Improving the quality of multi-level governance and strengthening the resilience of island economies of Croatia, Greece, and Sweden

TSI - MCP/23EL34

Country Report

SWEDEN

October 2025

The Project is implemented by the OECD in cooperation with the European Commission Task Force for Reform and Investment (SG REFORM) and benefitted from the financial support of the EU Technical Support Instrument (TSI).

Table of contents

FIGURES

TABLES

Foreword

Across the world, islands have long captured our imagination as places of beauty, culture, and resilience. Yet beneath the idyllic image lies a complex and often overlooked reality. Island communities face persistent structural challenges that are distinct from those of mainland regions. From demographic ageing and service delivery constraints to seasonal economies, climate vulnerabilities, and limited connectivity, island regions operate at the margins of national policy frameworks. These challenges are not only barriers to growth but risks to equity, cohesion, and the long-term sustainability of the economic and environmental systems.

In Sweden, more than 90 000 people live on islands without a fixed land connection. The diverse islands are stewards of exceptional biodiversity, cultural heritage, and regional potential. However, their unique characteristics have rarely been matched with equally tailored public policies. This report provides a comprehensive assessment of the state of island development in Sweden. It offers an evidence-based diagnostic of economic, demographic, and environmental trends, an in-depth exploration of two representative island municipalities – Gotland[1] and Öckerö – and a detailed review of the institutional frameworks shaping island policy. The analysis shows both the promise of innovation and the persistence of policy blind spots. It also offers a clear message: one-size-fits-all strategies will not work.

This report responds directly to the growing interest among Swedish national and regional authorities in ensuring that no place is left behind. Its findings are highly relevant to broader European and international discussions on balanced territorial development and resilience. The report identifies clear policy gaps in planning capacity, infrastructure provision, climate adaptation, and multi-level governance. More importantly, it puts forward practical and implementable recommendations – grounded in international best practice – that can help Sweden build a more inclusive and sustainable future for its islands.

Policy makers often ask what makes islands different. The answer lies not only in geography but in how institutions respond to it. Ensuring that island-specific data are collected, that policies are designed with island conditions in mind, and that local authorities are empowered and adequately resourced is not an optional extra. It is a requirement for effective governance. Sweden has the opportunity to lead by example. With the right strategic focus and coordination, its islands can become models of green transition, rural innovation, and social cohesion.

[1] Gotland holds the dual status of Municipality and Region (TL3).

Acknowledgements

This report was prepared by the OECD Centre for Entrepreneurship, SMEs, Regions and Cities, led by Lamia Kamal-Chaoui, Director. It was produced as part of the programme of work of the of the Working Party on Rural Policy, within the Regional Development Policy Committee of the OECD.

The project and this report were co-ordinated by Stefano Barbieri, Senior Policy Analyst, under the supervision of José Enrique Garcilazo, Deputy Head of the Regional Development and Multi-level Governance Division led by Dorothée Allain-Dupré.

The report was edited by Eduardo Rodriguez Montemayor (Policy Analyst), and drafted by Eduardo Montemayor, Felix Winkelmayer (Policy Analyst), Michelle Marshallian (Economist), Geoff Upton (Policy Analyst), and Stefano Barbieri of the OECD Secretariat. The project (and this report) also benefitted from valuable input provided by other OECD colleagues: Joshua Wood (Policy Analyst), Jeroen Michels (Policy Analyst), Maria Varinia Michalun (Head of Unit), Enrique Garcilazo.

We would like to express our sincere thanks and appreciation to the following individuals, whose contributions were instrumental to the project: at the Ministry of Infrastructure and Rural Development Maria Ahlsved, Mattias Moberg; at Region Gotland Meit Fohlin, Chair of the Regional Board, Stefan Persson, Head of department Regional Development, Erik Bäckström, Senior Analyst, Roland Engkvist, EU Policy Advisor and International Strategist; at Öckerö Municipality Cecilia Lindblom.

The project was Implemented by the OECD in co-operation with the European Commission Task Force for Reform and Investment (SG REFORM), with financial support from the EU Technical Support Instrument (TSI) and Norway's Arctic 2030 grant scheme. The OECD would like to express its sincere gratitude to the members of SG REFORM who actively contributed to the project: Kaspar Richter (Head of Sustainable Competitiveness Unit), Elodie Boulch and Nikos Kleniatis (Policy Officers).

The OECD is also grateful to all stakeholders from the government and civil society, academia and business representatives of Sweden, who contributed to the project during in-site and virtual missions, workshops and meetings.

Executive Summary

Swedish islands face a distinctive set of demographic, economic, environmental and governance challenges that require targeted and integrated policy responses. Insular islands, home to over 90 000 permanent residents across 39 municipalities, are structurally vulnerable in ways that differ from the mainland. Ageing is accelerating, with old-age dependency ratios reaching 44% in some islands – significantly above the national average. Although overall population in island municipalities grew by 8% from 2000 to 2020, this trend masks substantial youth outmigration, service access inequalities, and highly seasonal population swings that strain local infrastructure and budgets. Access to reliable transport and digital infrastructure remains a significant barrier to inclusion and competitiveness. Environmental vulnerabilities are especially acute in islands, due to limited ecological buffers and tourism pressure.

Island challenges go beyond remoteness and rural small scale: insularity brings systemic economic, social, and governance peculiarities disconnected from the rest. The costs of insularity extend beyond those directly imposed by geographic disconnection. Island communities, institutions and cultures can also display insular characteristics that reduce efficiency, limit cooperation (e.g. interregional collaboration may be weaker) and stifle innovation, culminating in additional and compounding cost burdens for island economies. GDP per capita in island municipalities tends to be 25–30% lower than in urban areas, and productivity gains have been modest. Narrow production bases (with little scale and diversification) are common, and these territories are also more exposed to external shocks.

A common denominator in islands is the mismatch between ambition and actions. The two case studies covered in this report, Gotland and Öckerö show distinct and unique peculiarities and challenges. Yet, both Islands feature strategic actions that demonstrate their commitment to fostering a sustainable and competitive economy through comprehensive planning, strategic business development, infrastructure enhancements, and active community engagement. Their common challenge is moving from vision to effective implementation on-the-ground. Local capacity is often a barrier.

As Sweden looks to strengthen territorial cohesion and prepare for the green and digital transitions, the need for an island-sensitive policy approach has never been more pressing. Swedish islands are at a strategic crossroads. Policies need to “see” islands as distinct systems – not simply remote rural areas. Addressing the specific needs of these communities is not only a matter of equity but also an opportunity to unlock untapped potential in sustainable tourism, blue economy, and local innovation. Despite challenges related to remoteness and insularity, Sweden’s islands have the potential to become pioneers of inclusive, sustainable and resilient territorial development. Their unique geography, social capital and environmental assets make them ideal laboratories for future-oriented policies if bottlenecks in infrastructure, governance and economic structure can be addressed. Capitalising on these opportunities requires: well informed local strategies to specialise and diversify economic activities and governance capacity to drive change. This boils down to two main policy lessons:

1. Islands need to be considered as a distinct territorial category in national strategic frameworks.

2. Islands need place-based development approaches.

The success of future strategies will hinge on the ability to deliver locally tailored, data-driven and island-proofed interventions. The challenge is that policy frameworks remain fragmented and often insufficiently tailored to the realities of island territories. The case studies of Gotland and Öckerö highlight both good practices and persistent gaps. Gotland has initiated strategic development efforts and benefited from some multilevel collaboration. However, operational delivery and inter-sectoral planning remain inconsistent. Öckerö has a local development strategy that is well aligned with its broader region and with national frameworks, but innovation capacity and economic diversification still have room for improvement. These cases underscore common needs across Sweden's islands while also revealing specific local idiosyncrasies that any national response must accommodate. The report identifies policy priorities for the development of island strategies (nationally and locally) and for key policy domains covering competitiveness, sustainability, infrastructure & connectivity. The policy approach needs to be coordinated across national, regional and local levels of government and be holistic – local authorities in islands recognise the importance of attracting new residents and businesses, via strong regional branding. Yet, there is a need for coordinated structures to streamline efforts related to in-migration, talent retention, business establishment and economic diversification.

Assessment & Recommendations

Island economies face unique and persistent challenges that demand tailored policy responses. Geographic isolation, demographic imbalances, seasonal economic activity, infrastructure limitations, and heightened environmental vulnerability place island regions at a structural disadvantage compared to their mainland counterparts. In Sweden, where more than 90 000 people live across numerous island municipalities without fixed land connection, these challenges are further exacerbated by limited national visibility and fragmented policy efforts. As Sweden aims to enhance territorial cohesion and advance the green and digital transitions, the urgency for an island-sensitive policy framework has never been greater. Addressing the specific needs of island communities is not only a question of equity – it also presents a significant opportunity to harness untapped potential in sustainable tourism, the blue economy, and local innovation.

This section provides a summary of the key trends and policy needs of Swedish islands, followed by recommendations for national and subnational actors to address these challenges. The assessment and recommendations draw on the report's comprehensive territorial analysis – covering demographic, economic, and environmental indicators across all Swedish islands (Chapter 1); an in-depth review of local governance, planning, and policy implementation in two representative case studies, Gotland and Öckerö (Chapter 2); and an examination of institutional arrangements and coordination mechanisms necessary for effective, long-term island development (Chapter 3). The summary is structured in two main parts: Trends and Policy Assessment, and Recommendations.

Trends and Policy Assessment across Swedish Islands

This section summarises the main economic, demographic, social and environmental trends across Swedish Islands, and what those trends mean for policies to improve competitiveness and wellbeing. The report adopts a pragmatic approach to quantify and benchmark key trends across economic, social and environmental indicators (by applying a flexible definition of islands grounded in the OECD typology but tailored to the Swedish context), while also calling for improving data for better policy making. What matters most is that the statistical lens aligns with the lived realities of island communities and supports place-based policy action for more resilient, inclusive, and dynamic island economies. By also drawing on trends in specific Island case studies (e.g. Gotland and Öckerö), this section also describes the policy actions currently being taken (or envisaged in the near future) by Swedish national and subnational authorities – and what they are not doing (i.e. the policy gaps) to address the emerging challenges.

Population dynamics

Trends

Swedish Islands have experienced modest and uneven population growth, shaped by accessibility and economic opportunities. There are significant disparities across regions and time periods. From 2001 to 2021, Gotland's population increased by 4.9% (0.23% CAGR), with most of the growth occurring after 2016. By contrast, the island municipality of Öckerö experienced population stagnation and ageing, reflecting its more constrained connectivity and economic base. These trends diverge from the higher national average growth of 16.8%, and from the 9.3% increase observed across OECD European island regions. The data reveal that, while some Swedish islands retain demographic stability, others face long-term decline and demographic imbalance – a risk compounded by youth outmigration and service centralisation. Such variation reflects the differential attractiveness and accessibility of specific islands.

KPIs for systematically tracking demographics at the municipal and sub-regional levels include: net migration rate, dependency ratio, labour force participation of 55+ population, and service accessibility index by settlement type.

Current policy actions and gaps

Policy efforts have begun to target demographic sustainability, but gaps remain in integrated, long-term strategies. National and regional efforts have supported basic service access. But policy responses vary, with Gotland adopting a more proactive demographic strategy than smaller municipalities. Gotland has invested in liveability, including affordable housing initiatives, childcare access, and health service expansion. It also promotes itself as a destination for remote workers and return migrants. Öckerö, part of a dynamic metropolitan region, is developing and implementing a brand strategy with a strong focus on attracting young people and residents of working age, as well as strengthening the municipality's attractiveness for businesses and new jobs. This branding initiative, launched 2024, now constitutes a central part of its long-term development agenda. Housing shortages and the cost of living are still challenges, but Öckerö is undertaking substantial housing development (1 000 new homes over the coming 10 years for a population of under 13 000). However, many smaller islands lack strategies tailored to counteract outmigration, ageing populations, or labour market attrition.

Policy priorities centre on addressing age imbalance, youth retention, and service sustainability. The data highlights an increasing dependency ratio on many islands and weak labour force replenishment. Planning for population change should be embedded in housing, labour market, and service delivery strategies. The diversity of island dynamics requires differentiated interventions rather than one-size-fits-all approaches. To enable place-based responses, population trends need to be monitored using more granular and harmonised indicators such as net migration flows, old-age dependency ratios, and child-to-care capacity metrics. Without systematic planning and support, smaller islands risk losing critical mass to sustain services.

A place-sensitive, multi-level approach to population dynamics is needed. Integrated demographic strategies should focus on (i) retention and attraction of young families and skilled workers, (ii) increasing housing affordability, and (iii) enabling quality service delivery despite scale constraints. The attraction of skilled people is a key element of Islands' economic competitiveness – so further covered in the relevant section below.

Economy and competitiveness

Trends

Island economies in Sweden have grown in absolute GDP terms but lag behind in per capita performance. Between 2001 and 2021, Gotland's GDP grew at 1.4% annually, just behind the national average of 2.1%. Öckerö's host region Västra Götaland grew at 2.0%. However, GDP per capita in many island regions remains below national averages, especially when adjusted for population growth and service needs. Labour productivity in island regions fell 6% over two decades, while growing 34% nationally.

Labour productivity and sectoral performance vary, with trade and public administration dominating employment. Islands rely heavily on trade/services and public administration. Knowledge-intensive sectors like ICT and professional services remain marginal. From 2001 to 2021, productivity in agriculture (+1.9%) and finance (+0.8%) rose modestly in islands, while sectors like manufacturing and construction declined. In Gotland, public and trade sectors dominate GVA and employment; Öckerö faces similar concentration, lacking diversification.

KPIs for business performance include labour productivity by sector, SME density, innovation investment per capita, and digitalisation rates among firms. KPIs for people performance should include employment rates, adult reskilling participation rate, and sectoral job vacancy rates.

Current policy actions and gaps

Policy initiatives supporting competitiveness are underdeveloped or insufficiently targeted. National and regional economic policies insufficiently differentiate for island conditions. While general innovation, tourism, and SME support policies are in place, few are island specific. Sectoral priorities such as tourism, green industries, and marine activities lack tailored productivity strategies. The national strategy has yet to include mechanisms to build innovation capacity in smaller, rural island economies. Islands face specific obstacles: distance from research centres, lack of clustering, and infrastructure deficits.

To foster resilience, economic development must diversify beyond current sectoral concentrations. The fall in labour productivity, especially in islands like Gotland, indicates overreliance on sectors with limited value-added. Diversification efforts show potential in green economy segments, cultural/creative industries, and health-related services.

