



The Tuscan Islands Biosphere Reserve





The Tuscan Islands **Biosphere Reserve**

brochure produced by the Tuscan
Archipelago National Park as coordinating
entity of the Tuscan Islands Biosphere
Reserve

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The MAB UNESCO Programme: *balance between man and nature*

The UNESCO “**Man and the Biosphere**” (MAB) Programme is an intergovernmental scientific programme established in 1971 that aims to lay the scientific foundations for improving the relationship between man and the environment.

The MAB Programme combines the practical application of natural and social sciences, economics, and education to safeguard natural and anthropic ecosystems, by promoting the **sustainable development of territories** from an economic, social and environmental perspective.

Through the Man and the Biosphere Programme, UNESCO supports and **enhances territories** where communities pursue their development in harmony with nature, while protecting biodiversity.

The MAB Programme seeks innovative approaches to economic development that are socially appropriate and environmentally sustainable.

The MAB Programme is projected into the future, but actually acts in the present.



it's about
life



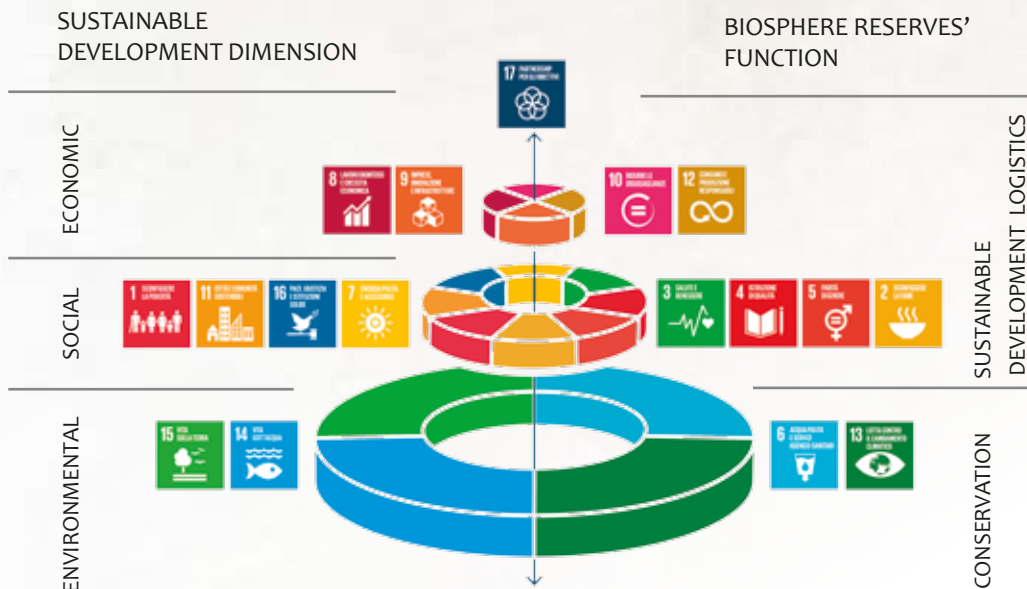
50th
anniversary
of UNESCO's MAB Programme

MAB UNESCO Programme objectives

Thanks to the World Network of Biosphere Reserves, the MAB Programme aims to:

- **identify, assess and mitigate** changes in the biosphere resulting from human and natural activities and the effects of these changes on humans and the environment, particularly in the context of climate change;
- **study** the dynamic interrelationships between natural ecosystems and socio-economic processes, particularly in relation to the accelerated loss of biological and cultural diversity affecting the ability of ecosystems to continue to provide essential services for human well-being;
- **ensuring** basic human welfare and a liveable environment, in the context of rapid urbanisation and energy consumption, as drivers of environmental change;
- **promote** the exchange and transfer of knowledge on environmental problems and solutions and foster environmental education for sustainable development.

The MAB Programme is identified by UNESCO as an ideal tool to pursue the Goals of the UN 2030 Agenda.



