

# Cohesion Policy in the outermost regions





Policy Department for Structural and Cohesion Policies Directorate-General for Internal Policies PE 747.282 - January 2024



## **RESEARCH FOR REGI COMMITTEE**

# Cohesion Policy in the outermost regions

#### Abstract

This study focuses on EU Cohesion Policy in the nine outermost regions. It first outlines the geographic, climate, socio-economic, demographic and administrative characteristics of these regions and further analyses the vulnerabilities affecting their convergence processes. It pays particular attention to the implementation of EU Cohesion Policy and the use of place-based approaches to foster their economic growth. Finally, it reviews the importance of Article 349 of the TFEU and concludes with recommendations for its wider application.

This document was requested by the European Parliament's Committee on Regional Development.

#### **AUTHORS**

Ambre MAUCORPS (Vienna Institute for International Economic Studies), Mário José Amaral FORTUNA, Tomás LOPES CAVALHEIRO PONCE DENTINHO, Philippe JEAN-PIERRE, Sergio MORENO GIL, Patricia PICAZO PERAL

Research administrator: Kelly SCHWARZ, Frédéric GOUARDÈRES, Zofia BOCHINSKA (Trainee) Project, publication and communication assistance: Iveta OZOLINA, Kinga OSTAŃSKA, Stephanie DUPONT Policy Department for Structural and Cohesion Policies, European Parliament

#### LINGUISTIC VERSIONS

Original: EN

#### **ABOUT THE PUBLISHER**

To contact the Policy Department or to subscribe to updates on our work for the REGI Committee please write to: <u>Poldep-cohesion@ep.europa.eu</u>

Manuscript completed in January 2024 © European Union, 2024

This document is available on the internet in summary with option to download the full text at: <u>https://bit.ly/3vGFwFa</u>

This document is available on the internet at: <u>https://www.europarl.europa.eu/RegData/etudes/STUD/2024/747282/IPOL\_STU(2024)747282\_EN.pd</u> <u>f</u>

Further information on research for REGI by the Policy Department is available at: <u>https://research4committees.blog/regi/</u> Followus on Twitter: @PolicyPEGI

Follow us on Twitter: <u>@PolicyREGI</u>

Please use the following reference to cite this study:

Maucorps, A, Fortuna, M, Ponce Dentinho, T, Jean-Pierre, P, Moreno Gil, S & Picazo Peral, P, 2024, Research for REGI Committee – Cohesion Policy in the outermost regions, European Parliament, Policy Department for Structural and Cohesion Policies, Brussels

Please use the following reference for in-text citations:

Maucorps et al. (2024)

#### DISCLAIMER

The opinions expressed in this document are the sole responsibility of the authors and do not necessarily represent the official position of the European Parliament.

Reproduction and translation for non-commercial purposes are authorized, provided the source is acknowledged and the publisher is given prior notice and sent a copy. © Cover image used under the licence from Adobe Stock

## CONTENTS

LIS <sup>.</sup>	T OF /	ABBREVIATIONS	5			
LIS.	LIST OF BOXES 6					
LIS <sup>.</sup>	T OF I	FIGURES	7			
LIS.	T OF 1	TABLES	7			
EXE	CUTI	VESUMMARY	9			
INT	RODI	JCTION	12			
1.	THE	OUTERMOST REGIONS: A SPECIFIC STATUS IN THE EU REGULATORY FRAMEWORK	13			
	1.1.	Outline of the nine EU outermost regions	13			
	1.2.	Article 349 of the TFEU and specific regulatory provisions	14			
	1.3.	Administrative and governance characteristics	16			
2.	THE	OUTERMOST REGIONS' GEOSTRATEGIC ROLE AND OPPORTUNITIES FOR THE EU	19			
	2.1.	The geostrategic position of the outermost regions on the global stage	19			
	2.2.	Biodiversity, access to key natural resources and economic potential	20			
3.		GRAPHIC, ECONOMIC, SOCIAL, DEMOGRAPHIC AND CLIMATE CHARACTERISTICS THE OUTERMOST REGIONS	23			
	3.1.	Geographic profile and climate patterns of the outermost regions	23			
	3.2.	Persisting socio-economic vulnerabilities	26			
	3.3.	Demographic trends and challenges	30			
4.		RITORIAL COHESION AND PROGRESS TOWARDS A SMARTER, GREENER, MORE INECTED AND MORE SOCIAL EUROPE	34			
	4.1.	Territorial cohesion issues in the outermost regions	34			
		4.1.1. Convergence towards the EU average	34			
		4.1.2. Convergence towards the respective national average	36			
		4.1.3. Intra-regional disparities and cohesion issues	38			
		4.1.4. Measuring cohesion with beyond-GDP indicators	40			
	4.2.	Progress towards a smarter, greener, more connected and more social Europe	43			
5.	СОН	ESION POLICY AND ITS COMPLEMENTARITY WITH OTHER STRATEGIES	48			
	5.1.	Cohesion Policy implementation in the outermost regions	48			
		5.1.1. Allocation of Cohesion Policy funding across operational programmes	48			
		5.1.2. Management and execution of Cohesion Policy programmes	53			
		5.1.3. Impact of Cohesion Policy funding	57			
	5.2.	Complementarity and synergies with other development strategies	61			
	5.3.	The role of place-based, tailor-made approaches	63			
6.	CON	ICLUSIONS AND POLICY RECOMMENDATIONS	65			

6.1. Conclusions of the study		65	
6.2.	Policy recommendations	66	
REFERENCES		70	
WIDER BIBLIOGRAPHY		74	
ANNEX	ANNEX		

## LIST OF ABBREVIATIONS

AIEM	Tax on Imports and Deliveries of Goods in the Canary Islands (AIEM)
CPR	Common Provisions Regulation
EEZ	Exclusive Economic Zone
EQI	European Quality of Governance Index
ERDF	European Regional Development Fund
ESF+	European Social Fund +
ESIF	European Structural and Investment Funds
ETC	European Territorial Cooperation
GDP	Gross Domestic Product
NRRP	National Recovery and Resilience Plan
OCTs	Overseas Countries and Territories
РО	Policy Objective
POSEI	Programme of Options Specifically Relating to Remoteness and Insularity
PPS	Purchasing Power Standards
RCI	Regional Competitiveness Index
RCP	Representative Concentration Pathway
REACT-EU	Recovery Assistance for Cohesion and the Territories of Europe
S3	Smart Specialisation Strategy
SME	Small and medium-sized enterprise
SPI	Social Progress Index
TFEU	Treaty on the Functioning of the European Union

## LIST OF BOXES

Box 1:	The archipelago of the Canary Islands	14
Box 2:	Mayotte, the latest outermost region of the EU	18
Box 3:	The strategic position of the Azores and its implications for the region's development	19
Box4:	The EEZ of the French outermost regions	20
Box 5:	The potential of renewable marine energies in Martinique	21
Box6:	Opportunities and threats for the Amazonian forest in French Guiana	21
Box7:	Biodiversity-related challenges in Réunion	22
Box8:	Renewables-based electricity generation in Réunion	22
Box 9:	Volcanic activity in the Canary Islands	23
Box 10:	Past and future climate events in Madeira	25
Box 11:	Climate-related disasters in the Antilles: the case of Saint-Martin	25
Box 12:	The role of public administration and public resources in Guadeloupe's economy	26
Box 13:	Water crisis in Mayotte	26
Box 14:	Prominent and interrelated socio-economic challenges in the Canary Islands	28
Box 15:	Persisting education and employment challenges in Réunion	29
Box 16:	The main drivers and structural challenges of the Azores' economy	29
Box 17:	The role of migration in the population dynamics of the Canary Islands	32
Box 18:	Exodus of the Azores' young population	32
Box 19:	Demographic change in Réunion	32
Box 20:	Population concentration and dispersion across the Canary Islands	39
Box 21:	Territorial cohesion and disparities in the Azores	39
Box 22:	Digital services in the Canary Islands	43
Box 23:	The implementation of Cohesion Policy programmes in Saint-Martin	54
Box 24:	The temporary withholding of Cohesion Policy funding in Mayotte	54
Box 25:	Execution rate of the 2014-2020 regional Cohesion Policy programme in the Azores	56
Box 26:	External shocks in the programming period 2014-2020 in Saint-Martin	56
Box 27:	Impact of ESIF (2014-2020) in the Canary Islands	59
Box 28:	The impact of REACT-EU in Réunion	60
Box 29:	Increasing Cohesion Policy 'territorialisation' in Saint-Martin	63
Box 30:	Risks of re-centralisation in Réunion	64
Box31:	Distribution of funding across POs in the 2021-2027 regional programme of Madeira	76
Box 32:	S5 priorities in Réunion (2021-2027)	78

## **LIST OF FIGURES**

Figure 1:	EU's outermost regions across the globe	13
Figure 2:	Number of Heating Degree Days (HDD) and Cooling Degree Days (CDD) in the Canary Islands (1979-2022)	24
Figure 3:	Income, education and employment indicators in the outermost regions (2019)	27
Figure 4:	Change in population size between 2014 and 2022 in the outermost regions, their Member States of origin and the EU	31
Figure 5:	Population projections in the outermost regions (2030, 2050 and 2100)	33
Figure 6:	GDP in PPS per capita of Guadeloupe as a percentage of the EU27 average	35
Figure 7:	GDP in PPS per capita of French Guiana as a percentage of the EU27 average	35
Figure 8:	GDP in PPS per capita of Réunion as a percentage of the EU27 average	35
Figure 9:	GDP in PPS per capita of Martinique as a percentage of the EU27 average	35
Figure 10:	GDP in PPS per capita of Mayotte as a percentage of the EU27 average	35
Figure 11:	GDP in PPS per capita of the Azores as a percentage of the EU27 average	35
Figure 12:	GDP in PPS per capita of Madeira as a percentage of the EU27 average	35
Figure 13:	GDP in PPS per capita of the Canary Islands as a percentage of the EU27 average	35
Figure 14:	GDP in PPS per capita of the outermost regions as a percentage of the respective national average (2001, 2011 and 2021)	37
Figure 15:	Citizens' perceptions of their quality of life in the outermost regions	40
Figure 16:	Citizens' perceptions of the situation of the economy in the outermost regions	41
Figure 17:	Citizens' perceptions of the most important issues in the outermost regions (2021)	42
Figure 18:	Proportion of households with broadband access in the Spanish and Portuguese outermost regions (2007-2021)	43
Figure 19:	Change in the number of air passengers and length of road network in the outermost regions (2000-2019 and 2000-2021)	44
Figure 20:	Evolution of GDP and carbon emissions per capita in Martinique (2008-2018)	45
Figure 21:	Total amount (in EUR) of ESIF (ERDF and ESF combined) by theme in the 2014-2020 regional programme of the Azores	76
Figure 22:	Cumulated EU payments (as of October 2023) as a percentage of the total EU allocation in the regional 2014-2020 Cohesion Policy programmes of the outermost regions	77

## LIST OF TABLES

Table 1:	Key geographic features of the EU's outermost regions	14
Table 2:	Examples of specific provisions in EU-funded programmes (in particular from the	
	European Structural and Investment Funds (ESIF)) for the outermost regions	15

Table 3:	Examples of tax-related specific provisions for the outermost regions	16
Table 4:	Administrative status and remits of the outermost regions	17
Table 5:	RCI, SPI and EQI scores and rankings of the outermost regions	30
Table 6:	Population characteristics of the outermost regions	31
Table 7:	2014-2020 regional Cohesion Policy programmes in the outermost regions	49
Table 8:	2014-2020 Interreg programmes covering the outermost regions	50
Table 9:	2021-2027 regional Cohesion Policy programmes in the outermost regions	51
Table 10:	2021-2027 Interreg programmes covering the outermost regions	52
Table 11:	S3 priorities (2014-2020) in the outermost regions	61

## **EXECUTIVE SUMMARY**

## The outermost regions: a specific status in the EU regulatory framework

The EU has nine outermost regions: Guadeloupe, French Guiana, Réunion, Martinique, Mayotte and Saint-Martin (France), the Azores and Madeira (Portugal) and the Canary Islands (Spain). Altogether, close to five million people live in the outermost regions, which is slightly more than 1% of the EU's total population. Seven of them are located in the northern hemisphere (all in or bordering the Atlantic Ocean) and two of them are in the southern hemisphere (both in the Indian Ocean). These regions are thus located in different parts of the world, far away from the European continent and hence from their Member State's mainlands. The outermost regions therefore provide the EU with a widespread presence around the globe, in particular in or close to America and Africa.

These geographic features legitimise their specific status vis-à-vis other EU regions: the outermost regions benefit from specific measures and derogations in EU legislation, granted by Article 349 of the Treaty on the Functioning of the European Union (TFEU), owing to 'their remoteness, insularity, small size, difficult topography and climate, economic dependence on a few products, the permanence and combination of which severely restrain their development'. In practice, this article has led to specific provisions being adopted across a wide array of policies and programmes, including EU Cohesion Policy. Besides, these regions are characterised by a diversity of governance systems. Indeed, their remit is not only wider than that of their mainland peers (given the 'autonomous' status of the Azores, Madeira and the Canary Islands) but also largely shaped by the historic developments of their relationship with their Member States of origin (especially in France with the increasing differentiation of the French outermost regions' administrative statuses from the 1970s onwards).

## The outermost regions' geostrategic role and opportunities for the EU

The geographic location of the outermost regions has major geopolitical and strategic implications, not least with regard to access to key natural resources, strategic assets and participation in global value chains. For the EU, this has notably materialised in, among others, several European Territorial Cooperation (ETC) programmes that link the outermost regions (and thereby the EU) to their closest neighbours. The fact that the exclusive economic zones (EEZ) of the outermost regions account for more than half of the EU's total EEZ is, of course, a key dimension of the EU's geoeconomic clout. Not least, the extensive EEZ of the outermost regions are associated with considerable blue economy potential in sectors such as shipping and fisheries.

## Geographic, economic, social, demographic and climate characteristics

The outermost regions demonstrate strong geographic commonalities in the sense that all of them, except French Guiana, are insular regions. At the same time, they are quite different when it comes to topography and climate patterns, even though many of the outermost regions exhibit volcanic origins and tropical maritime climates. More crucially, climate change has been identified as a major threat to the outermost regions' existing infrastructure and ongoing economic activities and hence the regions' future development prospects. Crucially, the stakes related to protecting the environment and curbing climate change are made even higher by the fact that they often conflict with the need for expanded infrastructure to accommodate a growing population (e.g. French Guiana) and/or new technological infrastructure necessary to keep up with globalisation and (re)industrialisation trends (e.g. the Azores), including in the context of the green and digital transition.

These geographic characteristics are also barriers to socio-economic development, insofar as distance and non-contiguity increase transport costs and thereby hinder their integration into the 'core' of the

EU's Single Market. Likewise, their relatively small size impedes them from achieving economies of scale. While Article 349 of the TFEU aims to overcome permanent and non-permanent constraints on their development and offset their drawbacks, these regions still face major development challenges in terms of education, employment and income, among others.

The outermost regions exhibit very different demographic profiles, both in terms of population size and population dynamics. Indeed, there is an extreme contrast between the regions that struggle to retain their population, especially young people (emigration), on the one hand, and those that face strong migratory pressure (immigration), on the other hand. In most cases, the trends observed lately are set to continue in the coming decades. Indeed, population projections from Eurostat forecast a steady population decline in Guadeloupe, Martinique, the Azores and Madeira and sustained population growth in Mayotte, French Guiana and Réunion. As an exception to these steady trends, the Canary Islands' population is expected to reach a peak around 2050 and start declining thereafter.

## Territorial cohesion and progress towards a smarter, greener, more connected and more social Europe

The development paths of the outermost regions have been heavily affected by internal, structural and geographical challenges and external shocks (e.g. the Great Recession or, more recently, the Covid-19 pandemic), which have proved difficult to cope with. As a result, the convergence process in the outermost regions has been mostly slow and irregular, if not reversed. Indeed, while all outermost regions experienced a continuous increase in Gross Domestic Product (GDP) per capita (at current market prices) between 2000 and 2021, this increase was in most cases not sufficient to bridge the development gap with the rest of the EU. Apart from Mayotte, which started from a considerably lower level, the other outermost regions have made little progress in catching up with the rest of the EU.

## Cohesion Policy and its complementarity with other strategies

EU Cohesion Policy represents a major source of support for the outermost regions, which are, for the majority of them, categorised as less developed regions. In the programming period 2021-2027, there are ten regional Cohesion Policy programmes and five Interreg programmes covering the outermost regions. However, the implementation of EU Cohesion Policy in these regions has been marked by numerous challenges, chiefly pertaining to capacity issues, thereby leading to delayed fund absorption and/or lower impact. Still, the (potential) qualitative and quantitative effects of Cohesion Policy on regional socio-economic development are far from insignificant (not least through its support for basic infrastructure). At the same time, it does not sufficiently underpin transformative projects that could boost innovation and competitiveness in the long term. The use of place-based, tailor-made approaches (as in Smart Specialisation Strategies), the territorialisation of Cohesion Policy funding management and the complementarity between Cohesion Policy and other support programmes are determinants of the outermost regions' economic catch-up.

## **Conclusions and policy recommendations**

The outermost regions show common patterns in terms of their (natural) handicaps, (structural) vulnerabilities and erratic convergence processes, which further legitimise their specific status in the EU regulatory and policy framework. At the same time, there are notable differences across these regions regarding governance structures and institutional capacity and economic and demographic dynamics that could potentially exacerbate disparities not only vis-à-vis the rest of the EU but also between themselves. In any case, place-based, tailor-made, multilevel governance approaches assume a central role in supporting sustainable and inclusive growth in these regions. Therefore, the study concludes with the following key policy recommendations:

- 1. Safeguarding Article 349 TFEU as an essential regulatory provision allowing the outermost regions to (partly) overcometheir handicaps while competing in the EU Single Market;
- 2. Adding flexibility and tailoring into Cohesion Policy with a view to increasing the participation of local stakeholders and the quality of their projects as well as other EU policies with a view to achieving cross-fertilisation of EU-funded projects;
- 3. Supporting (sustainable) transport development (e.g. with a new POSEI-like transport programme);
- 4. Supporting the green transition (e.g. with a dedicated Green Deal instrument);
- 5. Supporting R&D and innovation (e.g. through Smart Specialisation Strategies).

## **INTRODUCTION**

As of 2023, the EU encompasses 27 Member States and 242 regions at the NUTS 2 level of territorial disaggregation (based on the NUTS 2021 classification), of which eight NUTS 2 regions represent the nine outermost regions: Guadeloupe, French Guiana, Réunion, Martinique, Mayotte and Saint-Martin (France), the Azores and Madeira (Portugal) and the Canary Islands (Spain). Outermost regions are, by definition, located far away from the European continent and are thus granted tailored support from the EU to 'compensate for the constraints arising from [their] geographical remoteness'.

In particular, the EU's outermost regions benefit from specific measures and derogations in EU legislation, granted by Article 349 of the Treaty on the Functioning of the European Union (TFEU), owing to 'their remoteness, insularity, small size, difficult topography and climate, economic dependence on a few products, the permanence and combination of which severely restrain their development'. While facing a range of common challenges linked to their geographic features, the EU's outermost regions are very diverse when it comes to their demographic and socio-economic profiles. This has, in turn, influenced their economic development path and still weighs heavily on their convergence prospects.

In this context, the role of EU Cohesion Policy and the European Structural and Investment Funds in supporting (sustainable and inclusive) growth in the outermost regions, the majority of which are categorised as 'less developed regions' in the 2021-2027 Cohesion Policy framework, appears to be decisive. Yet their impact is hard to assess due to the diverse and rapidly changing profiles of these outermost regions in terms of geographic, environmental, economic, social and demographic characteristics, as well as the multifaceted nature of the institutional and governance systems in place there. Logically, the role of place-based, tailor-made approaches (not least as part of EU Cohesion Policy) to overcome regional disparities and build on the outermost regions' assets deserves particular attention.

This study describes the unique situation and specificities of the outermost regions and investigates the role of Cohesion Policy in exploiting opportunities for their socio-economic development. To do so, it builds on both primary and secondary data and uses different analysis methods, drawing from qualitative and quantitative information. It combines a qualitative and statistical analysis of the outermost regions' profiles and development paths, a literature review of policy documents and studies related to EU Cohesion Policy and other cohesion-enhancing strategies, interviews with key regional stakeholders, and in-depth case studies focusing on the following three outermost regions: Réunion, the Azores and the Canary Islands.

The study is structured in six chapters, each containing a wide range of 'boxes' providing key insights into one or more outermost regions:

- The first chapter describes the specific status of the outermost regions in the EU regulatory framework and their governance systems.
- The second chapter outlines the geostrategic role and opportunities of the outermost regions for the EU.
- The third chapter provides an overview of the geographic, economic, social and demographic and climate characteristics of the outermost regions and related challenges.
- The fourth chapter assesses territorial cohesion and progress made towards a smarter, greener, more connected and more social Europe in the outermost regions.
- The fifth chapter analyses the implementation of EU Cohesion Policy in the outermost regions and its synergies with other regional strategies.
- The sixth chapter draws the main conclusions and lays out key policy recommendations for the future of EU Cohesion Policy in the outermost regions.

## 1. THE OUTERMOST REGIONS: A SPECIFIC STATUS IN THE EU REGULATORY FRAMEWORK

#### **KEY FINDINGS**

- As of 2023, the EU's nine outermost regions have a total population of close to five million.
- These regions are located in different parts of the world across both hemispheres, in (or bordering) the Atlantic Ocean and the Indian Ocean. All of them but one (French Guiana, a land territory in South America) are either single islands, part of an island, or archipelagos.
- In order to offset the economic disadvantages resulting from their geographic features (remoteness, insularity, etc.), Article 349 of the TFEU provides for the adoption of specific measures aimed, in particular, at laying down the conditions of application of the Treaties to those regions, including EU policies.
- The implementation of EU policies and their related programmes is, in turn, shaped by the various administrative and governance systems in place in those regions.

## 1.1. Outline of the nine EU outermost regions

Altogether, close to five million people live in the nine outermost regions, which is slightly more than 1% of the EU's total population. Seven of them are located in the northern hemisphere (all in or bordering the Atlantic Ocean) and two of them are in the southern hemisphere (both in the Indian Ocean). The outermost regions therefore provide the EU with a wides pread presence around the globe, in particular in or close to America (e.g. French Guiana) and Africa (e.g. Canary Islands, Mayotte) (Figure 1).



Figure 1: EU's outermost regions across the globe

Source: European Commission, <u>https://ec.europa.eu/regional\_policy/policy/themes/outermost-regions/advisory-tool-for-</u> <u>the-outermost-regions\_en</u>, accessed on 13 November 2023

Some of them are located close to each other (e.g. Martinique, Guadeloupe and Saint-Martin), but none of them share a direct border with another EU region. Indeed, all of them but one (French Guiana) are

either single islands or archipelagos (Table 1), with Saint-Martin being only a part of the island of the same name (the other part being Sint Maarten, a country within the Kingdom of the Netherlands). These regions are thus located in different parts of the world far away from the European continent and, a fortiori, from their Member State's mainland.