Boosting island competitiveness also requires place-based, sector-specific policies to capitalise on rural specialisations. Priorities include: (i) boosting productivity in key sectors (e.g. tourism, construction, agri-food sectors) through upskilling and digitisation; (ii) fostering anchor firms and networks in niche innovation sectors (e.g. marine biotech); (iii) linking SMEs with regional innovation hubs. Tailored interventions like special innovation vouchers for island firms and pilot programmes connecting islands to testbeds and innovation accelerators could address isolation challenges.

Labour and skills shortages continue to be key barriers for the growth of Island economies, so they need integrated economic planning and lifelong learning ecosystems. Actions include developing cross-sectoral economic strategies at the regional level while expanding relevant regional training centres and digital skill hubs. Gotland and Öckerö would benefit from tailored workforce reskilling aligned with emerging sectors. Workforce development strategies must address demographic realities and skills mismatches, integrating vocational and tertiary education tailored for island-specific labour needs – along with youth retention incentives tied to training and employment support. Furthermore, older population structures and geographic remoteness require flexible training approaches, including distance learning and inter-municipal resource sharing.

Infrastructure and Connectivity

Trends

Connectivity limitations, physical and digital, undermine both economic potential and quality of life on islands. High logistics costs, long commuting times, and patchy digital access constrain business development, remote work, and service innovation. Connectivity is also essential for education, health, and economic resilience. Improved connectivity is key to economic integration and social inclusion. Strategic connectivity investments unlock labour mobility, knowledge flows, and logistics chains.

As for physical connectivity, remoteness continues to limit access to economic and social opportunities. While Sweden has invested in core transport infrastructure, many islands remain poorly connected. Ferry schedules and transport costs inhibit mobility. Island accessibility to regional markets is constrained by limited and sometimes unreliable transport services. Ferry connections remain the primary lifeline for many islands. Gotland has relatively strong links to the mainland via Visby, but the dependence on weather-sensitive sea routes affects reliability, and ferry service crossings vary in costs. In Öckerö, frequent short-distance ferries connect the archipelago to Gothenburg, but peak-hour congestion and limited service at off-peak times restrict commuting and logistics. Access to larger regional markets from Öckerö remains limited and unreliable during adverse weather.

As for digital connectivity, while broadband coverage is improving, quality and affordability gaps persist. Digital divides remain in infrastructure quality and service affordability. Fixed broadband coverage and speeds vary widely. Remote islands face cost and performance disadvantages, limiting business development and e-service uptake. Fixed broadband penetration in Gotland is relatively high, but speed and latency issues persist in remote villages. In Öckerö, digital access is constrained by high costs and infrastructure limitations in the outer islands.

KPIs for infrastructure include: average door-to-door travel time to key services, annual reliability of maritime services, percentage of population with access to daily mainland connections. KPIs for digital connectivity include: median broadband speed, share of households with 100+ Mbps access, digital affordability index. Producing KPIs for digital use by SMEs, large companies and public authorities is a priority.

Current policy actions and gaps

Current national policy frameworks do not fully account for the spatial and economic cost of insularity. Current policies underplay territorial accessibility issues. While national strategies include remote rural areas, island-specific accessibility metrics are largely absent – so insufficiently recognising island-specific needs. Investment prioritisation often favours population density rather than strategic role or vulnerability. When inter-jurisdictional coordination is insufficient, island economies can be at a disadvantage. Some policy actions address certain gaps but lack integration and flexibility. EU funding often supports capital projects but not operational continuity.

Local policy responses focus on infrastructure maintenance rather than transformation. Gotland stakeholders have signalled to the central government the prioritisation of high-frequency ferry links maintenance (within the process of public procurement of the ferry services) and developed a multimodal logistics hub in Visby to better integrate sea and land transport. Air and ferry services complement each other. However, while ferry services are procured, air traffic is entirely commercial, which creates vulnerability and a risk of rapid fluctuations in supply. Regular transport to and from Gotland is a critical social service, and for healthcare and other activities to function. Öckerö municipality has won a procurement by Västra Götaland Region that includes the electrification of a public transport ferry, though funding and operational challenges persist for the development of electrified public transport as both the initial investments and the higher operational costs make it difficult to secure sustainable financing. Targeted investments in ferry modernisation, intermodal hubs, and flexible scheduling are certainly

needed. Furthermore, island-specific service benchmarks should be developed - considering transport obligations as public service duties where market failure is evident.

Policy priorities include island-proofing national infrastructure strategies and embedding connectivity metrics into funding frameworks. Integrated island connectivity plans should cover access, quality and resilience. Strategic planning needs to consider resilience to climate impacts and population shifts and be driven by data: connectivity remains under-measured and relevant indicators such as service frequency, reliability, and cost per kilometre for residents and freight are not systematically tracked. It is important to use connectivity KPIs to condition future funding. Furthermore, implementation needs enhanced multilevel governance: building territorial cohesion through integrated investment frameworks – for instance, linking EU, national, and regional investments with island development plans. Otherwise, fragmentation of responsibilities between municipal, regional, and national levels hinders strategic transport planning. There is also insufficient coordination between ferry operators, public transport providers, and infrastructure agencies, which can be facilitated if national and subnational authorities build a common front.

Policy action on digital connectivity is also underway but lacks island-specific targeting. Policy priorities include closing the digital quality gap – systematically monitoring performance metrics (e.g. average upload/download speeds or broadband affordability indices) - and ensuring affordability. National broadband strategies are ambitious but do noy fully account for topographic and population density constraints on islands. Municipalities often depend on competitive grants that disadvantage smaller or lower-capacity applicants. Gotland has implemented local broadband expansion schemes, but administrative burden limits uptake. Universal high-speed access can be seen as a public good for resilience. Possible policy responses include subsidising last-mile digital infrastructure, introduce quality benchmarks, and encourage public-private partnerships and municipal broadband cooperatives.

Delivery of public services

Trends

Small island municipalities face systemic challenges in maintaining equitable access to services. Geographic isolation creates structural constraints for social service delivery and economic activity. School catchments, emergency services, and healthcare provision face diseconomies of scale. Bridging these gaps is essential for social equity and island attractiveness. Chapter 1 indicates that average travel time to a hospital or upper-secondary school can be significantly higher for island residents. For example, in parts of Gotland, residents may travel up to 60 km to reach a specialist health facility.

KPIs for service delivery include per capita cost of service delivery, emergency response times, digital service uptake in remote areas.

Current policy actions and gaps

Amid connectivity challenges, policy priorities also need to consider innovations to overcome remoteness and insularity, island-proofing public service design and leveraging digital solutions. This aims at integrating service delivery models and addressing operational cost burdens. Without tailored funding mechanisms, small municipalities struggle to ensure minimum service thresholds. Therefore, they can explore introducing accessibility standards for essential services and adopt blended digital-physical delivery models (e.g. remote diagnostics, hybrid schooling). Gotland has experimented with hybrid health services, including mobile clinics and digital consultations. Öckerö relies heavily on services located in the Gothenburg metropolitan area but lacks formal inter-municipal service agreements. Also. improved data integration is crucial for designing equitable access frameworks: data on spatial accessibility, travel time, and user satisfaction remain fragmented.

The Environment and Green transformation

Trends

Swedish islands are environmentally valuable but increasingly vulnerable to degradation and climate impacts. They face mounting environmental pressures, particularly from tourism and climate change. Limited water resources, biodiversity fragility, and infrastructure pressure are key concerns. Gotland faces groundwater depletion, especially during peak tourism months, while coastal erosion and habitat loss threaten biodiversity. Öckerö's marine ecosystems are under stress due to fishing and recreational pressures.

The green transition presents a strategic opportunity for economic renewal but requires new skills and infrastructure. Islands can lead in areas such as renewable energy, circular economy, and sustainable tourism. However, many islands lack enabling frameworks or investment capacity. Gotland is positioning itself as a renewable energy hub, with wind energy investments and pilot projects in hydrogen. However, gaps in technical workforce and grid capacity remain. Smaller islands lack capacity to develop green economy strategies. Öckerö has limited access to national innovation funding and lacks green training centres or business accelerators.

KPIs for environmental performance include seasonal water use per capita, land consumption per resident, waste recycling rate, GHG emissions per capita. KPIs for green transition metrics include share of renewables in local energy mix, green job share, environmental Gini index, access to green public services, resilience index by island.

Current policy actions and gaps

Sweden's environmental standards are high, but islands need tailored interventions. Environmental policies are guided by national frameworks, but island-specific risks are under-addressed. Most policies are sector-based and do not account for island-specific environmental stress. Gotland has a local water management plan and biodiversity monitoring, but implementation is underfunded. Öckerö participates in regional marine conservation schemes but lacks tailored adaptation strategies. Place-based environmental resilience strategies can give special emphasis to ecosystem services, sustainable land use, and adaptive water management. Tailored policies can be informed by island-specific environmental diagnostics and adaptive management, with standard indicators (e.g., water use per capita, air quality, land consumption) disaggregated by island to inform local planning. Seasonal environmental pressures also require dynamic monitoring systems.

Policy initiatives for the green transition are uneven and disconnected. Key ambitions in islands include scaling renewable projects, building institutional capacity, and creating green job pathways. Gotland has made progress in renewable energy, while others lag. National government support is needed to scale up green innovation ecosystems and financing. Central guidance can also develop green transition roadmaps per island, coordinate green training with job placement, and attract investment through green bonds or revolving funds. Municipalities require support to align land use planning, vocational training, and innovation policy with green economy goals.

Inequalities risk being exacerbated if green strategies are not inclusive. Investment tends to concentrate in higher-capacity areas, leaving smaller islands behind. Green strategies must also be context sensitive. Risk of exclusion or rebound effects is high if strategies neglect local constraints. These considerations require building governance and financing capacity, and using cross-sector platforms to align environmental, social, and economic goals. In short, policy priorities include equity-focused planning, tailored funding instruments, and knowledge exchange platforms. Island-specific green transition roadmaps - at least for the largest and more insular islands in Sweden (and not all municipalities with inhabited islands) - could jointly address water resilience, energy mix, waste cycles, and job transitions. Monitoring tools could track the distributional impact of green investments.

Inclusive multilevel governance and community participation

Addressing Island's demographic, economic, geographical and environmental challenges requires governance frameworks that enable cross-sector and cross-level coordination. Inclusive governance is a cornerstone of sustainable regional development – particularly for the resilience of rural and island territories where local needs and diverse voices can be easily overlooked. Sweden's multi-level governance offers opportunities for stakeholder engagement, but islands vary in their participatory culture and institutional capacity. Administrative capacity is often a limiting factor for smaller municipalities or rural, remote institutions across the OECD and other countries. Staff shortages, budget constraints, and competing priorities hinder sustained engagement. Moreover, participatory governance varies widely across island municipalities in Sweden, which also operate with asymmetric resources, affecting legitimacy and responsiveness (OECD 2023). This undermines participatory planning and long-term strategic thinking. While Gotland and Öckerö exhibit promising examples of collaboration, these are not systematically scaled. Gotland has embedded consultation in spatial and infrastructure planning, including citizen workshops on climate strategy. Öckerö has fewer institutionalised mechanisms, although it benefits from tight knit community networks.

The multilevel governance structure in Sweden offers a unique opportunity to involve diverse stakeholders in shaping regional policies. Local and regional governments play a crucial role in strategic planning and the delivery of essential services adapting to the specific needs and priorities of their communities. Swedish governance emphasises collaboration with local communities in planning, resource management, and green transition, ensuring policies respect local values and draw on community-specific knowledge. Public trust is strengthened through transparency and participation, using tools like consultations and digital feedback.

Multi-level governance still shows room for improvement when it comes to islands - fragmented institutional responsibilities and inconsistent coordination across national, regional and municipal levels hinder long-term planning and implementation. Swedish islands often fall through the cracks of sectoral policies, with limited mechanisms to ensure horizontal coherence or vertical alignment. For example, while Gotland benefits from some degree of regional authority and cross-sector initiatives, Öckerö illustrates the challenges of small municipalities managing complex development agendas without dedicated coordination structures. OECD evidence shows that decentralisation only delivers results when supported by capacity building, fiscal alignment and coordination frameworks. Swedish islands would benefit from clearer mandates, stronger intermunicipal collaboration, and institutionalised citizen engagement (e.g. participatory foresight, regional policy labs).

Though Sweden has mature processes for local citizen participation in general, island territories and remote regions can still improve local capacity and procedural infrastructure for participation. The challenge for island territories is ensuring equal voice across territories. Key gaps include the lack of systematic stakeholder mapping, insufficient feedback mechanisms, and limited digital participation tools. Indicators such as participation rate in planning consultations, citizen satisfaction scores, and local fiscal autonomy could guide progress. Participatory mechanisms can be enhanced with concrete actions such as promoting citizen assemblies or strategic forums for island planning; enhancing transparency through participatory budgeting and open data portals; building administrative capacity through shared services and professional training. Transparency and citizen involvement are vital for building trust and policy legitimacy. Tools like consultations, assemblies, and digital feedback platforms ensure communities shape decisions on infrastructure, land use, and equity. Embedding these practices fosters shared responsibility in regional development.

KPIs for inclusive governance performance include citizen participation rate in planning processes, local governance satisfaction score, per capita administrative capacity index. Producing a quality KPI for services rendered would be a priority.

Summary assessment of Gotland case

Gotland has a robust planning framework, anchored in both the reginal development strategy and the comprehensive plan, but strategic implementation would benefit from better cross-sector alignment and multi-level governance coordination. While digitalisation efforts and community engagement are commendable, there is limited integration of sustainability goals across sectoral strategies. Infrastructure planning in Gotland is advanced, particularly in energy and mobility, yet it lacks a fully developed integrated transport strategy. A strong land-use framework that accounts for climate resilience is also needed. The island demonstrates strong economic potential, particularly in green sectors, but firm creation is low and business support systems remain underdeveloped. Sustainable place-based development efforts are visible, including the focus on bioenergy and climate neutrality, but local innovation systems require strengthening to match ambition with delivery. The policy gap lies in translating strategic visions into actionable, coordinated investment across sectors, with better vertical coordination with national actors and increased support to small businesses and knowledge hubs. Investment in local capacity and mechanisms for policy integration could be key enablers.

