

Overcoming Insularity: Leveraging Sustainable Development Initiatives for Inclusive Growth in European Islands

di A. Berlinguer, G. Dente, D. Pappadà, A. Rubini, P. Saroglia

Working Papers della Fondazione Giacomo Brodolini

Direttore scientifico della collana

Anna Maria Simonazzi, Presidente della Fondazione Giacomo Brodolini

Fondazione Giacomo Brodolini

00185 Roma - Via Goito, 39

tel. 0644249625

fax 0644249565

info@fondazionebrodolini.it

www.fondazionebrodolini.it

ISBN: 9788895380667

Pubblicazione realizzata in collaborazione con Eurispes



ISTITUTO DI STUDI

POLITICI ECONOMICI E SOCIALI

***Overcoming Insularity:
Leveraging Sustainable
Development Initiatives
for Inclusive Growth
in European Islands***

di A. Berlinguer, G. Dente, D. Pappadà, A. Rubini, P. Saroglia

This article was partly created within the Comparative Law Section of the European Documentation Center of the University of Cagliari and under the patronage of Eurispes. Specifically, Prof. A. Berlinguer is to be credited with paragraph 2.3 and Dr. D. Pappadà with paragraphs 3.1 and 3.2. The paragraphs 2.1, 2.2., 2.4, 3.1, 3.4, 3.5, 4.1, 4.2, 4.3, 5.1,5.2,.5.3, 5.4 are to be credited to authors Amelia Rubini, Giancarlo Dente and Patrizia Saroglia.

Sommario

1. Introduction.....	1
2. European Islands: an Overview.....	4
2.1. European and Italian Islands	4
2.2. Definition and Features of Islands	5
2.3. Understanding 'Insularity'	9
2.4. Islands' Autonomy and Self-Governance	12
3. Addressing Insularity: Current Challenges and Strategies for a Sustainable Future.....	15
3.1. The Socio-Economic Situation of the Mediterranean Islands	15
3.2. The Socio-economic Gap in the Development of Islands	18
3.3. Tentative Analysis and Policy Responses	22
3.4. A SWOT Analysis of the Situation of Islands	26
3.5. Effective Policies for Islands	31
4. Insularity and the European Union: A Call for a Comprehensive Island Agenda.....	38
4.1. The Issue of Insularity in the EU Agenda	38
4.2. EU Sustainable Development Tools and their Application to Islands	43
4.3. The Way Forward for Insular Sustainable Development	56
5. Sustainable Development in European Islands.....	62
5.1. An Overview of Sustainable Development	62
5.2. Sustainable Development and the Circular Economy in the Islands	65
5.3. Sustainable Development and Tourism	68
5.4. Sustainable Development and the Energy Transition	71
6. References.....	75

1. Introduction

Abstract

Insularity leads to situations of slow growth or decline; this is a common reality for many islands. Focusing on the situation of European islands, this paper examines how addressing the issue of insularity. In particular, sustainable development initiatives appear to be a useful tool for fostering inclusive growth. The analysis was conducted by observing the situation of islands within the European Union, including their position within the political-institutional agenda. This was followed by an exploration of the so-called insular gap, efforts to measure it and responses implemented thus far. The study then highlights the strategic importance of sustainable and circular development initiatives implemented on islands, which can enhance their economic, social, and environmental well-being, mitigating the challenges they face.

This study explores potential avenues for **the future development of islands within the context of the European Union**. Islands develop in a unique and complex context, and, as Baldacchino (2007) argues, they may be viewed as pioneers of resilience and sustainability.

At present, approximately 600 million individuals reside on islands globally – about 10% of the world population, which account for roughly 3% of the Earth's surface area. Of the 195 nations recognised globally, 43 are constituted entirely of insular territories or archipelagic formations¹. Islands are “*ideal ‘laboratories’ for studying and measuring sustainability*”, (Spilanis, Kizos, Koulouri, Kondyli, Vakoufaris, & Gatsis, 2009). Indeed, their isolation makes them unique laboratories.

Being entirely surrounded by water, islands’ remoteness from the mainland creates specific characteristics and additional constraints that make them an interesting case

¹ Global islands database, v. http://www.globalislands.net/about/gid_functions.php

study, and a real challenge. According to Eurisles (2002) *“living on an island means living on a territory constantly cut off by the sea, with limited possibilities in terms of space, natural or human resources, or the size of the market insularity”*. This peculiar condition can be defined as *“a permanent phenomenon of physical discontinuity”*, (Deidda, 2016).

The three features that define insularity – smallness, remoteness and vulnerability (including susceptibility to seasonality and climatic disasters) – **have important implications for economic growth**, highlighting the challenges faced by islands. However, these constraints can also be seen as opportunities.

On the one hand, a large strand of literature has investigated insularity providing evidence of the negative impact of these geographical features, resulting in social and economic disadvantage, (Nunn, 2004; Baldacchino & Pleijel 2010; Spilanis et al. 2013). On the other hand, according to another body of literature (Mitropoulou & Spilanis, 2020; Conkling 2007; Karampela, Papazoglou, Kizos, & Spilanis 2017), these challenges can be perceived as a source for future growth.

In this regard, Deidda (2016) observes that *“taking advantage of islands’ geographic and cultural environment might be preferable than compensating for islands disadvantages”*.

In this sense, examining the unique opportunities and challenges posed by insular environments in advancing global sustainability objectives is essential, and analysing the intersection of environmental sustainability, social equity, and economic well-being is particularly vital for insular regions.

The significance of the political and economic aspects of the issue at hand is considerable, given the widespread global concern with respect to the establishment of a sustainable society. Consequently, there is an increasing demand for comprehensive analysis of this problem, and a substantial body of research has contributed to an enhanced comprehension of sustainability challenges in island settings.

According to Banos-González, Martínez-Fernández, and Ángel Esteve (2016), *“this may be due to the large potential of islands as observatories of sustainability, where the close interaction between ecological aspects and socio-economic processes is explicitly acknowledged”*.

A global vision that does not consider local interests makes such a vision ineffective. Moreover, according to Baldacchino and Kelman (2014), it is essential to consider the

uniqueness and local interests of islands. Indeed, a focus on long-term sustainable development that does not pay enough attention to policy pursuits with more immediate relevance creates an imbalance.

As stressed by Karampela et al. (2017), despite widespread agreement that ‘sustainable development’ is the desired goal of all policies and human societies, it is unclear how the general definitions can be translated into concrete and measurable policy goals.

The **United Nations Sustainable Development Goals (SDGs)** offer a comprehensive set of guidelines that enable the transformation of the abstract idea of sustainable development into **concrete policies and actions that create job opportunities, local development and environmental protection.**

The aim of this study is to investigate the policy aspects of the issues at hand, and to examine how sustainable practices, consistent with the **United Nations 2030 Agenda**, can act as an effective means of overcoming the obstacles caused by insularity and fostering inclusive growth.

The present study was developed by conducting a review of the literature on these issues across several disciplines.

We put forward the following research questions (RQs):

- **RQ1. What are the vulnerabilities observed by the islands in the EU?**
- **RQ2. What challenges do islands face, and what policies are being implemented to address them?**
- **RQ3. How can sustainable development initiatives be strategically harnessed to mitigate the challenges faced by insular communities and promote their economic, social, and environmental well-being?**

To address our research questions, the analysis presented in this study comprises four main sections. Section 2 delineates the theoretical context, providing information on the geographical and statistical characteristics of islands within the EU. Section 3 focuses on the specific challenges that islands encounter, followed by institutional and policy responses. Section 4 examines how European policy has addressed insularity and the emergence of balanced and sustainable territorial development. Finally, Section 5 describes the European challenge of balancing economic growth and environmental sustainability by implementing sustainable and circular policies that consider islands as an opportunity for development.

2. European Islands: an Overview

2.1. European and Italian Islands

It is crucial to examine the theme of islands from a multidisciplinary perspective to comprehend the limitations and challenges of the different possible approaches, and to investigate possible future developments.

In this section, we briefly review the main theoretical contributions and offer an overview of the features of the Italian and European islands, as well as the limitations encountered at the socioeconomic level.

The European islands are part of 13 Member States² and comprise approximately **2,400 inhabited islands**, accounting for **4,6% of the European Union's population** and showing **a population increase of 2% only from 2016 to 2020** (Haase, & Maier, 2021). Interestingly, **only 5% of this population resides on the islands of Northern Europe and the Atlantic**, while **the remaining 95% is concentrated in the Mediterranean region, primarily in Italy, France, Spain and Greece – with the five largest islands being: Sicily, Sardinia, the Balearics, Crete and Corsica**. It is important to note that “insular territories are regarded as individual units, while island groupings are referred to as archipelagos”.³

While Italy is often perceived as a peninsula situated in the centre of the Mediterranean Sea, it is actually the first European country in terms of island residents, with over **6.4 million individuals – nearly 32% of the total population of European islands, which stands at 20.5 million**).

² Croatia, Denmark, Estonia, Finland, France, Germany, Greece, Italy, the Netherlands, Poland, Portugal, Spain and Sweden. Ireland, Malta and Cyprus (the last two are entirely islands).

³ Haase et al. (2021), *op. cit.* The archipelagos face an additional constraint, referred to as double insularity, which stems from their geographically fragmented nature.

The Italian islands comprise Sicily and Sardinia, in addition to several smaller islands distributed across seven Italian regions⁴. In Sardinia, there are 1,5 million inhabitants, while Sicily has a total of 4.8 million, accounting for 2.7% and 8.2% of Italy's resident population, respectively.⁵ Among Italy's smaller islands, Ischia and Elba are the largest, whereas Capraia and Tremiti are smallest. In addition, there has been a decline in islands' population, with a national trend of -1.3% over the past three years, which is more pronounced in larger islands such as Sardinia (-2.3%) and Sicily (-1.5%). Overall, **the total population of all Italian islands, with the exception of Aeolian, Egadi, Pelagian, and Pontine islands, is declining**. According to the latest ISTAT forecast on Italy's demographic future,⁶ the resident population is expected to decrease by 4.9%, with a significant drop in Southern Italy, (12.2%), including Sicily (12.6%) and Sardinia (15.1%).

2.2. Definition and Features of Islands

According to Eurostat (2018), island regions are classified as NUTS III regions.⁷ Although they are recognised as island units, this distinction results in a significant number of islands being excluded from statistical analysis⁸.

Similarly, insular territories take their name from the ocean basins in which they are located, such as the Baltic Sea Islands, Northern Sea Islands, North Atlantic Islands, Mediterranean Islands, and Outermost Regions. In addition, the European Commission, in its Cohesion Policy (as outlined in Article 174 of the Treaty on the Functioning of the European Union), recognises various territories, including mountain regions and

4 Sicily, Sardinia, Campania, Apulia, Tuscany, Lazio and Liguria.

5 ISTAT (2022). *Censimento permanente della popolazione e delle abitazioni Sardegna e Sicilia 2022*.

6 ISTAT (2023a). *Previsioni della popolazione residente e delle famiglie. Il paese domani: una popolazione più piccola, più eterogenea e con più differenze*: <https://www.istat.it/it/archivio/288443>. (analysis for the period 2022-2042).

7 Nomenclature of territorial units for statistics. This classification is recognised at European level. The typology of NUTS3 island regions distinguishes five categories, depending on the size of the major island related to the NUTS 3 region: regions where the major island has fewer than 50,000 inhabitants; regions where the major island has between 50,000 and 100,000 inhabitants; regions where the major island has between 100,000 and 250,000 inhabitants; regions corresponding to an island with 250,000 to 1 million inhabitants, or part of such an island; regions being part of an island with at least 1 million. According to this definition only 11 member states are island regions.

8 Haase et al. (2021), *op.cit.*

sparsely populated areas, as experiencing developmental delays due to structural disadvantages. Among these are the island territories that are classified as less developed regions and differentiated from Outermost Regions, which are targeted by a specific EU policy (Article 349 TFEU).

For a considerable period of time, **an island was typically defined as a small landmass surrounded by water** (Doumenge, 1987; Jedrusik, 2011).

Despite differences in terms of size, population, cultural and environmental heritage, islands are united by the **concept of insularity**, which consists of **three features: smallness**, involving the scarcity of natural resources, restricted size and access to markets, reduced competitiveness due to elevated production costs, constrained local demand for commodities and services, limited workforce and population and limited capacity to exploit economies of scale; **remoteness**, which involves physical detachment from the mainland and entails difficulties in communications, transport, accessibility and disconnection from energy grids and digital networks, as well as specialisation of production and dependence on imports; **vulnerability**, which is the potential susceptibility of a system to external shocks (Adrianto & Matsuda, 2004; Briguglio, 1995), such as strong seasonality, cultural vulnerability and climatic disasters, and is linked to the natural and geographical features of islands as unique and fragile ecological and social systems. These factors are exacerbated by the potential impacts of climate change, leading to a specific culture different from continental ones (McCall, 1994; Spilanis et al., 2013).

Briguglio (1995) observed that some economic disadvantages are also typical of small islands, and Spilanis, Kondili, and Gryllaki (2003) pointed out these problems and characteristics are more intense on smaller islands.

Despite these challenges, islands' unique environment, valuable terrestrial and marine ecosystem, and rich cultural heritage make them attractive destinations for tourists, important fishing grounds, and strongly cohesive communities.

However, the literature fails to provide a definitive answer on how to address the limits to economic development under island conditions. The peculiarity of islands can be regarded as an asset or a permanent disadvantage. In this sense, researchers have explored this topic through the **concepts of insularity and islandness**, which offer two different points of view: **insularity is used to describe measurable characteristics**, while **islandness refers to specific characteristics that were previously disadvantages, which have been transformed into potentialities**.

While a leading and large strand of literature investigated insularity, providing a negative analysis of islands' geographical characteristics and focusing on the resulting disadvantages (Nunn 2004; Baldacchino & Pleijel, 2010; Spilanis et al., 2013), another part of the literature (i.e., Mitropoulou & Spilanis, 2020; Conkling, 2007; Karampela et al., 2017) posits that **this challenge can be perceived as a source for future growth.**⁹

In this regard, Deidda (2016) asserts that leveraging islands' geographic and cultural environment may be preferable to compensating for their disadvantages. And, as Baldacchino (2004) suggests, it is more appropriate to use the term 'islandness', as insularity has inadvertently accumulated a semantic burden of separation and backwardness.

Islandness is “a construct of the mind, a singular way of looking at the world” (Conkling, 2007). However, as described by Benoist (1986), *“insularity is a notion that is always present in the social framework of populations living in an island setting”*.

This unique identity, which is rooted in islands' connection to water and creates *“a shared sense of isolation”*, includes distinct cultural assets (Hay, 2006; Royle & Brinklow, 2018). Spilanis et al. (2013) observe the existence of a non-measurable *“experiential identity”* characterising each island; islands are *“objects of the mind”* and, therefore, perceived differently by each individual. Conkling (2007) suggests that islandness helps island communities reduce the abandonment of territories.

Mazette (1992) explained that internal and external relationships follow a circular pattern on islands. Insularity has a positive value, in the closed circular movement of processes that occur within an island and among its inhabitants. Whilst the sea symbolises the exchange and communication through which an island exports and imports culture and goods, the circularity that ensues is disrupted when the external environment threatens its population with domination and invasion.

As for the definition of island and the concept of insularity, it is more meaningful to refer to the more holistic notion of insularity. This goes beyond simple geographic boundaries, encompassing sociological, economic, and biogeographical concepts, as emphasised by Spilanis, Kizos, Kondili, Koulouri and Vakoufaris, (2005).

As indicated in the above section, **the unique characteristics of islands often result**

⁹ In the contemporary scientific landscape, the concept of insularity, which can be defined as the mode of existence for islands, has superseded islandness, as posited by Bonnemaïson (1991).

in geographical and socioeconomic isolation, which can exacerbate inequities and make them vulnerable.

In light of these circumstances, questions have been raised about the nature of the difficulties faced by islands. Factors such as economic size, distance from the mainland, historical factors, the economic and social infrastructural equipment (networks, connections, and essential services); in other words, the specific context of the territory becomes crucial for achieving economic and social development objectives.

Generalisations about specific geographical characteristics and insularity do not adequately address the critical issues and limitations faced by island development.

The geographical condition is generally linked to a condition of disadvantage which places insularity as a question of asymmetric socio-economic development between territories (Carboni, 2022b).

To address the critical issues that affect the European and the Italian islands, it is essential to consider the demographic evolution, social, environmental and economic development, as well as the resulting challenges regarding business competitiveness, skills development and the inclusion of disadvantaged groups.¹⁰ Sustainable development must be considered as a cross-cutting issue in all of these areas.

In particular, island territories in the Mediterranean area (which include the Italian islands) are characterised by economic, cultural, and social heterogeneity. Nevertheless, they share a range of similar challenges and issues.

¹⁰ All information originates from Report BesT Sicily and Sardinia (utilizing data from 2022 and 2019 for the smaller islands) in https://www.istat.it/it/files//2023/11/BesT_SICILIA.pdf and https://www.istat.it/it/files//2023/12/BesT_SARDEGNA.pdf).

See also, Indagine conoscitiva sull'individuazione degli svantaggi derivanti dalla condizione d'insularità e sulle relative misure di contrasto, Audizione dell'Istituto Nazionale di Statistica, Dott.ssa Sabrina Prati Direttrice della Direzione Centrale per l'analisi e la valorizzazione nell'ambito delle statistiche sociali e demografiche e per i fabbisogni informativi del Piano Nazionale di Ripresa e Resilienza Commissione parlamentare per il contrasto degli svantaggi derivanti dall'insularità, 14 dicembre 2023; Audizione dell'Ufficio parlamentare di bilancio nell'ambito dell'indagine conoscitiva sull'individuazione degli svantaggi derivanti dalla condizione d'insularità e sulle relative misure di contrasto. Intervento del Consigliere dell'Ufficio parlamentare di bilancio Valeria De Bonis Commissione parlamentare per il contrasto degli svantaggi derivanti dall'insularità, 1° febbraio 2024 and Eurostat, Regional yearbook, 2023 edition.

2.3. Understanding 'Insularity'

In Europe, the insular issue has never broken into social consciousness.

Some countries seem more aware of their morphological characteristics and indeed dedicate more constitutional norms to the insular issue, (such as Spain and Portugal), (Bassu, 2022), (Iacometti, 2006). **In Italy**, the insular heritage, including the two largest islands in the Mediterranean (Sicily and Sardinia), **has never had adequate political and cultural recognition**. It is therefore no coincidence that, as correctly noted, even in our lexicon, Italy is represented as a 'peninsula', as a 'boot', almost as if it were a synecdoche of the entire country, where the islands do not appear. Moreover, this synecdoche does not even have a name, unlike what happens in Denmark – where the peninsula is called Jutland – or in Turkey – Anatolia –, (Deriu & Sanna, 2020).

In Italy, however, nearly 7 million people (about 12% of the total population) live on an island (maritime, fluvial, lagoon or lacustrine), i.e., on a territory equivalent to over 15% of the national one. It is therefore more a visual asymmetry than a synecdoche the one we have been developing for such a long time. Historically, the insular issue has been absorbed by the Southern request for State aids, so that even the old article 119 of the Constitution (before the 2001 reform) assimilated the two, requiring the State to dedicate special contributions indistinctively.

This leads to conclude that insularity is a broad and complex phenomenon on which there is limited knowledge in Italy, as confirmed by the very few cultural, institutional contributions and scientific insights on the issue (Frosini, 2007). If analysed in their complexity, islands require a methodology and specific practical solutions for any theme addressed. This involves not simply addressing topics related to the maritime context, but also rethinking the internal condition of the islands – the cultural, economic and social aspects of insular life. These aspects become pressing in the many smaller islands that are part of the Italian and European archipelagos, where the insular dimension is twofold.

First and foremost, reference coordinates are lacking; **a definition of "island" is missing in both Italian and European legislation. Therefore, we have to rely on statistics**. In 1994, the publication *Portrait of the islands* by Eurostat considered inhabited islands as those not connected to the mainland by a link, excluding those where there is a capital city of a state. For Eurostat, an island is any territory that: 1) has a minimum surface area of 1 km²; 2) is at least 1 km away from the mainland; 3) has at least 50 inhabitants;

4) does not have a fixed connection to the mainland; 5) does not host the capital of an EU member state¹¹. Therefore, according to the Eurostat criteria, in Italy less than a hundred islands (the inhabited ones) would be considered as such. If the bridge over the Strait of Messina were built, Sicily would not be considered as an island anymore.

In 2008, the European Commission used a different criterion, based on the identification of regions whose entire population resides on an island.¹² Lastly, the European Parliament has acknowledged that *“there is a shortage of statistical data on the exact population of the islands in the European Union. In-depth understanding of the situation of islands would require data collected at a more granular geographical level.”*¹³

Even the United Nations Convention on the Law of the Sea (UNCLOS) of 10 December 1982 can only partially help. It refers to insularity assigning the following meaning to islands: *“a naturally formed area of land, surrounded by water, which is above water at high tide”*, (Article 121 “Regime of islands”). The definition was functional to the purposes of the Treaty, namely to identify the rights and obligations of states in the use of seas, oceans, and their resources, but it cannot be automatically extended to other contexts. For this reason, the second paragraph of article 121 provides that the territorial sea, the contiguous zone, the exclusive economic zone and the continental shelf of an island are determined in accordance with the provisions of the Convention. The third paragraph of the same article establishes instead that rocks, which are not suitable for human settlement or do not have an autonomous economic life, do not have either an exclusive economic zone or a continental shelf (Fois, *L’insularità nel diritto internazionale ed interno: orientamenti convergenti*, 2007) (Hayashi, 2021). However, **these are very broad and generic notions that have created extensive debate internationally**, characterised by contrasting opinions and undefined practices. The Italian constitutional mandate would thus require revisiting the matter with much greater precision.

Even the EU law, as the EU has acceded to UNCLOS, has not contributed to reducing doubts about the definition of island. Indeed, **there is no reliable definition of island in the European law**. The Treaty on the Functioning of the European Union (TFEU) only mentions that the European Union *“develops and pursues its actions leading to the*

11 Eurostat, *Methodological manual on territorial typologies*, 2018.

12 Green paper on Territorial Cohesion (COM 2008 616 final).

13 Executive Summary “Islands of the European Union: State of play and future challenges”, PE 652.239 - March 2021, [https://www.europarl.europa.eu/RegData/etudes/STUD/2021/652239/IPOL_STU\(2021\)652239\(SUM01\)_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2021/652239/IPOL_STU(2021)652239(SUM01)_EN.pdf).

strengthening of its economic, social and territorial cohesion” and that “insular regions” are territories “suffering from severe and permanent natural or demographic handicaps”, (Article 174 TFEU). A more favourable regime is provided for a few territories of Spain, Portugal, and France, (Article 349 TFEU), not all of which are insular. These are classified as “outermost regions,” thus referring only to the geographical remoteness from their respective motherlands. **While in Italy insularity has been absorbed by the “Southern issue”, in Europe the same issue has been somewhat assimilated to the condition of outermost regions.**

Within this inconsistent legal framework, **the European Parliament encourages the EU Commission to:** i) *provide a clear definition of the type of geographical, natural and demographic permanent handicaps that insular regions can suffer from, with reference to Article 174 of the TFEU;* ii) *explain how intends to implement the wording of Article 174 of the TFEU regarding the permanent handicaps of insular regions that hinder their natural development and prevent them from achieving economic, social and territorial cohesion* (Resolution of 4 February 2016 on the special situation of islands (2015/3014(RSP))). More recently, the European Parliament has highlighted, among others, the importance of improving connections through maritime routes, access to ports, and air transport services; enhancing digital infrastructure; strengthening education provision; considering natural risks connected to climate change; creating an ‘islands’ sub-category, given their distinct characteristics, in connection with the application of the rules on regional State aid for the period 2021-2027, and the abolition of the ‘*de minimis*’ ceilings for European islands and outermost regions, above which the Commission’s authorisation is required (Resolution of the European Parliament of June 7, 2022, on the islands of the EU and cohesion policy: current situation and future challenges (2021/2079(INI))).