Outermostregion	<b>Geographic location</b>	Distanceto country's capital	Type of territory
Guadeloupe	North-western Atlantic Ocean, Caribbean Sea	6 800 km	Archipelago
French Guiana (Guyane)	South America, North-western Atlantic Ocean	7 000 km	Land territory
Réunion (La Réunion)	Indian Ocean	9 400 km	Island
Martinique	North-western Atlantic Ocean, Caribbean Sea	6 900 km	Island
Mayotte	Indian Ocean	8 000 km	Archipelago
Saint-Martin	North-western Atlantic Ocean, Caribbean Sea	6 700 km	Island (part of)
The Azores (Açores)	North-eastern Atlantic Ocean, Macaronesia	1 500 km	Archipelago
Madeira	North-eastern Atlantic Ocean, Macaronesia	970 km	Archipelago
The Canary Islands (Canarias)	North-eastern Atlantic Ocean, Macaronesia	1 700 km	Archipelago

Table 1: Key geographic features of the EU's outermost regions

Source: authors' own elaboration

Five of them are archipelagos, i.e. they consist of several islands more or less distant from each other.

#### Box 1: The archipelago of the Canary Islands

The Canary Islands, located in the Atlantic Ocean, form an archipelago consisting of eight main islands and several smaller ones. These islands are situated off the northwest coast of Africa, specifically from about 100 kilometres to 500 kilometres west of Morocco. The Canary Islands represent a key south frontier of the EU.

The geographic dispersion of the eight islands (Tenerife, Gran Canaria, Lanzarote, Fuerteventura, La Palma, La Gomera, El Hierro and La Graciosa) implies both a fragmented territory, isolated from Spain's mainland and the EU and a scattered population, though the two main islands of Tenerife and Gran Canaria host 83% of the region's total population.

Source: authors' own elaboration

#### 1.2. Article 349 of the TFEU and specific regulatory provisions

These geographic features legitimate their specific status vis-à-vis other EU regions. More specifically, the outermost regions benefit from specific measures and derogations in EU legislation, granted by Article 349 of the Treaty on the Functioning of the European Union (TFEU), owing to 'their remoteness,

insularity, small size, difficult topography and climate, economic dependence on a few products, the permanence and combination of which severely restrain their development'.

The article also provides examples of policy areas where such specific measures can be adopted: customs and trade policies, fiscal policy, free zones, agriculture and fisheries policies, conditions for the supply of raw materials and essential consumer goods, State aid and conditions of access to structural funds and to horizontal EU programmes. It further specifies that these measures shall not '[undermine] the integrity and the coherence of the Union legal order, including the internal market and common policies'.

In practice, the application of this article has resulted in specific provisions being adopted across a wide array of policies and programmes, including the EU Cohesion Policy, its operational programmes and funding allocation. In its recent Staff Working Document entitled 'Outermost regions at a glance – assets, challenges and opportunities', the European Commission (2022a) provides a non-exhaustive list of such provisions in EU legislation, some applicable to all outermost regions (Table 2), others to selected outermost regions only (Table 3).

## Table 2: Examples of specific provisions in EU-funded programmes (in particular from the European Structural and Investment Funds (ESIF)) for the outermost regions

EU legislation/fund	Provisions for the EU outermost regions		
Common Provisions Regulation (CPR)	<ul> <li>Co-financing rate of 85% for all outermost regions, independently of GDP.</li> <li>Increased specific additional allocation of EUR 1.514 billion: EUR 1.142 billion in ERDF and EUR 372 million in ESF+ (current prices).</li> <li>Retroactivity: investments under the EMFAF compensation envelope and ERDF/ESF+ additional allocation can be financed after completion.</li> </ul>		
	Higher allocation for technical assistance.		
European Regional Development Fund (ERDF)	<ul> <li>Additional allocations are exempt from thematic concentration requirements.</li> <li>ERDF investments are possible for new airports and their infrastructure; disposal of waste landfills; increasing capacities for residual waste treatment in justified cases; and productive investments in enterprises, irrespective of size.</li> <li>Outermost regions are considered less developed regions, independently of their GDP, for thematic concentration requirements.</li> </ul>		
European Social Fund + (ESF+)	<ul> <li>A new specific additional allocation of EUR 372 million (current prices) is to be used for the general ESF+ objectives and is exempt from requirements to allocate a specific percentage to thematic areas.</li> <li>In general, 12.5% of ESF+ funding is to support youth employment, vocational education and training in outermost regions with a rate of young people not in employment, education or training above the EU average.</li> </ul>		
Interreg (European Territorial Cooperation (ETC))	<ul> <li>A specific strand of EUR 280 million for the outermost regions' cooperation with other regions, countries and territories in their neighbourhood.</li> <li>Co-financing rate of 85% for outermost regions cooperation projects.</li> </ul>		

Recovery Assistance for Cohesion and the Territories of Europe (REACT-EU)	<ul> <li>Dedicated additional amount of EUR 146.4 million (in 2018 constant prices) in addition to a share of respective national envelopes:</li> <li>EUR 65.9 million for the French outermost regions</li> <li>EUR 14.9 million for the Portuguese outermost regions</li> <li>EUR 65.6 million for the Canary Islands</li> </ul>
Programme of Options Specifically Relating to Remoteness and Insularity (POSEI)	<ul> <li>EUR 653 million (in current prices) per year in 2021-2027 (same as in 2014-2020) for the supply of essential agricultural products and support for local agricultural production:</li> <li>EUR 278.4 million per year for the French outermost regions</li> <li>EUR 106.2 million per year for the Portuguese outermost regions</li> <li>EUR 268.4 million per year for the Canary Islands</li> </ul>

#### Table 3: Examples of tax-related specific provisions for the outermost regions

Dock dues in the French outermost regions	<ul> <li>Reduced taxation for certain locally produced products and categories of products; a higher level of taxation for products "imported" from outside the region, including from mainland France; the tax differential between local and "imported" similar products is up to 20% or 30% in Guadeloupe, French Guiana, Martinique, Mayotte and Réunion.</li> <li>Local economic operators with an annual turnover below EUR 550 000 are not subject to dock dues.</li> </ul>
Reduced excise duties on certain alcoholic products in the Portuguese outermost regions	• Certain locally produced alcoholic products benefit from a reduced excise duty of 75% if purchased locally and of 50% if purchased in mainland Portugal.
Tax on Imports and Deliveries of Goods in the Canary Islands (AIEM)	<ul> <li>Reduced taxation for certain locally produced products and categories of products; and a higher level of taxation for "imported products" applies with a tax differential of up to 15%.</li> <li>Total fiscal advantage resulting from AIEM is limited to EUR 150 million per year with possible exemptions in justifiable cases.</li> </ul>

Source: European Commission (2022)

### **1.3.** Administrative and governance characteristics

The outermost regions are characterised by a diversity of administrative and governance systems stemming not only from the national institutional frameworks of their respective Member States of origin (i.e. France, Portugal and Spain) but also from the historic developments of their institutional relationship with them. For instance, the French outermost regions have experienced several changes in administrative status since the end of the Second World War, the most important ones being the reforms in 1982 and 2003, as well as in 2007 (for Saint-Martin), 2011 (for Mayotte) and 2016 (for French Guiana and Martinique) (Gay, 2021). As a result, the outermost regions have very different institutional and governance structures, remits and normative powers, leading to a large variety of administrative statuses (Table 4).

Outermost region	Member State	Administrative status	Remits
Guadeloupe	France	Overseas department and region (Département et région d'outre-mer)	Similar to those of the departments and regions in mainland France, albeit with derogations; its status (where 'department' and 'region' coexist) can evolve towards 'single collectivity'
French Guiana	France	Single territorial collectivity (Collectivité territoriale unique)	Similar to those of the departments and regions in mainland France, albeit with derogations; single assembly
Réunion	France	Overseas department and region (Département et région d'outre-mer)	Similar to those of the departments and regions in mainland France, albeit with derogations; its status (where 'department' and 'region' coexist) can evolve towards 'single collectivity'
Martinique	France	Single territorial collectivity (Collectivité territoriale unique)	Similar to those of the departments and regions in mainland France, albeit with derogations; single assembly and executive council
Mayotte	France	Overseas department (Département d'outre- mer)/ Single collectivity (Collectivité unique)	Similar to those of the departments and regions in mainland France, albeit with derogations; departmental council with both departmental and regional competences
Saint-Martin	France	Overseas collectivity (Collectivité d'outre-mer)	Different from that of those regions and departments in mainland France with regard to administrative organisation, allocation of competences and applicable law (i.e. own normative power in specific policy fields)
The Azores	Portugal	Autonomous region (Região Autónoma)	Own legislative body (Regional Assembly with own normative power in specific policy fields)
Madeira	Portugal	Autonomous region (Região Autónoma)	Own legislative body (Regional Assembly with own normative power in specific policy fields)
The Canary Islands	Spain	Autonomous community (Comunidad autónoma)	Own legislative body for two provinces (the Province of Las Palmas and the Province of Santa Cruz de Tenerife); each province is further divided into islands, functioning as separate political entities with their own local administrations, each governed by a local government known as the 'cabildo insular'

Source: authors' own elaboration based on Chantreuil et al. (2023a), the French Senate and www.vie-publique.fr

The Azores and Madeira are two autonomous regions of Portugal, implying that their budget is technically independent of the national budget, with its own revenue sources (however, financial transfers are legislated in order to allow the regions to achieve a minimal level of self-sufficiency to deliver services meeting national standards). These regions have their own legislative body (Regional Assembly) that approves the regional budget and regulates the sectors whose responsibility has been assigned to the regions, like education, training, health, transport, infrastructure and social programmes, among others.

In the same vein, the Canary Islands constitute an autonomous community of Spain (where each island has a governance body named 'Cabildo' (Cabildo~Council)), with a specific status: the Statute of Autonomy of the Canary Islands. This status delineates specific competences granted to the region, while others remain under the central State's authority. Notably, the Statute confers competencies in various areas, including education (ranging from primary to university education), healthcare, culture and heritage, environment, transport and communications. Additionally, it shares some competences, such as justice and security, with the central government. However, certain key areas, including Ports and Airports of General Interest (Article 161), regulation of air transport (Article 160), Civil Protection and Maritime Rescue (Article 149), granting work permits to non-EU foreigners and participation in migration management (Article 144), foreign trade with Africa or specific countries in the Americas (Article 127), promotion and defence of competition (Article 120) and gender and integration policies (Article 145), remain under central governance control. This has translated into a series of successive fiscal laws and measures: the Canary Islands Economic Tax Regime, Law 30/1972 on the Economic Fiscal Regime of the Canary Islands, the Reserve for Investments in the Canary Islands, the Special Registry of Vessels and Shipping Companies, the Tax on Imports and Deliveries of Goods in the Canary Islands (AIEM), the Canary Islands General Indirect Tax, the Canary Islands Special Zone, etc.

On the other hand, Guadeloupe, Martinique, French Guiana, Réunion and Mayotte are either single collectivities or overseas departments and regions - the latter since 2014 only – a status that broadly aligns with the legislative and governance framework applicable to metropolitan France.<sup>1</sup> Saint-Martin became a French overseas collectivity ('collectivité d'outre-mer') after a referendum in 2007, a specific status that grants the region more fiscal autonomy and competences in matters such as urban planning and economic development.

#### Box 2: Mayotte, the latest outermost region of the EU

Article 355(6) of the TFEU stipulates that the status of a Danish, French or Netherlands country or territory can change (from EU outermost region to EU overseas countries and territories (OCTs) and vice versa) upon unanimous decision of the European Council. Released in 2012, the additional Declaration on Article 355(6) of the TFEU indicates that 'the European Council, pursuant to Article 355(6), will take a decision leading to the modification of the status of Mayotte with regard to the Union in order to make this territory an outermost region within the meaning of Article 355(1) and Article 349, when the French authorities notify the European Council and the Commission that the evolution currently under way in the internal status of the island so allows'. Mayotte, formerly one of the EU OCTs, effectively became an EU outermost region in 2014.

Source: authors' own elaboration

<sup>&</sup>lt;sup>1</sup> A single collectivity is an administrative territory endowed with both regional and departmental competences and a single deliberative assembly. This type of collectivity falls within the scope of Article 73 of the French Constitution, just like the other overseas departments and regions. The establishment of a collectivity that supersedes an overseas department and region or the establishment of a single deliberative assembly requires the consent of the voters concerned (i.e. a referendum).

## 2. THE OUTERMOST REGIONS' GEOSTRATEGIC ROLE AND OPPORTUNITIES FOR THE EU

#### **KEY FINDINGS**

- The outermost regions provide the EU with a widespread presence around the globe, in particular in or close to America and Africa. This presence ensures crucial access to key natural resources, strategic assets and participation in global value chains.
- In particular, the extensive maritime economic zones of the outermost regions are associated with considerable blue economy potential as well as exceptionally rich but vulnerable marine biodiversity.
- Thanks to their specific geography, these regions are also endowed with huge potential for sustainable energy generation, which will prove pivotal for the green transition.
- Another economic sector with major strategic potential is certainly the space sector, witnessing the development of space infrastructure and sciences as well as astrophysics activities around Kourou in French Guiana.

## 2.1. The geostrategic position of the outermost regions on the global stage

The outermost regions provide the EU with a widespread presence around the globe, in particular in or close to America (e.g. French Guiana) and Africa (e.g. Canary Islands, Mayotte). This has major geopolitical and strategic implications, not least with regard to access to key natural resources, strategic assets and participation in global value chains.

#### Box 3: The strategic position of the Azores and its implications for the region's development

The Azores are a Portuguese archipelago composed of nine islands. Located in the middle of the North Atlantic Ocean, the region is considered an outermost region of Europe but can also be seen as a central point in the North Atlantic Ocean. At times the region has in fact been central for different activities: air travel (it was a central support base when air travel started to cross the Atlantic Ocean between Europe and North and South America when planes did not have sufficient flight autonomy to doit in one leg), communication (Faial, an island in the centre of the archipelago was a landing point for communications cables when they first were used), logistics (the Azores were a refuelling base when ships were powered by coal), defence (the Azores were an English air base during WWII and then housed a US air base, until today) and air control (the Azores are still the base for a significant part of the air control services of the North Atlantic Ocean).

These are just a few activities that have, in the past, grown and then declined as technology evolved, thereby bringing about economic cycles. Indeed, the Azores islands' economies evolve cyclically depending on the external demand for local resources and logistics technology. When airplanes had to make a stop in Santa Maria between Europe and America, the island saw its population double; likewise, while the American Military Air Base was fully working, the population of Terceira Island increased by 10%. When low-cost companies began to operate, tourism became a crucial sector for the islands' economy.

Source: authors' own elaboration

Importantly, the outermost regions allow their Member States of origin to establish cross-border relationships, often even transnational partnerships, with countries located far from the Member States' mainland (Constant, 2022). For the EU, this has notably materialised in, among others, a multitude of European Territorial Cooperation (ETC) programmes – also known as Interreg programmes – that link the outermost regions (and thereby the EU) to their closest neighbours. In particular, Interreg VI Strand D, the strand of Interreg programmes specifically dedicated to the outermost regions in the programming period 2021-2027, covers geographic areas that stretch across:

- The Amazonia "Plateau des Guyanes",
- The Caribbean Space,
- The Middle Atlantic/ Gulf of Guinea,
- The Indian Ocean (from Australia to India and the Eastern coast of Africa), and
- The Mozambique Channel.

In a wider geopolitical context, the recently presented EU Indo-Pacific strategy and the new EU-Africa strategy<sup>2</sup> are effectively of particular relevance for the outermost regions. The fact that the Exclusive Economic Zones (EEZ)<sup>3</sup> of the outermost regions account for more than half of the EU's total EEZ is, of course, a key dimension of the EU's geoeconomic clout.

#### Box 4: The EEZ of the French outermost regions

France has six outermost regions that belong in the EU (i.e. Guadeloupe, French Guiana, Réunion, Martinique, Mayotte and Saint-Martin), but many more overseas territories with different statuses and thus governance systems (e.g. French Polynesia, New Caledonia, French Southern and Antarctic Territories, etc.). Still, the French EU outermost regions account for a significant proportion of France's total EEZ (and, more generally, France's maritime space).

More specifically, the total EEZ of the French Antilles (Guadeloupe, Martinique, Saint-Martin and Saint-Barthélémy – the latter being, since 2011, no longer an EU outermost region but an OCT located only a few dozen kilometres away from Saint-Martin) amounts to 126 148 square kilometres; that of French Guiana amounts to 121 746 square kilometres; that of Réunion to 311 426 square kilometres; and that of Mayotte to 63 176 square kilometres. In sum, the French EU outermost regions (plus Saint-Barthélémy) have a total EEZ of 622 496 square kilometres, slightly more than twice that of mainland France (along the North Sea, Channel and Atlantic Ocean and Mediterranean Sea).

Source: authors' own elaboration based on data from the French Ministry for Europe and Foreign Affairs as of January 2023

## 2.2. Biodiversity, access to key natural resources and economic potential

Thanks to the outermost regions' location across different seas and oceans as well as their proximity to other continents, the EU can exploit key strategic assets, in particular those linked to natural resources. Indeed, the extensive maritime economic zones of the outermost regions are associated with a considerable blue economy potential in sectors such as shipping, fisheries, marine energy generation and coastal tourism. They also have an exceptionally rich but vulnerable marine biodiversity. In its communication on 'Transforming the EU's Blue Economy for a Sustainable Future', the European

<sup>&</sup>lt;sup>2</sup> The EU Indo-Pacific Strategy aims to foster a rules-based international order, fair trade, climate action and enhanced connectivity with the EU. The EU-Africa Strategy aims to boost economic relations, create jobs in both continents and deepen the partnership.

<sup>&</sup>lt;sup>3</sup> The United Nations Convention on the Law of the Sea (UNCLOS) defines an Exclusive Economic Zone (EEZ) as 'an area beyond and adjacent to the territorial sea' that 'shall not extend beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured'. In the EEZ, the coastal state has, among other rights, sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources.

Commission (2021) recognises this potential and states that it will endeavour to 'continue to support outermost regions, [...] seizing the opportunities offered by their large exclusive economic zones, in protecting their exceptionally diverse ecosystems, in developing their own sustainable blue economy strategies and in exchanging best practices to address their common climate adaptation challenges'.

In that regard, a study carried out for the European Commission (COGEA srl et al., 2017) identifies the opportunities for sustainable growth in the blue economy in each of the three sea basins related to the outermost regions: Caribbean-Amazonia (Guadeloupe, Martinique, Saint-Martin and French Guiana), south-west Indian Ocean (Réunion and Mayotte) and Macaronesia (Canary Islands, Madeira and the Azore). For the Caribbean-Amazonia and Macaronesia, it finds that renewable energy and blue biotechnology are two economic sectors with considerable growth potential for the near future, not least in terms of job opportunities and value added for the sea basin economy. For the south-west Indian Ocean, there are three such sectors:cruise tourism, renewable energy and blue biotechnology.

#### Box 5: The potential of renewable marine energies in Martinique

Martinique, like many other outermost regions, remains highly reliant on fossil fuels to meet its energy needs. In 2019, 75% of the region's electricity production stemmed from fossil energy sources and 25% from renewable energy sources (biomass, photovoltaic systems, wind farms, etc). Yet, there is a significant untapped potential for renewable energy from marine resources, in particular for ocean thermal energy conversion, wave energy and offshore wind energy. Still, the development of these types of energy is constrained by cyclonic risks (storm hazards).

from Source: authors' own elaboration based on data Transition énergétique en Martinique (www.transitionenergetiguemartinigue.mg) and ADEME (www.martinique.ademe.fr/expertises/energiesrenouvelables/energie-des-mers)

While the outermost regions' marine resources provide them with major economic assets and potentially enormous strategic benefits from exploiting them, they also contribute to their large and diverse biodiversity. Indeed, the rich biodiversity of the EU's outermost regions stems from both land and marine resources. By acknowledging their 'exceptionally high biodiversity value', the EU Biodiversity Strategy for 2030 (European Commission, 2020a) places 'particular focus [...] on protecting and restoring the tropical and sub-tropical marine and terrestrial ecosystems in the EU's outermost regions'.

#### Box 6: Opportunities and threats for the Amazonian forest in French Guiana

In French Guiana, around 95% of the land is covered by Amazonian forest. It therefore comes as no surprise that some 5 500 plant species and more than 1 500 animal species have so far been identified in the region. This rich biodiversity has a significant, positive impact on the development and resilience of the region, as demonstrated by, for example, the 250 local businesses active in the forestry-wood sector. At the same time, this ecosystem is greatly threatened by the unlawful exploitation of gold, which is thought to be employing at least 10 000 illegal workers (Gay, 2021). Indeed, (illegal) alluvial gold mining disrupts local hydrosystems and ecosystems through a range of environmental impacts (Melun and Le Bihan, 2020):

- Deforestation-based impacts (e.g. habitat loss, change in local climate parameters);
- Creek bed destruction-based impacts (e.g. increase in erosion, wetland degradation);
- Exploitation-based impacts (e.g. mercury contamination, waste pollution); and
- Extended impacts (e.g. increase in suspended matters, hunting pressure).

Source: authors' own elaboration based on data from the Office Français de la Biodiversité (<u>www.guyane.ofb.fr</u>), the French Ministry for Agriculture and Food sovereignty (<u>www.agriculture.gouv.fr/la-guyane-une-region-agricole-tropicale-et-florissante</u>)

#### Box 7: Biodiversity-related challenges in Réunion

Efforts to protect and enhance Réunion's terrestrial and marine biodiversity and preserve its resources, particularly water - which is at the heart of tomorrow's challenges – are indispensable. This is all the more necessary, as biodiversity is one of Réunion's major assets, including in terms of tourism development and research opportunities. Over 40% of its territory is protected, making it, along with French Guiana, one of the European regions with the highest levels of protection. However, urban sprawl, population growth and climate change are taking their toll on Réunion's biodiversity. This phenomenon is particularly pronounced on an island where the climate and topography make it highly sensitive to natural hazards, a situation that has been exacerbated by the effects of climate change. In addition, the fragmentation of ecosystems, the degradation of the environment due to overuse for agricultural and/or some tourism activities and the development of invasive exotic species are all threats to this essential resource for the region.

Source: authors' own elaboration

Thanks to their specific geography, the outermost regions are also endowed with a huge potential for sustainable energy generation that will prove pivotal for the green transition. In its recent communication focusing on the development of the EU outermost regions, the European Commission (2022b) highlighted this potential and recalled some of the renewable energy solutions already implemented in the EU outermost regions: 'With their rich sources of renewable energy – solar, wind, marine and geothermal – the outermost regions can be frontrunners in the clean energy transition, helping to achieve the EU's target of climate neutrality by 2050.'

#### Box 8: Renewables-based electricity generation in Réunion

The isolation of the island, its size and its location are often put forward as constraints. However, these can also be seen as advantages. For example, in several sectors, such as energy, agri-food and industrial symbiosis (meaning different industries or sectors working together to exchange resources), the usual configuration of industrial or economic models is that of economies of scale and therefore, large dimensions. However, in several of these fields, Réunion has already demonstrated its ability to adapt 'to the small' in what is usually designed for 'the large'.

This is the case, for example, in power grid management. The region's feat is not only that of producing around 30% (and soon 90%) of 'renewable' electricity – mostly from hydraulic energy, photovoltaic systems and biomass - but also that of successfully combining a multitude of electrical energy sources in such a small area. In larger territories, this management is often less complex, as the primary energy sources are larger and less sensitive to variations.

Source: authors' own elaboration based on 2021 data from the Observatoire Énergie Réunion

The aforementioned natural resources give rise to an array of economic applications, notably in the blue economy (renewable marine energy, blue biotechnology, aquaculture, etc.) and land renewable energy generation (solar, geothermal, etc.), but also in agriculture (e.g. the cultivation of plants that do not exist in mainland Europe, in particular non-conventional food plants such as moringa and jicama). These assets also open up new opportunities in areas such as tropical medicine and pharmaceuticals, and more generally in research and innovation as well as technological development. Another noteworthy economic sector for the outermost regions is certainly the space sector, with the development of space infrastructure and sciences as well as astrophysics activities. Kourou, located in French Guiana near the equator, hosts Europe's Spaceport of the European Space Agency (ESA), where a wide range of space missions are launched.