Summary assessment of Öckerö case

Öckerö's strategic approach combines strong local steering with the advantages of regional coordination. The municipality has an established vision for future development (defined by all parties) and a set of mandate goals (defined by the steering majority) supported by three overarching steering documents: the comprehensive plan, the five-year operational plan, and the business strategy programme. Strategies are not stand-alone but are deliberately designed to map into and reinforce regional frameworks. This integration can be a strength by aligning local strategies with regional and national priorities and frameworks. Öckerö gains leverage and impact in areas where collaboration is essential, such as infrastructure, labour market development, and sustainability. In infrastructure and land use, Öckerö has launched projects related to energy transition and transport efficiency, yet it is constrained by limited jurisdictional capacity and access to planning tools. Its economic development actions have focused on sustainable tourism and local services, and while innovation capacity and linkages with national entrepreneurship networks are underutilised, progress is being made in strengthening innovation ecosystems – a notable example is the dedicated effort to establish an innovation hub for the blue economy in the new Öckerö centre. The municipality actively promotes climate adaptation, yet resilience-building remains fragmented. A critical policy implication is the need for institutional empowerment and resourcing of smaller municipalities like Öckerö, which face capacity bottlenecks in implementation despite high ambition. Inter-municipal cooperation, delegated responsibilities, and targeted financial support can help Öckerö play a stronger role in shaping and delivering local economic and environmental transformation.

Summing up: overall policy implications for Island development

A holistic and tailored approach to island development must be grounded in territorial sensitivity, multilevel coordination, and evidence-based policymaking. Swedish islands display specific demographic, economic and infrastructural conditions that cannot be adequately addressed through generic rural or coastal strategies. Lessons from Gotland and Öckerö illustrate this: both have embraced elements of strategic planning and green transition, yet face gaps in execution, capacity, and policy integration. Gotland, for instance, has advanced sustainability planning, yet continues to struggle with water scarcity and land use coordination during peak tourism. Öckerö's long-term development strategy is well coordinated, though insufficient innovation and sectoral diversification on the ground may hamper resilience. Overall, long-term strategic planning for island development in Sweden requires a shift from sectoral to systemic thinking - rooted in local contexts and aligning demographic, economic and environmental goals. Central to this transformation is the ability to harness the Islands' competitive

advantages (such as their rich natural resources, cultural assets, and strong tradition of governance) while mitigating barriers related to geographic isolation, demographic pressures, and labour market gaps.

This report calls for the creation of a dedicated coordination platform at the national level. This can facilitate integrated planning, island-sensitive policy design, and joint priority setting with local and regional actors. Regular dialogue, joint funding instruments, and performance tracking are central to improving policy coherence. This can be supported by integrated planning tools, reliable data systems, and mechanisms for sharing good practices across islands. To support fair development, targeted funding and equalisation are needed so all regions (regardless of size or level of development) can contribute to and benefit from regional growth. These efforts can be enhanced by participatory processes that actively engage residents, businesses, academic institutions, and civil society organisations. Such inclusion ensures that development priorities reflect the diverse needs and aspirations of island territories, fostering trust and long-term commitment to policy outcomes.

Territorial policies for islands can combine place-based development with functional governance and inclusive engagement. This is compatible with OECD principles for rural well-being (OECD, 2020[1]). Policies must reflect geographic constraints, demographic dynamics and local institutional realities, so islands require tailored strategies that integrate land use, environmental protection, economic competitiveness and social services in an interlinked manner, rather than in silos.

Data and coordination are foundational. Islands often suffer from limited disaggregated data and weak national-local coordination (OECD, 2022[2]). In Sweden, fragmented data and inconsistent use of key performance indicators limit strategic foresight. Developing a harmonised island data platform, linked to national planning cycles, would support long-term planning. Moreover, formalising multilevel governance – through intergovernmental forums and island-sensitive national strategies - can ensure that policy delivery reflects real island needs.

Recommendations for National and Subnational Authorities

Recommendations in this section prioritise policies that are tailored and leading to inclusive development. Unlocking the full potential of Swedish island territories requires a comprehensive and integrated approach that leverages the unique assets of all regions, particularly those facing structural disadvantages such as more remote locations or limited access to infrastructure and services.

Inclusive Island development needs policy actions from both national and local (island) authorities. Recognising the need for a holistic, integrated, and tailored approach, recommendations need to align policy response across levels of government and territories connected to Islands in wider interregional policy making. The recommendations are underpinned by policy processes characterised by participatory governance, equitable resource allocation, and cross-border co-operation. Specific policy priorities and actions are put forward at the national level (i.e. for national government agencies and ministries) and the subnational levels. For the latter, there are recommendations that apply to all island economies, while the section also includes specific recommendations for the cases of Gotland and Öckerö. For all these cases, the recommendations cover *five* main policy areas:

1. Strategic planning and monitoring
2. Optimal Infrastructure and land use
3. Competitive landscape
4. Sustainable place
5. Multilevel governance

One of the policy priorities that cuts across all the policy areas is the use of data for evidence-based policy making. This is particularly crucial for strategy setting (of both island-sensitive national strategies and local strategies and plans devised by islands). Without adequate data, policymakers cannot assess the impact of demographic ageing, seasonality in employment, housing pressures, or infrastructure needs. Moreover, gaps in data prevent local authorities from making evidence-based decisions and weaken the rationale for national and EU-level support mechanisms.

I. Recommendations for National Authorities

I.1 Strategic planning and monitoring

Recognise islands as distinct territorial types in national strategies, with specific development needs. Sweden can integrate an "island-sensitive" lens into national and regional innovation, housing, and green economy strategies. This includes island-proofing policy frameworks and aligning them with EU territorial typologies. This responds to the gap identified in the assessment above on fragmented policy coverage and the need for integrated planning.

Facilitate a harmonised framework to link Island KPI data with decision-making through policy evaluation cycles. Encourage all island municipalities and regions to adopt KPIs aligned with national and EU benchmarks, with support from Statistics Sweden. Pilot dashboards for strategic foresight and local planning. This will require strengthening national datasets and indicators by establishing a disaggregated data framework for island municipalities, enabling regular monitoring of demographic trends, economic resilience, and service access. Concrete actions include**:** (i) creating a dedicated chapter on islands in Sweden's next rural strategy and (ii) launching a collaborative working group with Sweden Statistics and island municipalities to develop harmonised KPIs and dashboards – e.g. prioritise harmonisation of local data across NUTS3/TL3 and municipal levels.

National authorities can support core services in smaller Islands. National governments can offer practical guidance, clear policy frameworks, and targeted financial support to help smaller municipalities improve service delivery. However, regional and municipal governments should take the lead in implementing and managing core public services, tackling challenges like as high transportation costs, difficulties in attracting skilled professionals, and limited economies of scale. This approach allows national oversight to support regionally tailored solutions that effectively address local needs.

I.2 Optimal Infrastructure and Land use

Prioritise small-scale, high-impact transport and digital infrastructure on islands. These include ferry reliability, port upgrades, and last-mile broadband connectivity. This responds to the reliability and inter-modality challenges identified – and that infrastructure investment must reflect island-specific constraints and opportunities.

Support multi-modal integration and climate-resilient infrastructure planning. Current fragmentation and under-resourcing of strategic planning require stronger intergovernmental coordination. Also important is to fund connectivity strategies that blend maritime, road, and digital networks with climate adaptation consideration and to encourage local land use plans to integrate energy and climate resilience objectives.

Reform funding allocation criteria to better reflect territorial disadvantage. One option is to establish an "island accessibility index" to guide infrastructure grants and programme eligibility – considering the unique cost structures of sparsely populated islands in procurement and investment design. Concrete actions include: (i) introducing a ring-fenced island infrastructure fund under the transport ministry and (ii) mandating regional infrastructure plans to include connectivity strategies for outer islands.

I.3 Competitive Landscape

Develop a dedicated policy framework for island economic resilience and innovation. This directly responds to the policy priority to diversify island economies and improve productivity. National programmes can support local SMEs, start-ups, and anchor firms through dedicated island clusters and innovation hubs. This requires providing tailored support in green technologies, tourism innovation, and bio-based sectors. Capitalising on the strengths and assets of the diverse Islands can be facilitated by including islands in global value chain mapping and digital transition strategies – recognising the potential for niche sector development and remote service delivery. This also involves enhancing digital skills training and business digitisation programmes.

Promote island participation in national innovation and export support mechanisms. Integration with national programmes can reduce access disparities. Establish fast-track access to Vinnova innovation funds and Almi business support for island-based initiatives. Incentivise knowledge transfer between mainland research centres and island enterprises. Concrete actions include (i) introducing an "Island Innovation Vouchers" programme targeting tourism, green tech, and marine sectors and (ii) establishing regional economic attachés in island municipalities to liaise with national R&D agencies.

I.4 Sustainable Place

Ensure environmental goals are embedded in place-based investment programmes. This includes climate mitigation, biodiversity, water management, to name a few relevant areas, and it allows mainstreaming sustainability into national support for island development. This responds to the pressing need to tailor environmental policy to island contexts. This will require developing and monitoring island-relevant metrics of environmental capacity and performance. For instance, this can involve introducing natural capital accounting and ecological footprint indicators for island settings – prioritising data collection on seasonal resource stress (e.g. water, waste). Among the concrete actions is supporting localised ecological footprint assessments and seasonal pressure tracking.

Fund green transition pathways tailored to island conditions. Green investment must address infrastructure deficits and environmental risks – as identified in the examples of Gotland and Öckerö. This requires developing support for renewable energy, sustainable mobility, and circular economy solutions in islands, with green investment guarantees for small municipalities. Concrete actions include launching a national Island Green Transition Facility to co-finance renewable and circular economy initiatives.

I.5 Multilevel governance

Establish formal coordination mechanisms for island policy at the national level. The assessment in this section identified governance fragmentation as a barrier to strategic planning and capacity building. Co-designed policies ensure contextual responsiveness. This may involve creating an inter-ministerial working group on island development with regular engagement of municipal associations. This requires enhanced vertical alignment through joint planning and co-financing schemes – developing pilot projects where national and local authorities jointly design and evaluate policies (e.g. housing, transport). It also requires knowledge exchange and foresight capacity among island regions – supporting the creation of island policy networks, peer learning platforms, and joint research initiatives. Concrete actions may include (i) creating an Island Development Coordination Forum under the Prime Minister's Office and (ii) initiating annual joint planning rounds between ministries and island municipalities with shared priority-setting. Inter-municipal collaboration can also be strengthened by expanding programmes that enable shared services, pool labour resources, and co-ordinated regional development. In cases where municipalities are not geographically close, remote delivery mechanisms can allow efficient service delivery and maintain regional connectivity.

II. Recommendations for Subnational Authorities (in Swedish Islands)

II.1 Strategic planning and monitoring

Adopt comprehensive development plans that align with national frameworks while reflecting local characteristics and priorities. Active involvement of island municipalities can strengthen integrated development strategies at the island level – one of the priorities identified in this report. This involves adopting data-driven planning with clear performance monitoring – which requires investing in local capacity to use disaggregated data and foresight tools. Addressing data fragmentation is critical to island foresight. Establishing island-specific KPIs across sectors (e.g. such as housing, population dynamics, and service delivery) needs to be co-developed in coordination with central guidance and frameworks for harmonization. Specific actions can include requiring all island municipalities to update local development plans with measurable KPIs and cross-sector goals

Strengthen foresight capacity through regional collaboration and intelligence networks. Build foresight capacity at the local level is crucial to address regional disparities and promote inclusive development. This requires equipping civil servants and local institutions with the skills and resources to integrate future considerations into policy analysis and decision-making. A practical approach is "learning-by-doing," where hands-on experience fosters anticipatory thinking and proactive planning. Developing regional foresight intelligence with a spatial lens is also essential for strengthening cross-regional collaboration. This involves gathering and analysing data on local and global trends to assess their impact on regional co-operation and cross-border initiatives. Special attention should be given to shared challenges, such as labour market integration, digital connectivity, and infrastructure development, particularly in rural areas. Additionally, identifying joint opportunities in areas like renewable energy, tourism, and natural resource management can help drive collaborative regional initiatives – e.g. via joint foresight hubs or networks.

Foster collaboration across island municipalities. Explore inter-island cooperation models to pool resources, share administrative services, and align development efforts. Concrete actions include establishing pilot foresight units in Gotland and Öckerö – which can then offer lessons for other islands.

II.2 Optimal Infrastructure and Land use

Develop tailored local investment plans for infrastructure with island specific long-term resilience requirements. Local plans allow prioritising resilient and context-appropriate infrastructure (e.g. for ferry expansion, port and digital infrastructure upgrades), including with low-carbon and climate-resilient designs. Infrastructure also needs to be fit-for-purpose for demographic and economic trends. Concrete actions can include supporting digital twin mapping tools to simulate infrastructure impacts under demographic change. Then the relevant investments can be addressed by leveraging EU funds through improved project pipeline preparation – seeking support from national authorities to provide technical assistance to help municipalities access funding and develop feasibility studies for infrastructure projects.

Harmonise local land use planning with climate and demographic priorities. Planning must account for service access and environmental sustainability, and integrate land use strategies with water availability, ageing populations, and renewable energy needs. Concrete actions include revising local zoning ordinances to include energy and water resilience criteria.

II.3 Competitive Landscape

Promote economic diversification tailored to island contexts. Develop economic development plans with focus sectors based on comparative advantage (e.g. eco-tourism, marine innovation, renewable energy). This responds to the economic concentration and productivity challenges noted in this section's assessment. Encouraging innovation-driven enterprises and fostering collaboration between local

businesses and research institutions can help diversify the economy, create sustainable job opportunities, and enhance community resilience. Economic development strategies should prioritise firms that can increase productivity, as rising labour costs from workforce shrinkage will require greater competitiveness. Tailor regional policies to support firms in enhancing efficiency and innovation, rather than generic support. This approach will help local economies remain competitive in the face of demographic challenges.

Strengthen entrepreneurship, local innovation and SME support. This includes targeted programmes that can focus on access to financing, mentorship, and market expansion. Also important are support incubators and collaborative platforms that connect entrepreneurs, academia, and civil society. Strengthening entrepreneurial ecosystems addresses local value chain fragmentation. Concrete actions include using digital platforms to overcome isolation and launching local "Start-Up Labs" in partnership with regional universities and incubators, and funding sector-specific accelerators focused on sustainable tourism and blue economy.

Expand training and employment support programmes. Focus on youth retention, remote work readiness, and upskilling in emerging sectors (e.g. climate services, digital care). Workforce development programmes should prioritise flexibility, equipping residents with both job-specific skills for long-term careers and transferable skills that allow for smooth transitions between occupations. This helps workers remain adaptable to shifting job markets and changing economic conditions. Simultaneously, policies can encourage greater participation of older workers by revising employment regulations (mostly regulated through central agreements between the unions and employers' organisations) and supporting employer practices such as job sharing, workplace adaptations, expanded part-time opportunities, flexible scheduling, and targeted incentives to retain experienced workers. These measures help address demographic challenges and keep older workers engaged in the economy.