The European Committee of the Regions has also intervened on the issue, with the opinion *Entrepreneurship on Islands: contributing towards territorial cohesion* (2017/C 306/10) and the *Manifesto for European islands*, approved by his interregional Group “insular regions” in order to implement Article 174 TFEU and make effective the rights of citizens living on islands.

All in all, the issue of insularity is central to the European institutional political agenda, but it is addressed solely through soft law. **Thus, the *acquis communautaire* still resembles more of a ‘manifesto of good intentions’ than a range of effective policies with concrete outcomes**, (Berlinguer, 2023).

In Italy, insularity has been paid attention only when, in 2022, a new paragraph was added to Article 119 of the Constitution, according to which the Republic “recognises the peculiarities of the islands” and “promotes measures necessary to remove the disadvantages resulting from insularity.”¹⁴

We thus have now a provision, **which attempts to compensate the gap resulting from insularity**. It can be thought as an empty box that, on the one hand, must be filled with content and, on the other, harmonised with Article 174 TFEU. **Here, the insular condition is among the key elements for reducing the gap in the economic and social development of less favoured regions**. However, there is a need to identify many of the critical issues and problems affecting the islands – such as which insular “peculiarities” need to be recognised and what disadvantages derive from insularity –, and propose corresponding solutions.

2.4. Islands’ Autonomy and Self-Governance

Islands can be considered as independent states or territorial entities that operate within a symmetrical decentralisation system. Alternatively, they may be granted enhanced autonomy and special administrative and fiscal powers. The status of an island is influenced by its position within the state paradigm, which affects the extent of individual rights enjoyed by its inhabitants, as highlighted by Bassu (2023).

The relationship between specialty and insularity is of biunivocal correspondence, as Frosini (2020) highlights. Indeed, the recognition of islands’ insular character is reaffirmed at a national level through the acknowledgement of their specialty.

Policies that incorporate rebalancing and equalisation measures to reduce disparities between islands and mainland regions are crucial for fostering equality and economic development. It is important to note that constitutional recognition of insularity requires substantive action to address the opportunity gap that arises from

¹⁴ Article 119 of the Constitution acts as a benchmark for the constitutional validity of laws, highlighting island territories as peripheral regions and emphasizing the significance of insularity as a defining aspect of islanders’ identities. Before the amendments, article 119 established that “to provide for specific purposes, and particularly to enhance the South and the Islands, the State assigns by law special contributions to individual Regions” of Title V of the Constitution, in 2001, any direct reference to the Islands and the South had been removed.

insular status, going beyond mere symbolic gestures.

The constitutional enhancement for island realities lacking specific guarantees was first introduced in Italy in 1947, making it the first European country to do so (Frosini, 2020). Initially, this measure was intended to provide economic support, but it was later abandoned, due to the belief that it was a welfare approach reliant on public subsidies. At the time, the European approach was to actively promote development. The new Article 119, as identified by Frosini (2022), is regarded as a “constitutional right to insularity”. However, most importantly, it is conceived as an application of the principle of equality, as outlined in Article 3, paragraph 1 of the Constitution, which refers to substantial equality. The recognition of the “constitutional right to insularity” is crucial for interpreting and applying the new constitutional provision outlined in Article 119 of the Constitution (Frosini, 2022). In this sense, Demuro (2024) also states that the constitutional identity in Italy, among other things, is to guarantee difference in islands. The principle of insularity could become a parameter of constitutional legitimacy capable of assessing whether the objective that the legislator intends to pursue is suited to island conditions.

In this context, **not only is there acknowledgement by the state, but also a commitment to eradicating obstacles impeding the full realisation of the principle of equality among territories.**

The most pertinent instance is the **Spanish case**, involving the island communities of the Balearic and Canary Islands. This case involves a constitutional enhancement of the islands, where they are not only physically detached from the Iberian Peninsula, but also possess an island factor as a defining characteristic. Four articles in the constitution establish the “hecho insular”, or the island’s identity, as a legitimate factor. **Portugal’s constitution** has also included a provision for insular solidarity during its sixth revision, granting the Azores and Madeira the title of “Regiões Autonomas” and a representative legislature, along with extensive legislative, administrative, and financial autonomy.

Autonomy and self-government enable individuals to manage their territory without impediment, while simultaneously respecting the fundamental principles of national systems, including constitutional principles, unity, and indivisibility (Carboni, 2023).

This phenomenon occurs in certain Nordic territories, such as the Åland Islands, Faroe Islands, and Greenland – which fall under the governmental framework of Finland and Denmark, respectively, but have developed their own autonomous

governing systems over the years.

The Irish experience has consistently been linked to the concept of identity since its outset.

Greece's Constitution, as revised in 2008, recognises the distinct economic, social, and environmental challenges faced by island and mountainous regions, and endeavours to promote their development, foster social harmony, and protect the general welfare.

Greece is notable for a phenomenon referred to as “double insularity,” which involves the administrative linkage between smaller and larger islands. This has resulted in a decentralisation of governance, with the establishment of “island municipalities.”¹⁵

15 For a more detailed discussion see: Fazi, A., (2008), La Corse et les régions insulaires de Méditerranée occidentale: l'impossible autonomie ? *Ethnologie française* 2008/3, (38), 437-447; Fazi, A. (2019), La specialità politico-giuridica della Corsica: tra passato, presente e futuro, in M. E. Ruggerini, V. Szőke, M. Deriu (ed.), *Isole settentrionali, isole mediterranee*. Letteratura e società, Milano, Prometheus, 2019, 393-419; Naglieri G., (2023), Federalismo fiscale differenziato e la solidarietà interterritoriale: una lettura dell'autonomia differenziata italiana con la lente del regionalismo asimmetrico spagnolo, *Diritto Pubblico Europeo Rassegna online*, Fascicolo 1/2023; Bassu C., (2022) Isole del Sud nell'Europa delle Regioni. Il principio di insularità negli ordinamenti di Italia, Spagna e Portogallo come «questione meridionale», in *Rass. dir. pubb. eur.*, 1/2022; Arietti, (2022) Ripensare l'insularità nel sistema costituzionale italiano, tra suggerimenti scandinave e rinegoziazione dei rapporti centro-periferia, in *DPCE Online*, nov. 2022, 633-644; Frosini, T. E., (2007) *Isole nel diritto pubblico comparato ed europeo*, Giappichelli, Torino.

3. Addressing Insularity: Current Challenges and Strategies for a Sustainable Future

3.1. The Socio-Economic Situation of the Mediterranean Islands

The employment landscape in European rural regions, sparsely populated areas, and peripheral territories is characterised by suboptimal labour force participation, with a notable scarcity of vocational opportunities. These disparities are particularly pronounced in Southern Europe, in countries such as Spain, Greece and Italy.

In Italy, for instance, **regional disparities in employment rates are quite evident: the national employment rate for young people aged 15-29 years old is at 33.8%, while it is equal to 20.7% in Sicily and to 26.7% in Sardinia.**

In the age range 20-64 years, the employment rate in Italy was higher than Sicily and Sardinia at 64.8%. Moreover, both regions fell significantly short of the European average, with Sicily at 46.2% and Sardinia at 58.6% (28 and 16 percentage points below the European average, respectively), making them among the least employable regions in the Union. Nonetheless, both regions fared similarly or better than the rest of the South of Italy.¹⁶

It is noteworthy that **the share of employees working in the tourism sector is significantly higher than the national average in these regions.** The national employment rate was 59.3%, while it was 50.5% for the smaller islands.

¹⁶ It is worth underlining that EU employment rate was 74.6 % with the highest regional employment that was recorded in the Finnish archipelago of Åland 89.7%.

Generally, **these figures indicate poor economic performance in the labour markets of the two island regions.** The employment rate in Sardinia was 54.9%, while it was only 42.6% in Sicily, which is considerably distant from the national average (60.1%). **The employment market in island regions typically exhibits higher unemployment rates and lower quality of employment, with a greater proportion of irregular workers than the national average.**

Once the main characteristics of Italian islands' labour markets have been defined, the data on businesses and entrepreneurship need to be addressed.¹⁷

In 2020 Sardinia's economy contributed 2% to the nation's value-added output. While this was below the national average, it surpassed the contributions of other Southern regions. The economy is dominated by the service sector (79.3%), with agriculture (6.2%) and industry (7.9%) playing relatively minor roles.

Sicily's economy generated value comparable to 5.1% of the national average. It displays a modest industrial vocation in the manufacturing sector, which accounts for 8.5% of the regional output. Additionally, Sicily exhibits marked specialisation in the agricultural and services sectors, which together make up 77.6% of its economy.

The majority of Mediterranean islands do not possess a well-developed industrial sector, mainly due to the lack of raw materials, high-production costs, and logistical issues in transport. Along with fishing, the strategic nature of the agri-food sector also plays a significant role in shaping their economies.

With respect to the national average values, the greatest gaps are observed due to the lack of financial resources (28% of companies declare the presence of this obstacle, compared to 23.7% of the total of Italian companies), **the unfavourable socio-economic environment** (21.2% in the South and 17.2% in Italy) **and the lack of infrastructure** (5.6% and 3.3% respectively). The latter is higher for companies from the two largest islands, Sardinia and Sicily (8.4% and 7.2 %). Moreover, the difficulty in hiring qualified personnel,¹⁸ unfavourable geographical location and the small size of companies also affect relationships with other companies (a problem that is mostly

¹⁷ See also: ISTAT (2023), *Censimento permanente delle imprese 2023: primi risultati in* <https://www.istat.it/it/archivio/290644> (anno di riferimento 2022).

¹⁸ In general, low qualifications of workers in the Mediterranean island regions compared to the European Union average, in particular in terms of higher education and vocational training, a situation that favours school dropouts and early entry into the labour market of highly tertiary economies.

found in Sardinia).

As regards to training, in Sardinia, 12.2 percent of individuals aged 25-64 participated in educational and training activities, which is slightly higher than the EU27 average of 11.9%. However, in Sicily, this figure is over a third lower than the Italian average, at 6.3%, compared to 9.6%.

The productivity gap caused by the seasonal nature of the tourism industry creates a significant vulnerability, which is further worsened by the increasing frequency of adverse weather events. The impact of tourism on the islands is crucial, particularly considering that the share of tourist visiting between June and September is higher than the national average in both Sicily and Sardinia.

In this regard, it is worth noting that the national average for the share of tourist visits is 51.2%, while the figures for Sicily and Sardinia are 56.5% and 54.4%, respectively. Furthermore, the national average for the number of tourist visits per inhabitant is seven, whereas in Sicily it is 3.1 and in Sardinia it is 9.3. Finally, ISTAT notes that the seasonality of tourist flows is more pronounced in smaller islands than in the two largest islands and the national average.¹⁹

Although some progress has been made, female employment rates still lag behind male rates in the majority of EU regions.

In Italy, 55% of women aged 20-64 are employed, while in Southern Italy the figure is 37.1%, with an employment gap of 74% in Italy compared to the European target of 83.4%. **Looking at the major Italian islands, in Sicily only one in three women in the 20-64 age group is employed, whereas in Sardinia one in two is employed.**

In Sicily the gender employment gap measured 55.3% in 2022, which is 18.2% higher than the Italian data. Sardinia records a level of 74.1%, which is slightly better than the Italian national figure.²⁰ If we consider the share of female entrepreneurs, in Sardinia the percentage stands at 31.1% of the total, while in Sicily, this share drops to 28.7%. In general, Sicilian entrepreneurs are younger than the national average. Nevertheless, Sicily records negative data among the eight Southern Italian regions: more than one quarter of all young people are neither in employment, nor in education or training,

¹⁹ *The enormous tourist influx concentrated in certain periods of the year creates the risk of overtourism.*

²⁰ *ASVIS, (2023). I territori e gli obiettivi di sviluppo sostenibile. Rapporto 2023.*

with a high NEET rate (32,4% 13.4 percentage points higher than the national average). Moreover, the share of people at risk of poverty or social exclusion stands at more than 40%. In Sardinia, the percentage is 21.4%, which is slightly higher than the national average (19.0 percent), but 6.5 percentage points lower than the average of the South (27.9).

In terms of the share of NEET individuals, Sardinia and Sicily are placed at the bottom of the EU ranking, with values almost double the EU27 average. Similarly, their rankings for other indicators show values far worse than the EU27 average

While GDP remains a key metric for monitoring economic progress, it is increasingly important to assess progress with respect to the Environmental, Social, Governance (ESG) criteria as a means of implementing sustainable economic strategies, in light of the dependency on tourism and the high proportion of the tertiary sector in many island economies.

In order to harness the potential of the islands, it will be necessary to analyse territorial inequalities and outline the constraints and challenges that define the circumstances of EU islands. This will involve evaluating the effects of EU policies and the 2030 Agenda on the state of insularity.

3.2. The Socio-economic Gap in the Development of Islands

History and evolution of islands may help understanding the disadvantages resulting from insularity, by identifying the elements determining delays in development and distinguishing them from other factors.

LOW COMPETITIVENESS

The European Commission provides an overview of the competitiveness level of regions through **the Regional Competitive Index (RCI)**, which *“measures, with a rich set of indicators, the ability of a region to offer an attractive environment for firms and residents to live and work”*. If we narrow the examination to the Mediterranean and its five largest islands, the current ranking sees Cyprus at the top (RCI 86.6), followed by Corsica (77.3), Sardinia (67.1), Crete (63.8), and Sicily (60.1). When including smaller islands like Malta, the Balearic Islands and the Aegean Islands, the picture changes slightly: Malta and the Balearic Islands rank at the top (Malta RCI 90, Balearic Islands 86.4), while the Aegean Islands are at the bottom (57.4). These data already indicate

that dimension is not a key parameter for ensuring competitiveness; perhaps, the demographic data can be more decisive, since the most competitive islands are more densely populated (1,557 inhabitants/km² in Malta and 244 in the Balearic Islands). Other islands show more homogeneous data, with Sicily and Cyprus (188 and 131 inhabitants/km²), Crete and Sardinia (77 and 67) and finally Corsica with 46 inhabitants/km². **The history of populations demonstrates that the development model affects demographic trends:** since the early 1900s, the population of Cyprus has quintupled and that of the Balearic Islands has quadrupled, while the increase in Corsica and Sicily has been (relatively) modest 30-40%. Therefore, the increase in competitiveness of islands seems to be correlated with population growth.

Focusing on Italy, the two largest islands rank at the bottom of Italian regions, followed only by Calabria. Indeed, Sardinia has an RCI of 67.1, while Sicily 60.1, way below the Italian average (85). Comparing the two islands, the basic, efficiency, and innovation sub-indices are substantially similar for basic²¹ and innovation (respectively 82 for Sardinia and 85.4 for Sicily in the first case, and 64.3 and 65.3 in the second), while there is a greater gap in terms of efficiency: Sardinia being above Sicily by about 16 points (56.6 compared to 40.1 for Sicily). The efficiency sub-index (tertiary education, labour market, market size) reveals interesting data. Compared to regions not necessarily insular but considered by the European Commission as similar in terms of GDP (*peer regions*),²² our two largest islands show very low levels: 56 for Sardinia, compared to an average of 71 for similar regions, and 40 for Sicily, compared to an average of 65 (similar regions). **This suggests that GDP could change significantly, if the economic and labour markets and the related tertiary education factor were also to change.** Within the basic sub-index, the one related to institutions is very low both in Sicily (45.8) and in Sardinia (49.6), with values well below those of similar regions for Sardinia (80 for similar regions) and more similar for Sicily (53.8 for similar regions). These data are particularly significant at the national level, as Sardinia and Sicily (ranked 15th and 16th) are at the bottom of the ranking (above Puglia, Basilicata, Campania and Calabria) and distant from the national average of 54.3. A careful analysis on the origins of such low data (referring to institutional factors) would allow the identification of the causes and the possible impact of the insular condition on them.

21 Basic pillars are institutions, macroeconomic stability, infrastructure, health, basic education.

22 *The region's performance is compared with that of a group of economic peers; peers are identified based on GDP*; v. https://ec.europa.eu/regional_policy/sources/work/rci-2022/RCI_2_0_2022_edition_presentation.pdf.

EDUCATION AND INFRASTRUCTURE

Other indices confirm that – most of the time – the performances of the two Italian major islands are far from the best. **In terms of education, insular Italy is the area with the lowest level**, showing a value above the national average only in lower secondary education. In particular, Sardinia has an index of 54.8% while Sicily has 55.8%, compared to the national average of 47.8%. Regarding the number of people with a high school degree, Sardinia and Sicily are at 32%, a lower value than the national average of 37%. As for graduates, Sardinia is at 13% and Sicily at 11.6%, lower than the national average (15%). Both islands also have a high rate of illiteracy (1% compared to the national average of 0.4), as well as of illiterate individuals without qualifications (4.9% compared to the national average of 4).

Other data describe the major islands as “lagging” territories, but this does not come mainly from the geographical and morphological condition. This is the case of economic infrastructure represented by electrical and water distribution networks, which are of primary importance as they provide the basic inputs for production processes. In these cases, it has been noticed that the physical extent of the network is not indicative of the quality of energy or water supply, as the coverage is effectively widespread throughout the territory. In order to grasp the actual functioning of the infrastructure, it is necessary to measure the continuity of service and its intensity.²³ Interruptions in the supply are particularly frequent in the internal Apennine areas of central Italy, especially in the southern regions and in many of the insular ones: in the latter, the annual frequency of disconnections for low-voltage user is 14.3 (compared to 5.1 in the central-northern regions). For water networks, the adequacy of infrastructure is captured by the extent of losses in the distribution networks of drinking water, which have important consequences on the regularity of the service. These phenomena are largely due to the presence of leaks in the pipelines or to old plants and occur in various areas of Italy. In the first case (electrical network), the losses in the distribution of energy may derive from the morphology of the territories (Apennines and islands). In the second case (water network), the data for Campania are close to those of Sicily and Sardinia, suggesting that the issue is not specific to an insular territory, but it rather originates from a poor management of existing infrastructure. Insularity may not be the factor determining some results, also for accessibility to a social infrastructure such as waste collection facilities. At the national level, the most disadvantaged areas are the islands (especially Sardinia), the Calabrian ones, and certain mountainous border

23 Banca d'Italia, *I divari infrastrutturali in Italia: una misurazione caso per caso*, Occasional papers, n. 365, luglio 2021.

areas. However, even within the insular areas, a significant difference can be observed: Sardinia has very low levels both for separate and non-separate waste collection (10.2 and 9.2), whereas Sicily has a significantly higher level (25.8 for separate waste, and 59.5 for non-separate waste). Insularity is therefore not homogeneous but produces different outcomes. Conversely, in the case of telecommunication infrastructures, the lower accessibility of some areas (e.g., mountainous ones) and of an entire island may be attributed to orographic or geographical factors. The fixed network infrastructure or fast broadband is quite developed and relatively homogeneous throughout the national territory. However, the situation is very different for mobile broadband with 4G technology (up to 100 Mbps): the distribution of this technology appears to be rather uniform, except for the internal Apennine areas, where orographic factors are relevant, and for Sardinia.

ENERGY

The above negative scenarios show an exception: Sardinia ranks first in the national ranking for the consumption of energy from renewable sources compared to the total consumed. In this case, the geographical condition has been a triggering factor in climbing the ranking. In fact, Sicily, an insular region but closer to the mainland, is not as proficient as Sardinia in this respect. The data for energy consumption from renewable sources are clear: Sardinia has an indicator of 29, way above Sicily (15.5) and the national average (20). This is the result of the need to use alternative sources; **the insularity condition is the cause and the driving force to new forms of energy production and consumption.** Regarding islands, the European Clean Energy Transition Agenda (CETA) highlights that ***“despite having access to renewable sources of energy, such as wind and wave energy, many of them depend on expensive fossil fuel imports for their energy supply.”***²⁴ The (often) small size has represented the ideal scenario for the implementation of new forms of energy sharing, with consequent advantages for residents (in terms of energy savings as well) and for the climate and the environment in general.

When implementing the European directive on the electricity market, the Italian legislator²⁵ has considered the customer located on a non-interconnected smaller

24 Clean Energy for all (COM 2016 860 final), Clean Energy Transition Agenda (CETA) and Clean energy for EU islands secretariat which is “the central platform for the clean energy transition of the more than 2,200 inhabited European islands”. V. <https://clean-energy-islands.ec.europa.eu/>.

25 Directive (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market for electricity.

island as a vulnerable consumer.²⁶ For this reason, these consumers are in a protected energy market and can benefit from specific price conditions supporting disadvantaged consumers. New forms of participation in the electricity market, such as renewable energy communities, may be ideal to protect the inhabitants of islands against energy insularity and poverty (Pappadà, 2023). Moreover, a fund has been recently established (with an endowment of 2 million euros for the year 2023) supporting companies with high electricity consumption located in island regions (Sicily and Sardinia)²⁷. **Energy vulnerability (and poverty) is often a consequence of insularity.**

3.3. Tentative Analysis and Policy Responses

CAUSES OF THE INSULAR GAP

How does insularity effectively influence the data presented above? What disadvantage/delay really stems from the condition of islands?

In order to establish this causal relationship, it is necessary to separate what economists define as ‘first nature’ from ‘second nature’ factors. In the first case, we refer to objective elements that are given “regardless” of human intervention; this includes morphological and geographical data (territorial characteristics and distance from the mainland) that are immutable. The second nature refers instead to a level of analysis that focus on the consequences of human intervention and economic incentives, such as economies of scale or other spillover effects (Licio & Pinna, 2013). The difficulty is in determining the impact of an element of first nature on one of second nature.

Some studies have effectively found that “bad geography cannot be overcome, whereas the condition of isolation can” (Cocco, Deidda, Marchesi, & Pigliaru, 2019). **Using econometric tools, these studies have confirmed that insularity must be distinguished from peripherality; both are situations that create disadvantages for territories, but the former has a greater weight than the latter** (Cocco, Deidda, Marchesi, & Pigliaru, 2019).

²⁶ Art. 11 para. 1 lett. d) d. lgs. n. 210/2021.

²⁷ V. art. 24 para 5 d.l. n. 34/2023, Ministero delle Imprese e del Made in Italy decree, 08.11.2023, Inizio modulo

Fine modulo

Modalità di utilizzo delle risorse del Fondo per il sostegno alle imprese a forte consumo di energia elettrica localizzate nelle regioni insulari, Gazz. Uff. 22.12.2023, n. 298.

Analyses must therefore tend towards a “surgical” approach to the effects of insularity, distinguishing them from those due to other factors on which intervention is possible. Only avoiding the mixing of the two levels (first and second nature) makes it possible to address and identify the cost of the disadvantages resulting from insular status.

SOME ATTEMPTS TO MEASURE THE COST OF INSULARITY IN ITALY

It is a recurring statement that insularity generates an economic (Cerina, 2015) and psychological cost for residents (Licciardello, 2023). The two major islands, even before the reintroduction of the principle of insularity in the Constitution (art. 119), conducted studies attempting to quantify, in monetary terms, the so-called ‘**cost of insularity**’.