## 3. GEOGRAPHIC, ECONOMIC, SOCIAL, DEMOGRAPHIC AND CLIMATE CHARACTERISTICS OF THE OUTERMOST REGIONS

#### KEY FINDINGS

- Overall, the outermost regions are highly exposed to the risks of volcanic, seismic and/or hydro-meteorological disasters owing to their specific geography.
- Climate change is dramatically increasing the risk (in terms of intensity and/or frequency) of weather events. When they occur, these events typically entail tremendous damage to the regions' infrastructure and thus considerably hamper their development prospects.
- These risks come on top of persisting socio-economic vulnerabilities linked to education, employment and income, among other factors. These vulnerabilities reverberate, in turn, through productivity, competitiveness and wealth.
- The demographic dynamics of the outermost regions clearly stand out in the EU context. Indeed, they have either recorded steady population decline (mostly due to emigration) or substantial population growth driven by (foreign and often uncontrolled) immigration.
- These dynamics have (and are expected to continue to have) a strong impact on the regions' human capital, among other growth factors.

## 3.1. Geographic profile and climate patterns of the outermost regions

The outermost regions demonstrate strong geographic commonalities in the sense that all of them, except French Guiana, are insular regions (see Chapter 1). At the same time, they are quite different when it comes to topography and climate patterns, as they are located in different parts of the world and are the result of different types of geomorphological formations, even though many of the outermost regions exhibit volcanic origins and tropical maritime climates. These characteristics influence the outermost regions' unique biodiversity and ecosystems (see Chapter 2).

#### Box 9: Volcanic activity in the Canary Islands

The Canary Islands are characterised by their volcanic origin and ongoing volcanic activity. This feature showcases a remarkable geologic landscape but also generates some important risks, such as volcanic eruptions, as evidenced by the recent one in La Palma in 2021 or seismic activity. The Canary Islands are situated in a subtropical climate zone, providing year-round pleasant weather that is considered one of the best in the world (Whitmore, 1999). Their geographical location also makes them a biodiversity hotspot with various microclimates and a rich variety of flora and fauna as well as a high level of endemism (IUCN, 2022).

Approximately 30% of the plant species and 40% of the invertebrates on the islands are endemic and have adapted to the islands' diverse microclimates and ecosystems. The islands host four national parks and all the islands have UNESCO Biosphere Reserves. Even though nearly half of its surface area is protected (47% of its territory), on the other hand, the Canary Islands are currently experiencing an increasing desertification process with limited water resources.

Source: authors' own elaboration

More crucially, climate change has been identified as a major threat to the outermost regions' existing infrastructure (e.g. transport infrastructure) and ongoing economic activities (e.g. agriculture) and hence the regions' future development prospects. In fact, climate change can already be observed through the evolution of climate temperatures over the past decades. In the Canary Islands, for example, the number of Heating Degree Days (HDD) overall has been decreasing, whereas the number of Cooling Degree Days (CDD) overall has been increasing (Figure 2).





Source: Eurostat, Cooling and heating degree days by NUTS 3 regions, annual data, online data code: NRG\_CHDDR2\_A Note: The HDD index is a weather-based technical index designed to describe the need for the heating energy requirements of buildings, while the CDD index is a weather-based technical index designed to describe the need for the cooling (airconditioning) requirements of buildings. HDD and CDD indices are derived from meteorological observations of air temperature interpolated to regular grids at 25 km resolution for Europe. The blue and orange dotted lines indicate the linear trend lines for the HDD and CDD indices, respectively.

In other words, the region has been experiencing significant global warming, leading to lower heating needs and higher cooling needs. Similarly, the frequency and intensity of heatwaves have been increasing in the region in the last decades (Hernández-González et al., 2016). Climate change poses a significant threat to the Canary Islands' exceptionally rich biodiversity. Given its insular geography, the archipelago is more vulnerable to marine-related risks compared to mainland locations. Among the myriad impacts of climate change, rising sea levels are expected to result in permanent coastal flooding, profoundly affecting society, the economy and the environment. Projections indicate sea level rises ranging from 27cm (Representative Concentration Pathway (RCP)<sup>4</sup> 2.6) to 74 cm (RCP8.5) by the end of the century. Furthermore, an elevated mean sea level will amplify the impact of coastal storms, leading to beach erosion and flooding, which are critical economic risks for the islands. A high emissions scenario is expected to result in a 265% surge in cooling energy demand for the islands by 2100. Reduced rainfall due to climate change will lead to agricultural land loss, an increased incidence of forest fires and higher litigation costs. Specifically, Gran Canaria, Fuerteventura and parts of Tenerife are projected to experience moderate to extremely dry conditions under RCP2.6. Furthermore, the Canary Islands face critical vulnerabilities to climate change, stemming from their limited economic diversification and sewage treatment capacity (León et al., 2021).

<sup>&</sup>lt;sup>4</sup> A RCP is a trajectory of greenhouse gas concentrations (not emissions) endorsed by the IPCC. These pathways were employed for climate modelling and research during the IPCC's Fifth Assessment Report (AR5) in 2014. These pathways delineate various scenarios of climate change, all of which are deemed plausible based on the levels of greenhouse gases anticipated to be released in the future. RCP2.6 represents a scenario designed to limit global warming to below 2°C above pre-industrial levels. Conversely, RCP 8.5 portrays the highest baseline emissions scenario, wherein emissions are projected to increase steadily throughout the 21<sup>st</sup> century (Mariano et al., 2021).

#### Box 10: Past and future climate events in Madeira

Madeira is continuously exposed to severe natural events like very rough seas, heavy rainfall and strong winds. The most recent extreme event was due to a massive rain phenomenon in 2010, which caused damage estimated at EUR 700 million. More recently, the main island was affected by a severe fire that consumed a considerable part of the vegetation around the main city of Funchal, due to a dry spell and strong winds.

The island is also affected by frequent high winds, which hinder the operationality of its airport. Climate change is expected to accentuate the roughness of the seaas well as climate instability. This will, in turn, accentuate wind patterns and rainfall affecting the islands. More specifically, climate change will tend to increase the risk of these events and the vulnerability of the region's transport infrastructure.

Source: authors' own elaboration

#### Box 11: Climate-related disasters in the Antilles: the case of Saint-Martin

In 2017, the island of Saint-Martin was severely hit by Hurricane Irma, along with other islands in the Antilles. This natural disaster – classified as category 5 (the highest) - caused human victims and damaged 95% of the buildings across the territory. While the impact of climate change on the frequency of hurricanes remains uncertain, their intensity is expected to significantly increase in the future. Furthermore, rising sea levels and temperatures, ocean acidification and expanding erosion could have adverse impacts on the island's ecosystems, economy and population (Cittànova, 2021).

Source: authors' own elaboration

Overall, the outermost regions are highly exposed to the risks of volcanic, seismic and hydrometeorological disasters and climate change is dramatically increasing the risks of the latter. These events, when they occur, typically entail tremendous damage to the regions' infrastructure and, thus, economies. Climate change is therefore a matter of utmost importance for policy-making at all levels of governance. Indeed, a climate vulnerability and impact assessment carried out for the European Commission (Moinier and Smithers, 2020) reports 'important differences in the climate sensitivities and associated adaptive capacities of the outermost regions as compared to the European mainland'. It further stresses that some outermost regions (Madeira, the Azores, the Canary Islands, Guadeloupe) 'require resources for the implementation of adaptation actions and policies, based on established climate vulnerability assessments and adaptation plans and strategies' and that in other regions (Mayotte, St Martin, Reunion Island, French Guiana, Martinique), 'adaptation plans and strategies have not yet been developed due to a lack of resources and information's o that'the EU's added value would be to support the local development of context-specific adaptation plans and strategies'.

Crucially, the stakes related to protecting the environment and curbing climate change in the outermost regions are made even higher by the fact that they often conflict with the need for expanded transport, residential and other basic infrastructure to accommodate a growing population (e.g. French Guiana) and/or new technical and technological infrastructure necessary to keep up with globalisation and (re)industrialisation trends (e.g. the Azores), including in the context of the twin green and digital transition. Hence, the challenge for the outermost regions is twofold: mitigating and adapting to climate change while fostering the drivers of economic growth. As a matter of fact, economic growth is essential for these regions that face major socio-economic issues, owing to various factors, including historical and, of course, geographical ones.

### 3.2. Persisting socio-economic vulnerabilities

The insularity of the vast majority of the outermost regions, their remoteness from the European continent and their small size also materialise as barriers to socio-economic development, insofar as distance and non-contiguity increase transportation costs and thereby hinder their integration into the 'core' of the EU Single Market. Following the theory of new economic geography,<sup>5</sup> whereby agglomeration forces (such as increasing returns to scale) lead to the clustering of specific economic activities according to a so-called core-periphery pattern, the outermost regions end up at the periphery of the EU in both geographic and economic terms. Likewise, their relatively small size impedes them from achieving economies of scale and their production costs are thus higher than in mainland Europe (Chantreuil et al., 2023b). The small size of their market also feeds into the lack of diversification in their economic structure. Indeed, the European Commission (2022a) indicates that the outermost regions' economies hinge primarily on the tertiary and non-market public sectors (in the case of Mayotte, these sectors account for up to 90% of the region's GDP), with a small to minimal representation of the industry sector.

#### Box 12: The role of public administration and public resources in Guadeloupe's economy

An OECD study (2023a) provides a detailed picture of Guadeloupe's economy and its evolution over time. In particular, it shows that the regional economy is largely services-oriented – similar to the other outermost regions – but with a 'prevalence of services related to public administration, which account for roughly 40% of Gross Value Added (GVA) and employment, up from 26% in 1970 and 36% in 2000'. Conversely, the contribution of the construction and farming sectors to the regional economy has been decreasing significantly in the past five decades, while industry has declined by a few percentage points to around 10% of GVA in 2020. The study further points to the fact that 'public resources have played an essential countercyclical role in cushioning the effect of the multiple crises over time and in compensating structural handicaps, but they have not been accompanied by adequate incentives to foster local business development and entrepreneurship (Budoc, 2012; IEDOM, 2022)'. Unsurprisingly, mainland France appears to be the main trading partner of the region, accounting for the bulk of its exports. Finally, the study reports that other Caribbean countries account for only 2% of the region's trade flows, reflecting its limited trade integration into the regional neighbourhood (OECD/UNCTAD/ECLAC, 2020).

Source: authors' own elaboration based on OECD (2023a)

#### Box 13: Water crisis in Mayotte

In 2023, the so-called 'water crisis' in Mayotte has shed light on the deep-rooted vulnerabilities of the outermost region as regards the provision of basic infrastructure and services to its fast-growing population. Due to a major hydrological drought combined with an insufficient crisis prevention and management system, the region is experiencing a severe water shortage with devastating effects on the everyday lives of its residents (while the daily water needs of the region's population are estimated at 43 000 cubic metres, only 26 000 cubic metres are available for consumption). Notably, this has led the national government to take exceptional measures: distribution of water bottles, exemption from payment of water bills for three months, increase in healthcare personnel,

Source: authors' own elaboration based on data from the Banque des Territoires (2023)

While Article 349 of the TFEU – combined with a series of other national measures – aims to overcome permanent and non-permanent constraints on the development of the outermost regions and offset

<sup>&</sup>lt;sup>5</sup> See, for instance, Krugman (1991) and Fujita, Krugman and Venables (1999).

their drawbacks, these regions still face major development challenges. These challenges relate to infrastructure as well as education, employment, income (Figure 3) and, consequently, productivity, competitiveness and wealth.

As a matter of fact, the eighth report on economic, social and territorial cohesion (European Commission, 2022c) indicates that in 2019 (the year before the Covid-19 pandemic started in Europe), the employment rate in all outermost regions, except Madeira, was lower than the EU average. Likewise, productivity (measured as GDP per worker) in all outermost regions (except Guadeloupe) was lower than the EU average. Other challenges outlined by the report include, among others, low levels of urban wastewater treatment, high proportions of early leavers from education or training and lower levels of digitalisation (e.g. in terms of the share of households with internet access at home).



Figure 3: Income, education and employment indicators in the outermost regions (2019)

Source: authors' own elaboration based on data from the European Commission (Eurostat): Income of households by NUTS 2 regions (indicator code NAMA\_10R\_2HHINC), young people neither in employment nor in education and training by sex and NUTS 2 regions (indicator code EDAT\_LFSE\_22) and unemployment rates by sex, age, educational attainment level and NUTS 2 regions (indicator code LFST\_R\_LFU3RT) and Insee (Mayotte, NEET rate of 15-29 year-olds).

Note: Guadeloupe and Saint-Martin are grouped in a single NUTS 2 region. EU27 refers to the 27 Member States from 2020 onwards. The left-hand axis refers to net disposable income (grey bars) and the right-hand axis refers to NEET and unemployment rates (blue and orange dots, respectively). The data corresponds to the year 2019.

In 2019, all outermost regions, except Martinique, had an average net disposable income below the EU average of EUR 17 100 per capita. In four outermost regions (French Guiana, Madeira, the Azores and the Canary Islands), the average net disposable income was very low, ranging between two-thirds and three-quarters of the EU average. In Mayotte, it was even less than half of the EU average. Likewise, all outermost regions except for Madeira had a proportion of people aged 15-29 years old neither in employment nor in education and training (NEET) above the EU average of 12.6%. The situation of young people is particularly dire in the French outermost regions, where this indicator reached very

high levels, in the range of two to three times the EU average value. Finally, all outermost regions, without exception, had an unemployment rate of people aged 20-64 years old above the EU average of 6.6%. In the four outermost regions (Réunion, Guadeloupe, the Canary Islands and French Guiana), this rate even hovers around 20%, and in Mayotte, it got close to hitting the 30% mark. The Portuguese outermost regions were the only two regions performing relatively well in that regard, with an unemployment rate of 7% to 8%.

#### Box 14: Prominent and interrelated socio-economic challenges in the Canary Islands

The productive structure of the Canary Islands' small and medium-sized enterprises (SMEs) is characterised by their very small size, with close to 96% of them having fewer than ten employees. This situation significantly affects various aspects, including productivity, employment opportunities, levels of specialisation, economies of scale and internationalisation possibilities, as the presence of large companies in this region is limited. Moreover, 56% of these SMEs are microsized, with no salaried employees. The region's active population has grown in the last 15 years, primarily driven by immigration. While the employment rate is close to ten percentage points higher in 2022 than it was a decade before, the unemployment rate remains above the level recorded at the beginning of the 2000s before the 2008-2010 economic crisis.

The region's economy faces productivity-related challenges, leading to low wages, limited GDP, and constrained economic dynamism. Competitiveness is another source of concern, with certain sectors requiring additional support, ultimately affecting social cohesion and shifting the problem towards moderate poverty. These challenges are closely related to labour market conditions, with a risk of exclusion due to the presence of pockets of low-skilled and professionally specialised active individuals, long-term unemployment situations and high job temporality. The region's inactive population (meaning people not engaged in work) exceeds 700 000 people and there are high rates of unemployment among women over 46 years of age and young people. Additionally, the Canary Islands rank as the second region with the lowest salaries nationwide, and a significant proportion of employment contracts are temporary (around 30%). The underground economy also plays a significant role in the region, accounting for approximately 26% of GDP in 2020 (CES, 2023). As a result, the Canary Islands, along with Andalusia and Extremadura, maintain the highest rate of population at risk of poverty in Spain, at 28.4% (EAPN, 2022).

Closely related to the poverty issue is that of education. The educational attainment level of the Canary Islands' population is lower than the national average across all educational stages. It shows low completion rates in vocational training and below-average international assessment results in various fields, especially in subjects like foreign languages, particularly when compared to the OECD average (PISA, 2022). Indeed, one of the region's core issues relates to the necessity to modernise career guidance services in line with current requirements by implementing an integrated approach that spans the entire education system. More crucially, the region's school dropout rate remains high, even though it has decreased significantly in recent years.

Source: authors' own elaboration based on Eurostat data (employment and unemployment rates by sex, age, educational attainment level, citizenship and NUTS 2 regions) and ISTAC (Tasa de actividad, empleo y paro según sexo. Comarcas de Canarias por trimestres, 2022)

#### Box 15: Persisting education and employment challenges in Réunion

In Réunion, the proportion of the working-age population in employment is significantly lower than the national average. In 2019, the region's employment rate of 15–64-year-olds was only 46%, 20 percentage points lower than the national level. It is also particularly low for women and young people, who are therefore very exposed to the risk of poverty when they do not live in a household with other people receiving an income from work. Indeed, Réunion's youth unemployment rate stands at 42% and the acquisition of basic skills remains a major challenge. In 2021, 41 000 young people aged 15 to 29 in Réunion were neither in employment, education nor training (NEET). They represent 26% of this age group, twice as many as in France, even though this proportion has decreased compared to 2019 (34%) thanks to the recent dynamism of employment linked to the development of training schemes. Overall, difficulties of integration into the labour market are still very marked for Réunion's population as a whole and, in particular, for its young people. Indeed, only 27% of young people aged 15 to 29 had a job in 2021, compared with a national average of 47% (INSEE, 2022).

Source: authors' own elaboration based on INSEE data

#### Box 16: The main drivers and structural challenges of the Azores' economy

Aside from transfers coming from the EU and the national government that do not show a significant impact on employment (Dentinho and Fortuna, 2019) as well as recourse to public debt (i.e. the use of borrowed money to finance economic activities), the economy of the Azores is driven by two main clusters of activity: the agro-industrial cluster and the tourism cluster. Even though these sectors reveal some external competitiveness, they are subjected to very strong external challenges. Regarding the agro-industrial cluster associated with the dairy value chain, for a long time there has been a low value-added contribution in the transformation of milk, possibly due to the external ownership of most factories and the monopolistic situation of the dairy industry on Terceira Island (Dentinho, 1996). Regarding tourism, there is a clear dependence on external factors, as demonstrated by the impact of the liberalisation of flights, the Covid-19 crisis, competition from other touristic destinations (Sass, Maciel and Dentinho, 2023) and some justifiable worries about the economic sustainability of the islands because tourism is a very competitive but also highly volatile activity. In particular, tourist destinations become unsustainable if they do not specialise, innovate and compete (Demeter, Fechner and Dolnicar, 2023).

Poverty is also a considerable concern since the Azores have been exhibiting one of the highest poverty risk indicators and one of the highest ratios of participation in national social income support programmes (Diogo, 2019). These concerns are amplified by other challenges related to low education and training performances, low productivity and early exit from the educational system, making the problems structural in nature. Not least, the weak development of the region's base sectors and the large negative impacts of public debt service costs that subtract resources from other functions of government are also fuelling its socio-economic vulnerability. Overall, the socio-economic fragilities of the archipelago have absorbed a considerable amount of available financial resources through a myriad of programmes, such as the reconstruction programme after the earthquakes in Terceira (1980), when 70% of the houses had to be rebuilt, and in Faial (1989), after the landslides in Ribeira Quente in São Miguel (1996) or the social programmes that complement national social initiatives to mitigate poverty.

Source: authors' own elaboration

Note: Transfers from the EU include Cohesion Policy funds, POSEI funds and the financial resources directly attributed to EU programmes that local agents benefit from. Transfers from the national government include the established revenue-sharing

arrangements and other transfers from the central government to promote economic convergence or help overcome natural disasters.

All these challenges are naturally reflected in key EU indices, such as the Regional Competitiveness Index (RCI), the regional Social Progress Index (SPI) and the regional European Quality of Governance Index (EQI). Indeed, all outermost regions feature in the bottom half of the EU in terms of regional competitiveness and social progress and all outermost regions, except Réunion and the Azores, feature in the bottom half of the EU in terms of quality of governance (Table 5). Some regions are even ranked in the bottom decile of the EU. For instance, French Guiana ranks 211<sup>th</sup> out of 234 regions in the RCI and 233<sup>rd</sup> out of 240 regions in the SPI, followed by Mayotte at the 234<sup>th</sup> position in the SPI. As a matter of fact, these two regions face major and diverse challenges ranging from deficient sanitation infrastructure to safety concerns, all of which are aggravated by mounting demographic pressure.

Outermost region	Regional Competitiveness Index (2022)		Social Progress Index (2020)		European Quality of Governance index (2021)	
	Score (EU=100)	Rank	Score (EU=66.7)	Rank	Score (EU=0)	Rank
Guadeloupe	75.8	190/234	64.3	150/240	-0.526	134/208
French Guiana	61.4	211/234	48.4	233/240	-0.660	143/208
Réunion	77.0	183/234	64.1	152/240	0.182	92/208
Martinique	87.7	150/234	64.4	149/240	-0.271	118/208
Mayotte	68.6	200/234	48.1	234/240	-1.159	176/208
Saint-Martin	Not available					
The Azores	65.3	208/234	58.0	199/240	-0.012	101/208
Madeira	77.5	181/234	59.9	186/240	-0.213	111/208
The Canary Islands	76.1	188/234	67.4	131/240	-0.515	131/208

Table 5: RCL	SPI and EQI scores a	nd rankings of the o	outermost regions
rubic britely		ia raintings of the	outermost regions.

Source: authors' own elaboration based on data from the European Commission's DG REGIO for the Regional Competitiveness Index and regional Social Progress Index and Charron et al. (2022) for the regional Quality of Governance index. Note: The total number of regions in the rankings does not necessarily correspond to the total number of NUTS 2 regions because some regions have been merged into larger metropolitan areas and/or into NUTS 1 regions. Data for Saint-Martin alone are not available because the region is merged with Guadeloupe into a single NUTS 2 region. The second row indicates the EU average value for each index: for the RCI, the EU average value is 100; for the SPI, it is 66.7 and for the EQI, it is 0. Hence, individual scores indicate how far or close a region is from the EU average.

## 3.3. Demographic trends and challenges

The outermost regions exhibit very different demographic profiles, both in terms of population size and population dynamics. For instance, Saint-Martin has only 36 000 inhabitants, while the Canary Islands' total population is 2.25 million (Table 6).

Outermostregion	Population	<b>Recent demographic trend</b>	
Guadeloupe	383 600	Decline	
French Guiana	296 058	Increase	
Réunion	869 993	Increase	
Martinique	352 205	Decline	
Mayotte	299 022	Increase	
Saint-Martin	36 000	Decline	
The Azores	236 488	Decline	
Madeira	251 182	Decline	
The Canary Islands	2 252 237	Increase	

#### Table 6: Population characteristics of the outermost regions

Source: authors' own elaboration based on data from the European Commission (Eurostat) and the French National Institute of Statistics and Economic Studies (Insee)

Note: While Eurostat groups Guadeloupe and Saint-Martin in a single NUTS 2 region, this table relies on national data to differentiate between the two regions. For population data, values refer to 2020 and 2022, depending on data availability.

Importantly, the population of all EU outermost regions combined has been increasing steadily over the past years, whereas the EU's total population has decreased in 2021 and 2022, even though not every single outermost region has experienced population growth in the last few years. Notably, the variation is significantly more pronounced in all outermost regions, in one direction or the other, than what has been observed at the national and EU levels (Figure 4).





Source: authors' own elaboration based on data from the European Commission (Eurostat), Population on 1 January by age, sex and NUTS 2 region (indicator code DEMO\_R\_D2JAN).

Note: Guadeloupe and Saint-Martin are grouped in a single NUTS 2 region. EU27 refers to the 27 Member States from 2020 onwards.