Attract and retain workers through lifestyle and housing improvements. To make Swedish islands more attractive to residents and potential newcomers, it is essential to ensure affordable housing and a high quality of life. This requires a comprehensive housing strategy focused on affordability and liveability. Key actions include providing incentives for the construction and renovation of affordable homes, streamlining zoning and regulatory processes to accelerate housing development, and fostering collaboration with private developers and local governments to expand housing supply. Additionally, targeted marketing campaigns aimed at former residents, tourists, and immigrants will showcase the region's opportunities and lifestyle benefits, reinforcing both population retention and growth.

II.4 Sustainable Place

Align local environmental actions with national frameworks. With the presence of water stress and seasonal environmental impacts, decentralised but coordinated implementation is needed. Adopt nature-based solutions and climate resilience measures, incorporating ecological carrying capacity into tourism and housing policies. Concrete actions include developing island-specific climate adaptation plans.

Strengthen local green transition strategies. Municipalities, with community consultation, can develop green economy roadmaps addressing energy, transport, and land use. The transition can be facilitated by promoting local experimentation and innovation in sustainability – e.g. using pilot projects and local grants to explore decentralised energy, circular economy, and nature regeneration. This can be complemented by community grants for green infrastructure and ecosystem restoration. Risk sharing management between national agencies (operating through the national budget) and island communities could also be envisaged.

II.5 Multilevel governance

Institutionalise participatory governance models. Weak participation infrastructure is one of the main challenges highlighted in the assessment section. Local authorities need to create permanent community

councils or thematic citizen panels to support policy co-design. Concrete actions include establishing citizen assemblies on key policy topics (e.g. climate, transport).

Improve coordination with regional and national agencies. Enhancing strategic coherence is a critical gap thus the need to use shared data platforms and joint planning processes to align strategies – vertically with national authorities and horizontally with neighbouring regions. Smaller municipalities in particular need to enhance local government capacity by developing shared services and professional development programmes. Concrete actions include creating inter-municipal working groups for joint service delivery, which is often perceived as a challenge given the territorial structure of many small island communities – though in the case of Gotland, it is less relevant given the geographical distance from the mainland.

III. Recommendations for Gotland

III.1 Strategic planning and monitoring

Leverage Gotland's strategic vision through integrated implementation tools. This involves consolidating Gotland's strategic framework and implementation capacity – translating its development strategy into actionable, cross-sector investment plans with measurable targets. This builds on Gotland's relative leadership but recognises gaps in operational delivery. Concrete actions include establishing a cross-departmental implementation board to align planning and delivery and developing a live regional dashboard tracking KPIs across sectors.

Bridge data gaps through targeted indicators and foresight. Planning must be dynamic and sectoral linked. This includes monitoring demographic trends, labour market dynamics, and service gaps to inform planning. The goal is to enhance real-time data use – including for key sectors like tourism and water management. Concrete actions include reinforcing a foresight unit within Region Gotland to conduct scenario analysis, horizon scanning, and strategic evaluations. Piloting scenario-planning workshops for housing, water and workforce futures can also help plan investments.

III.2 Optimal Infrastructure and Land use

Expand infrastructure upgrades with a focus on resilience. The assessment in this report highlights systemic water and transport pressures. Gotland needs to prioritise water resource management (e.g. through smart infrastructure and conservation), sustainable mobility, and intermodal hubs – including redesigning ferry coordination hubs and improve inland public transport links. In general, it is important to integrate climate adaptation into infrastructure design.

Enhance spatial planning to support green transitions. Align zoning and land use policies with housing, energy, and biodiversity targets. Furthermore, integrated land use is essential for climate alignment.

III.3 Competitive Landscape

Strengthen knowledge-intensive sectors and rural entrepreneurship. To respond to identified productivity shortfalls, build on tourism and energy sectors by supporting digital start-ups, marine innovation, and local value chains. Concrete actions include creating incubators in key sectors (e.g. green energy, creative industries, local food) and offering start-up grants and scale-up support.

Support tailored workforce development. Skills alignment is a core constraint. Introduce training pathways tied to local economic sectors, including for vocational education, and partner with regional universities. Concrete actions include co-developing vocational pathways with Uppsala University campus and considering launching a remote work programme.

III.4 Sustainable Place

Expand Gotland's green leadership role. The policy assessment in this report notes strong potential and current initiatives ongoing. But there is still room for scaling renewable energy pilots and embed ecological planning in all sectors. This involves monitoring seasonal pressures on ecosystems and adjust policies accordingly. Also important is to institutionalise local climate adaptation governance. Furthermore, green and environmental initiatives can be planned in a way that are conducive to new economic activities – for instance, integrating biodiversity into spatial and economic development plans.

Invest in water resilience. The policy assessment in this report highlights that water scarcity is a structural risk. Therefore, enhancing infrastructure and regulation to address chronic water scarcity and anticipate climate pressures is a priority. Potential concrete actions include scaling up rainwater harvesting and desalination pilots.

III.5 Multilevel governance

Enhance collaboration with national ministries. Formalise intergovernmental working groups on tourism, environment, and housing. Also important is to institutionalise working groups for critical sectors. Potential concrete actions include launching an intergovernmental platform for co-design of Gotland's flagship projects and creating a policy lab within the regional authority. From a national standpoint, Gotland can become a testbed for national island-sensitive policies – for instance, launching pilot projects under national frameworks (e.g. rural broadband, green procurement) and evaluating outcomes for national scaling.

Develop foresight and regional intelligence tools. Evidence-based governance remains underdeveloped. Along with the recommendation to build data tools and monitoring, it is good for long-term policy making to use scenario planning to anticipate demographic and environmental challenges.

Enhance participatory governance and civic engagement: Citizen involvement in local development planning leads to higher civic trust and policies more aligned to local needs. Potential concrete actions include launching digital democracy platforms and hosting regular citizen panels on transport, energy, and housing.

IV. Recommendations for Öckerö

IV.1 Strategic planning and monitoring

Enhance monitoring and evaluation systems. Planning must be sectoral linked and dynamic, with real-time insights – including in key sectors like tourism and the blue economy. Planning and delivery can be linked to a live regional dashboard tracking KPIs across sectors. Policy making can also benefit from tracking key trends including outmigration, workforce participation, and access to services. Potential concrete actions include investing in foresight tools (including GIS-based planning systems and other data-driven approaches) and delivering foresight training to staff.

Strengthen an experimental approach for adaptive strategies. Impact evaluation of pilot initiatives, particularly with a quantification approach, allows learning what works and what does not over time and maintaining a responsive prioritisation of investments.

IV.2 Optimal Infrastructure and Land use

Align land use plans with regional sustainability goals. The policy assessment of this report highlights that current frameworks lack integration. For instance, there is the need to balance residential growth with

ecological protection and service access. Potential concrete actions may include amending zoning to prioritise low-impact housing.

Improve ferry service reliability and intermodal coordination. Peak-time access limitations are a key constraint. Potential concrete actions include developing real-time information systems, integrating ferry and bus schedules, modernising port infrastructure in key locations and reinforcing ferry service improvement partnerships (e.g. with Västtrafik).

IV.3 Competitive Landscape

Support local economic diversification and SME growth. The economic assessments of this report highlight a narrow employment base. To maintain its competitiveness, Öckerö needs to balance their sectoral strengths and areas of specialisation with diversification into new sources of growth. Innovation can be reinforced in key areas, prioritising remote services, tourism innovation, and sustainable aquaculture. Potential concrete actions may include creating a micro-grant scheme for island-based digital and service SMEs (e.g. also including for marketing) and sector-specific business programmes.

Expand skill development initiatives. The assessment of the island here developed reveals that youth outmigration and job mismatch continue to be pervasive. This highlights the need to support local talent development and vocational pathways. Potential concrete actions may include expanding collaboration between local schools and key industries (e.g. marine/tourism industries); offering internships and skill-building projects, and partnering with regional employment agency for mobile training units. Upskilling and training initiatives also need to address demographic change through programmes targeting youth, women, and older workers.

IV.4 Sustainable Place

Embed environmental goals in municipal policies. The assessment in this section highlights ecosystem stress, which points to the need to prioritise water use efficiency, biodiversity protection, and green public procurement. This involves embedding climate resilience in infrastructure planning and implement eco-friendly practices in key sectors like tourism (e.g. tourist capacity caps in sensitive areas, sustainability labelling system for accommodations and services). Potential concrete actions may include conducting a vulnerability assessment and updating local infrastructure codes to reflect sea-level rise and extreme weather risks.

Promote awareness and behavioural change. Community engagement is currently limited in this area. Engage communities in local climate actions and sustainability campaigns. Potential concrete actions may include running seasonal environmental awareness campaigns and expanding green procurement guidelines to all municipal departments.

IV.5 Multilevel governance

Enhance Öckerö's role in regional governance structures, strengthening cooperation within Västra Götaland. The policy assessment of this report suggests that cross-border collaboration within the vicinity and wider region of Öckerö' is currently insufficient. The needs of Öckerö municipality need to be reflected in regional policy and funding. Potential concrete actions may include securing Öckerö's inclusion and voice in key regional development platforms – reinforcing a regional foresight alliance (e.g. supported by the County Administrative Board) and a local-public sector exchange scheme with other islands (e.g. formal liaison units with Västra Götaland).

Build foresight capacity and shared learning. The policy assessment of this report identified limited internal capacity. This highlights the importance to connect with other island municipalities to share data, best practices, and staff training resources.

1 Diagnosis of Island Economies

This chapter presents a territorial diagnosis of Sweden's islands, revealing persistent demographic decline, ageing populations, limited economic diversification, and unequal access to services and infrastructure. While islands such as Gotland and Öckerö benefit from proximity to urban centres or tourism, most others face structural disadvantages due to remoteness, seasonal economies, and policy invisibility. Challenges include not always reliable ferry services, broadband gaps, youth outmigration, and water scarcity. Yet islands also hold potential in sustainable tourism, local food systems, and green energy. The chapter underscores the need for island-sensitive policy approaches, supported by disaggregated data and improved multilevel coordination.

.

Introduction

Sweden's islands face distinct demographic and economic dynamics that set them apart from mainland territories and demand closer policy attention. This chapter uses a comparative, data-driven approach to explore how Swedish islands are performing in relation to other island territories across the OECD – focusing particularly on demographic change, economic structure, productivity, and territorial typologies. Using harmonised OECD regional data, the chapter offers a disaggregated picture of performance among island regions and municipalities, with a particular focus on those within Sweden – benchmarking Swedish Islands against those in Croatia and Greece.

Understanding Island economies: the importance of data and definitions

Accurately identifying and understanding island territories is a necessary foundation for effective policy design, monitoring, and evaluation. Yet, across the OECD and within Sweden, there is no universally applied definition of what constitutes an island region for statistical or governance purposes. This creates inconsistencies in how data is collected, compared, and interpreted, making it difficult to assess how island economies are performing or how they differ from mainland areas.

The lack of a harmonised classification system for islands means that many regions with island-specific challenges are not recognised as such in national or international datasets. For example, many islands that are physically connected to the mainland by bridges are excluded from Eurostat's definition, despite facing similar demographic and economic pressures as other insular territories. Additionally, Swedish administrative divisions such as municipalities often include both mainland and island components, making it difficult to isolate island-specific data without further disaggregation. The absence of island-sensitive statistical frameworks limits the ability of policymakers to design tailored policies, apply for relevant funding, or track progress on issues like depopulation, service access, or environmental vulnerability.

This chapter adopts a pragmatic approach to quantify and benchmark key trends – while also calling for improving data for better policy making. This chapter contributes novel data analysis by applying a flexible definition of islands grounded in the OECD typology but tailored to the Swedish context. Throughout the report, the use of the 'Island' term refers to regions with islands – and does not necessarily mean that the whole region itself is an island. The technical details of the classification used, including international comparisons and typology breakdowns, and current measurement and definitional challenges are provided in Annex 1. What matters most is that the statistical lens aligns with the lived realities of island communities and supports policy action. Creating such alignment is a necessary first step toward building more resilient, inclusive, and dynamic island economies in Sweden.

The Chapter also makes the case for improved data collection and classification for advancing inclusive and place-based development. The following two sections use an OECD approach to explore trends across several demographic and economic indicators, in selected EU countries and in Swedish islands, including labour productivity, industrial development and others linked to local economic competitiveness such as business dynamics. These trends lead to evidence-based policy implications in further sections to improve Islands' competitiveness and wellbeing – particularly by also drawing on trends in specific island case studies (e.g. Gotland and Öckerö in Sweden). And one of the policy priorities is precisely to continue developing a data-driven approach for island economies: without adequate data, policymakers cannot assess the impact of demographic ageing, seasonality in employment, housing pressures, or infrastructure needs. Moreover, gaps in data prevent local authorities from making evidence-based decisions and weaken the rationale for national and EU-level support mechanisms.

Demographic and economic island trends in selected EU countries

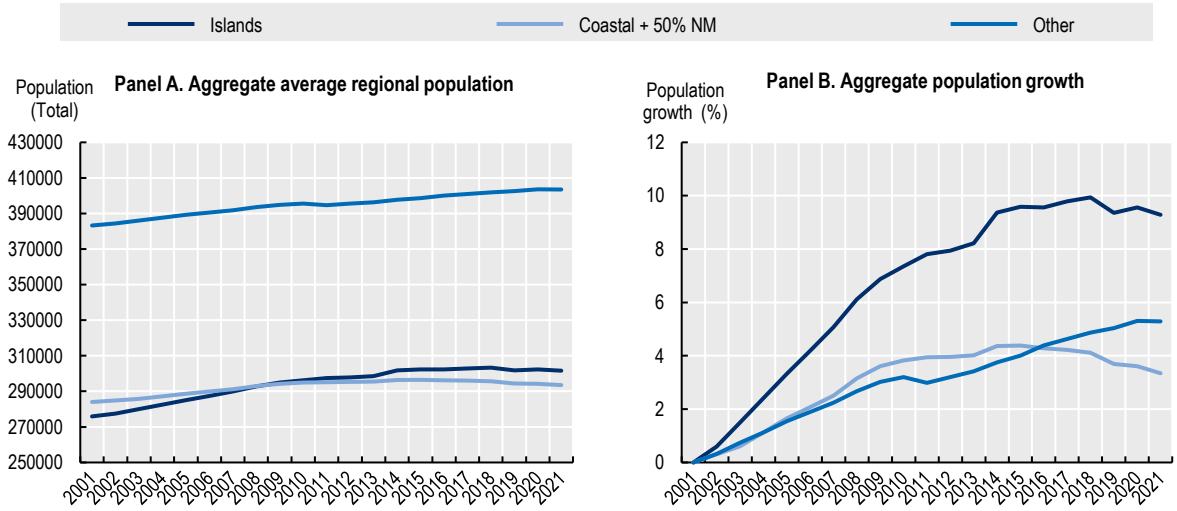
Population growth: on average, island regions outpace Coastal non-metro regions and other types of regions

From 2001 to 2021, OECD European island regions observed aggregate population increases. In 2001, the average *regional* population in Island regions was approximately 276 000 individuals, growing by 25 000 inhabitants to 301 000 individuals in 2021 (Figure 1.1, panel A). Similarly, non-metropolitan regions that were coastal or at least 50% of the population living 50km off the coast (Coastal non-metropolitan regions, from here onward) increased in terms of average regional populations. In 2001, Coastal non-metropolitan regions had an average of 284 000 inhabitants, and much less in terms of levels to 2021 (9

500 increase). Other region types (those not identified as Island regions or Coastal non-metropolitan regions) also grew, but to a lesser extent than Island regions, from approximately 380 000 in 2001 to 400 000 in 2021.