The first study, conducted for Sardinia by the Bruno Leoni Institute (IBL) based on a previous work by Crenos, (Deidda, 2014), attempts to estimate the impact of insularity on GDP per capita, identifying a coefficient to measure the so-called “insularity tax”. The study assumes that GDP per capita is determined by a series of factors explaining the wealth of a territory (morphology, infrastructure, human capital, economy).²⁸ Based on an econometric analysis, IBL quantifies the coefficient determining the loss of GDP due to insularity at -11.6. Multiplying this coefficient by the average distance between Cagliari-Rome and Sassari-Rome (approximately 495km) estimates the annual GDP per capita loss at 5,700 euros. Multiplied by the population (1,639,531), it quantifies the annual gross domestic product reduction at 9.5 billion euros.

For Sicily, Prometeia (an Italian research institute) multiplies the IBL coefficient by the average distance between Palermo-Reggio Calabria and Catania-Reggio Calabria, getting an annual loss of GDP per capita of 2,123 euros and an annual regional gross domestic product of 10.7 billion euros. However, Prometeia suggests a variation to the IBL model by including in the econometric specification 2 additional factors: the number of ports in the region and the share of graduates in the age group 30-34 years. After the inclusion of these two variables, the coefficient related to the distance from the continent decreases to -7.15, resulting in an annual loss of GDP per capita for Sicily of 1,308 euros and an annual regional GDP loss of 6.5 billion euros²⁹.

28 These concerns: distance from the mainland, regional surface area, kilometres of highways relative to the region's surface area, kilometres of railways relative to the region's surface area, number of recognized and active airports, illiteracy rate, average active interest rate for banks in the region, savings (amount of deposits), export/import data, regional public expenditure.

29 Applying to Sardinia the coefficient calculated by Prometeia, there is an annual per capita GDP

Prometeia also conducted another analysis aimed at estimating the impact of insularity on transport costs; more precisely, the goal is to measure the increase in GDP following their reduction. The analysis is conducted in two steps: first, this study measures the average transport costs, finding that Sicily has an average cost 50% higher than the Italian average and 30% higher than the average in Southern Italy. Therefore, it is possible to simulate the effects of a reduction in transport costs in Sicily that aligns them with those of the benchmark area (Southern regions). This results in increased exports, household consumption, and GDP over 6 years, with GDP increasing by 6.8%. In essence, the positive effect of a reduction in prices in the “Transport and storage” sector determines an increase in regional GDP of 6.8%, equivalent to about 6 billion euros.

In short, Sardinia and Sicily quantify the cost of insularity at approximately 9.5 billion and 6 billion euros, respectively; this is the annual GDP loss quantified by the cited studies.

POSSIBLE REMEDIES AND SOLUTIONS

Given the insularity cost, what are the most suitable solutions to it?

A year after the reintroduction of the principle of insularity into the Constitution, the debate has gained renewed attention, but there are few attempts to deal with it.

The first intervention (in chronological order) was provided by the 2023 budget law (law n. 197/2022), which established a bicameral parliamentary commission to deal with the disadvantages resulting from insularity.³⁰ This law created two funds: a) the national fund to counter the disadvantages resulting from insularity with an allocation of 2 million euros for every year from 2023 to 2025,³¹ and b) the fund to ensure a complete and effective system of airplane connections to and from Sicily and Sardinia, with an allocation of 8 million euros for the year 2023³² and 15 million euros starting from the year 2024. Specifically, the objective of the fund is to finance interventions for the mobility of residents in the two major islands.³³ After one year, there is no trace of the

loss of 3,539 euros and an annual regional GDP loss of 5.8 billion euros.

30 Art. 1, para 808-814 l. n. 197/2022.

31 Art. 1, para 806-808 l. n. 197/2022.

32 The fund has been refinanced to the amount of 8 million euros for the year 2023 by Article 7 quater, paragraph 1, of Legislative Decree no. 132/2023. The initial forecast was for 5 million euros

33 Art. 1, para 494-495 l. n. 197/2022.

ministerial decree, expected by February 2023, which should have established the methods and criteria for the use of the fund.³⁴ By contrast, a constitutional legitimacy judgment was promoted by the Sardinia Region on the rules (art. 1 paragraph 494-496) that establish this fund (Betzu & Coinu, 2023).

More recently, a specific section of the Special Economic Zone (ZES – Unica per il Mezzogiorno, Law. n. 124/2023) strategic plan is dedicated “to investments and priority interventions, necessary to remove, in accordance with what is provided for in article 119, sixth paragraph, of the Constitution, the disadvantages of insularity, in the Sicily and Sardinia regions”.³⁵ This measure is rather theoretical as it aims at drafting a report on investments and priority interventions for the major islands, without identifying further operational or concrete aspects. There is a situation of inequality between national and European territories, and regulatory interventions have failed to identify adequate compensation measures for mitigating the disadvantages of insularity (Demuro, Coinu, & Pigliaru, 2020).

We may also question the utility of the funds and ask whether they represent the best response to the problem of the cost of insularity. Data on the implementation of the cohesion policy show poor performance since, among EU Member States, **Italy ranks second in terms of allocated resources (over 64 million euros) but second to last in terms of the money spent, with a spending percentage of about 60% of the planned resources, compared to the European average of 80%. This highlights the need for a change of direction,** especially given that spending of European Funds for the 2014-2020 period was supposed to end by 31.12.2023.³⁶

Among the categories of Regions, significant delays in payments are observed in the less developed and, therefore, in all insular areas of Southern Italy. In particular, payments are over 17 percentage points lower than in the more developed regions. Individual performances are not equal: there is indeed a significant difference between the two major islands, with Sardinia recording 69.64 % of payments compared to Sicily's 59.16%. The situation is similar in terms of the implementation of national resources for cohesion. With respect to the development and cohesion plans (PSCs) under the responsibility of the Regions, the distribution of unspent resources is concentrated in the southern regions (27.09% is the percentage of payments compared to what was

³⁴ Art. 1, para 496 l. n. 197/2022.

³⁵ Art. 11, para 1 Legislative Decree 124/2023.

³⁶ V. Ministro per gli Affari europei, audizione 15.03.2023, available at: https://www.fondazioneifel.it/fondi-europei-e-coesione/item/download/5808_1508b860a943179025461328182fbc9d9.

planned) with important differences between Sardinia (38.85%) and Sicily (19.57%).³⁷

It follows that islands, in particular, do not only need resources, but also tools to employ and use them. The creation of technical assistance agencies for local island authorities could be useful to support them in implementing complex procedures.

These agencies could also assist offices in participating in national or European projects where specific skills are required, often not available in the staff of smaller island administrative bodies³⁸.

3.4. A SWOT Analysis of the Situation of Islands

Generally, islands exhibit distinct geographic, economic, demographic, and social characteristics, which present unique challenges to the implementation of European policies. As previously highlighted, while addressing these challenges, it is crucial to pinpoint the drawbacks and affected sectors, calculate the costs of insularity, considering the specific traits of the islands, and devise suitable tools and interventions. Through exerting political pressure at both the national and supranational levels, it becomes feasible to attain a state of equal opportunities for islands.

The various difficulties confronting islands in the contemporary era are multifaceted and encompass social, economic, and environmental concerns. It is essential to address the problem of insularity with tailored solutions, which take into account economic profiles and the implementation of economic and social corrective measures. In this regard, economic growth and social inclusion are intrinsically linked, and these solutions are not perceived as a privilege, but rather as a necessity for the survival of the islands, (Haase et al. 2021).

Prior to examining these challenges, it is essential to reiterate the present circumstances of EU islands, which have been determined through a comprehensive SWOT analysis.³⁹ **Strengths are firstly described: the quality of life, the abundance of natural and cultural capital and a robust cultural identity**, as potential sources

37 *La politica di coesione in Italia* (n. 1, July 2023, servizio studi Camera dei Deputati), available at: <http://documenti.camera.it/leg19/dossier/pdf/PP001BI.pdf>.

38 For example, Dafni, v. <https://dafninetwork.gr/en/> or Otra, v. <https://www.balcanicaucaso.org/aree/Croazia/Isole-in-Croazia-Otra-agenzia-di-sviluppo-224174>.

39 Spilanis et al. (2013). *The Development of the Islands – European Islands and Cohesion Policy* (EUROISLANDS). ESPON 2013, op. cit.

of wealth and job opportunities in the islands. **The weaknesses include restricted accessibility, restricted provision of public interest services, restricted private services and networks, and the absence of economies of scale and effective market organisation.** Secondly, there are several opportunities that must be considered, including: the growing demand for high-quality products and services that enhance the quality of life, as well as the need for safe and nutritious food items. Additionally, specific-interest tourism and residential services are also in high demand. However, there are also several threats that must be considered, such as the impact of climate change, the effects of globalisation, economic crises, and rising energy prices. Other factors that must be taken into account include water scarcity, soil degradation, and the extinction of fishing stocks.

The examination unveils that the difficulty at hand is complex and requires a multifaceted approach. Hence, it is essential to explore the diverse obstacles confronted by the European Union's islands.

In the context of Europe, island regions often face challenges that hinder their development and limit their opportunities. These include a scarcity of resources, elevated transportation expenses, inadequate labour force, consumers, and infrastructure, all of which contribute to the competitiveness issue faced by islands' economic systems. The restricted availability of resources and high land utilisation, which underpin economic growth in island regions, weaken the economic fabric, making it more susceptible to stagnation, unemployment, and diminished competitiveness.

The economic challenges encountered include: the need to align the utilisation of land resources with their limited availability; the importance of attracting investment in research, innovation, and digitisation; islands' distance from significant markets and urban centres. This leads to higher production costs⁴⁰ and diminishes the competitiveness of islands' businesses, exacerbating islands' reliance on the importation of essential goods and services, such as energy and fuel. As a result, living conditions and security are becoming increasingly uncertain on islands.⁴¹

The absence of an entrepreneurial culture that emphasizes innovation and human capital is often apparent, which impedes the growth of the local economy. This value,

⁴⁰ Given the reliance on transportation for the delivery of goods and services to islands, it is unsurprising that the cost of living in island territories is elevated (European Parliament, 2016a).

⁴¹ Espon bridges (2019), *Balanced Regional Development in areas with Geographic Specificities*.

which is both social and economic, can be attained through education and skills development.

The departure of younger individuals researching improved employment opportunities leads to the exacerbation of phenomena such as depopulation and ageing, which can prove to be highly detrimental, particularly in small island communities (Espon bridges, 2019).

In an effort to narrow the competitive disadvantage, islands concentrate their resources on a specific industry. Nevertheless, this concentration results in a reliance on a single sector and seasonal employment opportunities, which in turn leads to a lack of financial resources and restricted economic growth.

Tourism has emerged as a vital factor contributing to economic growth, generating employment opportunities and improving living standards, as substantiated by the prosperity of the Spanish isles of Tenerife and Majorca, (Espon bridges, 2019). Nevertheless, numerous islands confront obstacles in broadening their economic bases, stemming from constrained labour markets, which in turn engender enduring hardships.

Infrastructure is a crucial element in territorial growth, as it facilitates the achievement of development objectives by impacting socio-economic activities, investment, factors of production, and the overall attractiveness of islands, innovation, and expansion (Palei, 2015). It comprises various components, including road transport infrastructure, telecommunications, and accessibility⁴² via land, air, and water (Espon bridges, 2019).

The provision of suitable, cost-effective, and environmentally friendly modes of transportation is one of the challenges associated with improving connectivity and accessibility.

Islands are heavily dependent on sea or air transport,⁴³ as indicated in the report by Espon bridges (2019). However, their susceptibility to adverse weather conditions

⁴² *Mobility relates to the performances of transportation systems, whereas accessibility incorporates the interplay between transportation systems and land use patterns as an additional layer of examination. (Karampela et al. 2014).*

⁴³ *The most efficient method for securing territorial contiguity with the mainland is by means of air travel. In contrast, sea transport is not viewed as a viable alternative, although it does play a crucial role in ensuring the territorial unity of smaller islands that lack airports (Benelli, 2023).*

may result in lower standards, which can cause problems with transportation costs, seasonality, and connectivity with the surrounding area. Insufficient connectivity has a detrimental impact on every economic activity, resource, service, and infrastructure, as it increases transportation costs (Carboni, 2022).

The relationship between the mainland and islanders is directly influenced by the frequency and accessibility of the connections, which, in turn, affects islanders' quality of life of the and the number of individuals residing on islands (Haase et al. 2021).

Nonetheless, connectivity is not only about physical infrastructure, but also about digital development. According to the ESPON bridges report (2019), while digital development has helped to mitigate distance-related challenges, in the case of islands, it has also created additional limitations on what the digital infrastructure can achieve.

Considering the importance of addressing the social challenges that affect the quality of life, it is essential to take into account factors such as depopulation and ageing, which are particularly relevant in many island communities. To enhance the quality of life for island residents, it is crucial to ensure they have access to the same level of essential public services as mainlanders, while also promoting social equity. This involves improving education, healthcare, social welfare, and communication services, as the availability of these services can influence community decisions.

Rising transportation expenses for equipment and infrastructure have a detrimental impact on the size and quality of these services, as previously discussed. In several island systems, such as those in the Mediterranean, refugee migration has compromised social equity standards. The influx of a substantial number of migrants, which at times surpasses the local population, leads to a scarcity of assistance (EESC, 2017). The correlation between economic and social challenges is also evident in hyperspecialisation. The constrained labour market, with a limited number of job prospects, the seasonal nature of employment, the lack of labour market diversification, and the insufficient level of lifelong learning and skills all contribute to high unemployment, particularly affecting the younger segments of the population, who are often compelled to leave in pursuit of better job opportunities.

Governance challenges are typically characterised by the need for effective coordination between different levels of governance in islands, and the need to reassess the categorisation of islands and the reliance on GDP as the sole measure of development, as highlighted by Haase et al. (2021). To address this, alternative indicators such as the Power Purchasing Standard, Social Progress Index, and

SDG performance could be employed.⁴⁴ Furthermore, the scarcity of specialised operational programmes on the islands and the lack of sufficient statistical data block effective decision-making.

Many islands are perceived as possessing an abundance of both terrestrial and marine biodiversity, which is often reflected in their designation as protected areas. Nevertheless, natural capital management and conservation confront several obstacles, including the absence of information on ecosystems, insufficient data for ongoing monitoring, and insufficient resources, which are further exacerbated by the conflict between economic development – which is a top priority –, and the construction of infrastructure, transportation, tourism, and energy facilities – which have a significant influence on island biodiversity.

Islands are fragile and unique, but also limited and susceptible to external and human pressures, which presents an additional challenge. Generally speaking, islands are more prone to natural calamities or the consequences of climate change, such as drought, sea level rise, soil erosion, and marine pollution, as well as a variety of activities, particularly tourism, which can impact their natural and cultural environments.

Water, energy, and waste management pose considerable challenges for islands, particularly due to their limited capacity for waste management and insufficient water supplies, which often require the importation of water or desalination.⁴⁵ Moreover, as pointed out above, the existence of isolated, import-dependent energy networks or a reliance on fossil fuels tends to impede the implementation of environmentally sustainable solutions (Carbone, 2018).

Nevertheless, islands hold great potential to serve as testing grounds for novel ideas and concepts, such as marine renewable energy and aquaculture, as evidenced by Haase et al. (2021).

⁴⁴ Haase et al., *op. cit.*

⁴⁵ Desalination is a practice commonly employed in several island territories; however, it is frequently expensive and inefficient for providing the entire water supply (European Parliament, 2015).

3.5. Effective Policies for Islands

Identifying and understanding the main challenges that islands face is crucial in order to ensure their survival. As the European Economic and Social Committee (2017) notes, addressing these challenges requires a comprehensive approach that promotes the balance between the economic, social, and environmental sustainability of European islands. This can be achieved by implementing the principles of green, quality, and inclusive islands⁴⁶.

In order to overcome the constraints of European islands and transform them into smart, innovative, and sustainable economies, efforts must be grounded in sustainable growth, competitiveness, cohesion, and solidarity, as well as innovation and full employment. Sustainable development should be a cross-cutting issue in all of these efforts.

Furthermore, islands can serve as a laboratory environment for “inquiry and learning” that could attract young, innovative, and entrepreneurial individuals and activities (Espon bridges, 2019; Haase et al. 2021). This can provide a unique opportunity for islands to become more self-sufficient and resilient in the face of global challenges.

Efforts directed towards addressing economic issues should primarily focus on enhancing economic competitiveness, appeal, and diversity, while also granting increased flexibility with regards to the utilisation of state aid (EESC, 2023).

The entrepreneurial system necessitates initiatives that promote competitiveness,⁴⁷ as simply augmenting the workforce, capital, and infrastructure without innovative entrepreneurial endeavours cannot stimulate development, enhance living standards, or mitigate the adverse consequences of an ageing populace. A “new combination” of present resources is essential for generating novel value and fostering sustainable economic growth (Haga, 2015).

46 The European Economic and Social Committee (2017) emphasised the importance of inclusive islands in upholding the principles of Efficiency and Equity, which are essential for enhancing the competitiveness and social cohesion of all European islands. Efficiency ensures that every island can reach its full potential, while Equity guarantees that all citizens have equal access to opportunities and services, regardless of their geographical location.

47 For example, the Canary Islands have put in place ZECs (fiscal incentives that promote innovation and entrepreneurship) and the CIDE network (a network for business development and innovation) (ESPON, 2019), which have been instrumental in their growth.

To attain this goal, it is essential to nurture a business environment that prioritises knowledge acquisition, promotes continuous professional development, develops educational programmes that target entrepreneurship and business growth, and attracts talented migrants (Espon Bridges 2019).

The European Parliament (2022) has acknowledged that agriculture and fisheries are crucial components, as island communities greatly depend on these sectors and necessitate financial aid to sustain existing employment opportunities and create new ones within the industry.

As the report of Espon bridges (2019) points out, EU policies designed to promote employment may achieve better results if they consider the territorial element.

Undertaking significant investments in communication infrastructure and technology is essential for ensuring that public services are accessible and readily available to all residents of island territories. To establish European territorial continuity, it is vital to integrate the islands into the core Trans-European Transport Network (TEN-T) network by means of a multimodal corridor network.⁴⁸

To achieve a more integrated Europe, it is crucial to concentrate on the advancement of airport and port road infrastructure, as well as eco-friendly transportation. This must include a focus on territorial integrity for all islands. Implementing public service contracts⁴⁹ or social aid that provide preferential rates for maritime and air travel can guarantee a fair transition, while also bolstering the economic prosperity of European island communities,⁵⁰ Basoli (2023).

48 In Italy, two primary islands exhibit contrasting attitudes towards continuity. Sicily, as part of the Scandinavian Mediterranean TEN-T Corridor and integrated into the European economic sphere, differs significantly from Sardinia, which remains marginalised and reliant on maritime and air transportation (Basoli, 2023).

49 Public service obligations (PSOs) are designed to ensure that a certain standard of transport services is provided, which is proportional to the specific territorial and population needs of an area, including fluctuations caused by tourist flows. This helps to guarantee acceptable levels of service to the citizens of the islands, thereby promoting development and reducing economic and social disparities (Espon bridges, 2019). This right is accessible to all citizens, regardless of their location, and is limited solely to specific, homogeneous groups of passengers traveling on a particular route. It is crucial to acknowledge that if the market cannot fulfil the affordable mobility requirements of island citizens or provide an equivalent level of accessibility as reaching locations in the State's mainland areas through land transportation, the government must intervene to ensure equal and fair mobility opportunities for all citizens (Benelli, 2023).

50 In Spain, for instance, the tool of public service obligations has been extensively utilised,

The establishment of effective digital connectivity is undoubtedly a priority for islands; this includes the provision of high-quality broadband. For those living in remote locations, such as small islands, this is particularly crucial.⁵¹ By investing in efficient technology infrastructure that facilitates remote living and working, islands can create an attractive environment for skilled and independent workers to settle.

The tourism industry is a significant contributor to the economic growth of island regions, as it generates revenue and provides employment opportunities. As stated by the European Parliament (2022), it is essential to provide specific financial support for sustainable tourism initiatives to address seasonal tourism issues and to fund innovative pilot projects that promote greener and digital solutions that align with the objectives of the European Green Deal.

Tourism serves as a growth engine, as suggested by some literature (Armstrong & Read, 1998; Licio & Pinna, 2013). Additionally, isolation can present opportunities for specialised tourism development, leading to economic growth.

Developing sustainable tourism practices⁵² can help alleviate environmental pressures and combat the exploitation of natural resources. Consequently, interventions aimed at supporting and incentivising tourism should consider their impact on the environment and resources, as emphasised by Carbone (2018).

In order for policies to prove effective, they must be cohesive, collaborative, and well-coordinated across all tiers of governance, with the ultimate objective of mitigating any detrimental effects arising from tourism density and demographic

especially in island contexts and, particularly, to attain territorial cohesion between the various islands of the Canary and Balearic Islands. To guarantee the right to mobility of the inhabitants of the Canary Islands and the Balearics, which is recognised as freedom of movement across the national territory by Article 19 of the Constitution, the system of social aid is employed, via a discount mechanism of 75% on the fares of airlines connecting the islands with other Spanish airports located on the mainland. As for France, territorial continuity with Corsica has been secured through the imposition of public service obligations and by providing social aid.

51 According to Legambiente and CNR's (2022) Report, *ENERGIA, ACQUA, MOBILITÀ, ECONOMIA CIRCOLARE, TURISMO SOSTENIBILE. Le sfide per le isole minori e le buone pratiche dal mondo*, the Next Generation EU program has allocated 45 million euros to connect the minor islands of Sicily, Sardinia, Tuscany, Lazio, and Campania to ultrawideband networks.

52 Sustainable tourism may be defined as “a form of tourism that considers the economic, social, and environmental consequences of its present and future impact, and aims to satisfy the requirements of tourists, the industry, the environment, and local communities” (UNEP & WTO, 2005).

pressures⁵³. This encompasses tackling the burden on infrastructure and preserving the sustainability of environmental resources (Espon bridges, 2019).

Per the findings of Espon bridges' report from 2019, sustainable tourism ought to be regarded as a continuous process that is effortlessly incorporated into other development initiatives and closely engages with various sectoral processes, rather than a predetermined goal to be accomplished⁵⁴.

The eighth report on economic, social, and territorial cohesion⁵⁵ highlights an increase in disparities and underscores the distance from achieving substantial equality among European citizens, particularly between those residing on islands and those living on the European continent. In this context, it is crucial to perceive social challenges not only as threats, but also as sources of economic and social prospects (Sabato, Vanhercke, & Verschraegen 2015).

The well-being of islands is closely linked to the economic context: the scarcity of local entrepreneurship and employment opportunities in high-quality jobs and skills creates difficulties in attracting and retaining talent (Espon bridges, 2019).

The European Parliament (2022) highlighted the significance of enhancing the participation of women and youth in the labour market to address demographic challenges and the threat of depopulation, while simultaneously promoting a more equitable work-life balance.

Again, the report authored by Espon bridges emphasizes the significance of ensuring accessibility to services and connectivity, enhancing infrastructure and transportation,

53 The PNRR plan introduces the notion of "seasonalisation", which entails expanding the tourist season beyond its conventional summer-only span to encompass the spring and autumn months as well. This approach aims to distribute tourists more uniformly throughout the year, for example, by incorporating soft tourism or fishing tourism proposals. By doing so, several outcomes can be realized, such as an increase in the overall number of tourist visits, a decrease in pressure on the island during peak periods, an extension of local economic and commercial activities, and the integration of tourism with traditional pursuits like fishing, v. The Sustainable Islands Report, published by Legambiente and CNR in 2021, 2022, 2023 and 2024, also highlights these priorities.