The demographic situation actually presents an extreme contrast between the regions that struggle to retain their population, especially young people (emigration), on the one hand, and those that face strong migratory pressure (immigration), on the other. Mayotte is certainly the most striking example of the latter, as its population has grown by slightly more than a third since it became an outermost

region of the EU, mostly due to high (illegal) immigration flows. It is noteworthy that the region has been experiencing daunting, persistent challenges in terms of migration, education, unemployment, poverty and safety for decades, as its population has been growing very fast (+3.8% year-on-year on average) and is overall very young (with a median age of 17.7 years, against a national average of 42.2 years).<sup>6</sup> Migrant integration is another crucial issue for a number of outermost regions: Mayotte, French Guiana and the Canary Islands are among the ten EU regions with the highest share of non-EU-born migrants, and in Mayotte, this share even exceeds 50%.<sup>7</sup> This causes major social and political tensions, exemplified by recent events such as the Wuambushu operation against illegal migration in the region.

#### Box 17: The role of migration in the population dynamics of the Canary Islands

From 2001 to 2023, the population of the Canary Islands has increased by 32% and now represents 4.6% of Spain's total population. This increase is explained fundamentally by foreign population dynamics. The improvement in the region's economic situation, driven by a tourism boom at the end of the last century, led to a high level of external exposure for the region and improved its attractiveness as a place to live. In 2000, there were 77 196 foreigners living in the region and in 2022, the figure had risen to 288 489. As for the geographic areas of origin, 43.7% of the foreign population that has settled in the Canary Islands is from the EU, followed by America (primarily South America) with 25.4% and the African continent with 10.3%. In short, this increase of 211 000 foreign residents explains 40% of the region's population growth.

Source: authors' own elaboration based on data from the Gobierno de Canarias and Consejo Económico y Social de Canarias

#### Box 18: Exodus of the Azores' young population

Between 2011 and 2021, the Azores lost 10 000 residents (around 4% of the population). Even though all islands of the archipelago have shown population decreases, the problem assumes additional relevance for the smaller islands. The population decline can be traced to the relatively poor economic performance of the region and the consequent exodus of the younger population seeking better and/or different employment opportunities, mostly in North America and Europe.

Source: authors' own elaboration based on data from Instituto Nacional de Estatística (Portugal)

#### Box 19: Demographic change in Réunion

When Réunion became a French department in 1946, its population was around 250 000. Today, the island has a population of 865 000 and continues to enjoy dynamic demographic growth. According to updated Insee projections that contrast with those of Eurostat, the island's population should reach one million by 2045. More precisely, while the population grew by an average of 1.2% per year between 1999 and 2013, the pace of growth is slowing, notably due to outmigration since 2015 and is projected to increase by just 0.7% per year between 2013 and 2050. Concurrently, the population is ageing as the region is entering its final phase of demographic transition (as is already the case in Martinique and soon Guadeloupe). The proportion of the population aged over 60 is set to double between 2013 and 2050, reaching around 25%. Taken together, these factors heighten the risk of increasing social inequalities.

Source: authors' own elaboration based on data from Insee

In most cases, the trends observed lately are set to continue in the coming decades. Indeed, population projections from Eurostat forecast a steady population decline in Guadeloupe, Martinique, the Azores and Madeira (in the range of -33% to -40% over 2019-2100) and sustained population growth in

<sup>&</sup>lt;sup>6</sup> Source: Eurostat, Population structure indicators by NUTS 2 region, year 2022, indicator code DEMO\_R\_PJANIND2

<sup>&</sup>lt;sup>7</sup> Source: Eurostat, Population by sex, age, country of birth, labour status and NUTS 2 regions, indicator code LFST\_R\_LFSD2PWC

Mayotte, French Guiana and Réunion, albeit at a considerably slower pace for the latter one than for the former two. Indeed, Mayotte's population should grow by 190% between 2019 and 2100 and thus almost triple in the space of 80 years. Likewise, the population of French Guiana is expected to more than double between 2019 and 2100. In that sametime span, Réunion's population is expected to grow by a mere 3%. As an exception to these steady trends, the Canary Islands' population is expected to reach a maximum around 2050 and start declining after that, meaning that the population size in 2100 should be of the same order of magnitude as in 2030 (Figure 5).



Figure 5: Population projections in the outermost regions (2030, 2050 and 2100)

Source: authors' own elaboration based on data from the European Commission (Eurostat), Population on 1st January by age, sex, type of projection and NUTS 3 region (indicator code PROJ\_19RP3).

Note: Guadeloupe and Saint-Martin are grouped in a single NUTS 2 region. These estimates correspond to Eurostat's baseline projections.

These demographic trends are likely to further reinforce the outermost regions' socio-economic vulnerabilities because of either a growing deficit of skills, human capital and workforce (in the case of population decline) or a stronger pressure on existing infrastructure and labour markets (in the case of fast-paced population growth), while their financing capacity to cope with the challenges arising from these demographic dynamics remains limited. Last but not least, these demographic trends are also affecting the structure of the regional populations. In particular, youth outmigration combined with underlying population ageing trends contributes to a rapidly rising old-age dependency ratio. This entails mounting socio-economic challenges and logically feeds back into the region's capacity to bolster economic growth. Indeed, population ageing requires further financing efforts for e.g. healthcare, leaving less room for transformative and innovative investments.

## 4. TERRITORIAL COHESION AND PROGRESS TOWARDS A SMARTER, GREENER, MORE CONNECTED AND MORE SOCIAL EUROPE

#### **KEY FINDINGS**

- In the past few decades, the development paths of the outermost regions have been heavily affected by both internal challenges and external shocks (e.g. the Great Recession or, more recently, the Covid-19 pandemic).
- Hence, while all outermost regions have experienced a continuous increase in GDP per capita in absolute terms between 2000 and 2021, only Mayotte (and, to a lesser extent, Martinique) have progressed steadily relative to the EU average, but starting from a very low level. Still, all the outermost regions demonstrate a GDP (in Purchasing Power Standards (PPS) per capita) below the EU average.
- Their persisting and wide-ranging socio-economic vulnerabilities have not only impacted their convergence processes in terms of social outcomes and economic output but also in matters of innovation, technology uptake and, consequently, competitiveness.
- Indeed, while some progress has been achieved by the outermost regions with regard to becoming smarter, greener, more connected and more social European regions, further considerable efforts are needed to meet EU policy objectives and targets.

## 4.1. Territorial cohesion issues in the outermost regions

#### 4.1.1. Convergence towards the EU average

The development paths of the outermost regions have been heavily affected by internal, structural and geographical challenges (see Chapter 3), but also by external shocks (e.g. the Great Recession or, more recently, the Covid-19 pandemic), which have proved difficult to cope with. As a result, the convergence process in the outermost regions has been mostly slow and irregular, if not reversed. Indeed, while all outermost regions experienced a continuous increase in GDP per capita (at current market prices<sup>8</sup>) between 2000 and 2021,<sup>9</sup> this increase was in most cases not sufficient to bridge the development gap with the rest of the EU. Apart from Mayotte, whose convergence process has been very dynamic over the past two decades, not least because it started from a considerably lower level, the outermost regions have made little progress in catching up with the rest of the EU. More specifically, the divergence process of French Guiana and the Canary Islands started as soon as 2002-2003, while the convergence process of Réunion and Madeira reversed around 2006, that of the Azores around 2009-2010 in the wake of the economic and financial crisis and that of Guadeloupe around 2016. In Martinique, the convergence process halted around 2014-2015 and there has since been neither clear-cut convergence nor divergence with respect to the EU average (Figures 6 to 13). Except for Mayotte, GDP at Purchasing Power Standards (PPS) per capita in the outermost regions ranged between 62% and 95% of the EU average in 2000. In 2021, it ranged between 44% and 72% of the EU average.

<sup>&</sup>lt;sup>8</sup> When measured in Purchasing Power Standards (PPS), the increase in GDP per capita has not always been continuous, but the overall positive growth trend was nonetheless evident for all EU outermost regions over the observation period.

<sup>&</sup>lt;sup>9</sup> Source: Eurostat (see information below the figures). Guadeloupe refers here to Guadeloupe and Saint-Martin combined. Recent data for Saint-Martin is not available, but national data (IEDOM, 2014) over the 2000-2010 decade points to a moderate increase in GDP per capita.
## Figure 6: GDP in PPS per capita of Guadeloupe as a percentage of the EU27 average



Figure 8: GDP in PPS per capita of Réunion as a percentage of the EU27 average



# Figure 10: GDP in PPS per capita of Mayotte as a percentage of the EU27 average



Figure 12: GDP in PPS per capita of Madeira as a percentage of the EU27 average



Figure 7: GDP in PPS per capita of French Guiana as a percentage of the EU27 average



Figure 9: GDP in PPS per capita of Martinique as a percentage of the EU27 average



Figure 11: GDP in PPS per capita of the Azores as a percentage of the EU27 average



Figure 13: GDP in PPS per capita of the Canary Islands as a percentage of the EU27 average



Source: authors' own elaboration based on data from the European Commission (Eurostat), Gross domestic product (GDP) at current market prices and PPS by NUTS 2 regions (indicator code nama\_10r\_2gdp).

Note: Guadeloupe and Saint-Martin are grouped in a single NUTS 2 region. EU27 refers to the 27 Member States from 2020 onwards. The scale for Mayotte is different from that for the other regions. Eurostat defines the Purchasing Power Standard (PPS) as an artificial currency unit that can buy the same amount of goods and services in each country. Hence, national account aggregates expressed in PPS are adjusted for price level differences across countries.

For a majority of the outermost regions, the level of GDP in PPS per capita relative to the EU average in 2021 is very close (i.e. only a few percentage points above or below) to that of 2000. Mayotte is the only outermost region with a noticeable catch-up record, but it is still lagging far behind the EU average. The Canary Islands, which were closest to the EU average at the beginning of the 2000s with a GDP in PPS per capita that peaked at 97% of the EU average, have experienced a staggering decline in the past 20 years, up to the point that they have recently been overtaken by Martinique, Madeira, the Azores and Guadeloupe.<sup>10</sup> In this region, whose economy relies significantly on tourism, the sharp, pandemicinduced drop in GDP in PPS per capita (as a percentage of the EU average) observed in 2020 was far from being overcome a year later. A study conducted for the European Commission (2022d) assesses the scope and scale of the pandemic's immediate impact (and the measures taken to mitigate it) in the outermost regions. It shows that in the Canary Islands, real GDP dropped by 20% in 2020, business confidence fell by 23% in the last guarter of 2020 compared to a year before, and the value of imports and exports declined by 26% and 29%, respectively, in 2020. Moreover, the tourism sector, which represents more than a third of the regional economy, was hit very hard as the total number of tourists decreased from 15.1 million in 2019 to 4.6 million in 2020. Logically, the pandemic had a significant adverse social impact on the labour force: unemployment rose sharply (+6.4 percentage points in the last quarter of 2020 compared to a year before), with tourism, trade and transport being the most impacted sectors.

The example of the Covid-19 pandemic shows that external shocks – whether global or more localised – can have a very differentiated impact on regions depending on aspects such as the structure of their economy and their fiscal capacity. Typically, this impact would also largely depend on a number of factors at the national level, i.e. factors specifically linked to how individual countries react to crises and the type of policy responses they put in place, including their capacity and resources to implement them. Indeed, the outermost regions are still reliant on financial transfers from their country's central government. For some regions, this reliance is substantial; hence, their socio-economic development path follows that of their country of origin, at least to some extent. For example, Spain and Portugal were – just like other southern European countries - particularly afflicted by the economic and financial crisis that unfolded in 2008-2009. Indeed, the Great Recession affected not only their outermost regions but the country as a whole and it is thus relevant to examine the convergence process of the outermost regions in the national context as well.

## 4.1.2. Convergence towards the respective national average

As a matter of fact, the Canary Islands and French Guiana are the only two outermost regions whose GDP in PPS per capita decreased over each decade relative to their country's average (Figure 14). Conversely, Martinique, Réunion and Mayotte saw an increase in GDP in PPS per capita relative to their country's average over each decade. Meanwhile, Guadeloupe, <sup>11</sup> the Azores and Madeira had higher levels of GDP in PPS per capita relative to their country's average in 2021 than in 2000, but not as high as they were in 2011, shortly after the peak of the Great Recession (when Madeira's GDP in PPS per capita was even slightly higher than the Portuguese average).

<sup>&</sup>lt;sup>10</sup> Guadeloupe refers here to Guadeloupe and Saint-Martin combined.

<sup>&</sup>lt;sup>11</sup> Ibid.



# Figure 14: GDP in PPS per capita of the outermost regions as a percentage of the respective national average (2001, 2011 and 2021)

Source: authors' own elaboration based on data from the European Commission (Eurostat), Gross domestic product (GDP) at current market prices and PPS by NUTS 2 regions (indicator code nama\_10r\_2gdp). Note: Guadeloupe and Saint-Martin are grouped in a single NUTS 2 region.

The main factor that explains the poor long-term performance of the Canary Islands relative to national and EU averages relates to the significant change in both the number and profile of the region's population. Indeed, the population grew from 1.7 million in 2003 to 2.2 million in 2022, primarily due to immigration. The increase in population logically entails an increase in the denominator of the GDP per capita ratio. At the same time, when looking at the impact of immigration on the numerator (overall GDP contribution), it becomes apparent that many European migrants moving to the Canary Islands are retirees, with a limited contribution to the region's GDP. Additionally, the workforce attracted from other countries often lacks specialised skills and typically works in the service industry or construction, thereby making a relatively modest total contribution to the region's GDP. Lastly, some immigrants move to the region for family reunification purposes and their impact on GDP and the formal economy is often less significant. The relatively small size of the region's businesses, its workforce generally characterised by low qualifications and specialisation and the fact that the regional economy has already reached the zenith of its development cycle in its primary economic sector, namely tourism, have further curtailed regional growth. In particular, the reliance of the Canary Islands on a traditional tourism model, coupled with a dearth of innovation to boost productivity and competitiveness, is hindering its growth prospects. These factors come in addition to the lingering effects of structural deficiencies related to education, labour market conditions, administrative capacity and institutional quality, among other socio-economic factors.

Likewise, the evolution of the Azores' GDP in PPS per capita relative to both the EU's and Portugal's averages indicates that the region did not fare well after the economic and financial crisis, despite the recovery that was observed in the tourism sector after the 2015 liberalisation (the year 2011, one should recall, was the peak of the financial crisis in Portugal, which led to the Troika intervention, lasting until 2014). This hints at some deep-rooted problems that undermine the region's convergence path in spite of the development programmes that have been implemented. Fixed capital formation in the Azores was broadly on the rise from 1995 to 2010, but plummeted afterwards.<sup>12</sup> These results might not be detached from the way the government chose where to invest available resources. The mix of

<sup>&</sup>lt;sup>12</sup> Source of the data: SREA (Serviço Regional de Estatística dos Açores). Note: The OECD defines gross fixed capital formation as the 'acquisition of produced assets (including purchases of second-hand assets), including the production of such assets by producers for their own use, minus disposals' (Source: <u>https://data.oecd.org/qdp/investment-qfcf.htm</u>).

interventions in the region was found to be biased towards responding to the social emergency caused by very high unemployment rates, which were in turn due to the collapse of the construction sector without sufficient investment in fixed capital formation.

While the material success of Réunion (in terms of e.g. consumption levels and infrastructure) is evident, its main factors of economic fragility concern human capacity (training and qualification of talent) as well as the vulnerability of the functioning of its economy, which is largely based on sectors irrigated by public transfers and concentrated on a small number of growth drivers. In general, crises such as the 2008-2009 financial crisis and the social crisis of the "yellow vests" (with their impact on the widening gap in terms of GDP per capita) as well as the more recent crisis of the Covid-19 pandemic, have highlighted this vulnerability and the difficulty for the region in continuing to catch up with the European average (Dentinho and Reid, 2021). More specifically, the slowdown in the region's convergence process can be explained by several factors:

- The weaker capacity of traditional economic drivers (construction, agro-industry, traditional tourism) to maintain a sustained growth dynamic in an economy where internal development opportunities are shrinking, on the one hand, and to cope with symmetrical or asymmetrical shocks, on the other hand.
- The occurrence of several crises hitting the regional economy in general (e.g. the 2008-2012 financial crisis, the "yellow vest" crisis, the Covid-19 pandemic crisis) or certain key economic sectors only (e.g. the chikungunya disease and the shark crisis and their impact on tourism).
- The effects associated with an economy that is still heavily dependent on public transfers, which can generate risks in terms of inefficient allocation of resources.
- The continuously slow deployment of new growth drivers based on innovation and responses to new climate challenges (linked to the energy transition economy, circular economy, digital economy, blue economy, etc.). These new drivers, whose job content is still uncertain, cannot be substitutes for traditional drivers (yet). Their development is also hampered by the difficulty of finding sufficient highly qualified human capital and the limited diffusion of the effects of innovation across all sectors of the economy.
- The persistent presence of a significant proportion of the population exposed to various forms of poverty (income, housing and immediate consumption choices). Indeed, the latest regional study from INSEE (2023a) shows that Réunion is the third poorest department in France.
- The lack of coherence between the different levels of public decision-making and/or stakeholders engaged in territorial governance sometimes hinders the economy's responsiveness to crises and longer-term challenges.

European, national and local public authorities are not ignoring these facts. They are urging development stakeholders to take action to overcome the barriers holding back the emergence of more resilient growth. In particular, local authorities are also stressing the need for proactive policies linked to economic and social transition, particularly in the areas of energy, waste management, mobility, food self-sufficiency and entrepreneurship.

## 4.1.3. Intra-regional disparities and cohesion issues

Finally, it is worth mentioning the existence of intra-regional economic disparities and social inequalities in some of the outermost regions, where densely populated areas channel not only the effects of innovation but also large immigration flows, as can be seen in the example of the Canary Islands. Geographical characteristics play an important role in that respect.

## Box 20: Population concentration and dispersion across the Canary Islands

As a whole, the Canary Islands have been experiencing significant population growth, but some islands in the Canarian archipelago (e.g. El Hierro, La Palma and Gomera) have seen their populations stagnate or even decline moderately. On the one hand, these areas are struggling to find opportunities within the new service economy. On the other hand, the main urban areas of the two main islands (i.e. Gran Canaria and Tenerife) are sometimes deemed underprovided for compared to those less populated areas, as they receive limited and lower-quality public services and infrastructure, especially in peripheral neighbourhoods.

In the Canary Islands, there are significant population concentrations in the capitals of each of the islands, with Las Palmas de Gran Canaria having a population of 382 283 inhabitants and Santa Cruz de Tenerife having a population of 205 279 inhabitants. In particular, these large cities have absorbed a significant amount of immigration. These population hubs also include a significant proportion of the population at risk of exclusion or currently experiencing exclusion, with a notable increase in recent years due to the economic crises.

Notwithstanding these hubs, the region's overall population is scattered across the Canary Islands. This territorial and demographic structure affects the coordination and organisation of socioeconomic resources as well as the development of infrastructure such as healthcare, education and transportation. These challenges are further compounded by the rugged geomorphological features of the Canary Islands, as the region is characterised by mountainous terrain with a significant presence of volcanoes and high coastlines.

Source: authors' own elaboration

### Box 21: Territorial cohesion and disparities in the Azores

The only analysis of intra-regional disparities in the Azores was authored by the regional statistical services (SREA, 2016) and covers the period 1980-2010. This analysis uses a composite index of intra-regional development based on three components: economic competitiveness ('Smart Growth' or 'Qualitative Islands'), social inclusion ('Inclusive Growth' or 'Equal Opportunities Islands') and environmental sustainability ('Sustainable Growth' or 'Green Islands'). According to this index, all islands of the Azorean archipelago improved their standing between 2000 and 2010, except São Miguel, the largest island of the archipelago. Looking at the different components of the composite index, all islands, except Graciosa - one of the smaller islands - are at or around 95% of the regional average, suggesting a homogeneous level of development within the archipelago. Graciosa fares the worst in all components, while São Miguel fares better than the average only in the economic competitiveness component, exhibiting, together with Graciosa, one of the worst values in the components related to social cohesion and environmental sustainability. Since São Miguel accounts for more than half of the Azorean population and economy, it has a strong impact on the overall results. While the data is somewhat outdated, it is deemed a good approximation of the current situation in the archipelago. Still, further data collection would allow for a more recent, accurate assessment of the issue.

Source: authors' own elaboration based on data from the Serviço Regional de Estatística dos Açores (SREA)

The impact of successive crises (such as the financial crisis starting in 2008 and prolonged with the Troika intervention in the case of Portugal or the crisis caused by the Covid-19 pandemic) on the outermostregions, combined with, for the majority of them, a long-term slowdown in the key growth drivers, calls for tailor-made policies in favour of innovation and competitiveness. Importantly, these policies should bring about sustainable and inclusive effects in order to address territorial cohesion at

all levels of governance: the EU level, the national level and the regional and local levels. In particular, boosting education and training, increasing investments in research and innovation and improving institutional quality are fundamental for less developed regions, such as most of the outermost regions, to avoid falling into or staying in a so-called development trap (European Commission, 2022c).

## 4.1.4. Measuring cohesion with beyond-GDP indicators

Nonetheless, indicators of economic development – first and foremost GDP per capita - cannot suffice to depict the socio-economic situation of the outermost regions and the quality of life of their populations. Indeed, GDP is not a suitable indicator for measuring (and assessing the progress made towards) key societal goals such as well-being and sustainability (European Commission, 2013), hence the need for more qualitative indicators that capture citizens' perceptions. The Eurobarometer series 'Public opinion in the EU regions' released by the European Commission at regular time intervals offers additional insights into social and economic progress at the regional level, including in the outermost regions. It also sheds light on key socio-economic issues as perceived by their inhabitants.

In those surveys, respondents from the outermost regions reported chiefly a stagnation or amelioration of their quality of life in the past decade, with a strong upswing in 2021 compared to 2018 in those regions that had the lowest ratings in 2018 (Figure 15). In Réunion, the Azores, Madeira and the Canary Islands, the most recent perceptions of quality of life are remarkably close to average EU-wide perceptions. Still, the reported quality of life in the French outermost regions other than Réunion remains far below the EU average. For instance, 55% of the surveyed respondents in Guadeloupe considered their quality of life to be 'rather good' or 'very good' in 2021, against an EU average of 84%. Likewise, that share was 68% in French Guiana, 65% in Martinique and only 43% in Mayotte.



#### Figure 15: Citizens' perceptions of their quality of life in the outermost regions

How would you judge the current situation in: the quality of life in your region? Share of respondents who answered either 'rather good' or 'very good'

Source: authors' own elaboration based on data from the European Commission (Eurobarometer series 'Public opinion in the EU regions').

Note: Guadeloupe and Saint-Martin are grouped in a single NUTS 2 region. Percentages refer to the ratio of the sum of 'very good' and 'rather good' answers over the total number of answers other than 'I don't know'.

Furthermore, survey respondents in the outermost regions reported an overall improvement in the economic situation of their region, with the most impressive improvement reported in Réunion

(revealing the contrast between, on the one hand, the situation of poverty affecting the poor and unemployed and, on the other hand, the impression of an overall improvement in living standards over the last few years – before the Covid-19 pandemic hit), Madeira and the Canary Islands – albeit with a drop in 2021 for the latter, mirroring the impact of Covid-19 pandemic on the tourism-driven economy (Figure 16). Except for the Portuguese outermost regions, the perception of the economic situation in the outermost regions is, in all survey years, significantly more negative than what is reported at the EU level. For instance, only 29% of the surveyed respondents in Guadeloupe considered the situation of the regional economy to be 'rather good' or 'very good' in 2021, against an EU average of 70%.