The average regional aggregate growth of Island in population from 2001 to 2021, far outperformed non-Island regions. From 2001 to 2021, the average regional population in Islands regions grew by an aggregate 9.3% (Figure 1.1, panel B). This was higher than the growth in other types of regions (5.3%) and more than triple the aggregate growth in close to Coastal regions (3.3%). In terms of annual growth, from 2001 to 2021, Island regions saw a compound annual growth rate of 0.42%, which was close to double (1.7 times) that of other region types (0.25%) and close to three times (2.7 times) higher than Coastal non-metropolitan regions (0.16%).

Figure 1.1. Population and Population growth, by island region type



Note: Population is aggregated by each Island region type and presented here. Aggregate population is presented in regional means, rather than aggregate totals. Data included for Austria, Belgium, Croatia, Czechia, Denmark, Estonia, Finland, France. Germany, Greece, Hungary, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Poland, Portugal, Slovak Republic, Slovenia, Spain and Sweden. Source: OECD Regional Indicators, based on classification of regions in Table 1.3 (in Annex)
Source: OECD Regional Indicators, based on classification of regions in Table 1.3 (in Annex)

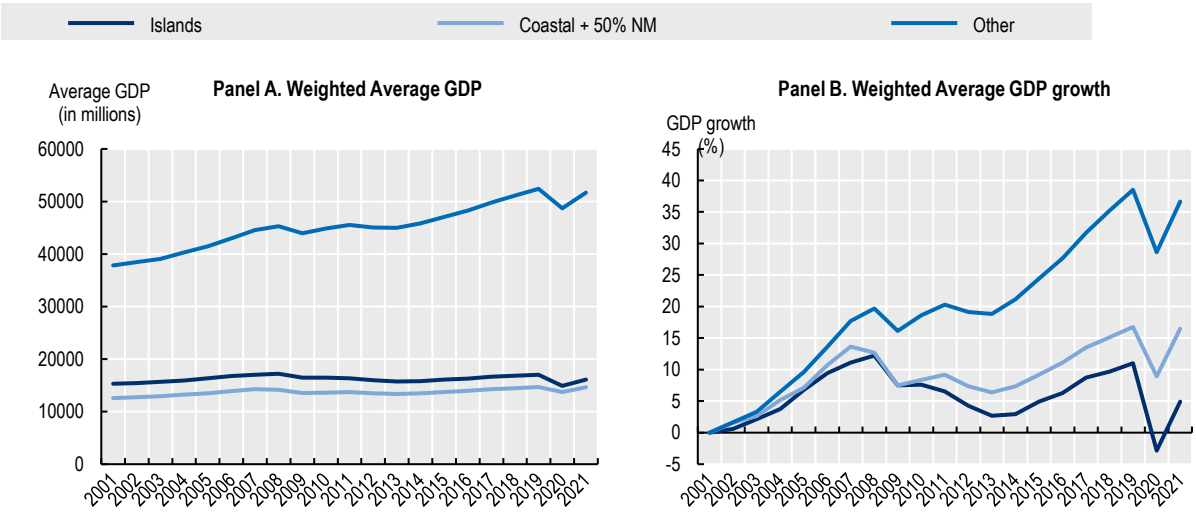
Aggregate economic growth: it is lagging behind in island regions

OECD European island regions have seen a relative stagnation of Gross Domestic Product (GDP) over the period of 2001 to 2021. In 2001, the population-weighted average GDP in island regions was 15 billion USD (Figure 1.2). This figure grew to 16 billion in 2021, or an aggregate 1 billion USD in terms of total increase. The population-weighted average GDP in Coastal non-metropolitan regions also grew, from 13 billion USD in 2001 to 15 billion USD in 2021, or a growth of 2 billion USD over the period. In all other types of regions, the GDP growth increased more substantially. In 2001, the population-weighted average GDP for other region types was 38 billion USD in 2001 and grew 52 billion USD in 2021.

Over the period of 2001 to 2021, the compound annual growth rates in population-weighted average GDP in Islands regions was very low, as compared to trends in Coastal non-metropolitan regions and other types of regions. Island regions saw a compound annual growth of the population-weighted average GDP of 0.23%. Over the same period, Coastal non-metropolitan regions saw a 0.7 % growth, which was over to 3 times more than Island regions. All other regions observed an annual an increase of 1.5 % over the entire period, which was 6.5 times more than in Island regions. In terms of aggregate growth, Island regions

saw a 5% growth of the population-weighted average GDP from 2001 to 2021 (Figure 1.2, panel B). This was lower than aggregate growth for Coastal non-metropolitan regions, that observed a 16% aggregate GDP growth. The aggregate growth in population-weighted GDP from 2001 to 2021 was substantially lower than the growth in all other regions, which saw an increase of 37%.

Figure 1.2. Population-weighted average GDP and GDP growth, by island region type



Note: Gross domestic product is weighted by population, and presented in 2015 constant prices, after adjusting for purchasing price parity (PPP), in millions. Data included for Austria, Belgium, Croatia, Czechia, Denmark, Estonia, Finland, France. Germany, Greece, Hungary, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Poland, Portugal, Slovak Republic, Slovenia, Spain and Sweden.
Source: OECD Regional Indicators, based on classification of regions in Table 1.3 (in Annex).

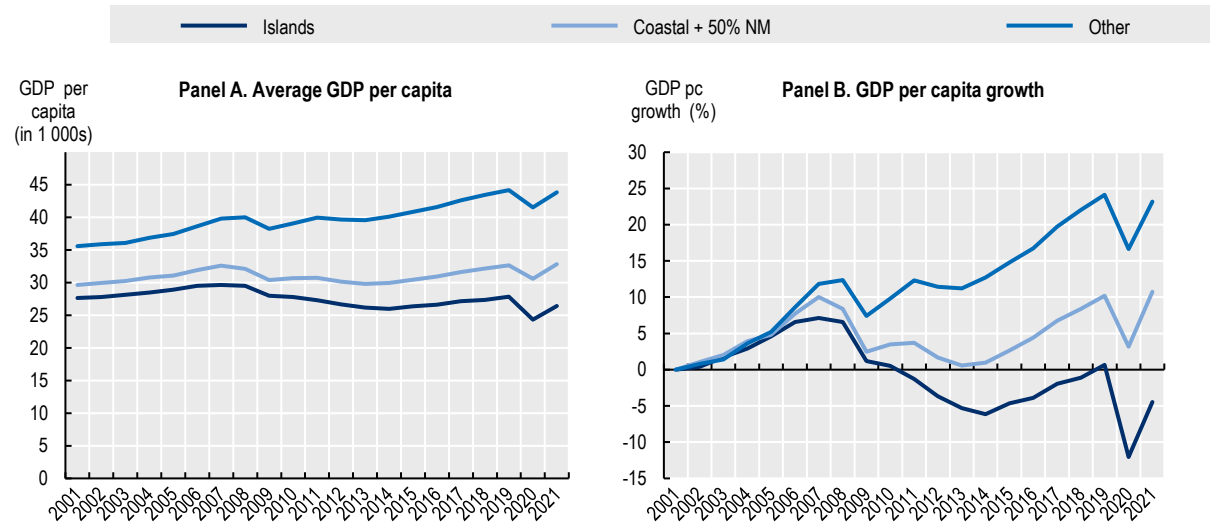
GDP per capita growth: it declined in Island regions between 2001 and 2021.

GDP per capita is relatively low in island regions as compared to both close to Island regions and all other region types. In 2021, GDP per capita in Island regions was close to 26 000 USD (Figure 1.3, panel A). This was lower than the GDP, 2 decades prior in 2001, where GDP per capita in Island regions was close to 28 000 USD. On the other hand, Coastal non-metropolitan regions and other types of regions saw an increase in GDP per capita. For example, in Coastal non-metropolitan regions, GDP grew from close to 30 000 USD in 2001 to close to 33 000 USD in 2021. In all other types of regions, GDP grew from close to 36 000 USD in 2001 to close to 44 000 USD in 2021.

Over the 2001 to 2021 period, GDP per capita growth was negative for islands regions, while it was positive for Coastal non-metropolitan regions and all other regions. Island regions saw a compound annual growth rate decline of 0.22%. On the other hand, Coastal non-metropolitan regions and all other regions saw increases of 0.29% and 1.00%, respectively.

In terms of aggregate growth, over the 2-decade period from 2001 to 2021, island regions saw an end-of-period aggregate decline of 4% (Figure 1.3, panel B). Within the period, there was some variation and catching up in Island regions, but not enough to recover the initial GDP per capita levels. Island regions saw a relatively consistent fall in growth starting from the years of the Global Financial Crisis (in 2009) and became lower than the initial 2001 year from 2011 to 2019. Island regions were then impacted again in the years of the global COVID-19 pandemic. In comparison, Coastal non-metropolitan regions and all other regions were also impacted by the 2 crises, but still demonstrated aggregate growth. Coastal non-metropolitan regions recorded an aggregate GDP per capita growth of 11%, while all other regions experienced a GDP per capita aggregate growth of 23% over the same 2001 to 2021 period.

Figure 1.3. Aggregate GDP per capita and GDP per capita growth, by island region type



Note: GDP per capita is calculated first by summing the total GDP and population of all regions within each island type, then dividing the sum of GDP by the sum of population. Data included for Austria, Belgium, Croatia, Czechia, Denmark, Estonia, Finland, France. Germany, Greece, Hungary, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Poland, Portugal, Slovak Republic, Slovenia, Spain and Sweden.
Source: OECD Regional Indicators, based on classification of regions in Table 1.3 (in Annex).

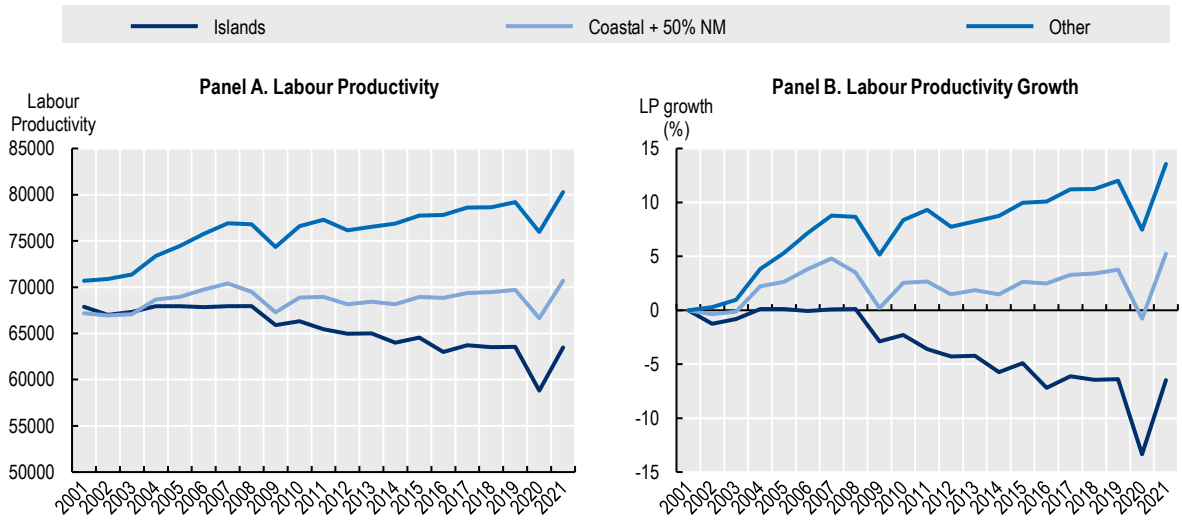
The economic analysis section provides a very aggregate and general picture of islands and close to Islands regions. It finds a relative challenge for Islands regions, that are not similarly experienced by regions with some Islands, nor in the rest of EU regions.

In sum, while population is increasing in island regions (Figure 1.1), GDP has not increased fast enough (Figure 1.2) to balance out in terms of aggregate GDP per capita trends. This is resulting in a decline in GDP per capita (Figure 1.3). If GDP growth was similar to the average growth in Coastal non-metropolitan regions (16.5% aggregate growth from Figure 1.2), then average GDP would have increased by close to 1.8 billion USD amounting to 0.73% compound annual growth (rather than 0.23%) and 11% higher aggregate growth (rather than 5%) over the 2001 to 2021 period. In terms of GDP per capita, holding the population constant (the same levels as before), if Islands had the same GDP per capita growth rates as Coastal non-metropolitan regions (11% from Figure 1.3), GDP per capita would be 31 000 USD per capita (rather than 26 000 USD per Capita) in 2021 amounting to a 0.49% compound annual growth (rather than a 0.22% decline) and 16% aggregate growth over the period. In other words, because of sluggish GDP growth and rapid increases in population, there was a net loss of 4 000 USD per capita.

Labour Productivity: it has fallen in island regions

Labour productivity has decreased in islands regions from 2001 to 2021, while it has increased in other regions. In 2021, gross value added per employed worker was close to 63 000, a 5 000 fall in GVA per worker from 2001 (approximately 68 000) (Figure 1.4, panel A) in island regions. This amounted to a 6% fall in aggregate growth from 2001 to 2021, or a 0.32% annual compound decline (Figure 1.4, panel A). In comparison, Coastal non-metropolitan regions and all other types of regions experienced a growth of 5% and 14% respectively, from 2001 to 2021, amounting to a compound annual growth of 0.24% for Coastal non-metropolitan regions and 0.61% for all other regions.