The MAB UNESCO Biosphere Reserves: a global network of excellence

The operational arms of the MAB Programme are the **Biosphere Reserves**, terrestrial and/or marine areas recognised by UNESCO as examples of implementing sustainability. To be recognised as a Biosphere Reserve, an area must both boast ecosystems that are representative of different biogeographical regions and significant for the conservation of biodiversity, and be populated by communities that aspire to experiment, test and apply approaches for sustainable development, providing local solutions to global challenges and disseminating the outcomes to all stakeholders.

Each Biosphere Reserve fulfils three main and equally important functions:

1. **conservation** of biological diversity, ecosystems, landscapes and cultural diversity;
2. local **development** according to “sustainable” territorial management models;
3. **support** for education, research, monitoring projects related to conservation and local, national and global sustainable development.

The three functions are pursued throughout the Biosphere Reserve with varying intensity depending on the zoning, which identifies one or more **‘core’ areas**, mainly dedicated to conservation, some **‘buffer’ areas**, adjacent to the core areas to facilitate their protection, and some **‘transition’ areas** where sustainable development is realised

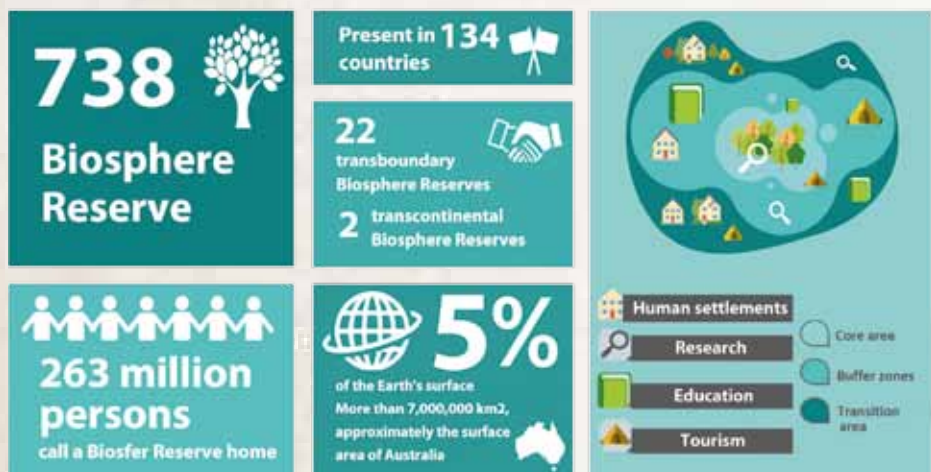


Figure updated to October 2022

The Italian Network of Biosphere Reserves

The first Biosphere Reserves in Italy date back to the late 1970s. Over the years, the number of Biosphere Reserves has increased, especially following the adoption of the Seville Strategy, which gave a strong impetus to this recognition, having also partly changed the very concept of Biosphere Reserve by positioning it as a laboratory for sustainable development. However, it was with the establishment of the Italian MAB National Technical Committee in 2011 that the largest increase in recognised territories took place. Today there are 20¹ of them, distributed throughout Italy, representing very different ecosystems and communities, united by the desire to protect their territory and contribute to the global challenges of sustainability.