54 The Balearic Islands are a prime example of sustainable tourism, as they implemented the Sustainable Tourism Tax in 2016 through the "Law on circularity and sustainability in tourism". This tax funds the regional strategic plan. Furthermore, some smaller Italian islands, such as the Egadi, Aeolian, and Pantelleria islands, are also adopting sustainable strategies on a smaller scale.

55 European Commission, (2021a). *Cohesion in Europe towards 2050, Eighth report on economic, social and territorial cohesion*.

adopting digital transformation, fostering active ageing, and guaranteeing equal opportunities and conditions for individuals with disabilities in regions referred to as “islands of equal opportunity”.

The European Parliament (2022) emphasised the necessity for a European Island Action Plan to tackle the matter of migration, while taking into account the difficulties faced in asylum and migration and promoting cooperative and respectful resolutions at the European level that prioritise the welfare and dignity of individuals.

According to Barca (2009), a novel blend of both social and territorial priorities is essential. To accomplish this, the social agenda must be permeated with a territorial viewpoint, while the territorial agenda must be embellished with a social aspect. The ultimate objective is to create a territorial approach to social inclusion that encompasses both of these transitions.

The Territorial Agenda 2030, published in 2020, emphasises the importance of collaborative political solutions with a strong regional focus and coordinated strategies that acknowledge and leverage the unique characteristics of different locations. This approach is crucial in achieving a balance between inclusivity, sustainability, competitiveness, and resilience through integrated, participatory, and innovative territorial development. In light of this, it is essential that governance solutions are not standardised; instead, governance should be exercised in a manner that is sensitive to the local context. This requires involving “local actors” in the decision-making process. Decentralisation of government functions and systems is therefore more appropriate for addressing local needs than centralised initiatives imposed from distant areas.⁵⁶

Over the past few years, concerns about the environment have become increasingly important in the context of the European Green Deal, which aims to establish a zero-carbon economy and a robust Europe. This move towards a more environmentally friendly, low-carbon future is a key component of the journey towards a sustainable and durable Europe.

The European Economic and Social Committee (EESC, 2023) emphasises the unique heritage of islands, despite their lack of resources. Preserving and restoring islands’

⁵⁶ Croatia offers an outstanding case in point. In 2017, it instituted an Islands Department within the Ministry of Regional Development and EU Funds, thereby consolidating all sectors concerned with the islands. This department now functions as the primary channel for addressing development concerns in the islands or for suggesting innovative development concepts (Espon bridges 2019).

fragile ecosystems and biodiversity, as well as protecting scarce natural resources, are of paramount importance. Furthermore, it is vital to provide assistance for a fair transition towards a climate-neutral future.

According to the Espon bridges report of 2019, it is imperative for islands to prioritise the conservation of natural habitats over economic pursuits when terrestrial resources are in short supply. This objective can be accomplished by implementing macro-regional strategies, which have been demonstrated to be more effective than those at the EU or national level. To promote sustainable management of natural resources and circular economy, the development of industries such as marine renewable energy, aquaculture, and blue biotechnology is essential, particularly in light of waste management (Haase et al. 2021).

The generation of renewable energy is widely acknowledged as an essential means of attaining energy security and fostering inclusive growth, whilst promoting a shift towards a more environmentally friendly energy system. However, energy provision in island regions can hinder development, requiring a reliable, sustainable, and cost-effective energy supply to foster sustainable growth.

In particular, disconnected islands that are not connected to the European energy grid face challenges of limited resources and high costs, as well as increased vulnerability due to their reliance on fossil fuels⁵⁷. The ultimate aim is for all islands to become completely self-sufficient in terms of water and energy, in line with the principles of the Green Deal (Espon bridges, 2019). The disadvantage of insularity requires the development of innovative solutions, with islands serving as platforms for piloting pioneering projects (Smart Islands declaration).

Climate change, a multifaceted challenge, impacts all sectors of the economy and

57 The report of Espon bridges 2019 points out that numerous European islands, particularly those in the Aegean Sea, are not connected to the continental electricity grid, which necessitates them to rely on their own resources for electricity production. This becomes particularly crucial during the summer season when tourists heighten the overall demand for electricity. The Greek island of Halki serves as a model for sustainable and autonomous energy production, as it operates a photovoltaic power plant and is not connected to the mainland grid. In 2017, 14 Member States and the European Commission adopted the Clean Energy for EU strategy to encourage energy independence in islands, acknowledging that customised solutions are essential for each individual island. According to a recent study conducted by Battistelli et al. (2023a), the majority of Italy's smaller islands encounter a common problem: 18 out of the 26 islands are not connected to the national grid, and the general state of environmental management on these islands is inadequate.

plays a crucial role in the pursuit of sustainable development. This complex issue further exacerbates an already intricate landscape. In order to address the increased vulnerability of islands to climate change, specific measures must be taken, as emphasised by the European Parliament in 2022, when it called for the enhancement of the EU Solidarity Fund to adapt to new threats such as rising sea levels, ocean warming and acidification, and desertification. However, to date, more resources have been allocated to mitigation rather than adaptation, as noted by the Conference of Peripheral Maritime Regions (CPMR) in 2017, who pointed out that adaptation can be perceived as costly and challenging preventive measures.

Climate models provide an indication of the direction of change, but they are uncertain in terms of scope and impact. Therefore, it is essential to share knowledge, establish effective multilevel governance to avoid overlaps, and disseminate the results on national platforms by utilising transnational approaches and macro-regional strategies (CPMR, 2017)

The topic at hand is of great importance, as it pertains to the **creation of special policies aimed at addressing the pressing issues of insularity, to transform this specificity into a valuable resource. This involves removing barriers that impede the enjoyment of rights and equal opportunities and promoting meaningful equality for those in a position of disadvantage.** As previously discussed, **islands possess enhanced autonomy, but lack legislative power. Thus, it is crucial to provide constitutional recognition to these territories, acknowledging that their diversity necessitates specific provisions to safeguard their unique nature.** The challenge lies not in securing resources and rescue interventions, but rather in adopting innovative, systemic, and sustainable approaches to tackle the associated costs and difficulties.

4. Insularity and the European Union: A Call for a Comprehensive Island Agenda

4.1. The Issue of Insularity in the EU Agenda

In accordance with previous statements, **the European Union was established without a specific directive addressing the subject of islands,**⁵⁸ despite the fact that insularity was a fundamental and distinctive geographical characteristic that had become increasingly complex and varied over time⁵⁹.

It is worth noting at the outset that policies arise from a policy debate that primarily focuses on the challenges facing the islands. **In Europe, these problems were initially not taken seriously:** in 1957, the Treaty of Rome made an indirect mention of the issue of islands, and in 1986, the Single European Act facilitated the harmonious growth of the Communities while decreasing territorial disparities, including reference to island areas.

In 1973, the accession of Ireland and Great Britain marked a significant turning point (Frosini, 2020). In accordance with the stipulations of the **Maastricht Treaty** signed in 1992, the European Union's member countries have committed to offering developmental assistance to their peripheral and disadvantaged regions.

58 The probable reason for this choice was the presence of island territories for France and Italy alone. However, with the accession of other member states, the number of islands grew and consolidated. In 1973, Denmark, Ireland, and the United Kingdom, two island states, and new island territories such as Greenland, the Faroe Islands, the Isle of Bornholm, the Isle of Man, the Isle of Wight, the Channel Archipelago, Shetland, Orkney, and the Hebrides joined the EU. In 1981, with Greece's accession, the number of islands increased significantly, and with the inclusion of Spain and Portugal in 1986, the presence of islands in the Mediterranean, with the Balearic Islands, and in the Atlantic, with the Canary Islands, the Azores, and Madeira, was further strengthened. Finally, in 1995, the accession of Finland and Sweden resulted in the inclusion of the Åland archipelago and the island of Gotland.

59 As Torres (2019) points out heterogeneity is expressed in terms of “*population (there are islands such as the Balearic Islands that exceed one million while there are islands that do not exceed 50 inhabitants), area, degree of political autonomy, and standard of living. In addition, there are island regions that accumulate a double or triple handicap: island, mountainous area, and low population density*”.

The **Treaty of Amsterdam** (1997), with Article 158 and **Declaration on Island Regions**, annexed to the Treaty, was the first to address this issue by emphasising the need to develop appropriate and specific policies that could compensate for the lower accessibility of islands and consider insularity as a mere disadvantage.⁶⁰ With the establishment of the **EU Cohesion Policy**, insularity was transformed into an advantage and potential territorial development if appropriate policies are implemented.⁶¹

Articles 174 and 349 of the Treaty on the Functioning of the European Union acknowledge islands as distinct territories with unique geographical features and provide a solid legal basis for implementing special measures in the outermost regions (Haase et al., 2021)⁶².

The European Economic and Social Committee (EESC, 2017) emphasized the need for the European Union to acknowledge the distinctiveness of the challenges that islands confront. To this end, it is essential that both the EU and national governments take proactive steps to harness the full potential of EU islands.

The Lisbon Treaty of 2009⁶³ marked a significant milestone by acknowledging the unique challenges faced by island regions and the persistent structural disadvantage associated with insularity in the context of the European Cohesion Policy. By seeking to address regional disparities, this policy is a fundamental aspect of European integration, and includes targeted investments to mitigate such imbalances⁶⁴.

60 Article 299 addresses the French Overseas Territories specifically and provides special support measures owing to their unique vulnerability.

61 Article 107, clause 2 of the Treaty on the Functioning of the European Union (TFEU) deems aid intended to foster economic growth in areas characterized by an abnormally low standard of living or significant underemployment to be compatible with the internal market.

62 It is crucial to acknowledge that the outermost regions ought to be regarded as a unique category and, consequently, warrant a separate approach within the framework of the European Structural and Investment Funds. As previously elucidated in the preceding chapter, in the context of Cohesion Policy, islands are typically lumped together with mountainous regions and sparsely populated areas, rather than receiving specifically tailored provisions. Typically, they are classified as “less developed” regions.

63 Article 158 of the TEC, as amended by the Treaty of Amsterdam and the Declaration on Islands, recognizes the difficulties encountered by islands and emphasizes the need for appropriate measures to address them. Nevertheless, it has been criticized for being a policy that primarily benefits the most disadvantaged islands, rather than extending to all island territories.

64 The European Union has implemented specific policies to address the challenges faced by islands classified as peripheral under Article 349 of the TFEU. Despite the diversity of these islands, policies have been developed and implemented successfully in areas such as agriculture,

As previously emphasised, **island territories exhibit a specific range of economic, administrative, and cultural features, while simultaneously grappling with comparable obstacles and difficulties.**

The concept of insularity, characterised by a peculiar geographic status, has been widely researched in light of political, social, economic, and cultural factors. **Research suggests that insularity is not a standalone issue, but rather intertwined with other challenges. Studies have emphasised how the permanent geographic features associated with insularity can hamper the economic and social development of island territories.** Despite these specific challenges and permanent natural disadvantages, this does not mean that islands are disadvantaged territories that require social policy to survive. Instead, it supports the notion that islands need a strategic approach to capitalise on these characteristics in European and global contexts.

The European Union thus recognises the multitude of challenges that derive from insularity; yet, there is a scarcity of acknowledgement of these issues in the EU's policy framework. Indeed, a large range of coordinated and targeted sector-specific policies are required at the European level⁶⁵. It is essential to highlight that the EU lacks a cohesive strategy for the non-outermost islands of the Union, which adversely impacts their economic development.

Despite the growing recognition of the unique insularity-related challenges faced by island territories, it is crucial to acknowledge that no specialised tools have been created to tackle these issues thus far. Consequently, these challenges continue to persist, resulting in adverse effects on the economic and social development of these regions.

cohesion, and competition. In addition, specific rules have been established for areas like state aid, operating aid, and investment. However, the Union has not established a separate policy for other islands that are closer to the mainland, despite the reference to island regions in Article 174 TFEU on territorial Cohesion Policy. Furthermore, there is a separate administrative unit within the Directorate General of Regional Policy that focuses solely on the outermost regions, unlike island regions.

65 The European Economic and Social Committee (2009) noted the need to adopt a holistic approach involving not only regional and Cohesion Policy *“but also, more particularly, the following areas: transportation; energy and water; education and labour; research, technological development and innovation; competitiveness; industrial policy; environment; and agriculture and fisheries”*.

The European Parliament, the Committee of the Regions, the European Economic and Social Committee, and the Conference of Peripheral Regions (CPMR)⁶⁶ have consistently advocated for greater recognition of the issue of insularity in the European legal system. These bodies have called for the European Union to demonstrate a greater readiness to address the unique challenges faced by island territories, with the ultimate aim of achieving effective territorial cohesion within the Union and showcasing the potential for island territories to contribute to sustainable development within the Union.⁶⁷ In contrast, the Commission has been more cautious, drawing attention to the socioeconomic diversity of the various island territories, which has informed the development of specific measures, including the absence of a general island policy (Torrens, 2022).

A number of islands have put forward proposals with the intention of achieving effective acknowledgement of Insularity within the EU Cohesion Policy, with the ultimate goal of securing suitable measures.⁶⁸

66 Founded in 1980, the CPMR is an association of 160 regions from 25 member and non-member states of the Union, with the aim of defending the interests of Europe's peripheral maritime regions. There are other international organizations representing the interests of European islands: the Seas, Rivers, Islands and Coastal Areas Intergroup (SEArICA) within the European Parliament and the European Federation of Small Islands (ESIN) (Haase et al., 2021).

67 See European Parliament Resolution 2016 (2015/3014(RSP)); Opinions of the European Committee of the Regions May 2017 (2017/C 306/10), (2019/C 86/09); 2019 Manifesto of European Islands, (2020/C 440/19); (2022/C 498/08), (2022/C 2959/22); European Economic and Social Committee (EESC) Opinions on the topic of insularity. These include: (2008/1214), (2012/813), (2014/5752), and the exploratory opinion *"Islands in the EU: from structural handicap to inclusive territory"* (2016/5508)60; the positions of the Conference of Peripheral and Maritime Regions (CPMR): the *"Gotland Declaration"*, at the 41st Annual General Assembly on May 12, 2022 the *"Manifesto for the European Islands"*, approved in Palermo on October 19, 2019, at the 47th Assembly of the Conference; CPMR Islands Commission *"Declaration Palma - Archipelago Europe: an agenda for the EU islands"*, meeting for its 42nd Annual General Assembly on February 22, 2023 in Palma de Mallorca. Also crucial are the various studies on island status; in particular, it is worth noting the contribution of ESPON (2013), op. cit.

68 Consultation between the representative assemblies of Sardinia and Corsica (Corsican-Sardinian Consultation) in the July 4, 2017 resolution on *"Recognition of the condition of insularity"* in implementation of Article 174 TFEU; On February 6, 2019, the Government of the Balearic Islands, the Autonomous Region of Sardinia, Corsica, and the Sicilian Region signed a joint document, which called for the concrete implementation of the third paragraph of Article 174 TFEU and the guarantee of equal opportunities and right to mobility for their citizens. On Oct. 8, 2019, the presidents of Corsica, Sardinia, the Balearic Islands and Gozzo approved an insular declaration in Brussels aimed at claiming insularity in the European Union by referring to the new concept of *"Mediterranean insularity"*.

Carta (2015) points out that “The distinctiveness of the island situation, closely connected to territorial cohesion policies, has been the subject of a gradual yet intermittent awareness marked by recurring “ups and downs” on the part of both the Community and the Union, which have, over the years, regulated, and continue to do so, the issue itself, in an attempt to bridge the gap and foster the harmonious development of the Union as a whole, as explicitly stated in the current Article 174 TFEU”.⁶⁹

The valorisation of island territories can be achieved by addressing islands’ unique challenges, which stem from their disconnection from the mainland and their distinct, enduring conditions. These characteristics can be observed not only between groups of islands, but also between individual islands within the same group, thus necessitating customised approaches.

It is evident that **EU islands cannot be classified as a homogenous category due to their varying sizes, populations, and degrees of economic growth. Despite these differences, they share a number of common problems** (Espon Bridges 2019; Deriu et al. 2020).

According to Deidda (2016), islands possess a dual character, exhibiting both a threat and an opportunity, thus making them a compelling subject for policy interventions as well as a fascinating case study.

69 Originally, the Treaty of Rome made no mention of Cohesion Policy, but it did establish the European Social Fund for a common regional policy. The idea of structural aid for disadvantaged areas emerged in the 1970s, leading to the creation of the European Regional Development Fund (ERDF) in 1975, which primarily financed infrastructure projects in underdeveloped regions of the Community. The European Guidance and Guarantee Fund (Feoga) and the European Social Fund (ESF) were established in 1962 and 1958, respectively. The Single European Act introduced the goal of economic and social cohesion, but it was the Maastricht Treaty in 1993 that established the cohesion fund, making it an institutionalised objective. The 2004 Treaty that adopted a Constitution for Europe further solidified economic, social, and territorial cohesion as an objective of the Union. However, the concept of territorial cohesion remains ambiguous and poorly defined in practical application. The community territory should be an “An indivisible, yet distinct, spatial and economic reality where differences should be both emphasized and surmounted” (Carta, 2015).

4.2. EU Sustainable Development Tools and their Application to Islands

The primary investment policy of the European Union, referred to as Cohesion Policy, was established in response to the escalating economic and social disparities that emerged as a result of the enlargements and the liberalisation of trade in goods and services, which culminated in the establishment of the single market.⁷⁰ From its inception, this policy has concentrated on GDP⁷¹ per inhabitant as a means of allocating funds, rather than other indicators that reflect social, economic, and territorial realities, such as the drawbacks connected with insularity.

During the period spanning 2000 to 2006, the European Regional Development Fund (ERDF), the European Social Fund (ESF), the European Agricultural Guidance and Guarantee Fund (EAGGF), and the Financial Instrument for Fisheries Guidance (FIFG) were employed as financial instruments to facilitate the economic and social Cohesion Policy. This was designed to respond to three primary objectives: the foremost aim was to promote the development and structural adjustment of regions which were lagging behind, specifically those with a per capita GDP of less than 75% of the European average. The second objective was to support the socioeconomic transformation of areas experiencing structural difficulties. The third objective was to provide support to regions excluded from Objective 1, modernise education, training, and employment systems. For each of these objectives, operational programs were established, which were subsequently divided into national operational programmes (NOPs) and regional operational programmes (ROPs) with specific goals outlined therein.

⁷⁰ Cohesion Policy is designed to promote the harmonious development of the EU by reducing economic disparities between regions. It achieves this by allocating resources to less developed areas, with the aim of narrowing the income gap between these regions and more prosperous ones. This policy is underpinned by the principle of solidarity among member states.

⁷¹ The European Parliament, the Committee of the Regions, and the European Economic and Social Committee have consistently emphasised the necessity of considering alternative statistical indicators that can reflect the economic and social vulnerability resulting from permanent natural disadvantages (Eu Parliament, 2016). They have acknowledged that GDP per capita is not sufficient in capturing the various factors that hinder the development of islands (Regions Committee, 2017). However, despite repeated calls, there appears to be a lack of serious contemplation within DG REGIO regarding the adoption of alternative indicators for the allocation methodology. Furthermore, this proposal may encounter resistance from several member states (Deriu & Sanna, 2020).

The Cohesion Policy, which was put into effect between 2007 and 2013, introduced a new iteration of the Structural Funds⁷² adopting a more strategic approach.

This involved allocating ERDF funds to address the unique challenges faced by specific regions, such as islands, mountainous areas, border regions, and sparsely populated regions. The allocation of these funds was aimed at promoting the sustainable development of these regions, which are often hindered by their geographical location. Additionally, a new legal entity called EGTC⁷³ was established to encourage territorial, cross-border, transnational, or interregional cooperation,

72 Council Decision of October 6, 2006, on Community Strategic Guidelines on Cohesion, which established the European Regional Development Fund (ERDF) with Regulation (EC) No. 1080/2006 of the European Parliament and of the Council of July 5, 2006 on the European Regional Development Fund; European Social Fund (ESF) by Regulation (EC) No. 1081/2006 of the European Parliament and of the Council of July 5, 2006 on the European Social Fund; Cohesion Fund (CF) by Council Regulation (EC) No. 1084/2006 of July 11, 2006, which established a Cohesion Fund, Council Regulation (EC) No. 1083/2006 of July 11, 2006, laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund, and the European Grouping of Territorial Cooperation (EGTC) By Regulation 1082/2006 of the European Parliament and of the Council of July 5, 2006 amended in 2013 by Regulation 1302/2013 of December 17, 2013. The effectiveness of these funds is not contingent upon the encouragement of fresh expenditure, but rather on the elimination of impediments or the creation of new prospects that bolster development. The European Regional Development Fund (ERDF), the European Social Fund (ESF), and the Cohesion Fund are the financial resources for interventions during the 2021-2027 programming period. Contrarily to the past, these funds finance interventions, with the ERDF promoting public and private investment to mitigate regional disparities, the ESF supporting initiatives to adapt workers and businesses to economic changes, and the Cohesion Fund contributing to interventions in the environment and trans-European transport networks sectors in nations with a gross national income below 90 percent of the EU average. The Lisbon Strategy, introduced in 2000, aimed to transform Europe into the most competitive knowledge economy in the world by 2010, concentrating on sustainable economic growth, job creation, and social cohesion. However, when it became evident that many of the objectives would not be accomplished on schedule, they were revised.

73 The establishment of a legal entity with its own autonomy, capable of managing European funds independently of the participating entities, has overcome the difficulties caused by the differing national laws and procedures of member states and their regional and local authorities in carrying out and managing cooperative activities. The European Economic Interest Grouping (EEIG) and the European Cooperative Society (SCE) were created by Council Regulation No. 2137/85 of July 25, 1985, and Council Regulation (EC) No. 1435/2003 of July 22, 2003, respectively, during the 2000-2006 Cohesion Policy; however, they failed to promote cooperation efficiently. In contrast, the European Grouping for Territorial Cooperation (EGTC) has proven to be a practical means of managing and accessing funds under the Cohesion Policy, going beyond the existing system for the allocation of funds, which is based solely on gross domestic product, to alleviate the problems arising from the condition of isolation.

as well as multilevel governance⁷⁴, both of which are essential for addressing the problems caused by insularity.

Although the European Grouping of Territorial Cooperation (EGTCs) provides a more structured approach to effectively utilise European funds, their success in achieving this objective for all island territories has been hindered by provisions and regulations which limit funding for territories that are more than 150 km apart when engaged in cross-border cooperation initiatives⁷⁵. This criterion is still maintained by the Interreg programme.⁷⁶ Recently, the European Parliament (2022) has called for a re-evaluation of the 150 km distance criterion, as it currently excludes certain Mediterranean islands from receiving funding from the European Regional Development Fund (ERDF), solely based on their geographical location.⁷⁷

The Cohesion Policy was established with the aim of providing funding in three key areas: growth, competitiveness, and employment. The primary objectives of this policy were to bring regions with a GDP per capita below the EU average to converge, promote competitiveness and employment in regions not initially covered by the funding, and encourage European territorial cooperation to address specific issues.

Throughout the 2014-2020 programming period, special provisions have been in place to allow for thematic concentration, which has made it difficult to address common challenges faced by islands. Furthermore, co-financing rates⁷⁸ and sometimes additional allocations have been adjusted to achieve policy objectives (Haase et al. 2021).

Various instruments and funding have been implemented to improve the economy, energy, and transportation in the island regions. However, these measures have not provided a comprehensive and general response to the challenges and drawbacks

74 Please refer to the Committee of the Regions', *White Paper on multilevel governance*, which was published in the Official Journal of the European Union on September 4, 2009 (OJ C 211).