Figure 1.4. Aggregate Labour Productivity and Labour Productivity growth, by island type



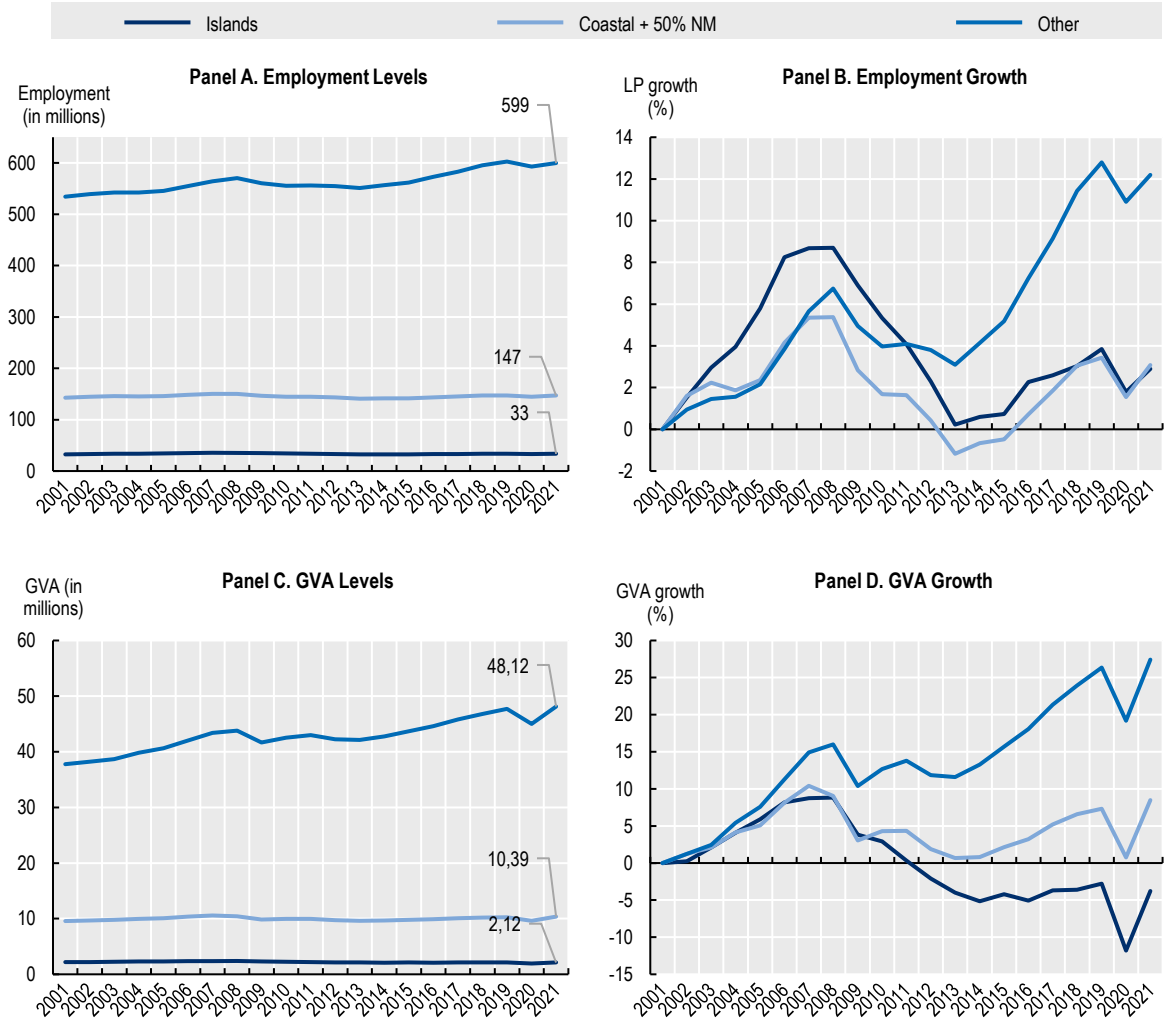
Note: Labour productivity is calculated first by summing the total gross value added (GVA) and employment of all regions within each island type, then dividing the sum of GDP by the sum of population. For consistency with following analysis, data on GVA and employment are the sum of the industrial GVA and employment for each country and year. Data included for Austria, Belgium, Croatia, Czechia, Denmark, Estonia, Finland, France. Germany, Greece, Hungary, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Poland, Portugal, Slovak Republic, Slovenia, Spain and Sweden.
Source: OECD Regional Indicators, based on classification of regions in Table 1.3 (in Annex).

The fall in labour productivity of island regions is associated with an absolute decline in gross value added, and sluggish but positive employment growth

Labour productivity is impacted by changes in global value added and employment. If gross value-added holds constant (does not decline), a decline of productivity can only be due to an increase in employment. If gross value-added declines, a decrease in productivity can be due to stagnant employment, increasing employment, or a decline in employment that is slower than the decline in gross value added.

In the case of island regions, the decline in labour productivity is due to both a decline in absolute value-added and a small increase in employment (Figure 1.5). Indeed, in islands regions employment grew with gross value-added until 2008, the first year of the Global Financial Crisis. Gross value-added fell after the crisis with employment. Despite the fall in gross value-added, employment started increasing after 2013, while gross value-added continued to fall. Over the entire period of 2001 to 2021, islands regions saw an aggregate 3.7% fall in gross value added, and a 3% growth in employment. In comparison, Coastal non-metropolitan regions saw a 8.5% aggregate increase in gross value-added but a relatively lower increase in employment (3%) from 2001 to 2021. All other regions observed a gross value-added aggregate growth of 27%, and an employment growth of 12%.

Figure 1.5. Levels and growth of Employment and Gross Value Added



Note: For consistency with following analysis, data on GVA and employment are the sum of the industrial GVA and employment for each country and year. Data included for Austria, Belgium, Croatia, Czechia, Denmark, Estonia, Finland, France. Germany, Greece, Hungary, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Poland, Portugal, Slovak Republic, Slovenia, Spain and Sweden.
Source: OECD Regional Indicators, based on classification of regions in Table 1.3 (in Annex).

Labour Productivity is highest in the Financial and Insurance sector, replacing industry as the most productive sector in island region types in 2021

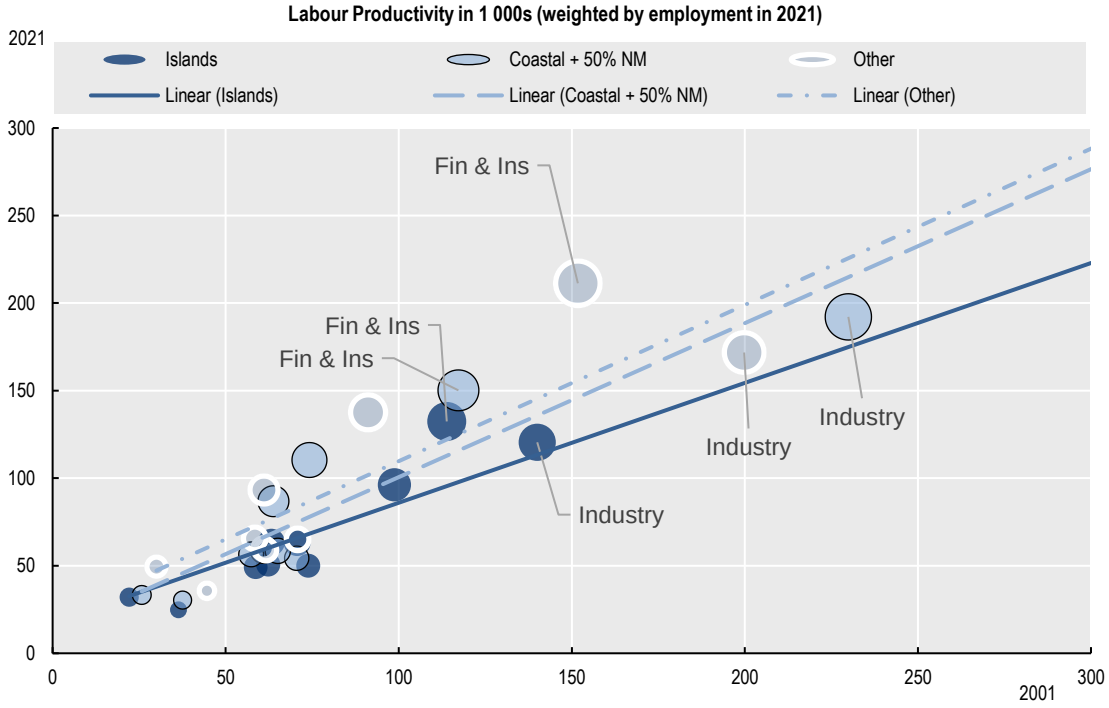
In 2021, the sector with the highest labour productivity in all types of regions is the Financial and Insurance sector (Figure 1.6).[2] In islands regions, labour productivity in the Financial and Insurance sector in 2021 was 130 000 USD, close to a 18 000 USD increase from 2001 (approx.110 000 USD). Despite productivity growth in these regions, the growth was smaller than growth in other region types. In Coastal non-metropolitan regions, labour productivity in the Financial and Insurance sector was close to 150 000 USD in 2021, close to a 33 000 USD increase from 2021 (approx. 120 000 USD). The placement of the Financial and Insurance sector as the top sector in all three types of Island regions, comes at the expense of the

[2] The Real Estate sector is excluded for easy of interpretation.

placement of the industry sector[3], which held the top position in islands regions in 2001 and fell to second place in 2021. On the other hand, the industry sector remained the top sector in Coastal non-metropolitan regions.

Figure 1.6. Sectoral labour productivity (2001 & 2021)

Labour productivity in 2001 and 2021, by Island type



Note: The unit of observation for each island type are sectors. The 10 sectors and their short titles are the following: Agriculture, forestry and fishing (Agriculture) ; Arts, entertainment and recreation; other service activities; activities of household and extra-territorial organizations and bodies (Arts&Rec) ; Construction (Construction); Financial and insurance activities (Fin & Ins); Industry (Industry); Information and communication (Inf & Com); Manufacturing (Manufact); Professional, scientific and technical activities; administrative and support service activities (Prof&Sci); Public administration, defence, education, human health and social work activities (Public Admin); Wholesale and retail trade; repair of motor vehicles and motorcycles; transportation and storage; accommodation and food service activities (Trade & Serv). The Real Estate activities sector was excluded for ease of interpretation.
Source: OECD Regional Indicators, based on classification of regions in Table 1.3 (in Annex).

Labour productivity increased in the agricultural sector and the financial and insurance sector in island regions

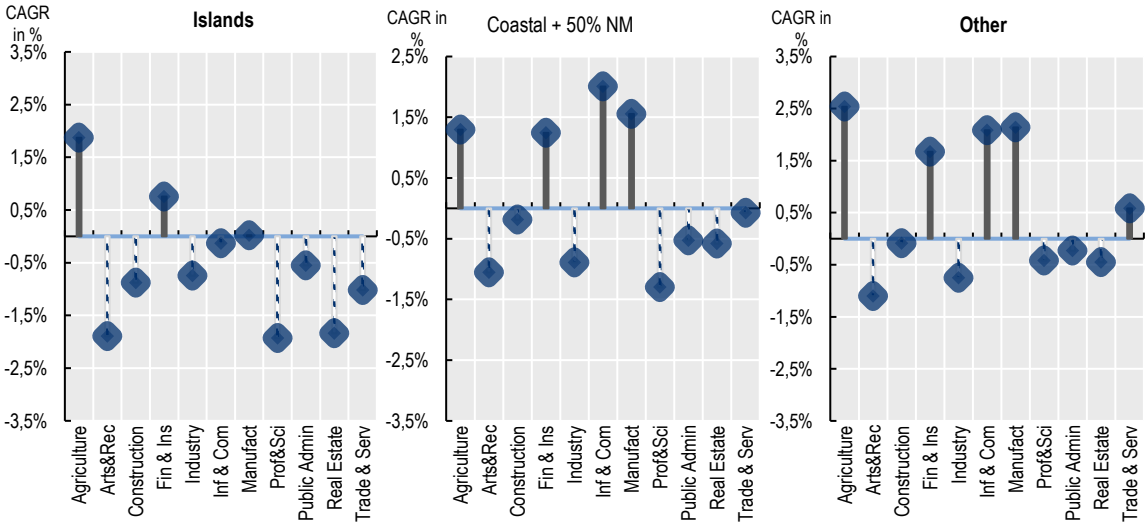
Despite high nominal growth of the Financial and Insurance sector (Figure 1.6), the highest increase in the compound annual productivity growth rates, over the 2001 to 2021 period, was in the Agricultural sector (1.9%). This was followed by growth in the Financial and Insurance sector (0.8%) (Figure 1.7). All other sectors observed a decline, with the highest decline in the Professional and Scientific service sectors and

[3] This sector includes the mining and quarrying sector; electricity, gas, steam and air conditioning supply sector; and the water supply, sewerage, waste management and remediation activities sector.

the Arts and Recreational sectors (-1.9% each). [4] In comparison with Coastal non-metropolitan regions, the strongest growth was in the Information and communication sector with a 2.01% compound annual growth rate from 2001 to 2021. The Financial and Insurance sector also grew to a greater extent than in Island regions, 1.25%, from 2001 to 2021. This sector also increased in all other region types (1.7% from 2001 to 2021). Islands saw stagnancy in the Information and Communication sector, as well as the Manufacturing sector, contrary to growth in Coastal non-metropolitan regions and all other regions. Lastly, the trade and services sector saw a decline in islands regions (-1.0%), as well as in Coastal non-metropolitan regions (-0.8%), while there was a small but non-trivial annual growth in all other region types (0.6%).

Figure 1.7. Sectoral Labour Productivity Growth

Compound annual growth rates, by sector and island type (2001 to 2021)



Note: The unit of observation for each island type are sectors. The 10 sectors and their short titles are the following: Agriculture, forestry and fishing (Agriculture) ; Arts, entertainment and recreation; other service activities; activities of household and extra-territorial organizations and bodies (Arts&Rec) ; Construction (Construction); Financial and insurance activities (Fin & Ins); Industry (Industry); Information and communication (Inf & Com); Manufacturing (Manufact); Professional, scientific and technical activities; administrative and support service activities (Prof&Sci); Public administration, defence, education, human health and social work activities (Public Admin); Wholesale and retail trade; repair of motor vehicles and motorcycles; transportation and storage; accommodation and food service activities (Trade & Serv). The Real Estate activities sector was excluded for ease of interpretation.
Source: OECD Regional Indicators, based on classification of regions in Table 1.3 (in Annex).

Economic structure: trade and services are the largest sector of employment for island regions.