#### Figure 16: Citizens' perceptions of the situation of the economy in the outermost regions

Source: authors' own elaboration based on data from the European Commission (Eurobarometer series 'Public opinion in the EU regions').

Note: Guadeloupe and Saint-Martin are grouped in a single NUTS 2 region.

With regard to the needs perceived by the local population, the Eurobarometer survey series provides an assessment of the most important issues in the outermost regions according to their inhabitants. In 2021, survey respondents in the outermost regions overwhelmingly indicated that the economic situation and unemployment were the most important issues facing their regions (Figure 17). Health and cost of living were also often mentioned by survey respondents across several outermost regions. In Mayotte, French Guiana and the Canary Islands – the outermost regions with the largest demographic growth in recent years - immigration appeared to be a very prominent issue, along with crime in the former two. On the other hand, housing and transport were less frequently mentioned by survey respondents. Similarly, outmigration, education and climate change were often not identified as the most important issues, despite the associated challenges (see Chapter 3).





Source: authors' own elaboration based on data from the European Commission (Eurobarometer series 'Public opinion in the EU regions').

Note: Guadeloupe and Saint-Martin are grouped in a single NUTS 2 region. The data corresponds to the year 2021. Percentages add up to more than 100% because respondents were asked to choose more than one option.

Importantly, these surveys do not reflect the most recent developments that impinge on the quality of life in one or more outermost regions. In particular, inflation has generally hit the outermost regions to a greater extent than their Member States: in 2022, consumer prices in the French outermost regions were higher by 9% (in Réunion) to 16% (in Guadeloupe) than in metropolitan France (INSEE, 2023b). Likewise, the annual rate of the consumer price index remains higher in the Canary Islands (3.6% in July 2023) than in Spain as a whole (2.3%) (INE, 2023). Only in Madeira and the Azores was it of a similar order of magnitude to the national average (Serviço Regional de Estatística dos Açores, 2023).

# 4.2. Progress towards a smarter, greener, more connected and more social Europe

The persistent and wide-ranging socio-economic vulnerabilities of the outermost regions have not only impacted their convergence processes in terms of social outcomes and economic output but also in matters of innovation, technology uptake and, consequently, competitiveness (see Chapter 3). Indeed, the proportion of people employed in high-value-added, high-technology sectors in the outermost regions has remained far below the EU average and without any clear progression in recent years.<sup>13</sup> The same observation applies to Gross Domestic Expenditure on Research & Development (R&D) (GERD).<sup>14</sup> This has, in turn, also affected their progress on the twin (green and digital) transition path. For instance, the digitalisation process has demonstrated mixed results in the outermost regions: on the one hand, access to digital services has increased dramatically - indeed, in some outermost regions, the proportion of households with broadband access more than doubled in the decade from 2007 to 2017 (Figure 18) – but on the other hand, the use of digital services remains limited.

Figure 18: Proportion of households with broadband access in the Spanish and Portuguese outermost regions (2007-2021)



Source: authors' own elaboration based on data from the European Commission (Eurostat), households with broadband access (indicator code isoc\_r\_broad\_h).

Note: The French outermost regions are not depicted due to data gaps.

#### Box 22: Digital services in the Canary Islands

While some progress has been made in strengthening and transforming digital services in the Canary Islands, particularly in areas such as e-health, e-culture, e-education and e-administration, these advancements remain modest, with less than 40% of citizens actively engaging electronically with administrative services. Indeed, most of the population either does not use digital services with the administration or uses them very infrequently. More generally, there is a concerning digital divide within the population, which can exacerbate social exclusion, hence the need to encourage the development of digital skills. Of note, there are ongoing discussions with the central government regarding the development of a specific telecommunications plan for the Canary Islands within the national Digital Agenda (Sixth Additional Provision).

Source: authors' own elaboration based on data from the Gobierno de Canarias (2023)

<sup>&</sup>lt;sup>13</sup> Source: Eurostat, Employment in technology and knowledge-intensive sectors by NUTS 2 regions and sex (from 2008 onwards, NACE Rev. 2), indicator code htec\_emp\_reg2. Data is only available for some outermost regions (Guadeloupe, Réunion, Martinique and the Canary Islands) and some years.

<sup>&</sup>lt;sup>14</sup> Source: Eurostat, GERD by sector of performance and NUTS 2 regions, indicator code rd\_e\_gerdreg. GERD for all sectors, measured in Euro per capita. Data is only available for some outermost regions (the Azores, Madeira and the Canary Islands) and some years.

At the same time, connectivity and mobility are of tantamount importance for the outermost regions' development since their accessibility is naturally hindered by geography. These regions are insular (except French Guiana), remote from the European continent and often have a topography that makes intra-regional transportation difficult (see Chapters 1 and 3).

In that regard, it is worth noting the staggering increase in road infrastructure and air transport observed across almost all outermost regions in the last two decades (Figure 19). The largest increase in the number of passengers carried by air transport has been recorded in the Azores, where this number grew from close to 0.8 million in 2000 to over 2.8 million in 2019, just before the Covid-19 outbreak, representing a 258% increase over the period. It fell to 1 million in 2020 and increased again to 1.7 million in 2022. In absolute numbers, the Canary Islands are the leading region, with 40 million air passengers recorded in 2019, up from 24.7 million in 2000 (62% increase). This number dropped to 14.3 million in 2020 and increased again to 19.5 million in 2021, barely half of its 2019 value. In terms of road network, French Guiana recorded a tremendous increase from a total length of 1 236 km in 2000 to 2 420 km in 2021, representing a 96% increase over the period. In other French outermost regions, the increase was also notable, from 25% in Guadeloupe (between 2014 and 2021 only) to 42% in Martinique (between 2000 and 2021).



Figure 19: Change in the number of air passengers and length of road network in the outermost regions (2000-2019 and 2000-2021)

Source: authors' own elaboration based on data from the European Commission (Eurostat), road, rail and navigable inland waterways networks by NUTS 2 regions (indicator code tran\_r\_net) and air transport of passengers by NUTS 2 regions (indicator code tran\_r\_net) and air transport of passengers by NUTS 2 regions (indicator code tran\_r\_net) and air transport of passengers by NUTS 2 regions (indicator code tran\_r\_net) and air transport of passengers by NUTS 2 regions (indicator code tran\_r\_net) and air transport of passengers by NUTS 2 regions (indicator code tran\_r\_net) and air transport of passengers by NUTS 2 regions (indicator code tran\_r\_net) and air transport of passengers by NUTS 2 regions (indicator code tran\_r\_net) and air transport of passengers by NUTS 2 regions (indicator code tran\_r\_net) and air transport of passengers by NUTS 2 regions (indicator code tran\_r\_net) and air transport of passengers by NUTS 2 regions (indicator code tran\_r\_net) and air transport of passengers by NUTS 2 regions (indicator code tran\_r\_net) and air transport of passengers by NUTS 2 regions (indicator code tran\_r\_net) and air transport of passengers by NUTS 2 regions (indicator code tran\_r\_net) and air transport of passengers by NUTS 2 regions (indicator code tran\_r\_net) and air transport of passengers by NUTS 2 regions (indicator code tran\_r\_net) and air transport of passengers by NUTS 2 regions (indicator code tran\_r\_net) and air transport of passengers by NUTS 2 regions (indicator code tran\_r\_net) and air transport of passengers by NUTS 2 regions (indicator code tran\_r\_net) and air transport of passengers by NUTS 2 regions (indicator code tran\_r\_net) and air transport of passengers by NUTS 2 regions (indicator code tran\_r\_net) and air transport of passengers by NUTS 2 regions (indicator code tran\_r\_net) and air transport of passengers by NUTS 2 regions (indicator code tran\_r\_net) and air transport of passengers by NUTS 2 regions (indicator code tran\_r\_net) and air transport of passengers and air transport of passengers and

Note: The road network consists of both motorways and other types of roads. Guadeloupe and Saint-Martin are grouped in a single NUTS 2 region. Data for the change in the number of air passengers in Mayotte corresponds to the change over the period 2014-2019, due to data gaps. Data for the change in the length of the road network in Guadeloupe corresponds to the change over the period 2014-2021, due to data gaps. No data on the road network is available for the Portuguese outermost regions and for Mayotte before 2017. Eurostat data can differ from that from national sources.

Besides, the geographic features of the outermost regions render their transition to climate neutrality particularly challenging. While their geographic location endows them with major renewable energy potential (see Chapter 2), their topography, insularity and remoteness translate into additional barriers to achieving cost-effective low-carbon energy networks. In particular, the outermost regions are still largely reliant on imported fossil fuels to meet their energy needs. In short, decoupling economic growth from (carbon-intensive) energy consumption has been and remains one of the main challenges

facing the outermost regions in overcoming their economic backwardness. Martinique, however, stands out as an outermost region that has overcome this challenge with the strongest catch-up records: While its GDP (in PPS per capita, both in absolute terms and relative to the EU average) has been increasing, its carbon footprint (in tonnes of carbon dioxide (CO<sub>2</sub>) per capita) has remained stable (Figure 20). In fact, its growing energy demand has been provided for by renewables, whose share in the region's final energy consumption has increased from 2.1% in 2008 to around 4% between 2015 and 2017 and to 5.5% in 2018 and 9.6% in 2019 (OTTEE, 2020).



Figure 20: Evolution of GDP and carbon emissions per capita in Martinique (2008-2018)

Source: authors' own elaboration based on data from the European Commission (Eurostat), gross domestic product (GDP) at current market prices and PPS by NUTS 2 regions (indicator code nama\_10r\_2gdp) and (OTTEE, 2020). Note: The left-hand axis refers to GDP in PPS per capita (blue line) and the right-hand axis refers to carbon emissions per capita (yellow line).

More generally, the outermost regions are faced with the need to improve the production and utilisation of energy resources. In the Canary Islands, for instance, the capacity to store the energy generated from renewable sources is lacking. This issue is further exacerbated by the presence of small, isolated electrical systems that are very difficult to interconnect due to the great depth of the seabed, leading to additional costs in electricity production. Reinforcing the networking of energy systems and interconnections between islands is thus a key aspect of the green transition.

Hence, while some progress has been achieved by the outermost regions with regard to becoming smarter, greener, more connected and more social European regions, further considerable efforts are needed to meet EU policy objectives and targets (linked to e.g. the new European Skills Agenda, the European Pillar of Social Rights Action Plan, the European Green Deal and the EU's digital strategy). A technical note from the Conference of Peripheral Maritime Regions' Islands Commission (Guzzon, Vera Paz and Buonaiuto, 2022) reviews the attention paid to the outermost regions in the respective Member States' National Recovery and Resilience Plans (NRRPs). It reports that "[the outermost regions] are considered in varying ways depending on the country. France's and Portugal's NRRPs strongly consider their outermost regions. In contrast, there is no specific reference to the Canary Islands in Spain's NRRP. The French NRRP, of which EUR 18 billion in green investments will support climate objectives, includes a series of measures specifically tailored to the outermost regions, such as the modernisation of water distribution systems, hospital infrastructure, employment and digital skills policies and support for transport projects carried out by local authorities. Similarly, Portugal has given the autonomous regions of Madeira and Azores a crucial portfolio, allocating specific investments to the energy transition (and water management and infrastructure in Madeira)". In many cases, the financial capacity of the outermost regions is a major constraint (i.e. an important limiting factor) to making significant progress towards the smarter, greener, more connected and more social objectives. The potential contribution of these objectives to the socio-economic development of the regions is, therefore, a key criterion for policy-setting and policy-making.

In the Azores, the 'smarter' objective is clearly linked to competitiveness on the global stage and has been embraced by regional policy-makers as such, albeit with very scarce resources to overcome the existing deficiencies at this level. The objective has been clearly assumed, but the available financial resources are not sufficient, not only to acquire assets and services but also to invest in the necessary training for the challenge ahead. The 'greener' objective has also been clearly assumed in all national and regional policies, including strategies linked to the circular economy and renewable energies. This objective, however, will tend to contribute insufficiently to enhancing the competitiveness of the region since it only implies that the region is following what the rest of Europe is doing in this regard, without any competitiveness 'leap-frogging' that would allow the region to catch up with its peers. To truly enhance competitiveness, the region might need to identify and implement strategies that go beyond established practices and address its particular circumstances or challenges. The 'more connected' objective is fundamental for a remote island region with limited transport options (air travel for passengers, sea transport for goods and submarine cables for telecommunications). Infrastructure has improved in these areas but is still far from being up to the level of continental competitiveness. The 'social' objective is a constant in regional policy but is constrained by the capacity of the region to generate its own revenues and by the limitations of national and EU transfers. The budget, as it currently stands, has been insufficient to achieve better results and improve the poor relative standings of the Azores.

The successful transition of Réunion's economic model cannot relysolely on traditional internal drivers and the local market, which will be saturated and/or, on demand, financed by financial transfers from the French State and the EU. For almost two decades now, the region has been striving to reconcile economic growth and environmental protection through its own regional strategies as well as European and national programmes (dedicated to e.g. the energy transition, the preservation and restoration of biodiversity, support for innovative companies and health research on diseases affecting the population of Réunion like diabetes, kidney failure and chikungunya (a virus transmitted by mosquitoes)). The need to do so is even more pressing today, as the impact of climate change is worsening. Réunion must therefore continue to invest in a smarter, greener and more digital economy to become a low-carbon economy. Its efforts to do so are already noticeable. As specified in the multiyear energy plan adopted in April 2022 (*Décret 2022-575 du 20 avril 2022 relatif à la programmation pluriannuelle de l'énergie de La Réunion*), the island is forging ahead towards 100% renewable electricity production. It is also committed to preserving its biodiversity and is moving towards self-sufficiency in food and waste management. On the digital front, the island already boasts a high-quality infrastructure network.

However, these achievements are fragile, and further efforts must respond to a number of unique challenges: isolation, lack of interconnectivity, the morphology of the territory, the critical size of markets, etc. Leveraging innovation and disseminating it throughout the regional economy is of prime importance to accelerate the development of a smarter, greener and more connected economy. The same applies to raising the quality of territorial governance (Charron et al., 2022), with the aim of achieving greater coherence and a long-term vision.

Finally, if the region is to achieve the objectives set out by the EU for 2030 and a fortiori for 2050, these conditions are necessary but not necessarily sufficient unless the population is involved in these transformations, a significant challenge that demands inclusive progress to ensure no one is left behind. Reconciling sustainable growth and social inclusion is imperative, even more so as the region's social situation remains volatile (Rodríguez-Pose et al., 2023a and Rodríguez-Pose et al., 2023b). In this respect, Réunion has many assets. The dynamism of its demography, while it can be seen as a

challenge, should also be seen as a support for the dynamism of its economy, enabling it to gradually build up a working population with up-to-date skills for the future. Similarly, Réunion's economy is not new to innovation. In the mid-2000s, an innovation ecosystem began to take shape, bringing together research institutions and private and public stakeholders, among others. Since the launch of this ecosystem, innovation competitions have enabled project leaders to advance solutions in the fields of energy transition, social innovation, value-added agricultural production, etc. This nurtures a constant flow of initiatives responding to the various challenges facing Réunion's economy and society. At the same time, a change in mindset is developing, with the aim of turning every constraint or challenge into a source of opportunity. Even if there is still a long way to go, this is the mindset that is currently permeating the territory in the face of current challenges. This dynamic is also supported by a local entrepreneurial dynamism that is attracting a growing proportion of the working population tempted by the entrepreneurial adventure (cf. the Smart Specialisation Strategy of Réunion and the document produced by the Regional Council (2018)). The region has therefore come a long way, since up until a few years ago, the ambition to become a civil servant dominated for a large proportion of young people.

All in all, the achievements of the outermost regions in the pursuit of the smarter, greener, more connected and more social objectives are mixed. On the one hand, the progress made in the field of broadband access and transport connectivity has been sizeable, especially considering the remoteness and insularity of (most of) the outermost regions. At the same time, the digital transition has not yet permeated all sectors of the outermost regions' economies, prompting the need for further efforts to stimulate and roll out innovation technologies and services. On the other hand, the progress made in relation to social and economic conditions (poverty alleviation, employment, education, etc.) has been overall limited, largely because of financial constraints combined with the lasting effects of socio-economic crises and demographic challenges. As for the green transition, the outermost regions are faced with a quandary: fostering economic growth while reducing their carbon footprint – a major challenge given that these regions rely extensively on imported fossil fuels for their energy supply, air transport for tourism and maritime transport for trade in goods, with no option for rail transportation. Hence, much remains to be done to make their economy climate-neutral, inclusive and resilient. Last but not least, this will require massive investments to harness their renewable energy potential and ensure the sustainability of their growth achievements.

## 5. COHESION POLICY AND ITS COMPLEMENTARITY WITH OTHER STRATEGIES

## KEY FINDINGS

- Cohesion Policy represents a major source of investment for the outermost regions, the majority of which are categorised as less developed regions. In total, there were 13 regional Cohesion Policy programmes implemented in the outermost regions in the programming period 2014-2020 for a total of around EUR 8.6 billion (including specific allocations and REACT-EU). In addition, there were seven cross-border and transnational Interreg programmes covering the outermost regions.
- In the programming period 2021-2027, there are ten regional Cohesion Policy programmes (most of them combining ERDF and ESF+) as well as five cross-border and transnational Interreg programmes grouped under a single strand.
- The implementation of Cohesion Policy in the outermost regions has been marked by numerous challenges, chiefly pertaining to management difficulties and limited capacity on the part of beneficiaries, thereby leading to delayed funding absorption and/or lower impact. Still, the impact of Cohesion Policy on regional socio-economic development is far from insignificant.
- The use of place-based, tailor-made approaches (as in Smart Specialisation Strategies), the territorialisation of Cohesion Policy funding management and the complementarity between Cohesion Policy programmes and other support programmes are determinants of the outermost regions' economic catch-up.

## 5.1. Cohesion Policy implementation in the outermost regions

The EU Cohesion Policy is the EU's main investment policy to bolster regional development through job creation, business competitiveness, infrastructure development, etc. and thereby improve citizens' quality of life. Support from the EU Cohesion Policy is delivered through the ESIF and, together with the Common Agriculture Policy (CAP), represents the lion's share of the EU budget. In the 2014-2020 programming period, the outermost regions were allocated an initial total amount of EUR 13.8 billion under the ESIF (excluding REACT-EU resources) and the CAP-related POSEI.

## 5.1.1. Allocation of Cohesion Policy funding across operational programmes

In detail, ESIF is allocated to EU Member States and regions according to various criteria, one of which is the level of socio-economic development defined by GDP (in PPS per capita) relative to the EU average. In the 2014-2020 programming period, most of the outermost regions were classified as 'less developed regions' (i.e. with a GDP per capita of less than 75% of the EU average).<sup>15</sup> Only the Canary Islands were classified as a 'transition region' (i.e. with a GDP per capita between 75% and 90% of the EU average) and Madeira as a 'more developed region' (i.e. with a GDP per capita above 90% of the EU average). The outermost regions thus had different EU Cohesion Policy operational programmes with dedicated objectives and budgets (for an example of budget allocation per theme, see Figure 21 in Annex), which ultimately co-financed a wide range of operations (or projects). Furthermore, the

<sup>&</sup>lt;sup>15</sup> In the 2014-2020 programming period, the EU average refers to the EU27, including the UK and excluding Croatia.

outermost regions benefited from REACT-EU resources with an additional amount of EUR 146.4 million (in 2018 constant prices) in addition to a share of the respective national envelopes, distributed as follows:

- EUR 65.9 million for the French outermost regions,
- EUR 65.6 million for the Canary Islands,
- EUR 14.9 million for Madeira and the Azores.

To illustrate those projects, there are currently 3 857 completed and 51 ongoing operations registered solely for the intervention field 'compensation costs due to market size' in the outermost regions in the 2014-2020 period, for a total value of close to EUR 955 million.<sup>16</sup> Examples of EU co-financed operations in the programming period 2014-2020 include:<sup>17</sup>

- Operating aid to overcome the permanent and structural difficulties faced by firms in Madeira and the Azores,
- Compensation for additional transport costs of productive inputs needed by firms in Réunion,
- Compensation for additional freight costs incurred by firms in Guadeloupe and Martinique due to ultra-periphery,
- Port infrastructure improvements (bollards, tunnels, piers, etc.) in the Canary Islands.

In total, there were 13 different regional operational programmes co-financed through the EU Cohesion Policy across the nine outermost regions in the 2014-2020 programming period (Table 6) for a total of around EUR 8.6 billion (including specific allocations and REACT-EU).

Outermost region	Category of region	Operational programmes	EU funding (ESIF including REACT-EU)
Guadeloupe	Less developed	Operational Programme ERDF-ESF Guadeloupe et St Martin Etat 2014-2020	EUR 262 million (shared with Saint- Martin)
		Operational Programme ERDF-ESF-YEI Guadeloupe (Conseil Régional) 2014-2020	EUR 784 million
Saint-Martin	Merged with Guadeloupe	Operational Programme ERDF-ESF Guadeloupe et St Martin Etat 2014-2020	EUR 262 million (shared with Guadeloupe)
E LC.	Less developed	Operational Programme Guyane (Conseil Régional) ERDF-ESF 2014-2020	EUR 525 million
French Guiana		Operational Programme Guyane Etat ESF 2014-2020	EUR 110 million
Réunion	Less developed	Operational Programme La Réunion (Conseil Régional) ERDF 2014-2020	EUR 1 471 million
		Operational Programme La Réunion Etat ESF 2014-2020	EUR 649 million

<sup>&</sup>lt;sup>16</sup> Source: European Commission's Cohesion Data Platform, 2014-2020 ERDF-CF Monitoring data on operations: <u>https://cohesion.data.ec.europa.eu/stories/s/2014-2020-Data-on-operations-WP2-public-/h9bm-ur7f</u>

<sup>&</sup>lt;sup>17</sup> Source: European Commission's Kohesio platform, <u>https://kohesio.ec.europa.eu/en/</u>

Martinique	Less developed	Operational Programme ESF Martinique Etat 2014-2020	EUR 159 million
		Operational Programme ERDF-ESF-YEI Martinique (Conseil régional) 2014-2020	EUR 674 million
Mayotte	Less developed	Operational Programme ERDF-ESF Mayotte Etat 2014-2020	EUR 350 million
The Azores	Less developed	Regional Operational Programme Azores (Autonomous Region)	EUR 1 266 million
Madeira	More developed	Regional Operational Programme Madeira (Autonomous Region)	EUR 487 million
Canary Islands	Transition	Operational Programme ERDF Canary Islands 2014-2020	EUR 1 439 million
		Operational Programme ESF Canary Islands 2014-2020	EUR 402 million

Source: authors' own elaboration based on information from the European Commission, DG REGIO database of operational programmes.

Moreover, these regions benefited from further Cohesion Policy support through their participation in national programmes and European Territorial Cooperation (Interreg) programmes. Indeed, the EU Cohesion Policy also supports a wide range of cross-border, transnational and interregional programmes to help neighbouring regions and countries tackle common challenges (Table 7).