75 Regulation 1083/2006 of July 11, 2006, cit.

76 Regulation 2021/1059 of the European Parliament and of the Council, dated June 24, 2021.

77 The Committee of the Regions also spoke on the subject in its Opinion of July 4, 2018, and in 2020, Opinion, October 14, 2020.

78 The distribution of co-financing for the new programming has been modified to raise national rates, thus lowering the EU's share. This takes into account the particular circumstances of ultra-peripheral and sparsely populated regions across three funds: the Regional Development Fund, European Social Fund Plus, and Cohesion Fund, in accordance with the levels of the 2007-2013 period.

faced by island territories. As a result, **the compensatory measures designed to address the disadvantages experienced by the islands have either not been adopted or have been inadequately and incompletely implemented** (Carta, 2015).

Haase et al. (2021) emphasise the importance of Member States promoting the development of island territories through national legislation and the implementation of the National Island Strategy. This involves defining special provisions for islands in partnership agreements with the European Union⁷⁹, and allocating dedicated Operational Programmes or special points for projects located on islands. Moreover, the establishment of local partnerships is crucial. Although these instruments are intended to support island territories, they have not always been entirely dedicated to their needs.

The Cohesion Policy for the period 2021-2027⁸⁰ appears to follow a similar approach to previous periods, but there is a noticeable absence of specific policies for island regions, which are generally treated as equivalent to continental regions. All European regions will continue to benefit from Cohesion Policy funds according to the usual division into three categories: more developed regions, transition regions, and less developed regions.⁸¹ Despite the mention of outermost regions and the need to address the unique challenges they face, island regions as a whole remain underrepresented in cohesion policies and the allocation of funds. While the new European Regional Development Fund (ERDF) and Cohesion Fund (CF),⁸² regulations acknowledge the importance of reducing disparities and promoting recovery in

79 Between 2014 and 2020, the collaborative agreements of only seven member states, Denmark, Greece, Spain, Croatia, France, Malta, and Portugal, comprised distinct sections that delved into the difficulties experienced by island territories (Haase et al. 2021).

80 Regulation OJ L 4331, introduced on December 22, 2020, establishes a unified set of regulations to govern eight EU funds, namely the European Regional Development Fund (ERDF), which is utilized for investing in the social and economic development of all EU regions and cities; the European Structural and Investment Funds (CF), which is utilized for investing in the environment and transport in less prosperous EU countries; the European Social Fund Plus (ESF+), which is utilized for investing in people, ensuring the skills needed to meet the challenges and changes in the labour market, supporting employment, and creating a just and socially inclusive society; the European Maritime and Fisheries Fund (EMFF); the Asylum, Migration, and Integration Fund (AMIF); the Internal Security Fund (ISF) and the Border and Visa Management Facility (BMVI); and the Just Transition Fund (JTF), which is utilized to support regions most affected by the transition to climate neutrality, in collaboration with member states. (Camera dei Deputati, 2019).

81 In Italy, the underdeveloped regions extend beyond Campania, Puglia, Basilicata, Calabria, and Sicily to encompass Sardinia and Molise, which were previously classified as transitional regions.

82 Regulation 2021/1058 of the European Parliament and of the Council of June 24, 2021.

low-income and low-growth regions, they do not specifically address the needs of island regions. Instead, new criteria such as youth unemployment, low educational attainment, climate change, and the reception and integration of migrants are taken into account, in addition to per capita income.

The partnership agreement between Italy and the European Union prioritises redirecting resources towards initiatives that support the European Green Deal and Pillars of Social Rights, while also adhering to the UN 2030 Agenda and national strategy for sustainable development. The strategic objectives for the 2021-2027 planning period include: creating a more intelligent Europe, promoting a greener Europe, fostering a more interconnected Europe, advancing a more socially inclusive Europe⁸³, and enhancing Europe's connection with its citizens⁸⁴.

The aim of European territorial cooperation is maintained in the new EU Cohesion Policy for the period 2021-2027, particularly through the extension of the Interreg programme.

The Interreg programme was introduced in the 1990s as a component of the Cohesion Policy⁸⁵ and is organised around three different forms of cooperation: cross-border (Interreg A), cooperation between regions that share a land or sea border to encourage coordinated and cohesive development; transnational (Interreg B), cooperation between significant transnational regions and their surrounding sea basins; and interregional (Interreg C), cooperation between regions to enhance the effectiveness of Cohesion Policy. The objective is to lessen disparities and account for territorial specificities by focusing on four main priorities: fostering intelligent and sustainable growth, energy efficiency, and low-carbon strategies; safeguarding and marketing natural and cultural resources; and improving transnational governance in

83 The programmes listed below are designed to achieve the objectives of the gender and equality strategy, with a specific focus on promoting women's entrepreneurship: the European Regional Development Fund, the European Social Fund Plus, the Cohesion Fund, the European Citizens' Initiative on Citizens, Equality, Rights, and Values, Creative Europe, the European Maritime Union and Fisheries Fund, Horizon Europe, and Invest EU.

84 The European Regional Development Fund (ERDF) has altered its investment strategy for the forthcoming programming period, focusing primarily on the first two thematic objectives: a smarter Europe and a greener Europe. This approach is in line with the thematic concentration rule, which was already in effect during the 2014-2020 programming cycle, (Camera dei Deputati, 2019).

85 To date, there have been six Interreg programming periods: Interreg I (1990-1993), Interreg II (1994-1999), Interreg III (2000-2006), Interreg IV (2007-2013), Interreg V (2014-2020), and the most recent, Interreg VI (2021-2027).

Mediterranean countries. Nonetheless, the programme does not specifically tackle the challenges faced by islands and lacks direct funding measures for addressing the disadvantages and expenses associated with insularity.

Island regions often compensate for the absence of dedicated policies by participating in global networks on islands⁸⁶ and employing cooperation⁸⁷ and partnerships to develop specific strategies addressing the challenges of insularity. Over time, various tools have been utilised, including the Just Transition Fund, the

86 For example: Greening the Islands, v. <https://greeningtheislands.org/about/>; Sustainable Islands Platform (SIsP) : <https://sustainableislands.iadb.org/programs/climate-smart-islands>; Local2030 Island Network v. <https://www.islands2030.org/> (Haase et al. 2021). In addition, The Clean Energy For EU Islands Network: , v. <https://clean-energy-islands.ec.europa.eu/>.

87 European Territorial Cooperation facilitates collaboration among various national, regional, and local actors in areas such as the economy, innovation, environment, accessibility, and sustainable urban development. It is focused on three areas of cooperation, including cross-border collaboration between territories sharing maritime borders, transnational cooperation between large geographic areas, and interregional cooperation. Three macro-regional strategies exist in Europe, including the EU Strategy for the Baltic Sea Region, the EU Strategy for the Danube Region, the EU Strategy for the Adriatic and Ionian Region, and the EU Strategy for the Alpine Region (EUSBSR, EUSDR, EUSAIR, and EUSALP). In the new programming, the high added value of contributions in areas such as the low-carbon economy, sustainable urban development, and regional cooperation is emphasized. For instance, the Nordic Islands of Entrepreneurship project, launched by the Nordic Council of Ministers in 2015, maps the state of entrepreneurship education on seven Nordic islands. The Mediterranean Strategy for Sustainable Development 2016-2025, adopted at COP19 in Paris in 2016, addresses the sustainability of the Mediterranean and the growth of mass tourism. Tenerife serves as a virtuous example for island waste management, while the Canary Islands aim to reduce the land area degraded by uncontrolled waste dumping. The Bluemed initiative promotes the blue economy, social welfare, and sustainable growth in the marine and maritime sectors, v. <https://www.blumed-initiative.eu/>.

Horizon 2020⁸⁸ programmes, Interreg⁸⁹, macroregional watershed strategies⁹⁰, and the Maritime Spatial Planning Framework⁹¹.

The Just Transition Fund (JTF)⁹² was initially launched during the 2021-2027 cycle as a novel component of the Green Deal at the European level. Its primary objective

88 Horizon 2020 has provided financial support for research and innovation initiatives, which has been beneficial for islands in developing innovative solutions to their unique challenges, particularly in the energy sector, although the programme does not have explicit provisions for these territories.

89 The Interreg NEXT MED islands programme, which encompasses 15 countries across the Mediterranean, has expanded its territorial and financial scope in the new 2021-2027 programming period. The programme aims to promote smart, sustainable, and equitable development throughout the Mediterranean basin by fostering cooperation and multilevel governance that is balanced, durable, and far-reaching. Furthermore, the Interreg NEXT MED programme seeks to promote equal opportunities in education. V <https://www.interregnextmed.eu/>. The ADAPT project, which is funded by the European Regional Development Fund and falls under the Central Baltic Interreg programme, has also contributed to improving public transportation by implementing a faster and more environmentally friendly ferry system in the Åland and Stockholm archipelagos. This has resulted in reduced travel time for both people and goods. V. [Assuring Depth of fairways for Archipelago Public Transportation | Central Baltic Project Database](#) The Blueislands project and Interreg Northern Periphery and Arctic are two initiatives that aim to address the impact of tourism on waste generation in Mediterranean islands and promote collaboration among local and regional authorities and operators from Nordic countries, respectively. The former project brings together eight major and 55 minor Mediterranean islands to tackle seasonal variations in waste generated due to tourism. V. <https://projects2014-2020.interregueurope.eu/intherwaste/news/news-article/2907/creating-synergies-focus-on-the-blueislands-project/>. On the other hand, the latter initiative enables collaboration among local and regional authorities and operators from Nordic countries, such as Iceland, the Faroe Islands, and Greenland, as well as the Highlands and Scottish islands. V. <https://interreg.eu/programme/northern-periphery-and-arctic/>. While interregional cooperation and initiatives can be the result of top-down efforts, such as the Blueislands project, bottom-up efforts, such as the Smart Islands Initiative, can also play a significant role in promoting collaboration. The Smart Islands Initiative helps to convey the needs of European islands at the European level and enables the identification of transferable lessons for different areas facing similar challenges and needs (Smart islands, 2018).

90 Haase et al. (2021) identified the essential requirements for a macroregional strategy to prove effective: the backing of neighbouring countries on the strategy's scope and execution, the existence of a transnational agreement that outlines the strategy's extent and themes, and adherence to the "principle of three NOs," which stipulates that no new funding, administrative facilities, or regulations should be introduced.

91 Refer to the example of Motorways of the Sea, which are critical in improving access to European markets for islands.

92 Established by Regulation (EU) 2021/1056 of the European Parliament and of the Council of June 24, 2021.

is to facilitate the transformation of regions that mainly depend on fossil fuels and industries with high emission rates, including outermost regions and islands.⁹³ The JTF aims to support the transition to a climate-neutral economy through initiatives such as energy efficiency and the use of renewable energy sources. The European Regional Development Fund (ERDF) and Cohesion Fund are the primary investment instruments utilised to achieve this goal. The JTF is specifically designed to provide assistance to those who are most affected by the transition to climate neutrality. It is more targeted in terms of both geographic location and thematic focus than other Cohesion Policy funds.⁹⁴

The European Maritime and Fisheries Fund (EMFF) seeks to promote the growth of initiatives related to the Blue Economy⁹⁵ by fostering ethical fishing practices ensuring

93 The primary objective of the EU Green Deal is to establish a long-term strategy that facilitates the accelerated transition towards renewable energy sources across all the islands in the European Union, while simultaneously fostering the development of the circular economy and safeguarding biodiversity.

94 The Just Transition Fund (JTF) has been established to address the adverse social, economic, environmental, demographic, and health consequences of climate change. All member states are eligible to receive JTF funding; however, only the regions within each state that are most affected are eligible. This includes territories that are reliant on mining or the production of coal, lignite, peat, and oil shale, which are expected to decline, leading to job losses and other negative impacts. Additionally, territories dependent on carbon-intensive industries such as steel, cement, or chemicals are also eligible, as they must undergo radical transformation, resulting in changes in skills and job profiles, among other impacts. The JTF's two primary objectives are to diversify local economies and to retrain and upgrade the skills of workers and job seekers. The JTF will primarily focus on supporting small and medium-sized enterprises (SMEs) and start-ups in affected areas, fostering the growth of new businesses and making the economy more resilient to future shocks. A significant portion of the funding will also be allocated to research and innovation activities of SMEs, as well as support for skills and job search. Many JTF regions aim to transition into alternative energy hubs. Another promising area for JTF investment is the circular economy. In order to access the fund, member states must submit Territorial Plans for a Just Transition (TJTP) to the European Commission, outlining the appropriate intervention logic. One of the two territories chosen in Italy is Sulcis Iglesiente in South-Western Sardinia.

95 Regulation (EU) No. 508/2014 of the European Parliament and Council, which came into force on May 15, 2014, superseded Regulation (CE) No. 2328/2003 of the Council, Regulation (CE) No. 861/2006, Regulation (CE) No. 1198/2006, and Regulation (CE) No. 791/2007. This regulatory framework, also known as the European Maritime and Fisheries Fund, is designed to provide islands with the opportunity to serve as Blue Economy laboratories by utilizing innovative solutions and technologies such as hydrogen development in ports and transportation. For example, the AspBAN initiative, which is part of the Atlantic Smart Ports Blue Acceleration network, focuses on the operation of Atlantic ports in the EU and promotes the modernization and connectivity of insular port infrastructure.

the preservation of marine ecosystems and their diverse array of species.

The European Union's Blue Economy Report for 2023 enhances the pivotal function of the blue economy in furnishing employment prospects within Member States that exhibit island or archipelago characteristics, including Denmark, Croatia, Malta, Greece, Cyprus, and Portugal. This sector is particularly vital for small islands and coastal communities.

Healthy marine and coastal ecosystems are essential for sustainable development, and it is widely recognised that the Blue Economy encompasses various sectors, such as biological and non-living marine resources, marine renewable energy, port activities, shipbuilding and repair, maritime transport, and coastal tourism⁹⁶.

The recently introduced programming period underscores the significance of coordinating funds, including the combination of the Regional Development Fund and the European Social Fund Plus. This integration might involve policies for cohesion and the Erasmus+ programme, as well as the Life programme. It is essential to recognise that these synergies can result in better programme outcomes.

Having recognised the importance of islands in the European Union, it is crucial to acknowledge the existence of various policies considering their unique features. One such policy is the LIFE programme, which co-finance environmental projects while simultaneously addressing island-related concerns, such as waste management. Furthermore, the European Union Solidarity Fund (EUSF)⁹⁷ plays a key role in mitigating the impact of adverse events on the development of territories, including islands and outermost regions. Although the EUSF is not part of the Cohesion Policy, it is an essential tool for providing support to these territories. **Additionally, the REACT-**

⁹⁶ According to the EU Blue Economy Report 2023, biotechnology, specifically algae, is one of the most dynamic subsectors of the blue economy. France, Spain, and Portugal have the highest number of production facilities among the EU member states. It is crucial to utilise offshore renewable energy to support the energy transition of small islands. Examples of such projects include Gaia in the Canary Islands, which features an offshore desalination plant powered by wave energy, and MUSICA in Chios, Greece, which combines wind, solar photovoltaic, and wave energy to power aquaculture and desalination activities. Other projects include Phares, which integrates tidal, solar photovoltaic, and offshore wind energy in Ouessant, France, and X1 Wind off the coast of the Canary Islands.

⁹⁷ In recent years, this fund has been utilised to tackle a variety of natural disasters, including hurricanes, cyclones, droughts, and fires, as well as earthquakes, floods, landslides, and adverse weather conditions in several islands, such as Cyprus, Madeira, Crete, Lesbos, and Kos, as per Torres(2022).

EU⁹⁸ regulation encourages Member States to use REACT-EU funds to support people in islands and outermost regions, integrating development policies and cohesion policies.⁹⁹

The Common Agricultural Policy (CAP) is a vital component of the European Union (EU), alongside regional policy. The European Agricultural Guarantee Fund (FEAGA) provides specialised treatment for the Azores, Madeira, the Canary Islands, the smaller Aegean islands,¹⁰⁰ and the French overseas departments¹⁰¹. Furthermore, the European Agricultural Fund for Rural Development (FEASR)¹⁰² offers tailored treatment for forest properties and technological investments in these regions. **The new CAP programming for 2023–2027 has been specifically designed to address the climate emergency, with clear environmental and climate objectives. However, there is a notable absence of specialised treatment for all islands.**

98 The European Union's Cohesion Policy encompasses the "Next Generation EU" (NGEU) program, which serves as the EU's primary response to the adverse economic consequences of the COVID-19 pandemic. The Recovery and Resilience Facility (RRF) is the primary tool for implementing NGEU, requiring member states to develop national recovery and resilience plans that specify investments and reforms for the 2021–2023 period. React-EU is regulated by the European Parliament and Council Regulation (EU) 2020/2021 of December 23, 2020, which amends Regulation (EU) No 1303/2013 to offer additional resources and implementation modalities to provide assistance in the context of the COVID-19 pandemic and its social consequences, aiming to prepare a green, digital, and resilient economic recovery (React-EU). Conceived with a shorter-term perspective (2021–2022) to help member states in the early stages of relaunching their economies, React-EU differs from the RRF, which has a duration of six years, from 2021 to 2026. However, it is crucial to note that an issue arises from these new funds: resources must be accompanied by tools and skills to spend them concretely. Therefore, it is useful to ask whether and how European funds can generally solve the problems of insularity. (Sciortino, 2022).

99 Reducing disparities is a fundamental principle of the Plan that must be upheld universally across all Missions and cannot be subject to negotiation. Implementing the infrastructural aspect of the Plan will promote greater citizen engagement, independence, and equality, thereby eliminating financial and social barriers that hinder equality. However, in Italy, there is a risk that the territorial allocation constraint of 40% of resources to the Mezzogiorno may not be met due to the inability of the territories to effectively utilize these resources, which may result in the allocation of resources to those who are better equipped to manage them.

100 The European Parliament and Council Regulation 229/2013, dated March 17, 2013, which repealed Council Regulation (CE) No. 1405/2006.

101 The Regulation 228/2013 of the European Parliament and the Council, dated March 13, 2013, pertains to the outermost regions of the European Union.

102 The European Parliament and Council Regulation 1305/2013, which was published on December 17, 2013, classified the FEASR as a SIE fund for the period 2014–2020. However, the approach has changed for the period 2021–2027, and the FEASR has now been separated from the Cohesion Policy funds and the FEAMP.

The provisions regulating state aid are applicable to islands in a variety of ways. The European Union is dedicated to maintaining fair competition within its internal market. However, Article 107(1) of the Treaty on the Functioning of the European Union grants the European Commission the right to allow businesses to receive financial aid from public authorities with the intention of fostering economic growth in specific regions. These aids help to promote economic, social, and territorial unity among EU Member States and the European Union as a whole by supporting investments and employment, and encouraging the diversification of economic activity in less developed regions. Furthermore, Article 108, paragraph 4 of the TFUE empowers the European Commission to approve public authorities granting financial aid or subsidies to companies that do not exceed the established “de minimis” threshold.

Islands were integrated into the regional aid perspective for the years 2007-2013¹⁰³, but with a narrow perspective of their insular status. This is because certain requirements excluded some islands from receiving regional aid benefits. Even during the period 2014-2020¹⁰⁴ and the subsequent period of 2022-2027¹⁰⁵, islands may still be eligible for regional aid, although with the same exclusions.

In the year 2022, the European Pact¹⁰⁶ provided additional support for businesses that adopt eco-friendly practices. However, it contains no specific reference to islands. This financial assistance serves as a protective measure for the challenges and modifications that occur during the green transition process.

The third dimension of territorial cohesion, alongside economic and social dimensions, should foster a sense of closeness and equality for all citizens of the Union. According to Carta (2015), it is unacceptable to view insularity as synonymous with isolation.

Today, **the concept of territorial continuity is not merely a local matter, but it is acknowledged as encompassing the rights of mobility between islands and the freedom of movement for all citizens, including both residents and non-residents.** Additionally, it is vital to establish a dependable and efficient means of connection with

¹⁰³ European Commission, *The guidelines for national aid to regions for the period 2007-2013*, March 4, 2006.

¹⁰⁴ European Commission, (2020), *Communication regarding the extension and modifications of the DAR 2014-2020*, July 8, 2020.

¹⁰⁵ European Commission (2021), *Communication from the Commission. Guidelines on state aid for regions*, April 29, 2021.

¹⁰⁶ European Commission, (2019), *The European Green Deal Communication*, COM (2019) 640 final, dated 11 December 2019.

these territories, ensuring a transportation system that does not discriminate against individuals living in disadvantaged areas due to the unique topography.

The economic growth has been hindered by their disadvantageous geographical position, which has put them at risk of being marginalised territorially in two ways. To begin with, the quality of the services rendered is a matter of doubt, and secondly, the transportation expenses are significantly higher than in the rest of the continent.

These factors have required the provision of substantial subsidies from the Union to transport companies operating in remote and sparsely inhabited regions, to ensure the survival of unprofitable yet essential transport connections for the residents of these underprivileged areas. State assistance directed towards users and public service obligations for transport companies have helped to provide indispensable services, while simultaneously grappling with the delicate balance between equality and competition.

Aid schemes are established to allocate subsidies to specific groups of travellers, as outlined in Article 107, paragraph 2 of the Treaty on the Functioning of the European Union (TFUE). If the services provided cater to disadvantaged regions, such as insular territories, the aid may extend to the entire population of the affected island.

Article 106 stipulates that public service obligations may be imposed for the specific mission entrusted to a public service that provides an economic public interest, as in the case of transport.

According to Armao (2020), state intervention is indispensable in industries that the market cannot adequately regulate. In the transport sector, the interventionist philosophy has undergone significant transformation due to the imposition of burdens, and the state possesses the authority to restrict access to the industry for a single carrier selected through a community tender process. Furthermore, the state can offer financial compensation to the carrier to cover the deficit in management, but it must not be deemed as an illegal form of state aid intended to cover the general operating losses of the company.

The importance of the European Union's regulation of maritime and aerial connectivity, as well as the need to rely on public service obligations in these sectors, is of utmost significance for European islands. This requirement emerged in 1992 as a result of the liberalisation of these sectors at the community level¹⁰⁷.

¹⁰⁷ The state-controlled model is vulnerable to crisis when free markets exist. Historically, this model has been responsible for providing transport services to unprofitable routes, and it has

In accordance with the Regulation of 1992,¹⁰⁸ maritime cabotage services are exempt from any restrictions within the Union, which permits shipowners to offer such services between ports in any Member State. Nevertheless, there are exceptions to this principle; for instance, those that allow Member States to impose public service charges and enter into public service contracts to ensure suitable transportation to, from, and within islands, to safeguard certain under-served maritime connections.

The regulations set forth in Regulation No. 2408 of 1992 empowered Member States to designate specific air routes for the purpose of imposing public service fees. It is essential that a Member State informs the Commission of its intention to implement such charges, which must adhere to European regulations and maintain the financial and economic balance of the air service.

In 2008¹⁰⁹, countries were offered the opportunity to make commitments to provide public service obligations (OSPs) for air routes that were deemed essential for the economic and social progress of a specific region. This allowed airlines with licenses from a Member State of the Union to operate air services without any limitations or constraints on intra-community routes and to determine their own prices, while ensuring a specific number of flights at a predetermined frequency. However, a state may choose to restrict these freedoms by imposing an OSP.

In April 2014,¹¹⁰ the Commission adopted the “Guidelines on State aid to airports and airlines”.