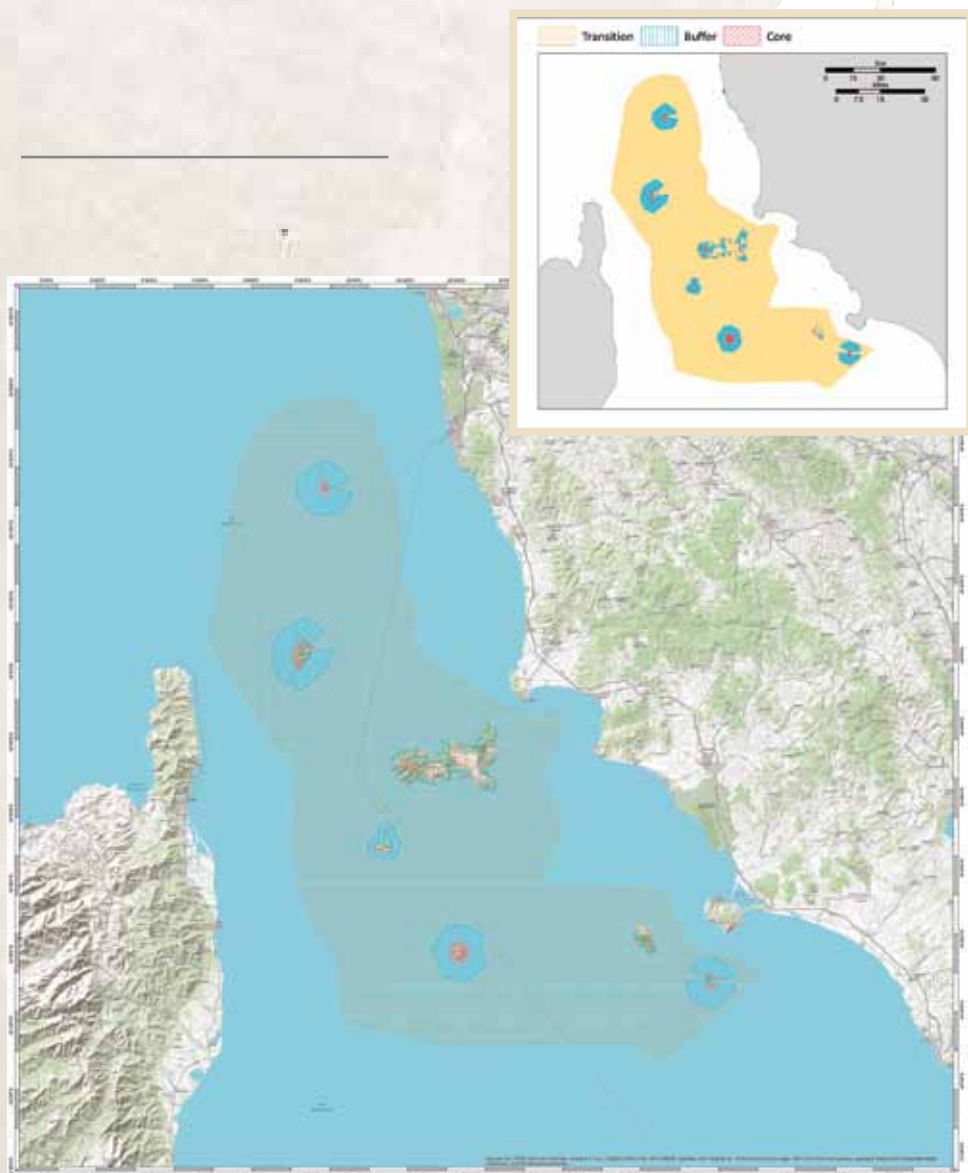


1. Collemeluccio - Montedimezzo
2. Circeo
3. Miramare and Trieste coastline
4. Cilento and Vallo di Diano
5. Somma-Vesuvio and Miglio d'Oro
6. Ticino, Val Grande, Verbano
7. Tuscan Islands
8. Tuscan coastal forests
9. Monviso
10. Sila
11. Tuscan-Emilian Apennines
12. Ledrensi and Judicaria Alps
13. Po Delta
14. Po Hill
15. Tepilora, Rio Posada and Montalbo
16. Valle Camonica – Alto Sebino
17. Monte Peglia
18. Po Grande
19. Julian Alps
20. Monte Grappa

¹ Figure updated to October 2022

The Tuscan Islands Biosphere Reserve

perimeter and zoning



The Tuscan Islands Biosphere Reserve was recognised in 2003. Later, in 2015, as part of the periodic review procedure within the UNESCO MAB Programme, the recognition was confirmed and the Reserve underwent a major enlargement of its surface area, which led to the current perimeter and zoning for the seven islands (Gorgona, Capraia, Elba, Pianosa, Montecristo, Giglio, Giannutri).