Table 8: 2014-2020 Interreg programmes cov	vering the outermost regions	

Programme	Regions and countries covered	EU funding
Interreg Caribbean Area	Guadeloupe, French Guiana, Martinique and Saint- Martin + 41 neighbouring countries and territories	EUR 63 million
Interreg Amazonia	French Guiana + Suriname and the states of Amapá and Amazonas in Brazil	EUR 19 million
Interreg Atlantic Area	Madeira, Azores and the Canary Islands + 33 regions from 5 countries	EUR 140 million
Interreg Indian Ocean	Réunion and Mayotte + 12 other countries	EUR 63 million
Interreg V-A Mayotte-Comores- Madagascar	Mayotte + Comores and Madagascar	EUR 12 million
Interreg V-A Saint Martin - Sint Maarten	Saint-Martin + Sint Maarten	EUR 7 million
Interreg V-A Madeira-Açores- Canarias	Azores, Madeira and the Canary Islands	EUR 121 million
European Observation Network for Territorial Development and Cohesion (ESPON)	EU	EUR 41 million
Interreg Europe	EU	EUR 359 million
Interact	EU	EUR 39 million
Urbact	EU	EUR 74 million

Source: authors' own elaboration based on information from the European Commission, DG REGIO database of operational programmes

In the 2021-2027 programming period, two outermost regions are classified differently than in the previous one: Martinique has moved up one category to become a transition region and Madeira has moved down two categories to become a less developed region.<sup>18</sup> The outermost regions also continue to be entitled to specific Cohesion Policy provisions, such as using a co-financing rate of 85% regardless of their GDP per capita level, receiving a higher allocation for technical assistance and being exempted from thematic concentration requirements as regards their specific additional allocation of EUR 1.5 billion in current prices (European Commission, 2022a). In this period, the number of regional programmes is slightly lower than in the previous period, as each French outermost region now has a single regional programme for ERDF and a part of the ESF+ combined (Table 8); they will also all participate in a common national programme covering (the other part of) ESF+.

Outermost region	Category of region	Operational programmes	EU funding
Guadeloupe	Less developed	Programme Guadeloupe ERDF-ESF+2021-2027	EUR 638 million
Saint-Martin	Merged with Guadeloupe	Programme Saint-Martin ERDF 2021-2027	EUR 59 million
French Guiana	Less developed	Programme Guyane ERDF-ESF+ 2021-2027	EUR 493 million
Réunion	Less developed	Programme Réunion ERDF-ESF+ 2021-2027	EUR 1 410 million
Martinique	Transition	Programme Martinique ERDF-ESF+ 2021-2027	EUR 601 million
Mayotte	Less developed	Programme Mayotte ERDF 2021-2027	EUR 347 million
The Azores	Less developed	Azores Regional Programme 2021-2027	EUR 1 140 million
Madeira	Less developed	Madeira Regional Programme 2021-2027	EUR 760 million
Canary Islands		Programme Canarias ERDF 2021-2027	EUR 1 097 million
	Transition	Programme Canarias ESF+ 2021-2027	EUR 447 million

Table 9: 2021-2027 regional Cohesion Policy programmes in the outermost regions

Source: authors' own elaboration based on information from the European Commission, DG REGIO database of operational programmes and Cohesion Open Data Platform

Besides, Interreg programmes involving the outermost regions are organised in a separate strand in the programming period 2021-2027, namely Interreg VI Strand D. For this particular strand, the Interreg Regulation offers the possibility to manage both external funds (e.g. the Neighbourhood Instrument) and the ERDF under the same set of rules, thereby allowing for calls for proposals that combine both types of funds. This strand consists of five Interreg programmes: Interreg Caribbean, Interreg Amazonia, Interreg Atlantic Area, Interreg Indian Ocean and Interreg Mozambique Channel (Table 9).

<sup>&</sup>lt;sup>18</sup> Of note, the countries entering the EU average (following Brexit and Croatia's accession) and the values of the categories' boundaries have changed between the programming period 2014-2020 and the following one: in the programming period 2021-2027, these are: less developed regions with a GDP (in PPS per capita) of less than 75% of the EU average, transition regions with a GDP (in PPS per capita) between 75% and 100% of the EU average and more developed regions with a GDP (in PPS per capita) above 100% of the EU average.

Programme	Regions and countries covered	EU funding
Interreg Caribbean	Guadeloupe, French Guiana, Martinique and Saint-Martin + 33 neighbouring countries and territories	EUR 75 million
Interreg Amazonia	French Guiana + neighbouring countries	EUR 19 million
Interreg Indian Ocean	Réunion and Mayotte + 11 other countries and territories	EUR 62 million
Interreg Mozambique Channel	Mayotte + neighbouring countries	EUR 11 million
Interreg Madeira-Açores- Canarias	Azores, Madeira and the Canary Islands	EUR 187 million
ESPON 2030	EU	EUR 48 million
Interreg Europe	EU	EUR 379 million
Interact	EU	EUR 45 million
Urbact	EU	EUR 92 million

Table 10: 2021-2027 Interreg programmes covering the outermost regions
--

Source: authors' own elaboration based on information from the European Commission, DG REGIO database of operational programmes and Cohesion Open Data Platform.

In addition to the amount of EU funding, Cohesion Policy programmes (in both programming periods) are topped up with national contributions (i.e. co-financing). Therefore, the total financial envelope of these programmes is greater than the sole amount of EU funding. Overall, financial support from the EU Cohesion Policy represents a very important contribution to the investment capacity of the outermost regions. For instance, EU funding from the ERDF and ESF+ combined (including the part of the national ESF+ programme decentralised to regions but excluding co-financing) granted to Guadeloupe for the programming period 2021-2027 amounts to EUR 721.5 million (or EUR 1 935 per inhabitant), equivalent to EUR 103.1 million annually over the seven-year period. In comparison, the total budget of the region for its investments and functioning amounts to EUR 641.8 million for the year 2022.<sup>19</sup> In other words, EU funding plays an essential role in the financing capacity of the region.

In the programming period 2021-2027, Cohesion Policy funding supports operations contributing to five Policy Objectives (POs), namely:

- PO1: a more competitive and smarter Europe,
- PO2: a greener, low carbon transition towards a net-zero carbon economy,
- PO3: a more connected Europe by enhancing mobility,
- PO4: a more social and inclusive Europe,
- PO5: Europe closer to its citizens by fostering the sustainable and integrated development of all types of territories.

The allocation of funding across these Policy Objectives relies on several factors, in particular:

- the type of fund (i.e. ERDF and/or ESF+) mobilised by the programmes,
- the thematic concentration principles,
- the needs and challenges identified in the regions covered by them, as outlined at the beginning of the corresponding programme documents.

<sup>&</sup>lt;sup>19</sup> Source: Région Guadeloupe, Budget Primitif 2022.

More specifically, the Programme Canarias ESF+ 2021-2027 earmarks its entire financial envelope to PO4, while the financial envelope of the Programme Canarias ERDF 2021-2027 is distributed across the first four POs. Likewise, the financial envelope of the 2021-2027 ERDF programmes of Saint-Martin and Mayotte covers the first four POs only. As for the 2021-2027 ERDF-ESF+ programmes in Guadeloupe, French Guiana, Réunion and Martinique, the financial envelope is distributed across all five POs. Finally, the financial envelope of the 2021-2027 Regional Programmes of the Azores and Madeira is distributed across all five POs as well as an additional PO addressing technical assistance (for an example of budget allocation per PO, see Box 31 in Annex).

The outermost regions are granted some flexibility regarding the rules on the thematic concentration of funding, co-financing rates, the eligibility of certain operations (see Chapter 1) and State aid. While this flexibility has proved very useful in helping EU-funded operations respond efficiently to the specific needs of the outermost regions, there remains room for further flexibility in the design and implementation of Cohesion Policy programmes. For instance, French Guiana is faced with major structural challenges linked to PO3 and PO4, but its regional ERDF-ESF+ programme still had to dedicate part of the EU funding to PO1 and PO2.

## 5.1.2. Management and execution of Cohesion Policy programmes

The diversity in governance systems, autonomy and remits of the outermost regions (see Chapter 1) leads to different ways of designing and managing EU programmes, in particular Cohesion Policy programmes. For example, the regional programmes of the French outermost regions in the programming period 2021-2027 are all managed by regional authorities, except for:

- Mayotte, whose regional programme is managed by the prefecture of the region (representing the State in the region) but with the Groupement d'Intérêt Public (GIP)<sup>20</sup> 'l'Europe à Mayotte' a new structure created in 2021 to link the State and the Departmental Council as regards EU fund management - plays an important role as an intermediary body for both the ERDF and decentralised ESF+ envelopes;
- Saint-Martin, whose regional programme is managed by the prefecture of Guadeloupe, although the regional collectivity also plays an important role as an intermediary body for both the ERDF and decentralised ESF+ envelopes.

Coordination of the regional programmes and the decentralised national programmes in the French outermost regions is ensured through the participation of the relevant stakeholders in the respective monitoring and technical committees, so that information can be shared and synergies exploited across programmes and governance levels.

In a similar fashion, the regional programmes of the Portuguese outermost regions are managed by regional authorities. On the other hand, the regional programmes of the Canary Islands are managed by the national Ministry of Finance and Civil Service (Ministerio de Hacienda y Función Pública), but the Government of the Canary Islands acts as an intermediate body for both the ERDF and the ESF+ financial envelopes, with the Directorate General of Planning and Budgets (Dirección General de Planificación y Presupuestos) serving as the coordinating unit for the government's functions in the role of an intermediate body, delegated by the Managing Authority. The intermediate body is responsible for selecting operations, ensuring compliance with the requirements set out in the Common Provisions Regulation and carrying out verifications for the operations within its remits.

<sup>&</sup>lt;sup>20</sup> A 'Groupement d'Intérêt Public' (GIP) – or Public Interest Group in English – is a partnership between public and private stakeholders that aims to pool resources together for the implementation of missions of general interest.

## Box 23: The implementation of Cohesion Policy programmes in Saint-Martin

Saint-Martin is a particular case of Cohesion Policy implementation as the region shared its 2014-2020 operational programme with Guadeloupe (with the latter's prefecture acting as the Managing Authority), namely the Operational Programme ERDF-ESF Guadeloupe and St Martin Etat 2014-2020. In this programme, Saint-Martin received an initial allocation of around EUR 55 million (i.e. excluding EUR 42 million from REACT-EU), split up between EUR 39 million of ERDF funding (including the specific allocation) and EUR 20 million of ESF funding. Interestingly, the collectivity of Saint-Martin acted as an intermediary body in the management of the ESF, meaning that it administered three quarters of the ESF envelope under the supervision of the Managing Authority. In the 2021-2027 programming period, Saint-Martin has its own regional programme (but still with Guadeloupe's prefecture as Managing Authority) financed by the ERDF only. Importantly, the collectivity of Saint-Martin is now an intermediary body for both the ERDF (EUR 58.8 million) and decentralised ESF+ (EUR 20.9 million) envelopes.

Source: authors' own elaboration based on data from the Collectivité de Saint-Martin, the European Commission's Cohesion Open Data Platform and the Agence Nationale de la Cohésion des Territoires (ANCT).

Notwithstanding the complexity of governance arrangements between the EU, the Member States and the regions themselves, the distribution of roles and competences related to Cohesion Policy implementation is clearly laid out in the outermost regions. Still, many Managing Authorities and intermediary bodies encounter difficulties while implementing the corresponding programmes, mostly because of the structural challenges (e.g. educational levels, quality of governance, etc.) widely affecting these regions. Indeed, these challenges impact several aspects of Cohesion Policy implementation, such as the human capacity of Managing Authorities in terms of recruitment and training of personnel as well as their administrative capacity to carry out public procurement procedures and assist beneficiaries. Besides, administrative cooperation between the state and local authorities in the outermost regions has been found insufficient for effective programme implementation in the programming period 2014-2020 (Malan and Dimauro, 2022), even though Managing Authorities reported significant progress in that regard in view of the programming period 2021-2027. Additionally, financial irregularities and error rates above 10% were identified by auditing bodies in some of the regional programmes concerned (Malan and Dimauro, 2022, European Commission, 2020b). These difficulties impact, in turn, the fund absorption and timeliness of EU payments (see Figure 22 in the Annex for recent statistics on EU payments in the programming period 2014-2020). Still, it is worth noting that the outermost regions performed generally well in terms of fund absorption (Ciffolilli and Pompili, 2023).

### Box 24: The temporary withholding of Cohesion Policy funding in Mayotte

In Mayotte, the disbursement of ERDF and ESF funding was even suspended in February 2021 as a result of an audit carried out by the European Commission, which identified irregularities and management flaws in relation to the region's programme implementation. The creation of the GIP (Groupement d' intérêt Public) 'L'Europe à Mayotte' as an intermediary body for the management of these funds was meant to overcome the shortcomings identified. The French audit authority conducted another audit of the region's new fund management and control system and concluded that it was complying with the regulations, so that fund disbursement could later resume.

Source: authors' own elaboration based on information from Prefecture de Mayotte, Communiqué 'La commission européenne lève la suspension de paiement du FEDER et du FSE à Mayotte', updated on 22 March 2023. Accessible at: https://www.mayotte.gouv.fr/Actualites/Communiques-de-presse/Communiques-de-presse-2023/La-commissioneuropeenne-leve-la-suspension-de-paiement-du-FEDER-et-du-FSE-a-Mayotte In the Canary Islands, administrative capacity for implementing policies and, in particular, carrying out tasks related to the management and control of Cohesion Policy funds needs to be improved. This includes basic aspects such as updating the IT system, training the responsible agents, reviewing and preparing procedures, guidelines and manuals and implementing simplified and more agile procedures in areas like public procurement, public grants, environmental standards and compulsory expropriations. It also involves developing a communication strategy and a thorough restructuring of the managing bodies (including the intermediary body), providing them with sufficient and specialised personnel for programme execution and strengthening their administrative and management capacity for the deployment of EU funds. More generally, there is a notable absence of long-term planning as well as formal and informal structures that function as think tanks and hubs for strategic thinking. Equally concerning are the actual mechanisms for evaluation, reflection and learning about implemented policies. Efforts seem to be more focused on finalising and justifying the use of the funds from the programming period 2014-2020 than on forward-looking planning for the programming period 2021-2027 and beyond. The 2021-2027 regional ERDF programme was only approved in December 2022 and there has since been a pronounced lack of follow-up, discussion and, more worryingly, thorough evaluation of the previous period. Finally, the existence of the regional coordination structure, the Coordination Commission for European Structural and Investment Funds, aims to ensure that there are no overlaps between the various funds and that they complement each other, thereby optimising their impact. As a matter of fact, a lesson learned from the programming period 2014-2020 relates to the need to adopt an integrated approach to using EU funds throughout the preparation and implementation phases.

Crucially, implementation difficulties have escalated during the socio-economic crises, successively hitting the outermost regions, in particular the Covid-19 crisis (because of e.g. lockdowns). On the one hand, the possibility to amend Cohesion Policy programmes (thanks to the mechanisms offered by the Coronavirus Response Investment Initiative (CRII), the Coronavirus Response Investment Initiative Plus (CRII+) and the Cohesion's Action for Refugees in Europe (CARE, CARE+ and FAST-CARE)) aimed to address the financing needs of public authorities while offering flexibility in the mobilisation of Cohesion Policy funding for that matter. Likewise, REACT-EU resources topping up the initial Cohesion Policy allocation were specifically aimed at fostering crisis repair and resilience. On the other hand, the provisions associated with these mechanisms also introduced some degree of complexity in the management of Cohesion Policy programmes (Maucorps et al., 2023) and Managing Authorities in the outermost regions generally deemed the absorption of the REACT-EU envelope within the time allowed extremely challenging. At the same time, Managing Authorities signalled the importance of knowledge building and retention as to how to implement Cohesion Policy programmes efficiently, as they drew key lessons from each completed programming period.

### Box 25: Execution rate of the 2014-2020 regional Cohesion Policy programme in the Azores

The 2014-2020 regional programme of the Azores is currently being finalised with mixed results in terms of its execution. Most of the thematic objectives show full use of the financial resources allocated to them (as of October 2023, the budget 'decided' equals 116% of the budget planned), but some might not reach the objective of 100% execution rate due to supply constraints stemming from the Covid-19 pandemic crisis and the war in Ukraine (as of October 2023, the budget 'spent' equals 91% of the budget planned). Importantly, the question of the durability of the programme's economic impact on the region would remain relevant even with an execution rate of 100% (due to, for example, the effects of external factors, the sustainability and lasting impacts). Further studies would be needed to identify the short, medium- and long-term effects of the investments in each thematic objective.

Source: authors' own elaboration based on data from the European Commission's Cohesion Open Data Platform

### Box 26: External shocks in the programming period 2014-2020 in Saint-Martin

The Cohesion Policy programming period 2014-2020 was marked by numerous challenges in Saint-Martin. After Hurricane Irma in 2017, the logic of programme implementation changed radically towards responding to pressing reconstruction needs and axis 12 ('Allocation to offset additional costs') of the programme was specifically designed to address these reconstruction needs. To this end, the programme benefited from both new funding resources and credit transfers from other axes. However, the capacity of the potential beneficiaries to lead EU-funded operations was severely undermined by the consequences of the hurricane. In 2020, programme implementation was once again disrupted by the Covid-19 pandemic crisis. Importantly, the region was granted significant REACT-EU resources: EUR8 million from the ESF and EUR 34 million from the ERDF. These additional amounts of funding were allocated to ensure that the whole financial envelope could be absorbed within the allotted time. Indeed, REACT-EU resources proved highly valuable to support e.g. training (ESF) and infrastructure (ERDF) projects in the region.

#### Source: authors' own elaboration

Besides the difficulties experienced on the side of the Managing Authorities, it is worth noting the difficulties on the side of the beneficiaries in successfully rolling out EU-funded operations. Despite simplification efforts, these operations are still associated with an appreciable administrative burden. Indeed, the rules pertaining to, for example, procurement procedures and State aid remain difficult to understand and follow for beneficiaries. Beneficiaries of Cohesion Policy support in the outermost regions are also more likely to have poorer business structures and face significant challenges in terms of financial resources for pre-financing and co-financing, as the banking sector is often reluctant to provide the necessary capital. In French Guiana, for example, this led to many abandoned operations in the programming period 2014-2020. Therefore, in the programming period 2021-2027, particular attention is being paid by the Managing Authorities to beneficiary support (e.g. by providing tailored information in relation to the application process for EU funding, public procurement procedures, etc.) to reach a wider pool of better informed and better prepared potential beneficiaries.

In Saint-Martin, for instance, the selection of EU-funded operations in the programming period 2021-2027 is governed by calls for projects, whereas it was done ad hoc in the preceding programming period. Facilitating access to ESIF is of pivotal importance for fund absorption, especially in those outermost regions where the number of potential beneficiaries is smaller and their implementation capacity is lower.

## 5.1.3. Impact of Cohesion Policy funding

Quality of governance, administrative capacity and stakeholder engagement (in particular beneficiaries) are all key determinants of the success of Cohesion Policy implementation (OECD, 2020). At the same time, rushing fund absorption in lagging regions has been found to be detrimental to their convergence process (Dicharry, 2023). More generally, the impact of Cohesion Policy on lagging regions has been subject to numerous analyses, but there is no categorical conclusion as to whether it fosters economic growth – and if it does, what the magnitude and sustainability of its effect could be. A quantitative assessment of the impact of the 2014-2020 Cohesion Policy programmes on regional GDP is provided by the European Commission (Crucitti et al., 2022). Using the RHOMOLO model,<sup>21</sup> the authors estimate this impact to be, in 2023 and 2043, in the range of 0.5%-1.5% above the baseline in Madeira and the Canary Islands and greater than 2% in the Azores.<sup>22</sup> In this latter region, the impact of the policy is foreseen to peak at more than 5%; that is, the region's GDP is expected to be 5% higher than what it would be in a scenario without the Cohesion Policy. The authors further specify that this impact depends on the 'policy injection, the fact that the policy mix strongly differs from one region to another, even within the same Member State, and the specific features of the regional economies, which determine their response to the policy'.

As a matter of fact, the achievements of Cohesion Policy programmes implemented in the outermost regions<sup>23</sup> concern a wide range of economic sectors and actors (e.g. businesses, schools, job-seekers, etc.). Nevertheless, the priorities and objectives pursued by these programmes do not necessarily dovetail with the scope and scale of the socio-economic needs identified in the outermost regions (see Chapter 3), so that EU Cohesion Policy may have a small direct impact on economic growth but a wider impact on other areas (e.g. environmental protection) and/or an important indirect impact in terms of building capacity, leveraging further public investments and laying the groundwork for taking up the challenges of the twin transition. In fact, the impact of Cohesion Policy funding is highly region-specific.

For instance, the regional ERDF and ESF programmes of Réunion have supported the continued financing of factors considered to be at the heart of the growth process, including infrastructure associated with R&D programmes and healthcare, human capital with training tools, innovation and digital network equipment. Similarly, the resources deployed have enabled regional stakeholders to build supportive ecosystems and sustain the region's efforts to preserve biodiversity, adapt to climate change and promote the energy transition. Nevertheless, in many areas, notably the emergence of innovation dynamics and their trickle-down into the economy, much remains to be done to transform innovative ideas into economic value, jobs and exports. One example is the development of a financial system that more readily supports investment in innovation and assists companies in their international expansion. Another example is the development of competition in economic sectors characterised by monopolies or oligopolies (cruise tourism, energy, transport, etc.).<sup>24</sup>

Likewise, the economic literature focusing on the Azores (e.g. Dentinho and Fortuna, 2019; Sass, Maciel and Dentinho, 2023) provides mixed results as regards the evaluation of the impact of EU funds on regional development. Even though EU funds might have an immediate short-term impact, their long-term impact tends to be low. This is mostly due to the fact that the import content of many investments is very high. Indeed, a substantial part of the funding is often allocated to the purchase of assets and

<sup>&</sup>lt;sup>21</sup> The RHOMOLO model is the European Commission's spatially computable general equilibrium model used for policy impact assessment. It provides sectoral (based on NACE Rev. 2 sectors), regional (at the NUTS 2 level) and time-specific (for specific years, including in the long run) results based on scenario analysis.

<sup>&</sup>lt;sup>22</sup> The French outermost regions are not included in the analysis due to data gaps.

<sup>&</sup>lt;sup>23</sup> As reported in the European Commission's Cohesion Open Data Platform (<u>www.cohesiondata.ec.europa.eu</u>).

<sup>&</sup>lt;sup>24</sup> Based on Réunion's Smart Specialisation Strategy 2014-2020 and the evaluation of the Smart Specialisation Strategy produced by the Regional Council.

services provided by other regions, hence the low economic impact locally. In addition, a substantial part of the programmes' funding is allocated to pursuing EU objectives, such as the green transition, that lead to the substitution of energy sources and not necessarily to boosting competitiveness (because the region's competitors might not be pursuing these objectives with equivalent intensity). More specifically, the value added generated by these transformations is typically very low since the necessary technology is almost totally imported.

### Box 27: Impact of ESIF (2014-2020) in the Canary Islands

ESF-funded operations over the programming period 2014-2020 primarily exhibit a repetitive approach, consolidating actions that have been ongoing since the beginning of the operational programme. While several initiatives have appropriate objectives, such as training unemployed individuals as innovation managers to enable them to oversee business innovation projects and facilitate their integration as innovation specialists within companies and the incorporation of technologists and innovative personnel into productive industries to promote the recruitment of highly qualified staff, there is still a lack of transformative projects aimed at boosting employment opportunities and addressing structural issues.

The launch of the 2014-2020 ERDF programme's implementation was found to be significantly delayed due to a combination of external and internal factors. Among the external factors, the extended period of the provisional government, budgetary constraints and modifications to the Public Sector Contracts Law had a notable impact, particularly affecting the axes associated with public expenditure, such as Axis 6 for environmental projects (water), Axis 7 for infrastructure and Axis 12 for sustainable urban development. As for the causes related to fund management, which equally affected all axes, the late approval of programmes and the slow process of designating responsible bodies and establishing management and control systems were prominent issues. Furthermore, in the case of Axis 4, which focuses on low-carbon economies, the lack of experience in managing EU funds by the responsible bodies overseeing energy policy at both the national and regional levels has hindered implementation. Concerning Axis 6, there have been execution problems with planned water purification and sanitation projects, with significant gaps in the completion of landfill sealing projects.