Armao (2020) highlighted that in Portugal, the number of places offered on routes with service charges accounted for roughly 40% of the domestic market, while in Ireland, the share of OSP in domestic traffic was approximately 70%. In contrast, France had a value of around 10%, and in other countries, including Italy, which has the highest number of island citizens in Europe, the significance of OSP in domestic traffic was negligible. Notably, Italy was the European country that invested the least in public service charges.

been sustained only through economic support from the state or a public territorial entity.

¹⁰⁸ Regulation (CEE) No. 3577 of 1992.

¹⁰⁹ Regulation (EC) No. 1008/2008 of the European Parliament and the Council, dated 4 September 2008.

¹¹⁰ Regulation (EU) No. 651/2014 of the European Union.

4.3. The Way Forward for Insular Sustainable Development

Merely refereeing the principle of insularity is insufficient to address the aforementioned challenges and achieve sustainable development. Instead, effective actions are necessary. Despite this, European institutions, especially the European Commission, have been reluctant to acknowledge the unique natural challenges faced by islands. Nevertheless, the concept of insularity has gained increased recognition in European constitutional, legal, and economic discussions. However, at its core, the issue of insularity is relatively minor when compared to the major issues that will determine the future of the Union.

In accordance with the European Island Manifesto of 2019, it is crucial to devise strategies reconsidering islands' unique requirements and demands through a multidisciplinary and inclusive approach.

However, several European studies suggest that the availability of resources is not always a sufficient condition for the success of growth policies. Therefore, it is prudent for the EU to refer to its insular territories and implement differentiated measures that take into account their inclusion within the Union's political agenda. In order to address the specific needs of insular areas, state aid and cohesion policies should focus on developing an integrated framework that incorporates provisions adopted by the Union across sectors such as transport, energy and water, education and employment, research, technological development and innovation, industrial policy, environment, agriculture and fisheries (CoR, 2023).

As observed by the European Economic and Social Committee, (2023) "in order to address structural and geographical constraints and specific needs that hinder these regions' development, a tailored approach, which would boost territorial solidarity, is needed so that no region is left behind".

The ninth report on cohesion in 2024 emphasises that regional development programmes have traditionally been a vital aspect of Cohesion Policy. However, the Just Transition Fund illustrates how support can be specifically adapted to address the unique development requirements of territories, aiming to tackle the obstacles posed by the climate transition. Moreover, intelligent specialisation strategies have demonstrated potential in boosting regional innovation ecosystems by leveraging local assets and resources, engaging a network of regional stakeholders, and bridging the innovation gap.

The promotion of tailored solutions can be enhanced by collaboration, which is becoming increasingly vital for territorial growth. This can be achieved by implementing the principles of subsidiarity and multi-level governance between island and mainland systems, as well as adopting macro-regional strategies targeted at islands. The establishment of new macro-regions through initiatives such as the GECT could result in a change in the funding allocation system based on gross domestic product. The formation of new partnerships could be facilitated through the sharing of knowledge and best practices, thanks to the establishment of European knowledge-sharing platforms that would enhance the effectiveness of the Cohesion Policy and simplify its implementation (Epson bridges, 2019).

The European Parliament (2022) and the European Economic and Social Committee (2023) emphasize the significance of having precise and up-to-date information on the specific conditions of the various islands within the Union. This is essential to carry out in-depth analyses and identify applicable measures to address them.

It is imperative to establish a data monitoring institute for disadvantaged territories by conducting an in-depth examination of the existing research on the challenges and expenses of insularity in European islands, and by conducting multidisciplinary analyses of the demographic, geographic, economic, social, and environmental characteristics of insular territories.

By the year 2027, the programming of cohesion policies has already been established, and it will be essential to identify additional tools or effective implementation methods for the principle of insularity.

The system centred on competition and the free market remains preeminent, and the SIEG, social state aids, and OSP continue to be regarded as a mere exception to this prevailing system.

To acknowledge the unique characteristics of islands within the European legal system, it is crucial to make specific exemptions to the prohibition on state aid. This can be accomplished by extending the scope of Article 107(3) of the Treaty on the Functioning of the European Union (TFUE) to cover insular regions and removing the GDP, unemployment rate, and population criteria. Additionally, the de minimis rule for small and medium-sized enterprises in insular areas should be abolished, and the requirement for a maximum distance of 150 km to facilitate cooperation eliminated. Moreover, the provision of connectivity and public service obligations should be enhanced.

The ninth report on regional cohesion emphasises the significance of allocating investments in strategic industries and sectors to unleash the potential of every region. It underscores that strengthening small and medium-sized enterprises in Europe should concentrate on cultivating agile and competitive businesses, rather than solely providing financial incentives. The optimal approach is to improve the local entrepreneurial environment.¹¹¹

The primary cause of the high expenses and limited accessibility experienced by insular territories is their territorial discontinuity, which significantly impedes the development of their economic framework. Therefore, it is essential to establish a trans-European transportation network and provide transportation-related assistance to overcome these challenges.

The European Parliament (2022) advocates for modifying the EU Solidarity Fund to address challenges such as climate change and natural disasters. Additionally, the European Social Fund Plus (FSE+) and the European Regional Development Fund (FESR) should offer employment prospects in areas dealing with depopulation. It is recommended that Horizon 2020 and Interreg establish targeted programmes for maritime transport and urban mobility, promoting sustainable transport and the blue economy. This would involve supporting sustainable tourism and fishing to enhance job opportunities, while also acknowledging the entire set of islands in the European Agricultural Fund for Rural Development, as has already been done for ultra-peripheral regions and some Aegean islands. Nonetheless, it is crucial to emphasize that simplistic solutions would only serve to replace critical issues and exacerbate economic and social disparities.

According to Carboni (2022b), the Resolution of the PE (2022) appears to have adopted an erroneous approach, as it is directed towards the Commission and does not diverge from the established Resolution of 2016. Given the impracticality of integrating Article 349, it would be judicious to resort to the Council, which has previously taken the lead in managing the most significant European document on insularity, the Declaration on Insular Regions, attached to the Amsterdam Treaty. This was ratified by the Intergovernmental Conference and endorsed by the Council. In line with the Declaration on the Peripheral Regions of the Community, appended to the Maastricht Treaty of 1992, it would be fitting to reconsider this course of action to achieve comparable

¹¹¹ In accordance with the revised guidelines, investments in significant corporations are now only authorized if the projects involve small and medium-sized enterprises for the purpose of conducting research and promoting innovation. However, from 2014 to 2020, the FESR provided support for productive investments, regardless of the size of the companies involved.

outcomes to those achieved by the ultra-peripheral regions (Carboni, 2022b).

The CDR (2023) report emphasizes that “unlike the Amsterdam Treaty and macro-regional strategies, **the Island and Rural Pacts must have new legislation, new funds, and new political approaches specific to these sectors, and it calls for a special tax/ State aid status to be included in the Pact for the islands**”.

The adoption of these measures by European institutions, particularly the Commission and the Council, has been almost negligible. These institutions have not shown any inclination to take binding actions that consider the insularity aspect in certain regions. This recognition does not align with the allocation of specific funding lines that are reserved exclusively for insular regions, and not merely because they are areas of developmental inadequacy, disadvantage, or in the process of transition (Carta, 2015).

The commitment of the European Union to insularity is hindered by the lack of comprehensive, practical measures designed to address the issue. The degree of success achieved in fostering cohesion is largely determined by the initiatives taken by Member States. It is crucial to acknowledge the insular context and establish a robust economic and fiscal system, which involves implementing fair principles of solidarity and insularity that are both equitable and just.

It is essential to acknowledge the contributions of both island regions and European countries.¹¹² As Carta (2015) pointed out, European island regions have not been proactive in safeguarding their identities and circumstances. To address this issue, they should take action at multiple levels, engaging both national and European institutions.

A vital factor in this context is political determination,¹¹³ as any significant adjustments

¹¹² Kindly note that, in Italy, the discourse surrounding policies of cohesion has, on occasion, concentrated more on the actual financial capacity of structural funds rather than their influence on the economic growth of the regions where they are being executed (Senato, 2018).

¹¹³ Italy has implemented the SNAI strategy to provide space for minor islands. Launched in the 2014-2020 programming period, the SNAI National Strategy for Internal Areas aims to ensure all citizens have access to essential rights and to promote economic development while improving territorial maintenance. In reality, the strategy was created to address the demographic decline affecting much of the country, particularly the mountainous regions. In the new programming, the 72 initial internal areas are joined by a 73rd area, known as the “Special Project for Minor Islands,” which comprises 35 municipalities from minor Italian islands that share depopulation and a lack of citizenship services with the internal areas. The National Recovery and Resilience Plan (PNRR)

made within the states would have significant implications at the European level, potentially leading to the modification of the Treaty or the realisation of ideas such as exclusive island collaboration.

The ninth report on cohesion states that the 2021-2027 framework has enhanced partnerships and engagement of regional and local actors, civil society, and social partners. Nevertheless, additional efforts are still deemed necessary.¹¹⁴

In 2017, the European Economic and Social Committee (EESC) expressed the view that isolated economies require increased adaptability in implementing policies such as the unified market, competition policy, transport policy, rural development policy, and fisheries policy. Additionally, the committee emphasized the importance of implementing measures to reduce resource utilisation, including water, land, energy, and waste recycling, among both businesses and the local population. By focusing on the “circular economy,” European islands can safeguard their economies from the risks associated with scarce resources and shifts in raw material costs.

Developing systematic approaches is of paramount importance, and it is imperative to support the implementation of comprehensive and transparent European strategies that are rooted in advanced knowledge, innovation, and human resources. It is essential to involve a diverse range of stakeholders, including civil society, economic actors from both the public and private sectors, and social partners. These strategies must align with the 2030 United Nations Agenda and its Sustainable Development Goals, as emphasized by the European Economic and Social Committee in 2019.

also allocates a specific component to these areas, particularly the 19 non-connected ones. The aim is to make small islands self-sufficient and environmentally friendly by enhancing existing connections and tackling the issue of overtourism. This involves promoting the revitalisation of tourism and cultural activities in smaller islands. Following the reintegration of the principle of insularity into the Constitution, a bicameral parliamentary committee was established to address the challenges of insularity. This committee established two funds: a national fund and a fund to ensure a comprehensive and efficient air link system to and from Sicily and Sardinia. Furthermore, the Unique Economic Zone for the South (Decree-Law n. 124/2023) has designated a specific section of the zone’s strategic plan to focus on “investments and priority interventions necessary to remove, as per Article 119, sixth paragraph of the Constitution, the disadvantages of insularity in the regions of Sicily and Sardinia.” However, the biggest challenge in Italy is that larger insular regions continue to be associated with those of the Mezzogiorno.

¹¹⁴ A notable example of the Croatian islands is the implementation of diverse energy transition initiatives, which highlights the “quadruple helix model,” a collaborative approach among the four main stakeholders: public authorities, entrepreneurs, educational institutions, and community members. The initiatives emphasize the significance of collaboration in achieving energy transition goals.

The ninth cohesion report emphasises the exacerbation of regional disparities, particularly in island regions, due to climate change, which represents a threat to conventional industries, such as agriculture, tourism, manufacturing, and even energy production, especially in areas with scarce water resources. A fair and equitable transition towards a greener and digital economy is thus necessary to provide opportunities for all. The rapid advancement of technology requires workers to continuously acquire new and additional skills.

In light of this, **the primary challenge for islands is to achieve balanced and sustainable territorial development by enhancing their economic competitiveness and growth potential while preserving natural resources and maintaining social cohesion. The appropriate course of action is to adhere to the key principles of the European New Bauhaus, which includes promoting sustainable, aesthetic, and inclusive projects.**¹¹⁵

The manner in which islands are perceived ought to be changed. The objective is to attain economic efficiency, social cohesion, and ecological balance by implementing policies that consider islands as an opportunity for development, rather than just addressing their isolated difficulties.

¹¹⁵ In specific regions, like the Cycladic islands in Greece, initiatives like the CYCLADES ISLANDS INTERCONNECTION have been put into action. This project, funded by the European Regional Development Fund via the “Competitiveness and Entrepreneurship” Operational Programme, aimed to provide advanced submarine cables to the islands. V. https://ec.europa.eu/regional_policy/projects/projects-database/connecting-greece-s-cyclades-islands-to-the-mainland-s-power-grid_en. Another initiative, INNONETS, was funded by the European Regional Development Fund under the Interreg V-A Greece-Italy Programme 2014-2020. This initiative was designed to promote transfrontier agri-food innovation and entrepreneurial creativity, with the aim of increasing competitiveness in all economic sectors in Greece and Italy, particularly in the Ionian Islands of Greece and the Puglia region of southern Italy. V. <https://interreginnonets.eu/it/project>. The STEP initiative, funded by the European Regional Development Fund under the Interreg V-A Poland-Denmark (including the island of Bornholm), -Germany-Lithuania-Sweden (South Baltic) programme, aimed to protect fragile ecosystems in the Baltic Sea by managing wastewater properly, with cleaner sludge serving as a renewable energy source. V. <https://www.step-interreg.eu/>. Finally, the NONAGON project, funded by the European Regional Development Fund Proconvergencia programme, developed a scientific and technological park in the Azores. This initiative helped local innovative entrepreneurs to start up and created nearly 200 jobs in these remote Portuguese islands. V. [Nonagon – Parque de Ciência e Tecnologia de São Miguel](#).

5. Sustainable Development in European Islands

5.1. An Overview of Sustainable Development

The approach of European policy towards the issue of island sustainability has been fragmented and incremental. Considering the distinctive circumstances that island territories confront, addressing these challenges is of paramount importance. However, insular regions frequently encounter difficulties in participating in the EU's sustainable development schemes or in formulating a governance framework that adequately addresses the underlying issues and conforms to European objectives.

In the past decade, the challenge of balancing economic growth and environmental sustainability has been a prevailing issue for European islands (Haase et al. 2021).

Previous sections have emphasised the fact that islands, despite their considerable diversity, often face similar challenges, limitations, and opportunities that require specific and local research to identify potential solutions.

Insularity frequently leads to social and territorial divisions, which can result in exclusionary outcomes and related expenses. To address this, it is essential to adopt a comprehensive perspective that encompasses not only geographic boundaries, but also environmental, sociological, and economic factors. This holistic approach is especially vital when considering sustainable development, which is a universal objective for contemporary societies. Although economic development is a significant aspect of sustainable development, it is not the sole focus. Instead, sustainable development aims to balance social and economic advancements with environmental conservation through sustainable management practices.

The idea of sustainable development presents a solution to the limitations of isolation by promoting extensive economic, social, and inclusive growth in island communities.

According to Spilanis et al. (2009), **islands have the potential to serve as “laboratories” for examining and quantifying sustainability due to their unique characteristics.** Furthermore, Karampela et al. (2017) suggest that all aspects of islands can be seen as a strategic opportunity for sustainable development or a chance to reinterpret and contextualise it.

Sustainable development, which encompasses the three key areas of the environment, society, and economy, permits each system to function perpetually without being subjected to deterioration resulting from the exhaustion or overburdening of vital resources. This results in social prosperity and economic competitiveness, fostering a robust foundation for future development while safeguarding the unique environment of the islands for both current and future generations. Additionally, it diminishes conflicts among the present and future users of the islands.

The growing interest in sustainability may be attributed to the **Brundtland Report**, which was published in 1987 and provided the first definition of sustainable development. This definition posits that development should meet the needs of the present without compromising the ability of future generations to meet their own needs (WCED, 1987).¹¹⁶ The **Earth Summit** held in Rio de Janeiro¹¹⁷ in 1992 and the **Kyoto Protocol** signed in 1997 also contributed to this interest by setting the first global attempts to regulate and stabilise greenhouse gas concentrations in the atmosphere through the establishment of binding emissions targets to limit negative environmental impacts

¹¹⁶ The Brundtland Report's definition of sustainable development posits it as a dynamic process, rather than a state of equilibrium. It entails the harmonization of resource exploitation, investment direction, technological advancements, and institutional modifications to fulfil both present and future needs.

¹¹⁷ The notion can be traced back to the Declaration of Rio de Janeiro on the Environment and Development, which was ratified in 1992. This declaration provided a plan of action for sustainable development in the 21st century, with the main objective of achieving a high-quality environment and a robust economy for all people worldwide. Sustainable development can be described as the advancement of living standards without exceeding the ecosystem's capacity to support it. The ecosystem's capacity refers to the maximum number of plant or animal individuals that can be sustained by the environment over an extended period without diminishing its productivity. For a more comprehensive understanding, one may refer to Boulding, K. (1966). *The Economics of the Next Space Ship. Resources for the Future*; and Pearce, D.W. and Turner, R.K. (1990). *Natural Resource and Environmental Economics*.

(UN, 1993; UN, 1998). The adoption of the **2030 Agenda by the United Nations**¹¹⁸ and its **SDGs** further confirm the global commitment to addressing the transition towards a more sustainable development path in terms of social, economic, and environmental outcomes, with **five main pillars: people, planet, prosperity, peace, and partnership**.

The **Treaty of Amsterdam**, which was adopted by the European Union in 1997, established a **sustainability model comprising three interrelated pillars: the environmental, economic, and social pillars**. These operate simultaneously to attain a harmonious equilibrium between economic development, social equity, and environmental conservation. The model acknowledges the significance of natural resources, economic advancement, and social institutions that foster social cohesion and peace in realising sustainability.

The **UN 2030 Agenda** encompasses **17 Sustainable Development Goals** (SDGs or Goals) and **169 targets**, committing the global community to eradicating poverty and achieving sustainable development by 2030, leaving no one behind. Due to the intricate and interconnected nature of the SDGs, interventions that integrate various thematic areas and consider their economic, social, and environmental dimensions simultaneously, with implications for multiple objectives and targets, are essential.

The United Nations' Sustainable Development Goals (SDGs) are intended to facilitate the transformation of the concept of sustainable development into practical policies and activities. According to Caprani (2016), the SDGs were formulated with inclusive economic growth as their primary objective, and they are widely regarded as a "transformative next era of human development."

The **EU's Cohesion Policy** holds substantial significance for the majority of the 17 Sustainable Development Goals, with **sustainable development being comprehensively integrated into all aspects of policy implementation**. The EU has committed to **implementing the 2030 Agenda and the integrated Sustainable Development Goals that are incorporated in the EU's political and strategic framework**, (Council of European Union 2017, 2019; European Commission 2019c).

¹¹⁸ The adoption of the Sustainable Development Goals by the United Nations General Assembly on September 25, 2015, has provided the most definitive description of sustainability, highlighting its multifaceted nature. The framework encompasses environmental, economic, social, and institutional dimensions, which are all interconnected. The SDGs serve as a global call to action to eradicate poverty, safeguard the environment, and guarantee that all individuals can lead lives of dignity and equality. As a blueprint for a better and more sustainable future, the 17 SDGs are designed to be universally applicable.

The European Union has consistently demonstrated its dedication to environmental sustainability through the implementation of various initiatives. The **EU Decarbonisation Roadmap 2050** was introduced in 2011, and the **EU Green Deal** was launched in 2020, both of which set ambitious targets for reducing emissions, promoting renewable energy sources, improving energy efficiency, and fostering sustainable economic growth (European Commission, 2019b). In 2022, the EU further demonstrated its commitment to renewable energy by adopting **RePowerEU** as part of its recovery plan, which aims to accelerate the deployment of renewable energy projects across Europe (European Commission, 2022).

The transition towards a circular economy is a critical component of the European Green Deal, which seeks to enhance the environmental sustainability and economic competitiveness of Europe. This approach can help reduce the pressure on natural resources and promote sustainable growth and job creation. Moreover, it is a prerequisite for achieving the **EU's objective of net-zero greenhouse gas emissions by 2050** and mitigating the decline in biodiversity. Hence, to address the climate and ecological crisis, it is essential that the economy shifts towards a decarbonised, circular, and regenerative green economy.¹¹⁹

5.2. Sustainable Development and the Circular Economy in the Islands

Achieving sustainable development in island regions necessitates adopting a multidisciplinary approach to development that promotes the concurrent growth of various activities. This approach should also involve the implementation of circular production processes inspired by circular economy principles, and the development of circular processes triggered by green and socially responsible public investments. These can help reduce dependence on the mainland, pollution, and inefficiencies in areas such as energy, water, waste, and transportation.

¹¹⁹ The circular economy must be differentiated from the green economy, as circular business models incorporate social, environmental, and economic factors. Unlike the circular economy, which primarily focuses on material management and waste reduction as an economic model, sustainability is a more comprehensive and all-encompassing concept. On the other hand, the linear economy and the green economy rely on the unlimited availability of natural resources and the planet's regenerative capacity. In contrast, the circular economy, exemplified by the Cradle-to-Cradle model, is a closed system that is required to prevent its collapse and substitute the free market economy with a relationship between the state and market.

For several years, research conducted by **Legambiente** and the **Italian National Research Council (CNR)** has highlighted the significance of these sectors in Italy's minor islands. The circular economy aims to reduce the utilisation of natural resources, decrease carbon emissions, and streamline costs, regardless of their nature. This approach also creates entrepreneurial opportunities and promotes sustainable economic growth.¹²⁰

The objective of sustainable systems in island territories is to effectively manage energy, circular economy, water, and mobility, with a focus on providing clean energy and water, waste management, and zero-emission mobility. To attain these objectives, the following targets must be reached: a fully renewable energy model, the complete closure of the material cycle, and the implementation of an effective and virtuous water resource management system (Battistelli et al., 2024).

Circular economic models have proven to be highly effective in achieving a green transition, as evidenced by islands, which address their distinct territorial challenges. By managing natural resources, economic and social ecosystems, and the local constraints and opportunities associated with the insular dimension, islands provide an ideal location for testing and implementing new circular approaches.

According to the Ellen MacArthur Foundation (2015), **a circular economy is “characterised as an economy that is restorative and regenerative”**. This alternative economic model contrasts with the conventional linear model. In line with Mitchell and Morgan (2015), a circular economy is a substitute for traditional linear economies that aims to retain resources for as long as feasible and derive maximum value from them during their utilisation. Eventually, the objective is to recuperate and reuse products and materials.¹²¹

¹²⁰ The 2023 report has presented a sustainability index for islands, considering various factors, such as soil consumption, waste, water, energy, protected areas, mobility, and building regulations. To ensure a successful ecological transition, the Sustainable Islands Observatory must pursue seven objectives in these territories, including coordinating governance between islands and ministries, aiming for zero soil consumption, promoting a sustainable model of waste management, making the water network more efficient, and aiming for sustainable mobility with zero emissions by 2050. The 2024 report highlights a median sustainability performance index of 46%, with a focus on waste management and an increase of 3% compared to 2019. The document emphasizes the need for a single coordination on the management of PNRR funds and the implementation of policies for adapting to climate change.

¹²¹ The traditional approach to economics, often referred to as the Brown Economy, typically follows a linear pattern. This production system adheres to the “take-make-use-dispose” pattern, in which the environmental impact of products is largely determined during their design phase.

The notion of a circular economy has been deemed the most suitable path towards sustainable development for islands,¹²² as stated by the European Economic and Social Committee (2017), which regards the “circular economy” as a top priority for European islands. Adopting a circular economy model for European islands could safeguard their economies from the risks associated with the procurement of resources and the volatile prices of raw materials.

The transition towards a circular economy involves substantial changes to production and consumption systems that extend beyond resource efficiency and waste recycling. It requires a comprehensive circular economy that encompasses not only the waste sector, but also domains such as energy, transport, water, and tourism, all under a unified vision. While islands are more susceptible to the consequences of human impact and must make substantial efforts to establish resilience systems, they also possess the advantage of serving as natural laboratories for initiating innovative ventures.