IDENTITY CARD

NOME - 'Tuscan Islands' Biosphere Reserve

ANNO DI RICONOSCIMENTO - 2003

ANNO VERIFICA - 2015

MUNICIPALITIES INVOLVED - **1.** Campo nell'Elba (including the island of Pianosa) **2.** Capoliveri - **3.** Capraia Isola - **4.** Isola del Giglio (including the island of Giannutri) - **5.** Livorno (only for the island of Gorgona) - **6.** Marciana - **7.** Marciana Marina - **8.** Porto Azzurro - **9.** Portoferraio (including the island of Montecristo) - **10.** Rio

PROVINCE - **1.** Livorno - **2.** Grosseto

POPULATION - about 33.500 inhabitants

NETWORK IN WHICH IT PARTICIPATES • EUROMAB • World Network of Island and Coastal Biosphere Reserves (WNICBR) • Mediterranean Biosphere Reserves

COORDINATOR - The coordinating body of the 'Tuscan Islands MAB UNESCO Biosphere Reserve' is the Tuscan Archipelago National Park, which performs its role by interfacing with the MAB UNESCO National Technical Committee and UNESCO.

GOVERNANCE - The National Park and all the organisations participating in the management bodies of the Biosphere Reserve (Management Committee, Advisory Assembly) guarantee the development of activities and the pursuit of the objectives in a broad and participatory manner, by promoting the implementation of the Action Plan and the collaboration between actors both within the Biosphere Reserve and with the other territories of the UNESCO MAB network.

The foundation story

“Welcome to the UNESCO MAB ‘Tuscan Islands’ Biosphere Reserve. Seven islands (Gorgona, Elba, Capraia, Pianosa, Montecristo, Giglio and Giannutri) that preserve precious treasures of biodiversity, an extraordinary geological and geomining heritage, as well as testimonies of considerable historical, archaeological and cultural value.

The Biosphere Reserve - which includes the largest marine park in Europe (the Tuscan Archipelago National Park) and is an integral part of the International Marine Mammal Sanctuary ‘Pelagos’ - is ready to inspire you.

In the ‘Tuscan Islands’ Biosphere Reserve, sustainable tourism is the watchword. Events and excursions to discover the most important natural and archaeological sites, trekking, kayaking and mountain-bike activities, snorkelling, diving and much more on all seven islands. There are countless opportunities to get to know the secrets of this fabulous archipelago in the heart of the Mediterranean Sea and enjoy its landscapes, sounds, colours and scents.

The area tells the story of mankind, of its relationship with the natural environment and of the many excellences that represent a privileged laboratory for education for sustainable development and for research in the field of marine environmental sciences, biological sciences, earth sciences, history and archaeology.

These are small islands on which to experiment innovative strategies and actions to combat climate change, to encourage sustainable mobility, to promote quality agro-food production linked to their climatic and agronomic peculiarities, but also to contribute to the achievement of the 2030 Agenda goals, in synergy with the Reserves belonging to the international network and in coherence with the UNESCO MAB Programme.”



Tuscan Islands



The Tuscan Archipelago National Park is the coordinating entity of the Tuscan Islands Biosphere Reserve