As of the beginning of October 2023, the execution rate of the Canary Islands' 2014-2020 ESIF stands at only 60%, while other Spanish regions like La Rioja have achieved an execution rate of 86%. Even though the Canary Islands grapple with significant unemployment issues, the region has the lowest execution level of the ESF in Spain, at just 34%. Several factors can explain these shortcomings, starting with the lack of prioritisation at all levels of government and the shortage of programmes aimed at educating public officials and civil servants about these funds. Additionally, public-private partnership instruments have not effectively communicated the opportunities that EU funds can offer to citizens (Fundación Finnova, 2023). In fact, the current approach to EU fund management seems to be chiefly guided by the aim of not losing funding rather than focusing on effective planning and execution. Hence, more effort seems to be dedicated to justifying the expenditures made in the period 2014-2020 than proactively planning for the following period. This lack of foresight raises concerns about the future direction of fund utilisation.

Looking ahead to potential future directions for the use of Cohesion Policy funds, it appears to be crucial to facilitate access to alternative sources of financing for both start-up and existing businesses, ensuring their financial viability and growth. Additionally, introducing temporary tax and social charge exemptions for companies can incentivise the recruitment of specific profiles, particularly those involved in R&D and innovation activities and those linked to the twin transition. Furthermore, it is essential to strike a balance between supporting and protecting the regional market (given its 'outermost' status) and encouraging e-commerce and innovation.

Source: authors' own elaboration based on data from the Government of the Canary Islands (Gobierno de Canarias): <u>www.gobiernodecanarias.org/fondoseuropeos/temas/fondos estructurales y de inversion/destacado ejecucion fondos estructurales.html</u>.

## Box 28: The impact of REACT-EU in Réunion

In the wake of the Covid-19 pandemic crisis, the ERDF programme's REACT-EU component was designed to swiftly generate a surge in demand. This surge was strategically intended to quickly permeate the broader economy by targeting mainly very small businesses and SMEs, in particular via public procurement contracts accessible to them (digital and public works). This support, with high levels of funding allocated to local authorities, was intended to enable them to finance these operations despite the decline in their net savings capacity.

The aim of these actions was to seize the three years granted for REACT-EU implementation as an opportunity to make a qualitative turnaround in educational structures and to roll out the digital transition. They also aimed to revitalise the sectors most exposed to the crisis, in particular tourism. They therefore focused on economic recovery in four main areas:

- Economic recovery, based on new financial engineering tools designed primarily to improve the capital position of companies, particularly in the tourism sector and a significant addition to the loan offer developed by the French public investment bank (BPI), via a "rebound loan": ultimately, targeted support for exposed sectors (aimed at very small businesses) was intended to support investment by these companies (in the small retail, construction and agri-food sectors), enabling them to maintain their modernisation efforts and, despite the deterioration in their cash flow, bounce back after the crisis.
- Health sector: following preparatory work carried out in partnership between hospitals and the regional health authority, actions to improve health infrastructure via support for increased training provision compatible with the programme's implementation period have been identified.
- Investments in the green economy, including energy (replacing light bulbs with more energy-efficient ones, work on pedestrian and cycle paths, recharging of electric vehicles, etc.), improving the efficiency of drinking water supply networks and revitalising town centres through sustainable urban development (shops and restaurants in town centres having been hit hardest by the crisis).
- Accelerating access to digital technology in the education and medical-social sectors by equipping schools with equipment and infrastructure (laptop computers, Wi-Fi modems), depending on the grade of students (high school and university students). A catch-up plan for the spread of teleworking has also been proposed for local administrations. Support for very small businesses for the digitalisation of their activities has also been implemented.

All in all, these actions have been designed to complement those contained in the draft 2021-2027 ERDF operational programme, with a common timetable for preparation, negotiation and implementation. Most of these actions are only implemented under REACT-EU (economic measures, building rehabilitation, digital), with the future operational programme (2021-2027) focusing on longer-term or complementary actions (e.g. support for business start-ups or more structuring actions for sustainable transport). Similarly, these measures complement those selected under the national Regional Stimulus Fund (implemented by the Region Réunion by mobilising and reallocating unused lines of the 2014-2020 programme), either because they target different beneficiaries or because they focus on complementary objectives (e.g. rehabilitation and construction of education buildings) or because they focus on operations of a different nature (e.g. health).

Source: authors' own elaboration

Cohesion Policy is a major source of support for the outermost regions: their regional programmes are endowed with a budget ranging from several hundreds of millions EUR to more than 1 billion EUR (except for Saint-Martin, the smallest outermost region) to support operations across most, if not all, of the POs. The (potential) quantitative and qualitative impact of Cohesion Policy on the outermost regions is significant but also mitigated by implementation difficulties on the part of both Managing Authorities and beneficiaries. Most importantly, Cohesion Policy does not sufficiently underpin transformative projects to foster innovation and competitiveness in the long term, especially in view of the twin transition – but its impact remains highly region-specific.

## 5.2. Complementarity and synergies with other development strategies

Cohesion Policy is only one territorial development tool among many others in the outermost regions. Indeed, other regional, national and EU policies and strategies are used for sectoral or cross-cutting investments with different timescales. At the regional level, Smart Specialisation Strategies (S3) are place-based approaches aimed at directing investments towards 'well-identified priorities for knowledge-based investments and/or clusters' that focus on 'competitive strengths and realistic growth potentials supported by a critical mass of activity and entrepreneurial resources' (Table 10).<sup>25</sup> Importantly, developing a Research and Innovation Strategy for Smart Specialisation Strategy (RIS3) was a prerequisite to receiving funding from the ERDF in the programming period 2014-2020. A study by IEDOM (2020) reports that, while the abundance of natural resources and well-structured public research are key drivers of innovation, poorly industrialised economic fabrics with a prevalence of very small businesses, an under-developed entrepreneurship mindset and limited interaction between public research and the private sector – factors commonly found in the outermost regions - hinder the development of innovation in regional economies, hence the importance of innovation-focused strategies.

Outermostregion	S3 priorities (2014-2020)
Guadeloupe	Geo-Climatic Risks; Creative industry; Integrated health policy; Biodiversity and Agriculture; Renewable energy on islands; Information and Communications Technology
French Guiana	Remote technology & sensing; Biodiversity; Telemedicine
Réunion	Tourism; Tropical bioeconomy; Energy; Health; Digital economy; Territorial Innovation
Martinique	Renewable energy and eco-technologies; Prevention of natural risks; Biodiversity, agrifood and cosmetics; Digital services and software; Silver economy
Mayotte	Sustainable exploitation of the sea and development of maritime activities; Agriculture and agri-food; Valorisation of primary resources (forests and 'land' water); Natural and cultural heritage; Alternative energies; Social economy; Social innovation; Information and Communications Technology; Mobility
Azores	Fishing and the sea; Tourism; Agriculture - Livestock and agroindustry

### Table 11: S3 priorities (2014-2020) in the outermost regions

<sup>&</sup>lt;sup>25</sup> Source: European Commission, Smart Specialisation Platform (<u>www.s3platform.jrc.ec.europa.eu/what-we-do</u>)

Madeira	Tourism; Sustainability, Management and Maintenance of Infrastructure; Information and Communications Technology; Energy, mobility and climate change; Quality of agricultural products; Health and well-being; Marine resources and technologies
Canary Islands	Digital Economy; Biotechnology and biomedicine related to biodiversity and tropical diseases; Marine Science; Astronomy and astrophysics instrumentation; Green growth and sustainability; Logistics and connectivity; Renewable energy; Tourism and quality of life

Source: authors' own elaboration based on information from the Smart Specialisation Platform and Prefecture de Mayotte

As a matter of fact, biodiversity, bioeconomy and agriculture feature prominently among the S3 priorities of the outermost regions, along with tourism and energy. Indeed, the focus placed on these sectors echoes the strategic assets of the outermost regions linked to their natural (and cultural) resources (see Chapter 2).

In order to strengthen the territory's resilience through innovation, Réunion adopted a Smart Specialisation Strategy (S3) in 2014 (cf. Region Réunion, 2015), which was updated in 2022. The S3 has made it possible to define an economic development strategy based on the enhancement of regional singularities and clear thematic priorities.

Built around the aim of leveraging the knowledge economy, this ambition has led to the mobilisation of resources contributing to the expansion of the regional research and innovation system, including:

- a network of world-class infrastructures in key fields such as climate change observation and atmospheric sciences, agroecology, marine sciences, biotechnologies and health,
- the University of La Réunion and five regional delegations of national organisations operating in some 40 laboratories, including nine joint research units,
- a dynamic regional support network for entrepreneurship and innovation, comprising 13 structures, including two technology resource centres,
- a competitiveness cluster and incubator and a regional innovation agency,
- 14 professional networks,
- multiple communities and third places, including six digital fabrication laboratories (fablabs) and eight coworking spaces,
- a dynamic network of private trainers and coaches,
- an innovation financing scheme.

However, according to the assessment of the first S3 (a preparatory assessment for its evolution towards the new S3 or S5) carried out by the regional innovation committee (cf. Region Réunion, 2022), the region is still hampered by a number of factors, such as:

- the number of university graduates still lagging behind the national average,
- the difficulty in achieving critical mass in terms of research effort, particularly given the fragmentation of research themes,
- the regional research and innovation system's lack of international appeal and openness,
- the governance structure of S3 is not well-suited to the requirements of the knowledge economy.

Despite the momentum generated by the S3 over the period 2014-2020, there remain a number of obstacles to the development of innovation in the region. Réunion's new S3, entitled S5, aims to boost the "Integration of Réunion into international research and innovation networks". Despite its undeniable strengths, the regional research and innovation system is, like the Reunionese economy, poorly internationalised, whether in terms of training, employment or participation in the Horizon 2020 and Horizon Europe programmes. In order to strengthen the internationalisation of research, the new S3 (or S5) action plan proposes to increase the attractiveness of the region in order to develop research and innovation capacities, as measured by the number of scientists and engineers working in Réunion; to amplify the transfer of knowledge, know-how and technologies in order to avoid duplication of R&D&I efforts and accentuate the impact of these activities on the region; to increase international recognition through greater participation in the Horizon Europe programme, as measured by the funding obtained by the region; and, finally, increase the number of innovative solutions originating in Réunion that are exploited internationally (for more detailed information on the cross-cutting priorities and thematic priorities of the S5, please see Box 32 in Annex).

At the national level, the outermost regions can take part in centrally governed policies, with or without adaptations depending on their governance arrangements (e.g. 'convergence contracts' in France). In some cases, national funding and EU funding can be combined (e.g. for reconstruction projects in Saint-Martin after 2017). At the EU level, the outermost regions benefit from a wide range of policies and programmes besides EU Cohesion Policy, such as the EU's Common Agricultural Policy and its rural development programmes. For these policies and programmes to generate the maximum impact in terms of socio-economic progress, they should be tailored to the needs of the regions and capabilities of the relevant stakeholders, seek synergetic and multiplication effects with each other and be thoroughly monitored and evaluated.

## 5.3. The role of place-based, tailor-made approaches

While the outermost regions share a large number of geography-related challenges and socioeconomic vulnerabilities (see Chapters 2 and 3), they are also characterised by a diversity of governance systems (including for the implementation of Cohesion Policy programmes) and, more generally, different historic and economic ties to their Member States and the EU (see Chapter 1).

Furthermore, the growth potential, investment needs and administrative capacity also vary from one region to the next, so their economic development levels and/or paths prove quite different, despite some commonalities with respect to growth-facilitating and growth-hindering factors. This reinforces the importance of place-based, tailor-made approaches that build on each outermost region's assets and opportunities while addressing its vulnerabilities, as in the regional Cohesion Policy programmes and S3. However, there is no common pattern of the outermost regions moving towards increasing 'territorialisation' of their Cohesion Policy programmes.

## Box 29: Increasing Cohesion Policy 'territorialisation' in Saint-Martin

Territorialised management of Cohesion Policy funding started with the programming period 2014-2020 in Saint-Martin. Before that, the collectivity of Saint-Martin was receiving funding 'via' Guadeloupe, whose prefecture is the Managing Authority of Saint-Martin's programmes. The collectivity of Saint-Martin is involved in Cohesion Policy programming from a political and administrative perspective and takes part in the corresponding technical, steering, monitoring and programming committees. In the programming period 2021-2027, the collectivity of Saint-Martin is in charge of PO1 while the prefecture of Saint-Martin (representing the State) is in charge of PO2, PO3 and PO4.

Source: authors' own elaboration

### Box 30: Risks of re-centralisation in Réunion

During the programming period 2014-2020, ERDF and ESF funding was characterised by programming and implementation based on place-based and tailor-made approaches. However, notable changes in fund governance have been recorded with regard to the programming period 2021-2027. More specifically, most of the 2014-2020 programmes' priority axes were drawn up at the territorial level and then implemented in consultation with various local institutions within the framework of shared governance. While the ERDF still operates in this way in the programming period 2021-2027, around two-thirds of the ESF+ envelope is managed by the State (through prefecture-related authorities). These changes have meaningful implications for the design and implementation of the programmes, as they carry the risk, for the local authorities, of losing autonomy in relation to programme design and management, for instance:

- Losing control of all or part of certain programmes,
- Experiencing more complex and slower programme management if they are no longer managed locally,
- Taking a step back in terms of devolution, especially as regards economic matters,
- Having to face local challenges without having the tools to address them.

#### Source: authors' own elaboration

The role of place-based, tailor-made approaches in fostering the socio-economic development of the outermost regions is therefore decisive. Indeed, these approaches are, by nature, fine-tuned to the specific strengths and weaknesses of the individual outermost regions to make the most of their unique resources and potentials while addressing their (structural) challenges, especially those that are not commonly found in their mainland counterparts. However, that role can only be fulfilled if the different governance levels (regional, national and EU) cooperate to ensure that such approaches are properly designed, sufficiently funded and effectively implemented. In other words, place-based, tailor-made approaches support sustained and inclusive growth when set up in a well-functioning multilevel governance framework. This pointhas been underlined in the Territorial Agenda 2030 (2020), recalling that 'remoteness and the distinct characteristics of outermost regions mean they face particular development challenges' and stating that, as a result, 'action to encourage decision makers at all governance levels to unleash the unique potential of territories with specific geographies and adequately address the constraints of these areas through integrated and cooperative approaches' should be taken by the relevant stakeholders.

## 6. CONCLUSIONS AND POLICY RECOMMENDATIONS

## **KEY FINDINGS**

- The analysis of the geographic features, socio-economic profiles and development paths of the outermost regions highlights common patterns in terms of their (structural) vulnerabilities and erratic convergence processes, which further legitimises their specific status in the EU regulatory and policy framework granted by Article 349 TFEU.
- At the same time, it also reveals differences across the outermost regions in terms of governance structures and institutional capacity, as well as economic and demographic dynamics that could potentially exacerbate disparities not only vis-à-vis the rest of the EU but also between themselves.
- By building on the outermost regions' specific assets and potentials, place-based, tailormade approaches assume a central role in supporting sustainable and inclusive growth provided that they are implemented in a well-functioning multilevel governance framework.
- A wider application of Article 349 TFEU materialising in further adaptations of existing policies (in particular the EU Cohesion Policy) and/or new outermost-specific programmes (e.g. a dedicated Green Deal instrument) could help stimulate transformative investments and boost the competitiveness of the outermost regions.
- With regard to the EU Cohesion Policy in particular, further flexibility could be introduced with a view to increasing the participation of local stakeholders and the quality of their projects, e.g. by creating pre-financing instruments and loosening State aid and eligibility rules.

## 6.1. Conclusions of the study

The analysis of the geographic features, socio-economic profiles and development paths of the outermost regions shows that they share both major assets and growth potentials (linked e.g. to natural resources) and persistent vulnerabilities (linked to e.g. education, employment and income). In turn, these vulnerabilities affect the productivity, competitiveness and wealth of these regions located far from the European continent. Most importantly, they hinder their convergence process towards the respective EU averages.

Moreover, the demographic dynamics of the outermost regions represent both challenges and opportunities for their future development: in some regions there has been a steady population decline (mostly due to emigration) and in others substantial population growth driven by (foreign and often uncontrolled) immigration. These dynamics have (and are expected to continue to have) a strong impact on the regions' human capital, among other growth factors. They could also exacerbate disparities between the outermost regions themselves.

At the same time, the outermost regions are quite diverse when it comes to governance characteristics as well as Cohesion Policy programming, management structures and administrative capacity. More specifically, Cohesion Policy programmes in the outermost regions are well-embedded in the overarching Cohesion Policy framework (e.g. allocation of funding across pre-defined objectives, alignment with EU long-term strategies, etc.). Still, some of these programmes have been (largely) amended to respond to external shocks and their management system (significantly) restructured to

adapt to capacity shortcomings on the part of the Managing Authorities and intermediary bodies and/or beneficiaries.

As a result, ESIF has had a mixed impact on the regions' socio-economic development. On the one hand, these funds have contributed to the development of basic infrastructure (e.g. schools) that is still lacking in these mostly lagging regions. Likewise, they provide key support to local citizens and businesses to overcome 'permanent and structural difficulties' (e.g. for freight transport). On the other hand, they fall short of supporting transformative projects that could boost innovation and competitiveness in the long term. Likewise, the poorly industrialised and highly concentrated structure of the outermost regions' economies imply that ESIF has a potentially stronger competitiveness impact on (non-outermost) regions that are already advanced in technology and knowledge-export through spillover effects than on the less developed outermost regions themselves.

These findings underpin the use of place-based, tailor-made approaches such as Smart Specialisation Strategies and territorialised Cohesion Policy programmes to best exploit the growth potentials of each outermost region and address its most pressing needs – in a policy-making and implementation setting where all governance levels collaborate based on their knowledge, capacity and remits. Likewise, they substantiate the wide-ranging application of Article 349 TFEU as a means of ensuring equal opportunities and level playing fields between all EU regions and hence territorial cohesion within and between Member States.

## 6.2. Policy recommendations

## • Policy recommendation 1: safeguarding and strengthening Article 349 TFEU

First and foremost, Article 349 TFEU should be safeguarded as an essential regulatory provision allowing the outermost regions to (partly) overcome their handicaps while competing in the EU Single Market and to mitigate their economic downturn relative to the rest of the EU. It also gives the outermost regions the means to achieve the EU's self-defined objectives. Still, the application of Article 349 TFEU could be reinforced along different avenues: at the fiscal level, at the level of aid schemes, at the level of standards affecting daily life, in terms of accounting for the specific locations of the outermost regions in their respective geographical basins and global value chains, at the level of complementarity between cooperation funds and aid granted to neighbouring countries, etc.

At the same time, current developments in Cohesion Policy programme design and implementation raise concerns about the extent to which territorial realities are considered. Indeed, the fear that access to specific programmes will be reduced at the cost of accessing cross-cutting (hyper-competitive) programmes has been mentioned by some regional stakeholders.

Faced with the risk of losing influence over programme design and/or being placed on an equal footing with the most economically vibrant EU regions, it is necessary to have a tool that enables decisions to be adapted to the particular contexts of the outermost regions. Article 349 has proved to be such a tool – to strengthen the resilience and adaptability of the outermost regions rather than protect their low-diversified economies. In its 'Assessment of the new Commission communication on outermost regions', the European Parliament (2023) also endorses the idea of a wider application of Article 349 TFEU, stating that "it could be interpreted in a more innovative and positive way, in particular with a view to creating ad hoc programmes and specific new policies, [...] should be applied in a transversal way to Union policies and initiatives, where appropriate" and the outermost regions' specific characteristics should be "systematically taken into account in EU legislative proposals and during interinstitutional negotiations, including, where appropriate, by conducting dedicated impact assessments, with a view to ensuring that EU legislation responds to the specific challenges and local realities of the outermost regions". It is thus important that all policy-making stakeholders at the EU

level (European Commission, European Parliament, Council of the European Union) endeavour to strengthen and mainstream the application of Article 349 TFEU across EU policies.

## • Policy recommendation 2: adding flexibility and tailoring to Cohesion Policy

With regard to Cohesion Policy specifically, it is noteworthy that the rationale behind Cohesion Policy adaptations for the EU outermost regions (e.g. specific co-financing rates, specific thematic concentration principles, etc.) remains of key importance as:

- Cohesion Policy is a major source of support for the outermost regions, especially in supporting basic infrastructure and services.
- But its impact falls short of bringing about transformative change that would prove crucial for boosting their competitiveness.

Further Cohesion Policy adaptations and, more generally, flexibility in EU policy mechanisms could help strengthen the position of the outermost regions vis-à-vis their EU peers. For instance, the compensation for additional costs granted to the outermost regions could increase further as the backwardness of the outermost regions increases. Moreover, the use of financial instruments is currently significantly constrained by the limited financial capacity of the beneficiaries. 'Intermediate instruments' between grants and loans could be developed for the outermost regions (and other lagging regions), so as to help the transition from one type of support to the other. Importantly, developing 'pre-financing tools' (with effective risk management) to help potential beneficiaries bear the upfront costs of EU-funded operations would allow for wider participation in Cohesion Policy programmes. Likewise, the scope of eligible actors and/or operations in Cohesion Policy-related public procurement could be widened so as to allow for more and more diverse applicants – indeed, the pool of potential beneficiaries is limited by the small market size in the outermost regions. Finally, further flexibility in State aid rules could help overcome the financial capacity issues widely observed in the outermost regions.

It is thus important that all policy-making stakeholders at the EU level (European Commission, European Parliament, Council of the European Union) endeavour to review and propose further adaptations to the EU Cohesion Policy programmes in the outermost regions, in concertation with the relevant stakeholders at the local and regional level.

## • Policy recommendation 3: adding flexibility and tailoring to other EU policies

With a view to achieving cross-fertilisation of EU-funded projects, outermost-specific calls for projects under e.g. the LIFE and ERASMUS programmes could foster the participation of these regions in flagship R&D and education initiatives. Indeed, their participation is currently constrained by capacity and competitiveness issues, while their need for technological innovation is growing as the green and digital transition unfolds. The exhaustion of traditional growth potential in some regions (e.g. tourism) and the acceleration of external shocks (e.g. natural disasters) also call for innovation-driven, value-added growth models that rely on a larger range of economic sectors.

Realistically, these can only be developed through more intense R&D and innovation activities and increased cooperation between the public and private sectors as well as across governance levels. This could be promoted as part of one or more EU programmes (e.g. Horizon Europe programmes and Cohesion Policy programmes). More generally, improved coordination and complementarity between programmes (e.g. Cohesion Policy programmes) and strategies (e.g. S3) as well as policies (e.g. fiscal policy) would help streamline the use of cohesion-enhancing funds by the relevant authorities in the outermost regions and produce multiplication and synergetic effects in support of their convergence processes.

It is thus important that all policy-making stakeholders at the EU level (European Commission, European Parliament, Council of the European Union) endeavour to review and propose further adaptations to EU policies and programmes (other than Cohesion Policy) in the outermost regions, in concertation with the relevant stakeholders at regional and national level.

# • Policy recommendation 4: supporting (sustainable) transport development in the outermost regions

Finally, the very status of the outermost regions stems from their remoteness to the EU core: a POSEIlike transport programme would help the outermost regions enhance the accessibility of goods and mobility of people and thus reduce two major barriers to their development. This specific programme could cover both freight transport and individual mobility and both unimodal and multimodal transport systems by providing investment support to transport infrastructure (roads, ports, etc.), transport operations and transport-related energy demand. Such a programme has been specifically called for by the Presidents of the EU outermost regions during their 28<sup>th</sup> Conference (2023).