The circular economy is envisioned as an evolution and, at times, a superseding of the green economy within the blue economy. **The future viability of European islands is contingent upon the EU Green Deal and the Blue Economy. This entails economic, social, and environmental aspects, which are consistent with the three pillars of the SDGs.** For instance, SDG 14 pertains to “conserving and sustainably using the oceans, seas, and marine resources for sustainable development.” Generally, **the Blue Economy refers to economic activities that depend on the sea, with a specific focus on the sustainability of the maritime environment and its long-term growth.** Blue Thinking, or a Blue mindset, serves as the driving force behind the Blue Economy, emphasising sustainability as the catalyst for businesses’ economic transformations. It involves incorporating existing and emerging technologies to recycle natural resources, reduce waste, increase efficiency, and enhance control and competitiveness through

This linear approach not only leads to increased consumption of natural resources, resulting in excessive exploitation and negative externalities during extraction and processing, but it also contributes to the persistent generation of waste, with significant ramifications for our planet. To counteract this trend and fulfil the EU’s climate objectives, it is imperative to accelerate the transition towards circular production systems. A circular economy is regenerative, representing a growth model that reevaluates the usage of resources, with the goal of eradicating waste and prolonging the lifespan of products, equipment, and infrastructure. This requires the implementation of new business models and a more decisive shift from ownership-based solutions to service-based solutions.

¹²² As per the sixth report on the circular economy (2024), Italy continues to hold the highest ranking among the five key European countries (France, Germany, Spain, and Poland) evaluated for their circularity performance, achieving a score of 45 points.

digitalization.¹²³

The Blue Economy, which encompasses the realms of transportation and maritime pursuits, coastal tourism, marine and coastal energy, seabed mining, aquaculture, and marine biotechnology, serves as a critical catalyst for economic expansion and sustainability within the EU outermost regions, as elucidated by the Blue Economy Report (2024). This report emphasises the importance of desalination¹²⁴ and blue biotechnology, including algae production and processing.¹²⁵ The Blue Economy's impact on GDP and employment in island or archipelagic nations, such as Croatia, Denmark, Cyprus, Malta, Greece, and Portugal, is noteworthy.

The Blue economy, with its vast potential, has come to the fore in European islands in recent times. The unique challenge faced by these islands is to balance the demands of agriculture, tourism, renewable energy, and nature conservation (Spalding, 2016).

There are numerous opportunities that arise for European islands when EU-funded projects focus on sustainable tourism, energy transition, and eco-friendly resource utilisation, including the implementation of green energy and circular economy practices.

5.3. Sustainable Development and Tourism

In island regions, tourism has the potential to generate economic advantages whilst simultaneously engendering adverse social and environmental ramifications. The unique geographical attributes, biodiversity, and cultural characteristics of islands

123 The goal of the green economy is to address climate change and its impact on the planet by utilizing resources and innovations. In contrast, the blue economy focuses on redirecting investments from emissions reduction and environmental protection to the efficient use of natural resources, the integration of future technologies for natural resource reuse, and the minimization of waste while increasing productivity with lower investments and more employment. This approach seeks to reduce costs by mimicking nature's efficient use of energy and materials. The green economy necessitates increased investment from entrepreneurs and higher costs for consumers, while preserving the environment. The blue economy views waste as a resource and looks to solutions inspired by natural ecosystem design.

124 The MUSICA project proposes the integration of wind energy, solar photovoltaic, and wave energy for the purposes of supplying electricity to aquaculture and desalination facilities situated on the Greek island of Chios. V. <https://musica-project.eu/>.

125 The countries that have the largest number of production facilities are France, Spain, and Portugal.

serve as significant catalysts for tourism in numerous destinations. Nevertheless, these insular environments constitute delicate ecosystems susceptible to the adverse effects of intensive human activity. The repercussions of such anthropogenic pressures manifest in various forms, including environmental contamination, accumulation of waste, and unsustainable exploitation of natural resources. According to Carboni and Pungetti (2018), “such negative impacts could be minimised through management based on knowledge, sustainability, application of technology and stakeholder participation”. Sustainability in island tourism is thus of paramount importance.

With the high season and coastal areas being particularly affected, **it is imperative to shift towards a circular and sustainable development model**. Public green investments promoting social responsibility can help achieve this. While tourism is often seen as a driver of local development, sustainable tourism that considers all three dimensions – social, economic, and environmental – is crucial for positive outcomes. Therefore, **there is a need for comprehensive planning and the implementation of tourism policies that prioritise sustainability to support development processes**.

The issue of overtourism and its impact on islands is a pressing concern, given that tourism, like all human activities, is acknowledged to be a driving force behind territorial change. In order to define the limits or development thresholds beyond which a destination's balance is altered, the concept of tourism carrying capacity has been established as a useful paradigm (Cifuentes, 1992; Cifuentes, Mesquita, Méndez et al., 1999). It is widely accepted that sustainability policies aimed at maintaining equilibrium between the needs of tourists and the local population are the only viable solution to this problem.

The detrimental effects of mass tourism on resources and economies are substantial, whilst sustainable tourism practices foster competitiveness and contribute to the prosperity of local communities. The concept of carrying capacity was devised to understand the greatest environmental impact that can be tolerated prior to it having an adverse effect on the environment's ability to recover from alteration.¹²⁶

Historically, academic investigations have predominantly focused on the analysis of destinations' physical and economic carrying capacities. It is only in recent scholarly discourse that the concept of social carrying capacity has begun to

126 The World Tourism Organization (1999) defines the carrying capacity of a tourist destination as the maximum number of individuals who can concurrently visit a specific site without causing detrimental effects to its environmental, physical, economic, and sociocultural aspects, whilst simultaneously maintaining the quality of experience for visitors.

receive commensurate attention and scrutiny. When tourism generates substantial economic spillover effects, it is recognised as an economic activity that facilitates local development. Considered a multifaceted sector encompassing diverse areas, an assessment of the resulting financial costs and benefits is conducted (Dwyer, Forsyth & Spurr, 2004). The concept of physical carrying capacity pertains to tourism's impact on the natural and built environment. It denotes the threshold at which a destination's environmental and cultural assets become irreparably damaged or can only be restored at prohibitively high costs. Conversely, social carrying capacity relates to the modifications imposed on the local community and its social structures, particularly affecting the residents' quality of life (Bimonte & Punzo, 2005).

Despite its potential, the concept of insular carrying capacity as a tool for achieving effective sustainable development remains insufficiently investigated. This is attributable to the diverse interpretations that arise when considering the notion of insularity, (Mota, Franco & Santos, 2021; Butler, 2019).

To safeguard the sustainability of tourism, it is essential to adopt a multidimensional approach that considers the environmental, social, and economic consequences of tourism simultaneously. By evaluating all three dimensions collectively, it becomes feasible to identify the critical aspects of each region, which can delineate the boundaries of acceptable tourism that promote concord among all the parties involved.

New strategies for the management of tourism are necessary to reduce costs and create additional benefits. In this regard, the circular economy is a model that can aid in making tourism more sustainable¹²⁷. The circular economy aims to enhance the efficient utilisation of resources and to protect and enhance the cultural, natural, historical, and intangible legacies of destinations.

Assessing the carrying capacity of the island is a vital step in implementing territorial planning for islands, and can aid in the preservation of their ecology and economic growth. Promoting sustainable tourism will play a significant role in ensuring the long-term sustainability of islands.

127 The BLUEISLANDS initiative, which emphasised circular economy principles and sustainability, exemplifies this approach. Its primary objective was to address the challenges posed by seasonal variations in waste production on islands, which are predominantly attributed to tourism.

5.4. Sustainable Development and the Energy Transition

Considering the extensive variety of renewable energy sources available on the islands, such as solar, wind, marine, and geothermal energy, utilising these resources can lead to substantial socio-economic benefits for the EU islands. The transition towards a more sustainable energy supply by implementing advanced technologies is a critical factor driving sustainable and robust economic development, as well as nurturing the growth of local skills and employment prospects within island communities.

Implementing renewable energy sources is vital for reducing the carbon footprint of any economy, regardless of its size. Small island communities are actively addressing the issue of decarbonisation by utilising their distinctive qualities to serve as live testing grounds for innovative energy systems in Europe. By doing so, they have the potential to become pioneers in the global transition towards clean energy, not only in Europe.

Studies show that islands possess the potential to achieve sustainable energy self-sufficiency¹²⁸. European islands, in particular, can benefit from the implementation of renewable energy sources. In addition to reducing their carbon emissions, the renewable energy industry presents prospects for economic growth and job creation, not only in the energy sector, but also in sectors like tourism (Skjølsvold, Ryghaug & Throndsen, 2020).

The modern-day islands can serve as a demonstration of the advantages of decarbonisation, showcasing how it promotes strong and self-sufficient energy systems(Kuang, Zhang, Zhou, Li, Cao, Li, et al., 2016). This can be achieved by reducing dependence on imported fossil fuels, protecting the environment, and establishing energy independence. Additionally, islands can illustrate how the energy transition can drive economic growth through the creation of regional employment opportunities, innovative entrepreneurial ventures, and community autonomy (Ioannidis, Chalvatzis, Li, Notton & Stephanides, 2019).

As indicated by the Commission in 2016, islands are ideal locations for testing

¹²⁸ Samsø, a Danish island, has been a renewable energy hub since 1997. It has become a popular tourist destination due to its sustainable efforts to become self-sufficient. El Hierro, an island in the Canaries, has been powered solely by renewable energy since 2014, thanks to wind and hydroelectric installations. The Aeolian Islands have also implemented more sustainable forms of urban transport, including low-emission vehicles. Kythnos, as part of the Smart Island project, is the first island to serve as a testing ground for advanced intelligent energy technologies.

pioneering initiatives and leading the way for Europe's path towards a smart, eco-friendly, and inclusive future.

They furthermore play a key role in the transition towards clean energy by embracing innovative technologies and creative solutions that can serve as a global model. However, the process of energy transition is complex and fraught with obstacles.

Over the years, various policy initiatives have been proposed to encourage sustainable social and economic growth in islands, while minimising environmental impact. These measures highlight the importance of integrated coastal zone management and responsible use of energy, water, and renewable resources, in order to mitigate the negative effects of high vulnerability and limited adaptability of small island ecosystems. **The Clean Energy for EU Islands Initiative¹²⁹ launched by the European Commission marks a significant milestone in the establishment of a new energy model for islands¹³⁰. This initiative has led to the creation of the first 30 renewable islands, which are small-sized territories committed to achieving energy independence using renewable energy sources (REEs) by the end of the decade.** The "30 renewable islands by 2030" objective aims to attain energy self-sufficiency in the shortest time possible.¹³¹

129 The initiative, which commenced in 2017 as part of the "Clean Energy for All Europeans" package, offers a long-term framework to facilitate the sustainable and cost-effective generation of energy on islands. The successful completion of the pilot phase (2018-2020) has allowed the secretariat to continue its crucial work in promoting the EU's climate goals. The secretariat operates based on a central methodology that is founded on the concepts of "explore," "create," and "act," and provides tailored solutions to all EU islands, based on their phase of energy transition.

130 Musotto's assertion in 2007 (European Parliament, 2007) emphasised the need to tackle various challenges faced by European islands and underlined the considerable renewable energy potential that these islands possess. Furthermore, it highlighted the necessity of cultivating sustainable energy initiatives within these communities. In 2012, the Eurelectric report illustrated the potential for European islands to serve as demonstration sites for advanced sustainable energy technologies that support the continent's transition towards a low-carbon economy. The Eurelectric II report, released in 2017 and titled "Towards Energy Transition in European Islands," underscores the role of islands in Europe's energy transition. This report advocates for the implementation of a European framework that offers tailored solutions to satisfy the energy requirements of islands, utilises their potential as testing grounds for innovative technologies, and empowers island communities to play a pivotal role in their local energy transition.

131 In the next three years, the European Union will extend large support to the chosen territories in order to facilitate their shift towards renewable energy sources. A tailored plan will be devised for each of the thirty islands, taking into account their current situation, unique factors, potential, opportunities, challenges, and priorities, aiming for 100% renewable energy in electricity and heat, as well as in transportation. This bespoke strategy will encompass initiatives across eight

The potential for islands to transform into intelligent territories and to initiate a paradigm of low-carbon, sustainable, and inclusive development is a result of several years of collaboration between European islands under the Island Partnership Initiative¹³². At the operational level, the Island Partnership has created an environment that facilitates collaboration between islands on local sustainable energy planning and the execution of sustainable energy projects, leading to the implementation of two European-scale projects, ISLEPACT¹³³ and SMILEGOV.¹³⁴

The Smart Islands initiative¹³⁵ presents a fresh perspective on the management of natural resources and infrastructure for islands, advocating for a comprehensive approach to unlock their potential and enhance the quality of life for island communities. This approach has the potential to transform European islands into intelligent territories that contribute to the EU's success in various policy areas, including climate change mitigation, circular economy, innovation, sustainable transport and mobility, blue growth, and digital agenda (Smart island initiative).

key areas: energy efficiency, renewable electricity generation, flexibility services, transportation, industrial operations, temperature control and heating, connections, and business models.

132 The Pact of Mayors offers potential for local economic development, thereby facilitating the creation of fresh employment prospects and nurturing the expansion of the Green Economy in their respective regions. Moreover, the Pact's primary goal is to aid municipal governments in spearheading the implementation of pertinent policies. By becoming a part of the Pact of Mayors, cities are bound to present their Energy Sustainability Action Plan (ISEAP), which outlines the policies and measures they will enforce to realize the set targets. V. <https://eu-mayors.ec.europa.eu/it/home?ettrans=it>.

133 The Directorate-General for Energy has invited island partnerships to propose a binding agreement for island development, aiming to motivate participating island authorities to achieve a 20% reduction in CO2 emissions by 2020 through the development of insular sustainable energy action plans (iSEAPs). V. <https://www.islepact.eu/>.

134 In 2013, a coalition of 13 European entities collaborated in a multi-tiered governance framework to cultivate sustainable energy initiatives. The culmination of their efforts was the formulation of the Intelligent Islands Strategy. This strategy underscores the significance of alliances between various stakeholders to guarantee the execution of comprehensive solutions that optimise existing synergies between energy, waste, water, transport, and ICT, and facilitate sustainable economic development on islands. V. <https://europeansmallislands.com/smilegov/>.

135 A "Smart Island" is characterised by its commitment to fostering sustainable local development, ensuring a high quality of life for its residents, and safeguarding the environment. Furthermore, it utilises advanced technologies in its energy and transportation sectors. Moreover, this type of island adopts pioneering governance techniques and novel funding mechanisms that encourage greater engagement and creativity. V. <https://www.smartislandsinitiative.eu/en/index.php>.

The supply of energy is a pressing challenge for islands owing to their limited size and self-sufficient energy systems. These regions typically rely on the importation of fossil fuels for functions including electricity production, transportation, and heating. The utilisation of fossil fuels not only results in substantial CO2 emissions but also incurs a substantial cost. This situation amplifies the financial burden experienced by the inhabitants of these islands (Ioannidis et al. 2019).

Developing sustainable local growth in fragile contexts necessitates innovating by maturing a transdisciplinary vision, addressing the problem not only from a legal and economic perspective, but also from a social, ecological, and cultural one (Salustri & Appolloni, 2021). **The aim is to guide political actions with an overall approach to make the EU islands laboratories for energy transitions. However, unclear regulations, inadequate funding, and limited network capacity impede the implementation of projects.** The political and technological inertia, compounded by the ongoing economic crisis in Europe, continue to impede the islands from realising their full potential to host innovative and sustainable projects. **To overcome this challenge, it is essential that the islands establish a baseline to better comprehend their capabilities and prioritise their objectives, while simultaneously monitoring and evaluating their outcomes.** By doing so, the islands will be able to develop sustainably and safeguard their ecosystems.

6. References

Adrianto, L., & Matsuda, Y. (2004). Study on assessing economic vulnerability of small island regions. *Environment, Development and Sustainability*, 6, 317–336.

Armao, G. (2020). Condizioni di insularità ed oneri di servizio pubblico aereo, *GIURETA Rivista di Diritto dell'Economia, dei Trasporti e dell'Ambiente*, XVIII.

Armstrong, H.W., & Read, R. (1998). Trade and growth in small states: The impact of global trade liberalisation, *World Economy*, 21, 563–585.

Armstrong, H.W., & Read, R. (2004). Insularity, remoteness, mountains and archipelagos: a combination of challenges facing small states? Paper presented for the regional studies association conference Europe at the margins: EU Regional Policy, Peripherality and Rurality, University of Angers.

Alleanza italiana per lo sviluppo sostenibile, ASVIS, (2023). I territori e gli obiettivi di sviluppo sostenibile. Rapporto 2023.

Baldacchino, G. (2004). The coming of age of island studies, *Tijdschrift voor economische en sociale geografie*, 95(3), 272–283.

Baldacchino, G. (2007). *A world of islands: An island studies reader*. Agenda Publishers & Institute of Island Studies.

Baldacchino, G., & Pleijel C. (2010). European Islands, Development and the Cohesion Policy: A Case Study of Kökar, Åland Islands. *Island Studies Journal*, 5(1), 89–110.

Baldacchino, G., & Kelman, I. (2014). Critiquing the Pursuit of Island Sustainability. *Shima: The International Journal of Research into Island Cultures*, 8(2), 1–21.

Banos-González, I., Martínez-Fernández, J., & Ángel Esteve M. (2016). Tools for sustainability assessment in island socio-ecological systems: an application to the Canary Islands. *Island Studies Journal*, 11(1), 9-34.

Banca d'Italia (2021). I divari infrastrutturali in Italia: una misurazione caso per caso, Occasional papers, n. 365, luglio 2021.

Barca, F., (2009). An agenda for a reformed Cohesion Policy a place-based approach to meeting European Union challenges and expectations. European Communities, Brussels.

Basoli, G. (2023). I collegamenti aerei delle regioni insulari.

Bassu, C. (2022). Isole del Sud nell'Europa delle Regioni. Il principio di insularità negli ordinamenti di Italia, Spagna e Portogallo come "questione meridionale". *Rassegna diritto pubblico europeo*, 77-92.

Bassu, C. (2023). Insularità, forma di Stato e godimento dei diritti tra riconoscimento formale ed effettività, DPCE online 3/2023, *Insularità nel diritto comparato*, 2773-2788.

Battistelli, F., Messina, A., Tomassetti, L., Montiroli, C., Manzo, E., Torre, M. et al. (2023a). Assessment of Energy, Mobility, Waste, and Water Management on Italian Small Islands. *Sustainability*, 15, 11490.

Battistelli F., Minutolo A., Nanni G., Laurenti M., Montiroli C., Tomassetti L., & Petracchini F., (2023b). Suolo, rifiuti, acqua, energia, mobilità, depurazione. Le sfide della sostenibilità nelle isole minori. Legambiente, CNR, Rapporto Isole Sostenibili, Osservatorio sulle isole minori.

Battistelli, F., Minutolo, A., Nanni, G., Laurenti, M., Lugli, D., Tomassetti, L., & Petracchini, F., (2024). La transizione ecologica nelle isole minori, Legambiente, CNR, Rapporto Isole Sostenibili, Osservatorio sulle isole minori.

Benelli, G. (2023). Insularità, trasporti aerei e continuità territoriale, DPCE online 3/2023 – *Insularità nel diritto comparato*, 2789-2806.

Benoist, J. (1987). L'insularité comme dimension du fait social. Iles tropicales : insularités, «insularisme». Actes du colloque organisé à Bordeaux-Talence du 23 au 25 octobre 1986. Talence : Centre de Recherches sur les Espaces Tropicaux (Université Michel de Montaigne, Bordeaux 3), 36-44. (Îles et Archipels, 8).

Berlinguer, A. (2023). L'Italia, le isole, il Mediterraneo: una questione irrisolta. DPCE Online, 2807-2822.

Betzu, M., & Coinu, G. (2023). L'insularità e la difficile strada verso l'effettività. DPCE Online, 2897-2906.

Bimonte, S., Punzo, L. F., (2005). A proposito di capacità di carico turistica. Una breve analisi teorica, EdATS Working Papers Series Economia dell'Ambiente e del Turismo Sostenibile, Osservatorio per il Turismo Sostenibile.

Biondo, C., Zanchini, E., Petracchini F., Tomassetti F., Segreto M., Battistelli F. et al. (2021), ENERGIA, ACQUA, MOBILITÀ, ECONOMIA CIRCOLARE, TURISMO SOSTENIBILE. Le sfide per le isole minori e le buone pratiche dal mondo. Legambiente, CNR, Rapporto Isole Sostenibili, Osservatorio sulle isole minori.

Biondo, C., Zanchini, E., Petracchini F., Messina M., Battistelli F., Tomassetti F., & Segreto M. (2022). ENERGIA, ACQUA, MOBILITÀ, ECONOMIA CIRCOLARE, TURISMO SOSTENIBILE. Le sfide per le isole minori e le buone pratiche dal mondo. Legambiente, CNR, Rapporto Isole Sostenibili, Osservatorio sulle isole minori.

Bonnemaison, J. (1991). Vivre dans l'île: une approche de l'îleité océanienne, Paris, ORSTOM.

Briguglio, L. (1995). Small island developing states and their economic vulnerabilities, World Development, 23(9), 1615-1632.

Butler, R.W. (2019). Tourism carrying capacity research: a perspective article, Tourism Review, 75(1), 207-211.

Camera dei deputati, ufficio rapporti con l'Unione Europea (2019), La nuova politica di coesione 2021-2027 Dossier n° 11 - 5 giugno 2019.

Camera dei deputati, servizio studi (2023). La politica di coesione in Italia. Dossier n° 1 - Luglio 2023.

Caprani, L. (2016). Five ways the Sustainable Development Goals are better than the Millennium Development Goals and why every educationalist should care, Management in Education, 30(3), 102-104.

Carbone, G. (2018). Expert Analysis on Geographical Specificities: Mountains, Islands and Sparsely Populated Areas – Cohesion Policy 2014-2020, Final Report.

Carboni, D. & Pungetti G. (2018). L'importanza della capacità di carico turistica per una governance condivisa e per uno sviluppo sostenibile del le isole mediterranee, AGEI - Geotema, Supplemento 2018.

Carboni, G. G. (2022a). L'insularità e i suoi costi, Rassegna di diritto pubblico europeo, XXI,1/2022.

Carboni, G. G. (2022b). La stagione dell'insularità, Federalismi.it, n.22/2022, 20-30.

Carboni G.G., (2023), Note di metodo su Isole e comparazione, DPCE online 3/2023 - Insularità nel diritto comparato, 2759-2772.

Carta M. C. (2015), Coesione territoriale e principio di insularità nell'ordinamento dell'Unione europea, Studi sull'integrazione europea, X, 599-619.

Cerina, F. (2015). Is insularity a locational disadvantage? Insights from the New Economic Geography. CRENOS, working paper, 1-18.

Cifuentes, M. (1992). Determinación de capacidad de carga turística en áreas protegidas. Bib, Orton IICA/CATIE.

Cifuentes-Arias M., Mesquita C.A.B., Méndez J., et al (1999). Capacidad de carga turística de las áreas de uso público del Monumento Nacional Guayabo, Costa Rica. Turrialba, CR: WWF.

Circular Economy Network (CEN), Fondazione per lo Sviluppo Sostenibile (2024). 6° Rapporto sull'economia circolare in Italia - 2024.

Chatziefstathiou, M., Spilanis, I. (2004). Aquacultures' Contribution at Sustainable Development of Island Regions - 2nd International Congress on Aquaculture, Fisheries Technology & Environmental Management 9 18 - 19 June 2004, Evgenidion Foundation, Athens, Greece, E.U.