Orchids



Tyrrhenian painted frog



Butterfly Sanctuary



Monk seal



Posidonia



Grouper



Octopus



Sea turtle



Raptors



Montecristo Viper & Goat



Cetaceans



Squid



Amberjack



Barracuda

Capraia island



Gorgona island



Porto



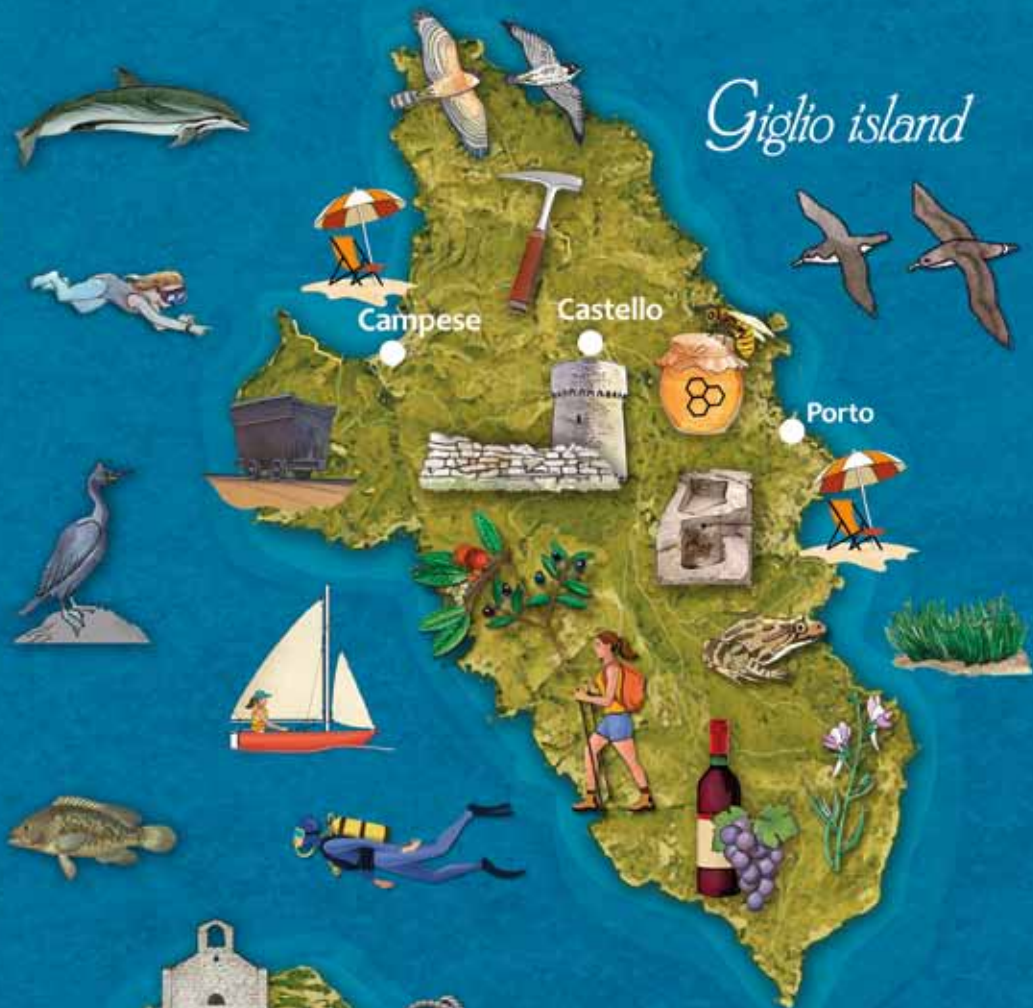
Paese



Pianosa island



Giglio island



Cala Maestra



Montecristo island

Cala Maestra

Cala Spalmatoio



Giannutri island

Precious treasures of biodiversity and an exceptional geomining heritage

The 'Tuscan Islands' Biosphere Reserve is characterised by an area of undeniable beauty due to its wealth of inlets that can often only be reached by sea, its steep and wild slopes, its local endemisms, its extraordinary evolutionary history from a **geological** and **mineralogical** point of view, and its very nature of being an archipelago understood as a territory to be explored island by island, in order to appreciate its unique peculiarities.

The Biosphere Reserve includes marine habitats of high naturalistic-environmental value, with marine biocoenoses or species of particular value. These include the important **Posidonia** meadows around the islands of the Archipelago, the hard bottom and sandy biocoenoses, and species of particular conservation importance such as the **Audouin's gull**, the **Scopoli's shearwater**, the **Yelkouan shearwater**, the **Mediterranean monk seal**, the **Osprey**, the **European leaf-toed gecko**, the **Tyrrhenian painted frog**, the **Montecristo Viper** (*Vipera aspis hugyi*).

The Tuscan Archipelago represents a hot spot of biodiversity and its nature is protected thanks to the establishment of the **National Park**, the largest marine park in the Mediterranean Sea, which includes seven islands, numerous islets and reefs emerging in a wide stretch of the Tyrrhenian Sea, in the heart of the large **Marine Mammal Sanctuary 'Pelagos'**, established in 1999 as an international protected marine area.