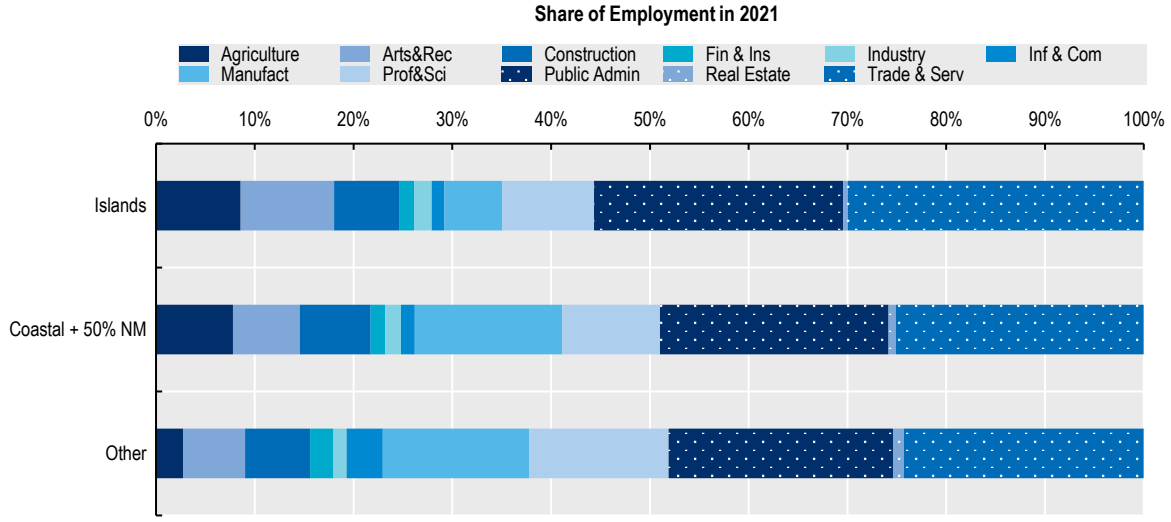
In 2021, close to a third (30%) of employment in islands regions is in the Trade and Services sector, followed by employment in Public Administration (25%) (Figure 1.8). Similarly, the top two sectors in Coastal non-metropolitan regions are similarly the Trade and Services (25%) and Public Administration (23%). The top two sectors in all other regions are also Trade and Services (24%) and Public Administration (23%).

[4] The gross value-added of the Real Estate sector contains the value of temporary capital investments that are temporally ambiguous, lumpy and susceptible to market fluctuations. Furthermore, prices are subject to speculation rather than real prices, as the other sectors. For this reason, the interpretation of this sector is not taken into further consideration.

The relative shares of employment start to differ more substantially between types of regions in the Professional and Scientific services sector and the manufacturing sector. In islands regions, the Arts and Recreation sector is the 3rd largest employer, while the Professional and Scientific Services sector is the 4th largest and the Agricultural sector is the 5th largest sector (all with close to 9% of total employment). In Coastal non-metropolitan regions, the 3rd largest employment is the Manufacturing sector with 15% of total employment, followed by the Professional and Scientific services sector with 10% of total employment and Agricultural sector with 8% of total employment. In other types of regions, the Manufacturing (15%), Professional and Scientific services (14%) and the Construction sector (7%) account for a larger share of employment.

Figure 1.8. Employment shares by island region (2021)

Share of employment in sectors (2021)



Note: The unit of observation for each island type are sectors. The 10 sectors and their short titles are the following: Agriculture, forestry and fishing (Agriculture) ; Arts, entertainment and recreation; other service activities; activities of household and extra-territorial organizations and bodies (Arts&Rec) ; Construction (Construction); Financial and insurance activities (Fin & Ins); Industry (Industry); Information and communication (Inf & Com); Manufacturing (Manufact); Professional, scientific and technical activities; administrative and support service activities (Prof&Sci); Public administration, defence, education, human health and social work activities (Public Admin); Wholesale and retail trade; repair of motor vehicles and motorcycles; transportation and storage; accommodation and food service activities (Trade & Serv). The Real Estate activities sector was excluded for ease of interpretation.
Source: OECD Regional Indicators, based on classification of regions in Table 1.3 (in Annex).

The largest growth was in the Professional and Scientific services sectors[5].

In addition to variations in the shares of employment by sector in the 3 types of regions in 2021, annual compound growth rates varied across sector and region type (Figure 1.9). The largest employment increases in terms of compound annual growth rates were in the real estate sector (2.76%), however this sector accounts for the lowest share of total employment (0.5%). On the other hand, growth in the Professional and Scientific services sector was relatively high (2.03%) in Islands regions, and accounted for a sizable share of total employment (9%). Furthermore, there was an increase in employment in both the Arts and Recreational sector (1.0%), and the Trade and Services sector (0.7%). Employment fell in the Agricultural sector (-1.5%), and the Manufacturing sector (-1.3%).

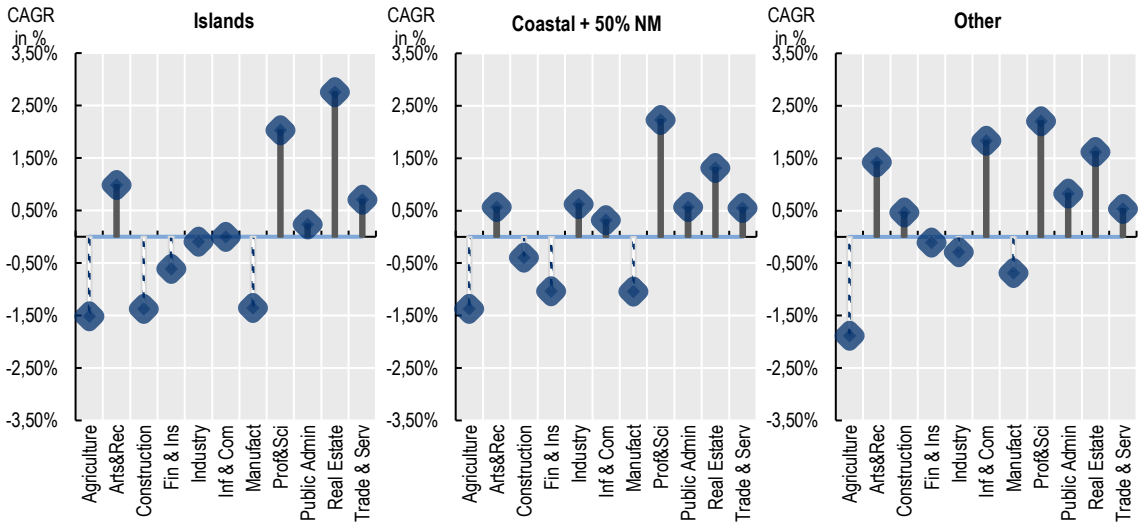
[5] Excluding the statistics from the Real Estate sector.

The top sector for employment growth in Coastal non-metropolitan regions was the Professional and scientific services sector (2.0%), followed by

Information and Communications sector (2.3%), followed by (the very small) Real Estate services sector (1.3%), and the Industry sector (0.6%). While the Manufacturing sector saw a decline (-1.04), it was to a similar to the decline in islands regions (-1.09%). For other regions, the Professional services (2.2%) and the Information and Communications sector grew substantially (1.8%), as did the Real Estate activities sector (1.6%). Similarly, the Agricultural and Manufacturing sectors declined (-1.9% and 0.7%, respectively).

Figure 1.9. Annual Employment growth in island regions

Compound annual growth rates (2001-2021)



Note: The unit of observation for each island type are sectors. The 10 sectors and their short titles are the following: Agriculture, forestry and fishing (Agriculture) ; Arts, entertainment and recreation; other service activities; activities of household and extra-territorial organizations and bodies (Arts&Rec) ; Construction (Construction); Financial and insurance activities (Fin & Ins); Industry (Industry); Information and communication (Inf & Com); Manufacturing (Manufact); Professional, scientific and technical activities; administrative and support service activities (Prof&Sci); Public administration, defence, education, human health and social work activities (Public Admin); Wholesale and retail trade; repair of motor vehicles and motorcycles; transportation and storage; accommodation and food service activities (Trade & Serv). The Real Estate activities sector was excluded for ease of interpretation.
Source: OECD Regional Indicators, based on classification of regions in Table 1.3 (in Annex).

The largest share of gross value-added is in the trade and services sector, though it is decreasing – while increasing in the Agricultural sector.

Similar to trends in employment, in 2021, the sectors contributing the most to gross value-added of Island regions is the public administration[6] sector and the trade and services sector (Figure 1.10). Excluding the

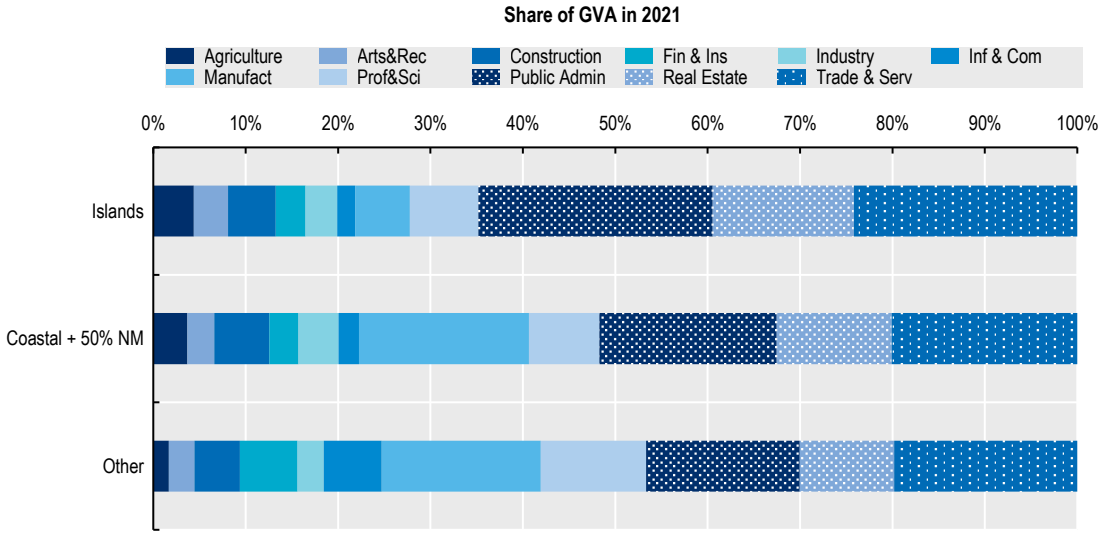
[6]When it comes to understanding gross value added in Public Administration, this is often non-comparable with other private sectors. This is because, for most OECD and EU countries, Public Administration is not a for-profit sector, and gross value added is often proxied by expenditure. Given the nature of rural and Island regions that are often more distant, less populated, and often with a natural geography which impacts public service delivery, it is not uncommon for public services to cost more. For this reason, the interpretation of this sector's gross value-added is not aligned with the interpretation of gross value added in other (mostly) private sectors. It can also be impacted by non-competitive nature of state-owned enterprises.

Real Estate services sector[7], the Trade and Services sector and the Professional and Scientific services sector are the next largest contributors to gross value added in island regions, with 24% and 7%, respectively of the total gross value added of island regions.

In Coastal non-metropolitan regions and all other types of regions, the trade and services sector is the largest contributor to gross value-added, outpacing the Public Administration. However, the Manufacturing and the Public Administration sectors account for the 2nd and 3rd largest shares in the region types. In Coastal regions, the Public Administration sector accounts for 19% of gross value-added, while the Manufacturing sector accounts for 18% of gross value-added. In all other types of regions, the Manufacturing sector accounts for 17% of gross value-added, while the Public Administration sector accounts for 17% of gross value-added.

Figure 1.10. Gross Value-added shares by island region (2021)

Share of Gross Value-added in sectors (2021)



Note: The unit of observation for each island type are sectors. The 10 sectors and their short titles are the following: Agriculture, forestry and fishing (Agriculture) ; Arts, entertainment and recreation; other service activities; activities of household and extra-territorial organizations and bodies (Arts&Rec) ; Construction (Construction); Financial and insurance activities (Fin & Ins); Industry (Industry); Information and communication (Inf & Com); Manufacturing (Manufact); Professional, scientific and technical activities; administrative and support service activities (Prof&Sci); Public administration, defence, education, human health and social work activities (Public Admin); Wholesale and retail trade; repair of motor vehicles and motorcycles; transportation and storage; accommodation and food service activities (Trade & Serv). The Real Estate activities sector was excluded for ease of interpretation.
Source: OECD Regional Indicators, based on classification of regions in Table 1.3 (in Annex).

Despite large shares of gross value-added in the Trade and Services sector, gross value-added in this sector decreased, in terms of compound annual growth, between 2001 and 2020, by -0.3% (Figure 1.11). Excluding the Real Estate sector, in island regions, gross value-added only increased in the Agricultural sector (0.3%), the Professional and Scientific services sector (0.1%), and the Financial and Insurance services sectors (0.1%). All other sectors observed a decline in gross value added, with the largest decline

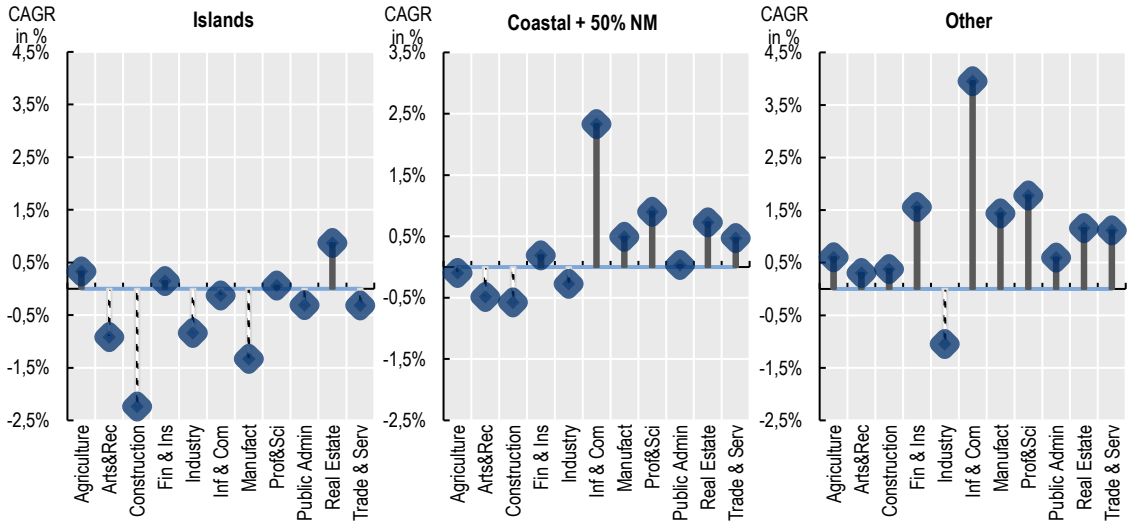
[7] The gross value-added of the Real Estate sector contains the value of temporary capital investments that are temporally ambiguous, lumpy and susceptible to market fluctuations. Furthermore, prices are subject to speculation rather than real prices, as the other sectors. For this reason, the interpretation of this sector is not taken into further consideration.

coming from the Construction sector (-2.2%), the Manufacturing sector (-1.3%), followed by the Arts and Recreational activities sector (-0.9%), and the Industry sector (-0.8%).