Chi, Y., Liu D., Zhang M. (2022), Island carrying capacity for three development types: ecological resource, agricultural production, and urban construction, Heliyon, 8 (1), 1223.

Cocco, L., Deidda, M., Marchesi, M., & Pigliaru, F. (2019). Insularity and economies of density: analysing the efficiency of a logistic network using an econometric simulation-based approach. Regional Studies, 900-911.

Comitato europeo delle Regioni, (2023), Relazione annuale dell'UE 2023. Lo stato delle regioni e delle città.

Conference of Peripheral and Maritime Regions, CPMR (2017) Review of EU strategy on adaptation to climate change. Policy position.

Conference of Peripheral and Maritime Regions (CPMR), (2022). Gotland Declaration, May 12, 2022.

Conference of Peripheral and Maritime Regions (CPMR), (2023), Palma Declaration, Archipelago Europe: an agenda for EU islands, February 22, 2023.

Conkling, P., (2007). On islanders and islandness. *Geographical Review*, 97(2), 191-201.

Council of the European Union, (2017), A sustainable european future, The EU response to the 2030 Agenda for Sustainable Development.

Council of the European Union, (2019), Building a sustainable Europe by 2030 – Progress thus far and next steps – Council conclusions (10 December 2019).

Dallavalle, E., Cipolletta, M., Casson Moreno, V., Cozzani, V., & Zanuttigh B., (2021). Towards green transition of touristic islands through hybrid renewable energy systems. A case study in Tenerife, Canary Islands, *Renewable Energy* 174 (2021) 426-443.

Deidda, M. (2014). Insularity and economic development: a survey. CRENOS, working paper, 1-27.

Deidda, M., (2016). Insularity and economic development: A survey. *International Review of Economics*, 63, 107-128.

Demuro, G., Coinu, G., & Pigliaru, F. (2020). Multiple Timeframes, Insularity Policies and Autonomy Instruments. *Collège international des sciences territoriales*, 19-22.

Demuro, G. (2024), Isole e arcipelaghi nella riforma costituzionale: per la costruzione di un diritto alla diversità insulare in *Rassegna parlamentare*, 249-256.

Deriu, R. & Sanna, C., (2020), Insularità: una nuova Autonomia attraverso la cooperazione tra le Regioni insulari euromediterranee, *Federalismi.it*, 5/2020, 17-33.

Doumenge, F. (1987). Quelques contraintes du milieu insulaire. In *Iles tropicales : insularités, «insularisme»*. Actes du colloque organisé à Bordeaux-Talence du 23 au 25 octobre 1986. Talence : Centre de Recherches sur les Espaces Tropicaux, Université Michel de Montaigne, Bordeaux, 8-16, Îles et Archipels, 8.

Dwyer, L., Forsyth, P., Spurr, R., (2004). Evaluating tourism's economic effects: new and old approaches, *Tourism management*, XXV, 3, 307-317.

Ellen MacArthur Foundation, (2015), *Towards a circular economy: Business rationale for an accelerated transition*.

Espón, (2017), *Territorial Cooperation for the Future of Europe*.

Epson SoET, (2019), *State of the European Territory Report*.

Espón Bridges, (2019), *Balanced Regional Development in areas with Geographic Specificities*.

Eurelectric, (2012). *EU islands: Towards a sustainable energy future*.

Eurelectric, (2017). *Towards Energy Transition in European Islands*.

Eurelectric, (2019). *Key recommendations on the decarbonisation of European Islands*.

EURISLES (2002) *Off the coast of Europe: European construction and the problem of the islands*, Study undertaken by EURISLES on the initiative of the Islands Commission of CPMR.

European Commission, (2008). *Communication from the Commission to the Council, the European Parliament, the Committee of the Regions and the European economic and social committee. Green Paper on Territorial Cohesion Turning territorial diversity into strength*, COM(2008)616 final.

European Commission, (2011), *Comunicazione della Commissione Europea al Parlamento europeo, al Consiglio, al Comitato economico e sociale europeo e al Comitato delle regioni. Tabella di marcia verso una Un'Europa efficiente nell'impiego delle risorse*, COM(2011)571 definitivo, Settembre 20, 2011.

European Commission, European Economic and Social Committee and Committee of the Regions. (2015).

Communication from the Commission to the European Parliament and the Council, The missing link: an EU action plan for the circular economy. COM/2015/0614 final.

European Commission, (2016) Comunicazione della Commissione al Parlamento europeo, al Consiglio, al Comitato economico e sociale europeo, al Comitato delle regioni e alla Banca europea per gli investimenti Energia pulita per tutti gli europei, Bruxelles, 30.11.2016 COM(2016) 860 finale, Novembre 30, 2016

European Commission, (2019a), Report on the Implementation of EU Macro-Regional Strategies,” (SWD(2019) 6 final), January 29, 2019.

European Commission (2019b). Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions. The European Green Deal. COM(2019) 640 final, December 11, 2019.

European Commission, (2019c), Reflection paper towards a sustainable Europe by 2030, COM(2019)22 of 30 January 2019.

European Commission, (2020a), Communication of the Commission on the extension and amendments of the 2014-2020 DARs, July 8, 2020.

European Commission, (2020b), Comunicazione della Commissione al Parlamento europeo, al Consiglio, al Comitato economico e sociale europeo e al Comitato delle regioni Strategia dell’UE sulla biodiversità per il 2030, Riportare la natura nella nostra vita, COM(2020) 380 finale.

European Commission, (2021a) Cohesion in Europe towards 2050, Eighth report on economic, social and territorial cohesion.

European Commission, (2021b), Communication from the Commission. State aid guidelines for regions, April 29, 2021, (2021/C 153/01).

European Commission (2022). Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions: REPowerEU Plan. COM/2022/230 final.

European Commission, Clean energy for EU islands, (2023a). Study on regulatory barriers and recommendation for clean energy transition on EU islands.

European Commission(2023b). The EU Blue Economy Report 2023. Publications Office of the European Union. Luxembourg.

European Commission, (2024a) Ninth report on economic, social and territorial cohesion.

European Commission (2024b). The EU Blue Economy Report 2024. Publications Office of the European Union. Luxembourg.

European Committee of the Regions (CoR), (2009), Committee of the Regions white paper on multilevel governance(GU C 211 4 September 2009).

European Committee of the Regions (CoR) (2017). Opinion on Entrepreneurship on Islands: contributing towards territorial cohesion (2017/C 306/10).

European Committee of the Regions (CoR), (2018), Opinion, Boosting growth and cohesion in EU border regions, July 4, 2018, COTER-VI/036.

European Committee of the Regions (CoR)(2019a), European Islands Manifesto.

European Committee of the Regions (CoR)(2019b), Opinion of the European territorial cooperation (2019/C 86/09).

European Committee of the Regions(CoR)(2020), Opinion of Toward sustainable use of natural resources in the Mediterranean island context (2020/C 440/19).

European Committee of the Regions(CoR)(2022a), Opinion of Digital Cohesion, (2022/C 498/08).

European Committee of the Regions (CoR) (2022b), Opinion of Strengthen Cohesion Policy support for regions with geographic and demographic disadvantages (art. 174 TFUE)(2022/C 2959/22).

European Committee of the Regions(CoR)(2023), Opinion of the European Committee of the Regions on enhancing Cohesion Policy support for regions with geographic and demographic handicaps (Article 174 TFEU)(2023/C 79/07).

European Economic and Social Committee (2009), Opinion on: Better integration in the domestic market as a key factor for island cohesion and growth, Feb. 3, 2009, (2009/C 27/26).

European Economic and Social Committee (2012), Island-specific problems (2012/813).

European Economic and Social Committee (2014), Smart islands (2014/5752).

European Economic and Social Committee (2016), Exploratory opinion requested by the Maltese presidency, Islands in the EU: from structural handicap to inclusive territory (2016/5508).

European Economic and Social Committee (2017) Exploratory opinion on Islands in the EU: from structural handicap to inclusive territory, 30/06/2017, (2017/C 209/02).

European Economic and Social Committee (2019), Opinion on 'The future of Cohesion Policy in the post-2020 period' (2019/C 228/07).

European Economic and Social Committee, (2023), Opinion on Main challenges faced by EU islands, and mountainous and sparsely populated areas, ECO/612.

European Environment Agency, (2023), The biodiversity benefits of a strong circular economy, Briefing No. 10/2023.

European Environment Agency, (2024) Accelerating the circular economy in Europe State and outlook 2024 EEA Report 13/2023.

European Investment Bank, (2023), Circular Economy Overview.

European Parliament (2004), Resolution on structurally disadvantaged regions (islands, mountain regions, regions with low population density) in the context of Cohesion Policy and their institutional prospects, March 25, 2004 (2002/2119(INI)).

European Parliament (2007). Resolution, Islands and the natural and economic constraints in the context of regional policy, December 13, 2007, (2006/2106(INI))

European Parliament, Directorate-general for internal policies (2015). Study, Research for REGI Committee - Adriatic and Ionian Region: socio economic analysis and assessment of transport and energy links.

European Parliament, (2016a). Islands of the EU: Taking account of their specific needs in EU policy.

European Parliament (2016b). Resolution, Special situation of islands, 4 February 2016 (2015/3014(RSP)).

European Parliament (2022). Resolution, Islands and Cohesion Policy: current situation and future challenges, 2021/2079(INI).

European Topic Center on Circular Economy and Resource Use, (2023), Consumption and Environment in the European Circular Economy, Report 2023/8.

Eurostat, (2018), Methodological manual on territorial typologies.

Eurostat (2023). Regional yearbook 2023 edition.

Eurostat (2024). Sustainable development in the European Union - Monitoring report on progress towards the SDGs in an EU context.

Fang, X., Zou J., Wu Y., Zhang Y., Zhao Y. & Zhang H. (2021), Evaluation of the sustainable development of an island "Blue Economy": A case study of Hainan, China, *Sustainable Cities and Society*, 66 (1) 102662.

Foley, A., Brinklow, L., Corbett, J., Kelman, I., Klöck, C., Moncada, S., et al. (2023) Understanding "Islandness", *Annals of the American Association of Geographers*, 113(8), 1800-1817.

Fois, P. (2007). L'insularità nel diritto internazionale ed interno: orientamenti convergenti. *Isole nel diritto pubblico comparato* (p. 191-196). Giappichelli.

Fois, P. (2015). La continuità territoriale e l'insularità nell'Unione Europea. In C. Pinto, & Pruneddu, La comunità territoriale della Sardegna (p. 37-46). Aracne.

Frosini, T. E. (2007). *Isole nel diritto pubblico comparato ed europeo*. Giappichelli.

Frosini, T. E., (2020). «Insularità» e Costituzione, *Rivista giuridica del Mezzogiorno* / a. XXXIV, n. 1.

Frosini, T.E., (2022). For a re-constitutionalisation of the «Mezzogiorno» and the islands. *Rassegna di diritto pubblico europeo* 1/2022, Edizioni Scientifiche Italiane.

Garau, C., Desogus, G. & Stratigea, A. (2023). Digitalisation Process and Sustainable Development of Vulnerable Territories. *TeMA - Journal of Land Use, Mobility and Environment*, 16(3), 565-593.

Geissdoerfer M., (2017), The Circular Economy A new sustainability paradigm?. Journal of Cleaner Production, 143, 757-768.

Global islands database, in http://www.globalislands.net/about/gid_functions.php [February 14, 2024].

Haase, D., & Maier, A., (2021). Research for REGI Committee. Islands of the European Union: State of play and future challenges, European Parliament, Policy Department for Structural and Cohesion Policies, Directorate-General for Internal Policies, PE 652.239 - March 2021, Brussels, Belgium.

Haga, K. (2015). Innovation and entrepreneurship in aging societies: theoretical reflection and a case study from kamikatsu, Japan. Journal of Innovation Economics 18(3) 119-141.

Hayashi, M. (2021). International Legal Regime regarding Islands and Rocks. The SPF Review of Island Studies, 1-10.

Hay, P., (2006), A phenomenology of islands. Island Studies Journal 1(1), 19-42

Heshmati, A. (2015). A review of the circular economy and its implementation. IZA Discussion Paper Series, 9611, (December 2015), Bonn, Germany.

Jedrusik, M. (2011). Island studies, island geography. But what is an island? Miscellanea Geographica, 15, 201-12.

Karampela, S., Kizos, T., & Spilanis, I., (2014). Accessibility of islands: towards a new geography based on transportation modes and choices, Island Studies Journal, 9(2), 293-306.

Karampela, S., Papazoglou, C., Kizos, T., & Spilanis, I. (2017). Sustainable Local Development on Aegean Islands: A Meta-Analysis of the Literature. Island Studies Journal, 12(1), 71-94.

Katsaprakakis, D.A., Proka, A., Zafirakis, D., Damasiotis, M., Kotsampopoulos, P., Hatziaargyriou, N., et al. (2022). Greek Islands' Energy Transition: From Lighthouse Projects to the Emergence of Energy Communities. Energies, 15, 5996.

Keen, M., Schwarz, AM, & Wini-Simeon, L. (2018). Toward defining the blue economy: practical lessons from Pacific Ocean governance. Marine Policy, 88, 333 – 341.

Ki-Hoon Lee, Junsung Nohb, & Jong Seong Khim, (2020), The Blue Economy and the United Nations' sustainable development goals: Challenges and opportunities, *Environment International*, 137, 105528.

Koundouri, P., Anquetil-Deck, C., Becchetti, L., Berthet, E., Borghesi, S., Cavalli, L., et al., (2023). Transforming Our World: Interdisciplinary Insights on the Sustainable Development Goals, SDSN European Green Deal Senior Working Group.

Kuang, Y., Zhang, Y., Zhou, B., Li, C., Cao, Y., Li, L., et al., (2016), A review of renewable energy utilization in islands. *Renew Sustain Energy Rev*; 5, 504–13.

Iacometti, M. (2006). Le isole Baleari e Canarie: due diversi tipi di insularità nell'Estado autonomico spagnolo. *Isole nel diritto pubblico comparato*, (pp. 63–100). Sassari.

Ioannidis, A., Chalvatzis, K.J., Li, X., Notton, G. & Stephanides, P., (2019). The case for islands' energy vulnerability: Electricity supply diversity in 44 global, islands. *Renew. Energy*, 143, 440–452.

ISTAT (2022). Censimento permanente della popolazione e delle abitazioni Sardegna e Sicilia 2022. [March 2, 2024].

ISTAT, (2023a) Previsioni della popolazione residente e delle famiglie. Il paese domani: una popolazione più piccola, più eterogenea e con più differenze, in <https://www.istat.it/it/archivio/288443>. [March 2, 2024]

ISTAT (2023b). Il benessere equo e sostenibile dei territori Sardegna 2023. Bes dei Territori, in https://www.istat.it/it/files//2023/12/BesT_SARDEGNA.pdf. [March 2 2024]

ISTAT (2023c). Il benessere equo e sostenibile dei territori Sicilia 2023. Bes dei Territori, in https://www.istat.it/it/files//2023/11/BesT_SICILIA.pdf. [March 2 2024]

ISTAT (2023d), Censimento permanente delle imprese 2023: primi risultati in <https://www.istat.it/it/archivio/290644> [March 2, 2024].

Licciardello, O. (2023). Insularità come dato e come costruito: ricadute psico-sociali. Cagliari.

Licio, V. M., & Pinna, A. M. (2013). Measuring insularity as a state of nature. Is there a case of bad geography? CRENOS, working paper, 1-46.

Martínez-Vázquez, R. M., Milán-García, J., & Valenciano, J. P., (2021). Challenges of the Blue Economy: evidence and research trends. *Environmental Sciences Europe*, 33-61.

Mazzette, A., (1992). Identità, appartenenza e insularità nel sardismo, *Studi di Sociologia, Vita e Pensiero – Università Cattolica del Sacro Cuore*, 30 (4), 365-378.

McCall, G., (1994). Nissology: A Proposal for Consideration, *Journal of the Pacific Society*, Vol. 17 (2-3), 1-14.

Mitropoulou, A., & Spilanis, I. (2020). From Insularity to Islandness: The use of place branding to achieve sustainable island tourism, *International Journal of Islands Research*, 1(1), Article 5.

Moncada, S., Camilleri, M., Formosa, S., & Galea R. (2010). From incremental to comprehensive: Towards island-friendly European Union policymaking. *Islands Studies Journal*, 5(1), 61-88.

Mota, L., Franco, M., & Santos, R. (2021). Island tourism carrying capacity in the UNESCO Site Laurisilva of Madeira.

Nunn, P.D. (2004). Through a Mist on the Ocean: Human Understanding of Island Environments, *Tijdschrift voor Economische en Sociale Geografie*, 95 (3), 311-325.

OECD, Baron, R., (2016), Energy Transition after the Paris Agreement: Policy and Corporate Challenges, Background paper for the 34th Round Table on Sustainable Development 28-29 September 2016, WindEurope Summit, Hamburg.

Pacheco, A., (2022), Energy transition process and community engagement on geographic islands: The case of Culatra Island (Ria Formosa, Portugal), *Renewable Energy*, 184, 700-711.

Palei T., (2015), Assessing the Impact of Infrastructure on Economic Growth and Global Competitiveness. *Procedia Economics and Finance*, 23, 168-175.

Pan, S.Y., Gao, M., Kim, H., Shaha, K. J., Pei, S. L., & Chiang, P. J., (2018). Advances and challenges in sustainable tourism toward a green economy, *Science of the Total Environment*, 635, 452-469.

Pappadà, D. (2023). La dimensione territoriale delle comunità energetiche rinnovabili: l'insularità quale condizione ottimale? *DPCE online*, 2851-2870.

Picken, F., (2023), Tourism and the blue economy, *Tourism Geographies*.

Relazione sullo stato della green economy – 2023. Fondazione per lo sviluppo sostenibile.

Riva Sanseverino, E., Riva Sanseverino, R., Favuzza, S., & Vaccaro V. (2014). Near zero energy islands in the Mediterranean: Supporting policies and local obstacles, *Energy Policy*, 66, 592-602.

Royle, S., & Brinklow, L., (2018). Definitions and typologies. In *The Routledge International handbook of island studies*, ed. G. Baldacchino, A World of Islands. Routledge, (pp.3-20).

Sabato, S., Vanhercke, B., & Verschraegen G. (2015). The EU framework for social innovation – Between entrepreneurship and policy experimentation, ImPROvE Working Paper No. 15/21. Antwerp: Herman Deleeck Centre for Social Policy – University of Antwerp.

Salustri, A., & Appolloni, A., (2021). Brevi riflessioni sullo sviluppo locale sostenibile nelle Isole Minori italiane, *Public Finance Research Papers*, Istituto di Economia e Finanza, DSGE, Sapienza Università di Roma, 46, 3-19.

Sciortino, A., (2022), L’impatto del PNRR sulle diseguaglianze territoriali: note introduttive, *Rivista AIC*, 3, 270-280.

Senato della Repubblica (2018). Spendere per crescere? Trent’anni di politiche Ue per le aree depresse: l’impatto della coesione in Italia e in Europa, Impact assessment office.

Smart islands declaration in <https://www.smartislandsinitiative.eu/en/declaration.php> [February 10 2024]

Skjølsvold, T.M., Ryghaug, M., Throndsen, W., (2020). European island imaginaries: Examining the actors, innovations, and renewable energy transitions of 8 islands. *Energy Res. Soc. Sci.*, 65, 101491.

Spalding, M.J. (2016). The new blue economy: the future of sustainability. *Journal of ocean and coastal economics*, 2 (2), Art.8.

Spilanis, I., (1997), Qualité versus quantité: une stratégie durevole pour les îles, 1 ère Conférence Européenne sur le Développement Sustainable des Iles, Minorca, 24-26 avril, 145-152.

Spilanis, I., Kondili, J., & Gryllaki, S. (2003). Measuring the attractiveness of small islands. A tool for sustainability. Paper submitted For Presentation at the International Conference On Sustainability Indicators. Malta/6-8 November 2003.

Spilanis, I., Kizos ,T., Kondili, J., Koulouri, M., & Vakoufaris, H. (2005). Sustainability measurement in islands: the case of south Aegean islands, Greece, Paper presented at the 'Biodiversity Conservation and Sustainable Development in Mountain Areas of Europe' Conference, Greece, Ioannina, 20-24 September.

Spilanis, I., Kizos, T., Koulouri, M., Kondyli, J., Vakoufaris, H., & Gatsis, I. (2009). Monitoring sustainability in insular areas. *Ecological Indicators*, 9(1), 179-187.

Spilanis, I., Kizos, T., Biggi, M., Vaitis, M., Kokkoris, G. et al. (2013). The Development of the Islands – European Islands and Cohesion Policy (EUROISLANDS). Final report. Luxemburg: ESPON & University of the Aegean.

Tan, J., Tan, F.J., & Ramakrishna, S. (2022). Transitioning to a Circular Economy: A Systematic Review of Its Drivers and Barriers. *Sustainability* 2022, 14, 1757.

Territorial Agenda 2030, (2020) A future for all places. Informal meeting of Ministers responsible for spatial planning, territorial development and/or territorial cohesion 1 December 2020, Germany. In <https://territorialagenda.eu/library/> [April 29 2024]

Torrens, J.D.J., (2019). Il principio dell'insularità e la sua applicazione nelle isole Baleari. Convegno: l'Europa, la Sardegna e la questione insulare. Un bilancio dopo venti anni (1999-2019). Cagliari, Sardegna, 21 ottobre 2019.

Torrens, J.D.J., (2022), Studio sull'impatto delle politiche dell'Unione Europea sulle isole del Mediterraneo con particolare riferimento alle Isole Baleari. Rapporto commissionato dal MPE Jordi Solé i Ferrando del gruppo dei Verdi/EFA, Ottobre 2022. United Nations Environment Programme (UNEP) & World Tourism Organization (WTO) (2005). *Tourism Making Tourism More Sustainable – A Guide for Policy Makers*.

United Nations (1993). Report of the United Nations Conference on Environment and Development. Rio de Janeiro, 3-14 June 1992.

United Nations (1992). Conference on Environment & Development. Rio de Janeiro, Brazil, 3 to 14 June 1992. AGENDA 21.

United Nations (1998). Kyoto protocol to the United Nations framework convention on climate change.

United Nations (2015). Paris Agreement. United Nations Framework Convention on Climate Change.

United Nations, (2015), Transforming our world: the 2030 Agenda for Sustainable Development, United Nations Environment Programme, Nairobi.

United Nations (2016). The Sustainable Development Goals Report.

United Nations, (2022), Strengthening the circular economy as a contribution to achieving sustainable consumption and production, Resolution adopted by the United Nations Environment Assembly March 2, 2022.

United Nations, (2023), Ensuring sustainable consumption and production patterns, United Nations, Department of Economic and Social Affairs, Sustainable Development.

World Bank Group and the United Nations Department of Economic and Social Affairs. (2017), The potential of the blue economy: increasing the long-term benefits of sustainable use of marine resources for small island developing states and less developed coastal countries. The International Bank for Construction and Development, the World Bank.

World Commission on Environment and Development - Report (1987), Our Common Future

WTO, (1999), Guide for local authorities on developing sustainable tourism, World tourism Organization, Madrid.

I Working Papers nascono dall'attività di progetto e di studio del gruppo di ricerca della Fondazione Giacomo Brodolini. Sono uno strumento agile di informazione che permette la sistematizzazione e la diffusione dei lavori realizzati sulle principali tematiche d'interesse della Fondazione.