NATURA 2000

18

sites included
in the Natura
2000 network

between Special Protection
Areas (SPAs), Special Areas
of Conservation (SACs) and
Sites of Community
Importance (SCIs)



22

habitats of
common
interest



37

animal species
of common
interest



2000

plant species
including

54

orchid
species

10

endemic
species



Evidence of remarkable historical, archaeological and cultural value

The territories of the Tuscan Islands Biosphere Reserve have been frequented by humans since **prehistoric times**, as revealed by the 30 **prehistoric sites**, the **Etruscan sites** linked to **mining activities** and the remains of **Roman maritime villas**, such as Villa Domizia on Giannutri island and Bagni di Agrippa on Pianosa island.

The history of Elba and its inhabitants is intertwined with **iron mines**, which were exploited from ancient times until the end of the last century. Today, the inestimable mineral and industrial archaeological heritage has been inherited by the **Mineral Park of the Elba Island** in Rio and the **Calamita Mines** in Capoliveri, while the lesser known, but equally important, geo-

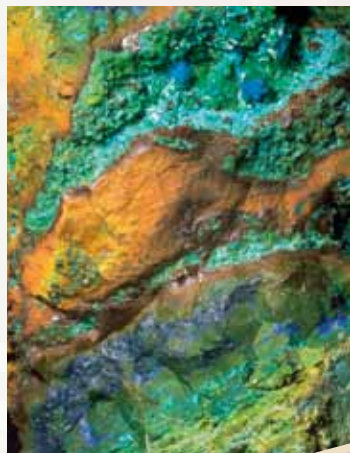
The wine and food tradition

Farmers and miners, the inhabitants of the Tuscan Archipelago have, over the centuries, developed a **simple and frugal cuisine** which is no less **tasty and varied**.

Typical are the 'gurguglione' vegetable stew of Hispanic-Moorish influence, the 'sburrita' cod soup, and among the desserts, the 'schiaaccia briaca', the 'panficato gigliese', and the 'corollo'.

Delicious dishes based on octopus, squid, anchovies and spider crab come from the sea, among which the very tasty 'cacciucco elbano' stands out. The first Slow Food Presidium is dedicated to the 'palamita', a blue fish similar to tuna, while the most important festival on the island of Capraia is dedicated to flying squids.

Wild herbs are widely used in the traditional cuisine of the Tuscan islands: chicory and radicchio, chard and wild fennel.



Sustainable tourism: *that's the watchword!*

The main economic activity is related to tourism, which is increasingly linked to knowledge of nature and experiences such as *trekking, mountain biking, kayaking, snorkelling and diving*.

In consideration of the high anthropic pressure of tourism, particularly in the summer season, the Tuscan Archipelago National Park - which provides the management of the Biosphere Reserve - is deeply committed to the definition and implementation of a strategy for the development of sustainable exploitation, shared with broad groups of stakeholders, through the adoption of the **European Charter for Sustainable Tourism** in Protected Areas (ECST).



Other economic activities are agriculture and fishing, which are strongly linked to tourism. The islands are ideal territories for small productions that rediscover traditional crafts and processing techniques. The preservation of agri-food products is also essential for the protection of biodiversity: examples include the famous Aleatico wine and wine production, organic honey and goat's milk cheeses, desserts, and oil.

In view of a reduced exploitation of fish resources, sustainable mariculture has recently been introduced, with a submersible cage system for breeding European bass and sea bream in Capraia island.

Recreational boating and ports drive economic and cultural dynamics, thus making it possible to experiment with innovative approaches to communication and the perception of the territory by visitors, while the extensive network of trails (over 500 kilometres in the seven islands of the Tuscan Archipelago) allows for a large number of educational activities, aimed at sustainability and knowledge of the biodiversity and geodiversity of the Tuscan islands.



The goals of the Tuscan Islands Biosphere Reserve

All Biosphere Reserves are required to pursue the sustainable development goals defined by the UN through the 17 UN Sustainable Development Goals and those of the MAB Programme. To this end, the Biosphere Reserves translate these global objectives at the local level, identifying their own priorities and the areas in which their actions can be more positive and concrete.

