aims to respond to the needs of certain production sectors that have emphasised the need for professional figures with transversal and multidisciplinary skills, who are able to operate in a highly competitive context in a logic that is no longer just about profit, but also about integration and respect for the environment and territories, and who are integrated, at the same time, in a scenario that is developing according to dictates consistent with what is defined as ecological transition.



Vanvitelli University of Caserta

It offers the Master's Degree Course in Science and Technology for the Environment and the Territory, which provides knowledge of the main environmental issues and related problems for the analysis and management of the territory and the entire environmental system, forming professional figures operating independently in this sector.

The **ENEA Portici Research Centre** is part of a research district that includes the Polymeric and Composite Materials Engineering and Structures District and the CNR's Institute for Composite and Biomedical Materials, which carries out research, valorisation, technology transfer and training activities on polymeric and biomedical materials issues.

The research activities carried out at the Centre cover the most diverse applications of thin films and nanostructured materials (third-generation photovoltaics, organic photovoltaics, OLEDs, sensors, organic TFT, special coatings for thermodynamic solar, graphene PV), studies on smart PV and smart grids as well as environmental issues.

The CRdC (Regional Centre of Competence) is a consortium for Research and Technology Transfer, whose members are the University of Naples 'Federico II', University of Campania Luigi Vanvitelli, University of Salerno, University of Sannio, University Parthenope of Naples, National Research Council, National Institute of Nuclear Physics.

The Mission of CRdC Tecnologie S.c.a.r.l. is to undertake initiatives suitable for the development, in the Campania Region, of a centre for product and process innovation for the industrial system, acting as a hinge between this and the world of research of which it is a direct expression.

IMAST is the Italian technological district for composite, polymeric and structural materials engineering. It has as members several innovative companies (Avio, Fiat Research Centre, Cetena, Cytec Solvay Group, Adler Plastic, Dompé, FCA, Leonardo Spa, MBDA, STMicroelectronics and Boeing Company as an associate member), research bodies and centres (CNR, ENEA and Cira), universities (Turin Polytechnic, Bari Polytechnic, University Federico II, University of Salerno, University of Campania 'Luigi Vanvitelli') and the Istituto Banco di Napoli Foundation.

It operates through three main activities: strengthening international excellence in research, attracting and training talent, and accelerating technological innovation in industry (also by intercepting and attracting private investment)



STRESS S.c.ar.l. Sviluppo Tecnologie e Ricerca per l'Edilizia Sismicamente Sicura ed ecoSostenibile)

It is a non-profit consortium company.

Founded in Naples in 2010, its objective is to promote innovation as a qualifying element of the particularly complex construction sector. To achieve this aim, it is part of a composite network that includes leading research institutes and important entrepreneurial realities operating at national and international level.

In 2012, it was indicated by the MIUR as the implementing party of the High Technology District on Sustainable Construction, and is now among the most accredited references in the construction innovation sector in Southern Italy.



Atena s.c.a.r.l. is the reference consortium company of the High Technology District in the environmental and energy sectors.

It is made up of universities, research institutes and enterprises, all of which are united by a strategy aimed at innovation, growth and value creation of the national production system for energy and the environment.

Through an international partnership, they aim to attract investments in high-tech production sectors, contribute to the strengthening of the technical and scientific skills of the participating companies, and strengthen the research system in Campania, nationally and internationally.

Smart Power System for renewable energies, a technological district operating in the field of renewable energies.

Its purpose is the competitive consolidation of the regional territory for the development and transfer of scientific and technological knowledge concerning the use and integration in electricity grids of advanced technologies for the generation and storage of energy in distributed form according to the "Smart Grid" paradigm.

The main topics for research are Smart Grid, Energy Valorization, Renewable Sources, Micro Grid, Fuel Cells, Energy Saving and Environmental Sustainability, Geothermal Energy.

Important industrial entities (large companies and SMEs), academia and specialised Research Centres participate.





CORPORATE BEST PRACTICES



Industria Monouso Beneventana

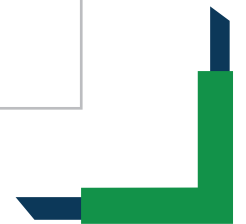
Company specialized in the production of disposable tableware in plastic and biodegradable and compostable Mater-Bi. Founded in 1996, with a marked production flexibility in a continuous cycle, it has converted part of its production processes in the direction of eco-sustainability: ecological disposable cups and plates in biodegradable and compostable Mater-Bi that are normally disposed of in organic waste, turning into compost: a safe agricultural fertiliser.

Novamont

Novamont is in Campania with its research centre in Piana di Monte Verna, in the province of Caserta, specialising in the development of industrial biotechnologies. It promotes a bio-economy model based on the efficient use of renewable resources and territorial regeneration. Starting from local areas, it activates integrated biorefineries in the territories dedicated to the production of bioplastics and bioproducts from renewable sources designed to protect the soil and water, through the reconversion of industrial sites that are no longer competitive, respecting local specificities and in partnership with all the players in the supply chain.

Re.Ma.Plast

A Salerno-based company that has been concentrating its efforts since 2008 on the production of eco-friendly films using biopolymers with R&D for the sampling of compostable films and bags. The characteristics of these films are completely similar to traditional ones but, at the same time, Biodegradable and Compostable not derived from the processing of cellulose, starches and vegetable oils.



BEST PRACTICES AZIENDALI



Seri Industrial

Located in the province of Caserta, a company that together with its subsidiaries FAAM Research Centre, Plast Research and Development, implements several research and development projects along the entire chain of electric accumulators and in the production and recycling of plastic material, through a circular economy business model. During 2019, it brought the lead metallurgy activity resulting from the recycling of spent lead batteries up to speed. Specifically, SERIPlast introduced additional products to the market of PP (polypropylene) compounds for the automotive sector, made from the recovery of plastic battery waste.

Experimental Station for the Leather and Tanning Material Industry

The SSIP's Environmental Technology Department carries out experimental development activities for the energy valorization and recovery of materials from tanning processing in the perspective of the Circular Economy. The department is developing research projects on the assessment of recalcitrant COD (high concentrations of pollutants with low biodegradability in tanning wastewater) with respect to traditional purification systems; the energy valorization of sludge from tanning consortium plants; and the study of the industrial sewage network in the Solofra district. SSIP has set up numerous collaborations with the most prestigious research and training organisations in Campania and in Italy: Campania Digital Innovation Hub, University of Naples Federico II, University of Salerno, University of Campania Luigi Vanvitelli, National Green Chemistry Cluster SPRING, National Technological Cluster (CTN) on Made in Italy, CNR.