Most importantly, this programme should strive to 'green' the transport sector of the outermost regions: in urban areas (e.g. by supporting Sustainable Urban Mobility Plans), less densely populated areas (e.g. by improving road networks), at the regional level (e.g. by connecting the various islands of an outermost archipelago) and more widely at the interregional level in their respective geographical basins as well as at the intercontinental level in connection with Europe's mainland.

To do so, the final report of the expert group on 'Transport accessibility for the EU Outermost Regions' (Pickup and Mantero, 2017) outlines a list of key cross-cutting actions, including:

- Enhancing the market competitiveness of air services;
- Optimising user-based subsidies in relation to travel demand patterns;
- Improving the attractiveness of outermost destinations;
- Fostering a more strategic approach to transport-related investments made under the EU Cohesion Policy;
- Facilitating the access of the outermost regions to the Connecting Europe Facility through the Trans-European Network for Transport (TEN-T) network;
- Strengthening the outermost regions' accessibility within their respective regional basins;
- Achieving sustainable mobility and accessibility within the local territory;
- Ensuring access to skills in the transport sector.

These last two points showcase the interconnectedness between the various structural challenges faced by the outermost regions, in particular across sectors such as transport and energy, transport and education, and more generally, transport and innovation.

It is thus important that policy-making stakeholders across all governance levels take a strategic, crosscutting and tailor-made approach to address the accessibility and mobility deficit in the outermost regions, in concertation with stakeholders in the wider regional basins.

## • Policy recommendation 5: supporting the green transition in the outermost regions

Similarly, an outermost-specific instrument to address the adverse socio-economic impacts of the European Green Deal and support their transition to climate neutrality (in particular through the production of locally sourced renewable energies) could prove fundamental for ensuring that the outermost regions are not caught in a development trap in the green and digital era, especially as they

are not covered by the Just Transition Fund. In particular, their renewable energy potential could prove a major driver of 'green growth'.

To unlock this potential, the OECD (2023b) advocates for an approach focused on three main pillars: innovation, connectivity and investment. It also stresses the importance of 'close cooperation between national institutions of France, Spain and Portugal, the European Commission as well as territories and countries in the Caribbean, South America, Atlantic Ocean and Indian Ocean'.

It is thus important that policy-making stakeholders across all governance levels take a strategic, crosscutting and tailor-made approach reaping the growth benefits of renewable energy potentials while protecting environmental resources in the outermost regions, in concertation with stakeholders in the wider regional basins.

## • Policy recommendation 6: supporting R&D and innovation in the outermost regions

Finally, R&D and innovation should be at the core of development strategies in the outermost regions, supporting the 'modernisation' of traditional growth factors such as tourism. Indeed, innovation is a key dimension of the twin (green and digital) transition, a determining factor for economic growth and competitiveness and thus a driver of convergence.

It is thus important that policy-making stakeholders across all governance levels devote considerable attention to R&D and innovation in the outermost regions' future policies and strategies.

## REFERENCES

- Banque des Territoires, AFP, 2023, Crise de l'eau à Mayotte : la distribution de bouteilles étendue à toute la population. Published on 3 November 2023. Available at: www.banquedesterritoires.fr/crise-de-leau-mayotte-la-distribution-de-bouteilles-etendue-toute-la-population
- CES (Consejo Económico y Social de Canarias), 2023, *Informe Anual. Año 2021; 2023*. Depósito legal: GC 245-2015. Publicado 2023
- Chantreuil, F., Hoarau, J.-F., Lebon, I., L'Horty, Y., Mathouraparsad, S., 2023a, *Le développement ultrapériphérique: un défi pour les politiques publiques*. Cahiers français, nr. 433. Edited by La Documentation française.
- Chantreuil, F., Hoarau, J.-F., Lebon, I., L'Horty, Y., Mathouraparsad, S., 2023b, Adversité et diversité des outre-mer français. Cahiers français, nr. 433. Edited by La Documentation française.
- Charron, N., Lapuente, V., Bauhr M., Annoni, P., 2022, *Change and Continuity in Quality of Government: Trends in subnational quality of government in EU member states*. Investigaciones Regionales-Journal of Regional Research, 2022(53), 5-23. DOI: 10.38191/iirr-jorr.22.008
- Ciffolilli, A., Pompili, M., 2023, Research for REGI Committee *Absorption rates of Cohesion Policy funds*, European Parliament, Policy Department for Structural and Cohesion Policies, Brussels
- Cittànova, 2021, Fascicule 6: Un territoire à l'avenir nécessairement résilient, Collectivité de Saint-Martin.
- COGEA srl, ND International, Fundación AZTI, Poseidon Aquatic Resources Management Ltd, 2017, *Realising the potential of the Outermost Regions for sustainable blue growth*. Study for the European Commission, Executive Agency for Small and Medium-sized Enterprises (EASME).
- Constant, F., 2022, *Géopolitique des outre-mer, Entre déclassement et (re)valorisation*. Le Cavalier Bleu edition.
- Demeter, C., Fechner, D., Dolnicar, S., 2023, Progress in field experimentation for environmentally sustainable tourism A knowledge map and research agenda. Tourism Management, Volume 94, 2023, 104633, ISSN 0261-5177, https://doi.org/10.1016/j.tourman.2022.104633
- Dentinho, T.P., 1996, *ICT and Regional Development. The Case of the Azores Dairy Value Chain.* PhD Thesis. University of Newcastle upon Tyne (mimeo).
- Dentinho T.P., Fortuna, M.A., 2019, *How Regional Governance Constrains Regional Development. Evidences From an Econometric Base Model For the Azores*. Revista Portuguesa de Estudos Regionais 52: 25-35.
- Dentinho, T. P., Reid, N., 2021, *Effects and policies of COVID-19*. Regional Science Policy & Practice, 13(Suppl 1), 2.
- Diogo, F., 2019, Some peculiarities of poverty in the Azores. Sociologia on line, n.º 19, June 2019, pp. 81-101.
- EAPN (European Anti-Poverty Network), 2022, El Estado de la Pobreza, Seguimiento de los indicatores de la Agenda UE 2030, 2015-2022, Las Comunidades Autónomas. EAPN España.
- European Commission, 2013, *Progress on 'GDP and beyond' actions*, Commission Staff Working Document, Brussels, 2 August 2013, SWD(2013) 303 final, Volume 1 of 2.

- European Commission, 2020a, Communication on the EU Biodiversity Strategy for 2030, Bringing nature back into our lives, Brussels, 20 May 2020, COM(2020) 380 final.
- European Commission, 2020b, Annual Activity Report 2020, Annexes, Directorate-General Regional and Urban Policy.
- European Commission, 2021, Communication on a new approach for a sustainable blue economy in the EU, Transforming the EU's Blue Economy for a Sustainable Future, Brussels, 17 May 2021, COM(2021) 240 final.
- European Commission, 2022a, *Outermost regions at a glance assets, challenges and opportunities*, Commission Staff Working Document accompanying the document 'Putting people first, securing sustainable and inclusive growth, unlocking the potential of the EU's outermost regions', Strasbourg, 3 May 2022, SWD(2022) 133 final.
- European Commission, 2022b, Communication on Putting people first, securing sustainable and inclusive growth, unlocking the potential of the EU's outermost regions, Strasbourg, 3 May 2022, COM(2022) 198 final.
- European Commission, 2022c, Cohesion in Europe towards 2050, Eighth report on economic, social and territorial cohesion. PDF doi: 10.2776/624081.
- European Commission, 2022d, Study on the impact of the COVID-19 pandemic on the outermost regions final report. Study written by Ecorys. Publications Office of the European Union. PDF doi: 10.2776/541180.
- Fujita, M., Krugman, P., Venables, A., 1999, *The Spatial Economy: Cities, Regions, and International Trade*. MIT Press.
- Fundación Finnova, 2023, *Informe Anual. Año 2021*. Consejo Económico y Social de Canarias. Depósito legal: GC 245-2015.
- Gay, J.-C., 2021, La France d'outre-mer, Terres éparses, sociétés vivantes. Armand Colin edition.
- Guzzon, C., Vera Paz, A., Buonaiuto, A. (Conference of Peripheral Maritime Regions' islands commission9, 2022, *Green investments: towards the sustainable and competitive recovery of islands*. Technical Note: Green Investments. December 2022.
- Hernández-González, Y., Guimarães-Pereira, Â., Rodríguez, S., Cuevas, E., Barbosa, P., 2016, *Perspectives on contentions about climate change adaptation in the Canary Islands: A case study for Tenerife*. European Commission's Joint Research Centre. EUR 28340 EN, doi:10.2788/282252
- IEDOM (Institut d'émission des départements d'outre-mer), 2014, Comptes économiques rapides pour l'Outre-mer.
- INE (Instituto Nacional de Estadística), 2023, Consumer Price Index (CPI). 2021 Base Harmonised Index of Consumer Prices (HICP). 2015 Base July 2023. Press Release. 11 August 2023.
- INSEE (Institut national de la statistique et des études économiques), 2022, A La Réunion, un quart des jeunes ne sont ni en emploi, ni en études, ni en formation en 2021. Insee Analyses La Réunion, 72, August 2022.
- INSEE (Institut national de la statistique et des études économiques), 2023a, *Panorama de la Pauvreté à La Réunion*, Insee Dossier Réunion 07 published on 20 October 2023.

- INSEE (Institut national de la statistique et des études économiques), 2023b, *En 2022, les prix restent plus élevés dans les DOM qu'en France métropolitaine, en particulier pour les produits alimentaires.* Insee Première n° 1958. July 2023.
- IUCN, 2022, *The IUCN Red List of Threatened Species*. Version 2022-2. www.iucnredlist.org. Accessed on [24 September 2023].
- Krugman, P., 1991, Increasing Returns and Economic Geography. Journal of Political Economy, Volume 99, Number 3, June 1991.
- León, C. J., Lam-González, Y. E., González, M. M., García, C., de León Ledesma, J., Tuya, F., ..., Vega, R., 2021, Downscaling climate change impacts, socio-economic implications and alternative adaptation pathways for islands and outermost regions. Madrid: McGraw Hill.
- Malan, J., Dimauro, M., 2022, Research for CONT Committee Single Audit Approach Root Causes of the Weaknesses in the Work of the Member States' Managing and Audit Authorities, European Parliament, Policy Department for Budgetary Affairs, Brussels
- Mariano, C., Marino, M., Pisacane, G., Sannino, G., 2021, Sea Level Rise and Coastal Impacts: Innovation and Improvement of the Local Urban Plan for a Climate-Proof Adaptation Strategy. Sustainability, 13, 1565.
- Maucorps, A., Moshammer, B., Pindyuk, O., Tverdostup, M., Gorzelak, G., Khrapunenko, M., Kaldur, K., Zavarska, Z., Castelli, C., 2023, Research for REGI Committee – *The use of Cohesion Policy funds to support refugees from Ukraine*, European Parliament, Policy Department for Structural and Cohesion Policies, Brussels
- Melun, G., Le Bihan, M., 2020, Histoire et impacts environnementaux de l'orpaillage en Guyane. Clefs de compréhension des tensions actuelles. Edited by Office français de la biodiversité.
- Moinier, C., Smithers, R.J., 2020, Vulnerability and impact assessment of the EU's outermost regions: a thematic report to support an ex-ante impact assessment of the EU Adaptation Strategy. Study for the European Commission.
- OECD, 2023a, Production Transformation Policy Review: Spotlight on Guadeloupe's Internationalisation. OECD Development Pathways, OECD Publishing, Paris, https://doi.org/10.1787/ac8c5b0d-en.
- OECD, 2023b, *Making renewable energies drivers of competitiveness in the EU outermost regions*. OECD Development Policy Papers No 52. October 2023.
- OECD/UNCTAD/ECLAC, 2020, Production Transformation Policy Review of the Dominican Republic: Preserving Growth, Achieving Resilience. OECD Development Pathways, OECD Publishing, Paris, https://doi.org/10.1787/1201cfea-en.
- OTTEE (Observatoire Territorial de la Transition Écologique et Énergétique), 2020, *Bilan énergétique 2019, Martinique, Chiffres détaillés*. Collectivité Territoriale de Martinique.
- Pickup, L., Mantero, C., 2017, *Final report on 'Transport accessibility for the EU Outermost Regions'*. Report from the expert group to the European Commission. 17 July 2017.
- PISA (Programme for International Student Assessment), 2022, Spain report.
- Presidents of the EU outermost regions, 2023, Final Declaration of the 28<sup>th</sup> Conference of the Presidents of the EU outermost regions. Santa Cruz de Tenerife. 8 November 2023.

- Regional Council of Réunion, 2018, *Pour un modèle réunionnais partagé*. Contribution de la Région Réunion aux assises de l'Outre-mer engagées par le gouvernement en concertation avec les acteurs économiques de La Réunion, June 2018, Région Réunion.
- Rodriguez-Pose, A., Dijkstra, L., Poelman, H., 2023a, *The Geography of EU discontent and the Regional Development Trap*. Regional and Urban Policy, Working Paper O3/2023, European Commission.
- Rodriguez-Pose, A., Terrero-Davila, J., Lee, N., 2023b, Left-behind versus unequal places: interpersonal inequality, economic decline and the rise of populism in the USA and Europe. Journal of Economic Geography, (0), pp. 1-26.
- Sass, K., Maciel, R., Dentinho, T.P., 2023, *The impact of COVID-19 on Tourism, Employment, and Population of the Azores Islands*. Letters in Spatial and Resource Sciences (forthcoming).
- Serviço Regional de Estatística dos Açores, 2023, Índice de Preços no Consumidor. October 2023.
- SREA, 2016, Indicador Compósito de Desenvolvimento Intra-Regional (ICDIR-Açores) 1980-2010. Regional Government of the Azores, Terceira.
- 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.
- Whitmore, T., 1997, *Indices of the Most Pleasant Climates*. Climatological Research. Syracuse University (USA).

## **WIDER BIBLIOGRAPHY**

- Bachtler, J., Bourdin, S., Kah, S., 2023, *Cohesion Policy in the Post-Pandemic Europe*. In N.F. Dotti, I. Musialkowska & S. de Gregorio Hurtado, EU Cohesion Policy: A Multidisciplinary Approach, Edward Elgar Publishing.
- Bourdin, S., Jean-Pierre, P., Rossignol, N., 2022, *Les régions ultrapériphériques face aux conséquences du COVID*. Policy Brief, EGTC ESPON, Luxembourg.
- Bourdin, S., Cottereau, V., Hermet, F., Jean-Pierre, P., Meideros, E., 2023, *How have Europe's outermost regions dealt with the economic and social consequences of the COVID-19 crisis? Effects, policies, and recommendations.* Regional Science Policy & Practice. https://doi.org/10.1111/rsp3.12690. Juin.
- Bourdin, S., Hermet, F., Jean-Pierre, P., 2023, *Are the Remotes Regions (always) the Laggings?*. Working Paper, presented at ERSA conference, Alicante, September 2023
- Capello, R., Nijkamp, P. (Eds.), 2019, Handbook of regional growth and development theories: revised and extended second edition. Edward Elgar Publishing.
- Croissant, Y., Jean-Pierre, P., 2002, Les politiques de transferts sont-elles favorables à la croissance des économies. Louvain economic review, 2002, 68 (3), pp.335. (10.3917/rel.683.0335)
- Deidda, M., 2016, *Insularity and economic development: a survey*. International Review of Economics, 63(2), 107 128.
- Di Cataldo, M., Monastiriotis, M., Rodriguez-pose, A., 2020, *How Smart Are Smart Specialisation Strategies?*. Journal of Common Market Studies, 1-27, DOI: 10.1111/jcms.13156
- Diebolt, C., Hippe, R., 2022, *Human Capital and Regional Development in Europe*. Frontiers in Economic History.
- Diemer, A., lammarino, S., Rodríguez-Pose, A., Storper, M., 2022, *The Regional Development Trap in Europe*. Economic Geography, DOI:10.1080/00130095.2022.2080655
- EPRS, 2023, *Guide du Financement Européen Edition 2023*. Servide de Recherche du Parlement Européen, Bruxelles, 204pp. DOI: 10.2861/856949
- ESPON, 2022, Territorial impacts of Covid-19 and policy responses in European regions and cities. Final Report. Luxembourg.
- Holstein, P., Tarnus, E., 2021, Ile en transitions Plan d'actions pour la Recherche et l'Innovation La Réunion – 2021-2027, Agence Nexa.
- INSEE (Institut national de la statistique et des études économiques), 2021, *Les défis économiques, sociaux et environnementaux du XXIe siècle à La Réunion*. Insee Analyse LA Réunion, 66, December.
- INSEE (Institut national de la statistique et des études économiques), 2023, *Comptes économiques rapide de La Réunion 2022*. July.
- Jean-Pierre, P., 1997, Dynamique d'une économie régionale en développement au sein de la Communauté Européenne. Revue Région et Développement, 5, pp. 93-128.
- Jean-Pierre, P., 2007, Transferts et Déséquilibres Macro-économiques des Économies Ultramarine, Colloque « Économies d'outre-mer : s'ouvrir pour soutenir la croissance ? ». AFD Paris.
- Mazzola, F., Pizzuto, P., Ruggieri, G., 2022, Tourism and territorial growth determinants in insular regions: A comparison with mainland regions for some European countries (2008-2019). Papers in Regional Science.

- Ministère de la Transition Ecologique, 2022, Décret 2022-575 du 20 avril 2022, relatif à la programmation pluriannuelle de l'énergie de La Réunion.
- Poirine, B., 1995, Les petites économies insulaires, théories et stratégies de développement. Ed. L'Harmattan, 290p.
- Polyzos, S., Tsiotas, D., 2020, *The contribution of transport infrastructures to the economic and regional development*. Theoretical and Empirical Researches in Urban Management, 15(1), 5-23.
- Pounder, P., Gopal, N., 2021, *Entrepreneurship and small island economies*. Organizations and Markets in Emerging Economies, 12(2), 415-439.
- Région Réunion, 2022, *De la S3 vers la « S5 », Smart Specialisation Strategy for Social and Sustainable Dévelopment*. https://regionreunion.com/IMG/pdf/plan\_d\_action\_s5\_21-27\_vdef.pdf
- Région Réunion, 2015, *La Strategie de Spécialisation Intelligente de La Réunion*. http://www.innovonslareunion.com/fileadmin/user\_upload/innovons/S3/2016-07\_Nexa-Innovons-Brochure\_190x265\_FR\_04.pdf
- Rizzi, P., Graziano, P., Dallara, A., 2018, A capacity approach to territorial resilience: The case of *European regions*. The Annals of Regional Science, 60(2), 285-328.
- Rodriguez-pose, A., Vidal-Bover, M., 2022, Unfunded mandates and the economic impact of decentralization: When finance does not follow function, Papers in Evolutionary Economic Geography, #22-21.
- Streitz, N. A., Riedmann-Streitz, C., Quintal, L., 2022, *From 'Smart-only' island towards lighthouse of research and innovation*. In International Conference on Human-Computer Interaction (pp. 105-126). Springer, Cham.
- Weimer, D. L., Vining, A. R., 2017, *Policy analysis: Concepts and practice*. Routledge.

## ANNEX

# Figure 21: Total amount (in EUR) of ESIF (ERDF and ESF combined) by theme in the 2014-2020 regional programme of the Azores



Source: authors' own elaboration based on data from the European Commission's Cohesion Open Data Platform Note: Amounts excluding national co-financing but including REACT-EU resources. Allocation of funding as of October 2023.

### Box 31: Distribution of funding across POs in the 2021-2027 regional programme of Madeira

The 2021-2027 regional programme of Madeira ('Madeira 2030') is financed through the ERDF and ESF+. Most of the combined EU funding (excluding national co-financing) has been allocated to PO4 (EUR 350.9 million), followed by PO1 (EUR 193.6 million), PO2 (EUR 126.5 million), PO3 (EUR 60 million), PO for technical assistance (EUR 19 million) and, finally, PO5 (EUR 10 million). Therefore, the distribution of EU funding from the EU Cohesion Policy in Madeira places greater emphasis on social and innovation challenges, in line with the identified vulnerabilities.

Source: authors' own elaboration based on data from the European Commission's Cohesion Open Data Platform





Source: authors' own elaboration based on data from the European Commission's Cohesion Open Data Platform

As of October 2023, EU payments (relative to total EU funding allocation) for Cohesion Policysupported operations are highest for the regional programmes of the Portuguese outermost regions, with more than 80% of the expected payments already made. In contrast, they were low for the regional programmes in Guadeloupe, Saint-Martin, French Guiana, Martinique, Mayotte and the Canary Islands (ESF only), with less than 60% of the payments made.

## Box 32: S5 priorities in Réunion (2021-2027)

Despite the momentum generated by the S3 over the period 2014-2020, there remain a number of obstacles to the development of innovation in the region. Réunion's new S3, entitled S5, aims to boost the "Integration of Réunion into international research and innovation networks".

Indeed, despite its undeniable strengths, the regional research and innovation system is, like the Reunionese economy, poorly internationalised, whether in terms of training, employment or participation in the Horizon 2020 and Horizon Europe programmes.

In order to strengthen the internationalisation of research, the new S3 (or S5) action plan proposes to increase the attractiveness of the region in order to develop research and innovation capacities, as measured by the number of scientists and engineers working in Réunion; to amplify the transfer of knowledge, know-how and technologies in order to avoid duplication of R&D&I efforts and accentuate the impact of these activities on the region; to increase international recognition through greater participation in the Horizon Europe programme, as measured by the funding obtained by the region; and, finally, increase the number of innovative solutions originating in Réunion that are exploited internationally.

With this in mind, the S3, updated in 2022, comprises four cross-cutting priorities and nine thematic priorities, which go hand in hand and constitute the S3's areas of intervention:

- Four cross-functional priorities for operational implementation of the S3:
  - o Implement the S3 effectively,
  - o Coordinate and support research and innovation to meet the region's major challenges,
  - Facilitate entrepreneurial initiatives and support innovation and business transformation initiatives,
  - o Integrate Réunion into international research and innovation networks.
- Nine thematic priorities, aimed at further specialising in strategic areas of activity:
  - Socio-ecological dynamics in tropical island environments: knowledge and restoration of systems,
  - Blue economy and sustainable management of tropical coastal and marine socioecosystems,
  - Resilience to climatic, geological and anthropogenic hazards,
  - Agro-products, tropical natural extracts and sustainable food,
  - Sustainable development and tropical buildings for bioclimatic and resilient cities in intertropical zones,
  - o Deployment of decentralised, low-carbon energy systems in isolated territories,
  - o Digital transition and digital risk prevention,
  - o Sustainable health for vulnerable populations,
  - For inclusive Creole societies, in a multicultural, insular and post-colonial context.

Source: authors' own elaboration

This study focuses on EU Cohesion Policy in the nine outermost regions. It first outlines the geographic, climate, socio-economic, demographic and administrative characteristics of these regions and further analyses the vulnerabilities affecting their convergence processes. It pays particular attention to the implementation of EU Cohesion Policy and the use of place-based approaches to foster their economic growth. Finally, it reviews the importance of Article 349 of the TFEU and concludes with recommendations for its wider application.

PE 747.282 IP/B/REGI/IC/2023-20

Print ISBN 978-92-848-1522-7 | doi:10.2861/754859 | QA-09-24-001-EN-C

PDF ISBN 978-92-848-1523-4 | doi:10.2861/000408 | QA-09-24-001-EN-N