The Tuscan Islands Biosphere Reserve has defined its specific objectives by referring to 16 thematic categories, each related to the three main functions of the UNESCO MAB Programme, which are distinctive of the Tuscan Archipelago and the sustainability challenges its communities are facing.

Thematic categories preservation function	Thematic categories development function	Thematic categories logistic function
Biodiversity	Sustainable tourism	Education to sustainable
Geodiversity	Sustainable mobility	Scientific research
Water resources	Agroecology	Environmental Monitoring
Habitat	Green economy	Information Communication
Landscape	Blue economy	
Climate change		
Material and non-material cultural heritage		

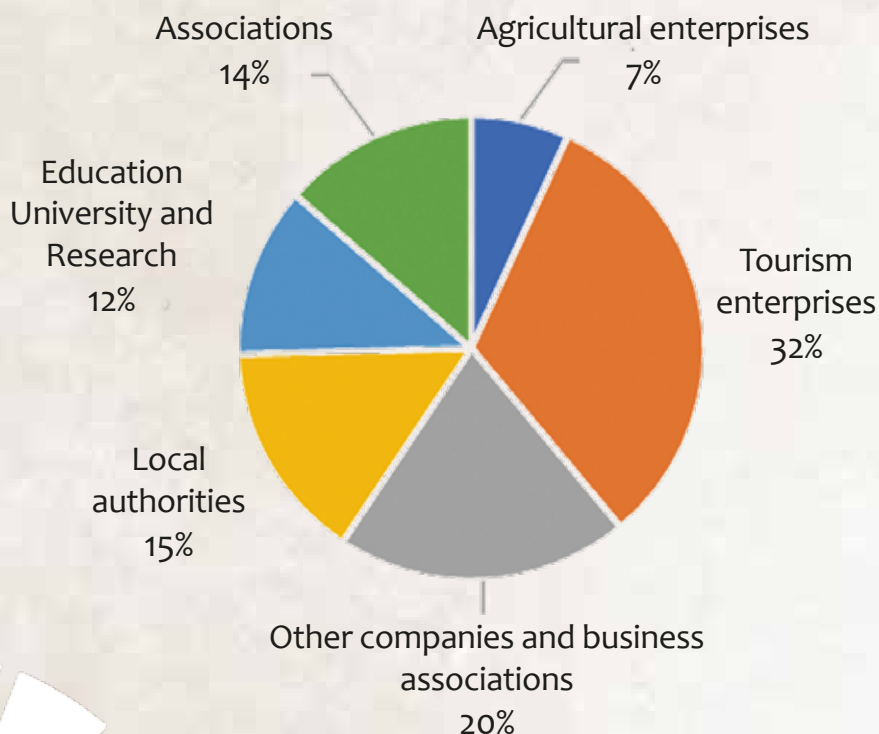
For each thematic category, a number of specific objectives have been identified, the pursuit of which is entrusted to the projects included in the Biosphere Reserve’s Action Plan in 2021, valid for the following years.



The Action Plan of the Reserve

Sixty-one different stakeholders have contributed to the construction of the Tuscan Islands Biosphere Reserve Action Plan by submitting at least one suitable project to implement the sustainability objectives specifically identified for the Tuscan Archipelago.

It should be underlined that - also thanks to the excellent territorial involvement work already carried out during the ECST process - most of these stakeholders are private and in particular tourism enterprises and citizens' associations.



Overall, the Action Plan consists of 102 projects, the contents of which relate to the three main functions of the Biosphere Reserve in a balanced manner, although with a slight predominance of the sustainable development function. About one third of these projects relate to the entire Biosphere Reserve, while the remainder focus on a single island or specific locations. The project bank of the Tuscan Islands Biosphere Reserve Action Plan pursues the implementation of 11 of the 17 Sustainable Development Goals of the 2030 Agenda (UN SDGs), in particular the goals related to ‘sustainable cities and communities’ and ‘life on land’.







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Green List
Protected / Conserved Areas