The Construction sector, the Arts and Recreational activities sector, the Industry sector and the Agricultural sector saw declines of 0.6%, 0.5%, 0.3% and 0.1%, respectively in Coastal non-metropolitan regions. However, all other sectors grew over the period of 2001 to 2021. In other regions only Industry fell (0.1%), and all other sectors grew. The major growing sectors, in both Coastal non-metropolitan regions and other types of regions, were in the private services categories that included the Information and Communications sector, and the Professional and Scientific services sector. The Information and Communication sector observed a 2.3% annual growth in Coastal non-metropolitan regions and 4% growth in all other regions. The Professional and Scientific services sectors observed a 0.9% annual growth in gross value-added in Coastal non-metropolitan regions and 1.8% in all other regions.

Figure 1.11. Annual Gross Value-Added growth in island regions (2001-2021)

Compound annual growth rates (2001-2021)



Note: The unit of observation for each island type are sectors. The 10 sectors and their short titles are the following: Agriculture, forestry and fishing (Agriculture) ; Arts, entertainment and recreation; other service activities; activities of household and extra-territorial organizations and bodies (Arts&Rec) ; Construction (Construction); Financial and insurance activities (Fin & Ins); Industry (Industry); Information and communication (Inf & Com); Manufacturing (Manufact); Professional, scientific and technical activities; administrative and support service activities (Prof&Sci); Public administration, defence, education, human health and social work activities (Public Admin); Wholesale and retail trade; repair of motor vehicles and motorcycles; transportation and storage; accommodation and food service activities (Trade & Serv). The Real Estate activities sector was excluded for ease of interpretation.
Source: OECD Regional Indicators, based on classification of regions in Table 1.3 (in Annex).

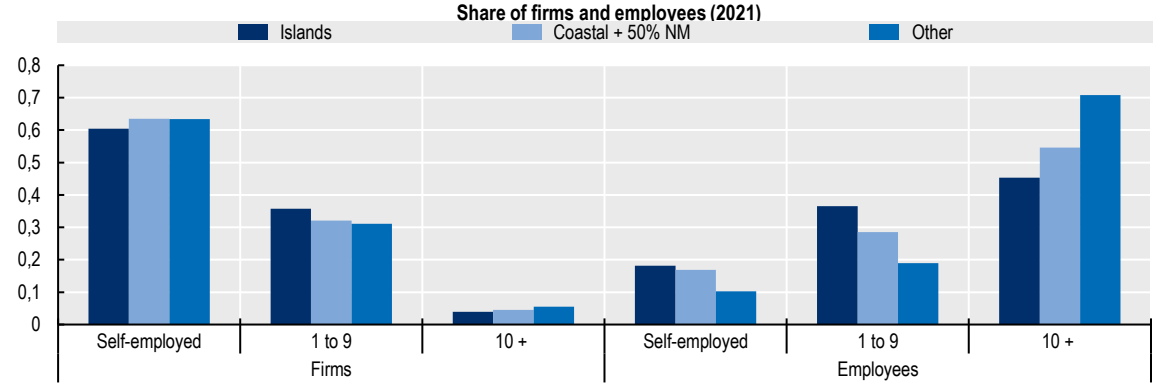
Small firms and firm density: smaller firms (including micro firms of 1-9 employees) employ a larger share of workers in Island regions than in other regions

The majority of firms in island regions, as in other types of regions, are self-employed firms. In island regions this represents 60% of all firms, and accounts for 36% of all employment (Figure 1.12). Self-employment is also high in Coastal non-metropolitan regions and all other types of regions. In Coastal non-metropolitan regions, self-employment accounts for 63% of firms, but only 17% of employees. In all other types of regions, self-employment accounts for 63% of firms, and 10 % of employees.

Firms with 1-9 employees (small firms) are important in island regions. They account for 36% of firms and 36% of employees in island regions. Island regions have the largest share of small firms, and it accounts for more of employment in Island regions than in close to Coastal regions and any other type of region. Close to 32% of firms in Coastal non-metropolitan regions have 1-9 employees, and account for 28% of employment. In all other types of regions, firms with 1-9 employees account for 31% of firms, and only about 19% of employment.

Finally, firms with more than 10 employees represent a small share of overall firms in island regions despite accounting for the largest share of employment. Firms with more than 10 employees account for only 3.8% of total firms in Islands regions, but 45% of employment. In comparison Coastal non-metropolitan and all other types of regions, firms with more than 10 workers account for a marginally larger share of total firms (4.5% and 5.5% each) and close to a third higher share of employment (54% and 71%, respectively).

Figure 1.12. Share of Firms and Employees, by firm size (2021)



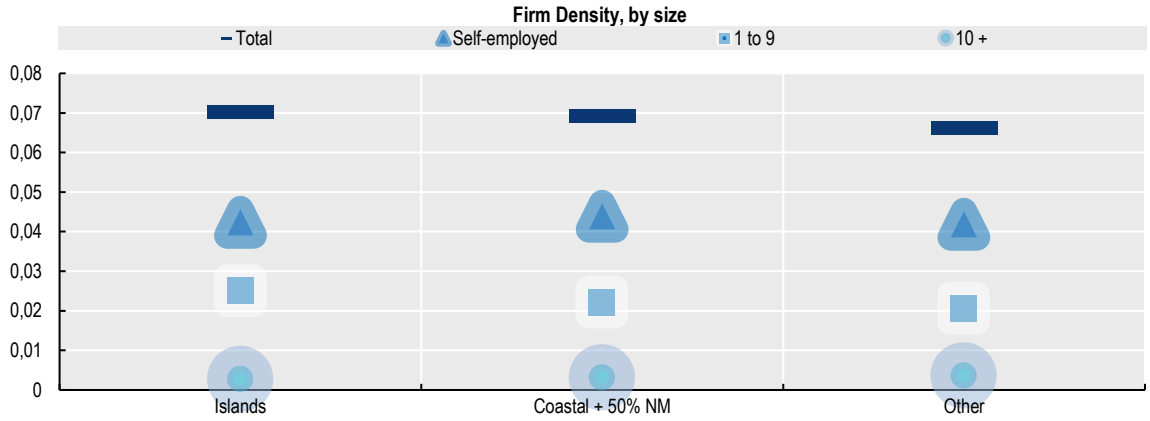
Note: The shares presented are the sum of the total number of firms within each Island region type category. The share of each size of firm sums to 1 for each Island region type.
Source: OECD Regional Indicators, based on classification of regions in Table 1.3 (in Annex).

Firm density in island regions is similar to Coastal non-metropolitan regions and all other regions

The intensity of business formation is one type of indicator of competitive regions, despite its many caveats. In terms of the density of businesses (number of firms per population), island regions have approximately 7 firms per 100 inhabitants (Figure 1.13).This was similar to the density of firms in Coastal non-metropolitan regions which had 7 firms per 100 inhabitants, but higher than the average in other regions that had approximately 6.6 firms per 100 inhabitants. The highest density of firms are self-employment firms, which account for 4 firms per 100 inhabitants in island regions, Coastal non-metropolitan region, as well as other regions.

Figure 1.13. Number of Firms per population, by firm size (2021)

Number of firms per inhabitant, by Island type and size



Note: Firm density is calculated as the number of firms over the total population for each Island type and size category.
Source: OECD Regional Indicators, based on classification of regions in Table 1.3 (in Annex).

Trends in selected islands in Sweden

This section presents data trends specifically focused on Swedish island territories, using a tailored typology to capture their unique characteristics. For the purpose of this report, Swedish islands are defined as municipalities that are either entirely composed of islands – such as Gotland and Öckerö – or contain significant island populations within their administrative boundaries. The analysis distinguishes these territories from both mainland and coastal regions, aligning with an OECD territorial typology adapted for insular contexts. This pragmatic definition reflects the functional realities of island living in Sweden, including geographic isolation, population size, and governance structure, while enabling comparability with other island regions across the OECD. The selected case study regions (Gotland and Öckerö) serve as illustrative examples of Sweden's island diversity and performance – while Gotland's whole territory belongs to the same municipality (Region Gotland), with common challenges all over the territory, Öckero does not share the same characteristics and challenges as the rest of the region in belongs to (Västra Götaland).

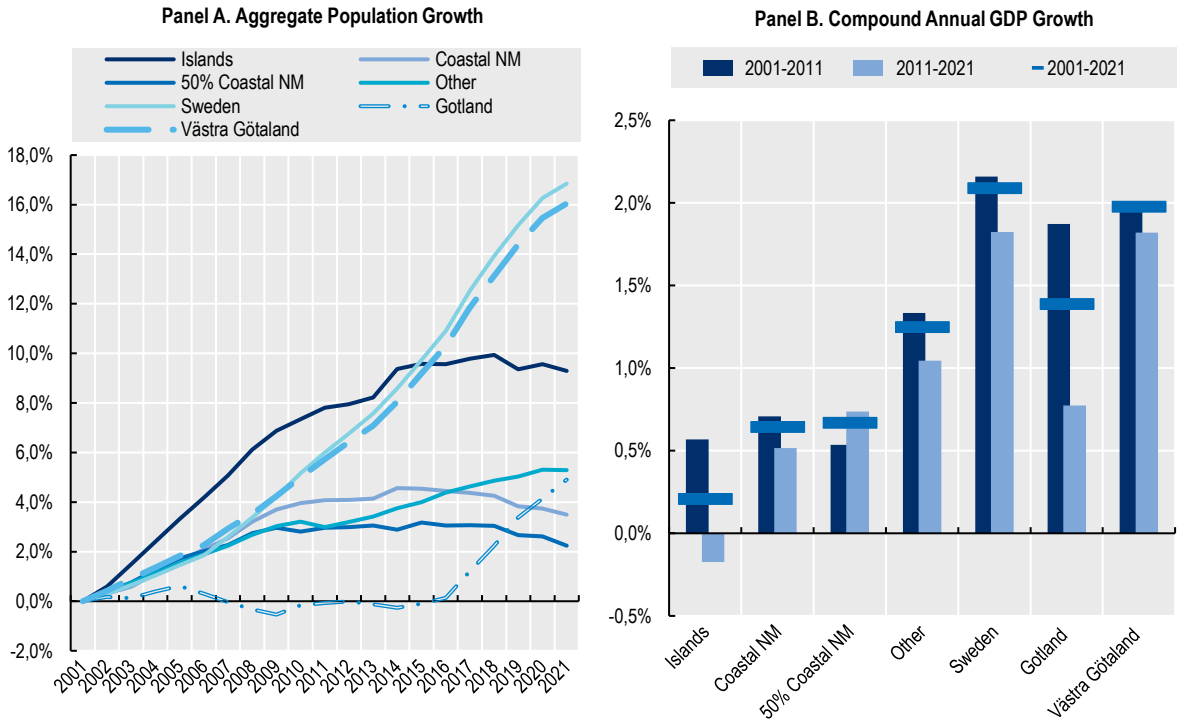
Population growth

Population increased in Västra Götaland like in the rest of Sweden over the whole period from 2001 to 2021, but only picked up after 2016 in the region of Gotland

The population in Sweden in 2021 was 10.4 million, increasing by 1.5 million from 8.9 million in 2001. The national increase in total population amounted to an 16.8% aggregate increase (Figure 1.14, panel A), or 0.74% increase in terms of compound annual growth rates. Similarly, both island (Gotland) and coastal (Västra Götaland) regions in Sweden saw an increase, 4.9% aggregate growth and 0.23% annual growth in Gotland or 16.0% aggregate growth and 0.71% annual growth in Västra Götaland. However, the increase in population in Gotland occurred to a larger extent after 2016, while increases in the coastal region and Sweden grew steadily over the period and declined towards the end of the period. This period also coincided with an expansion of the population due to an increase of refugees in the region. Despite this overall increase in the region as a whole, the Island of Öckerö observed a decline in population.

In comparison, annual population growth in Västra Götaland outpaced Coastal non-metropolitan regions. Coastal non-metropolitan regions saw an average increase of 0.16%, as compared to 0.71% in Västra Götaland. On the other hand, population growth in Gotland did not outpace increases in population on average in island regions, which observed a 9.3% aggregate increase of 0.42% annual growth, as compared to the 4.9% aggregate growth and 0.23% annual growth previously reported for Gotland.

Figure 1.14. Sweden: Aggregate Population Growth and Compound Annual GDP Growth



Source: OECD Regional Indicators, based on classification of regions in Table 1.3 (in Annex).

Economic performance

Both Gotland and Västra Götaland observed higher annual GDP growth than comparable regions.

Gross domestic product increased over the two periods from 2001 to 2021 for case study regions and for benchmark regions (Figure 1.14, panel B), despite a fall in the gross regional product per employed person in Öckerö municipality. On average GDP grew by 2.1% in Sweden, while it also grew, but to a lesser extent in Gotland (1.4%) and Västra Götaland (2.0%). The first period, from 2001 to 2011, observed stronger growth than the second period from 2011 to 2021, in both case study regions. In Gotland annual growth in the first period was 1.9%, but it fell by more than half of its growth rate to 0.8% in the second period. Västra Götaland also had lower growth in the second period, but the fall was not as drastic. In the first period, Västra Götaland saw an annual increase of GDP of 2.0%, whereas growth fell to 1.8% in the second period.

While both case study regions and Sweden outpaced the rest of the benchmark regions, a similar trend in GDP was observed between the two case study regions and Island and Coastal non-metropolitan regions. Coastal non-metropolitan regions (regions similar to Västra Götaland), saw an increase of 0.6% over the

2-decade period from 2001 to 2021, however, the first period, from 2001 to 2011 saw an increase of 0.7%, while the second period saw a smaller increase of 0.5%. On the other hand, island regions (regions similar to Gotland) saw an increase of 0.2% in the 2001 to 2021 period, with growth in the first period of 0.6%, but an annual average decline in the second period of 0.2%.

Labour productivity in Gotland and Öckero outpaced all other types of regions, due to strong increases in gross value-added, and smaller labour adjustments

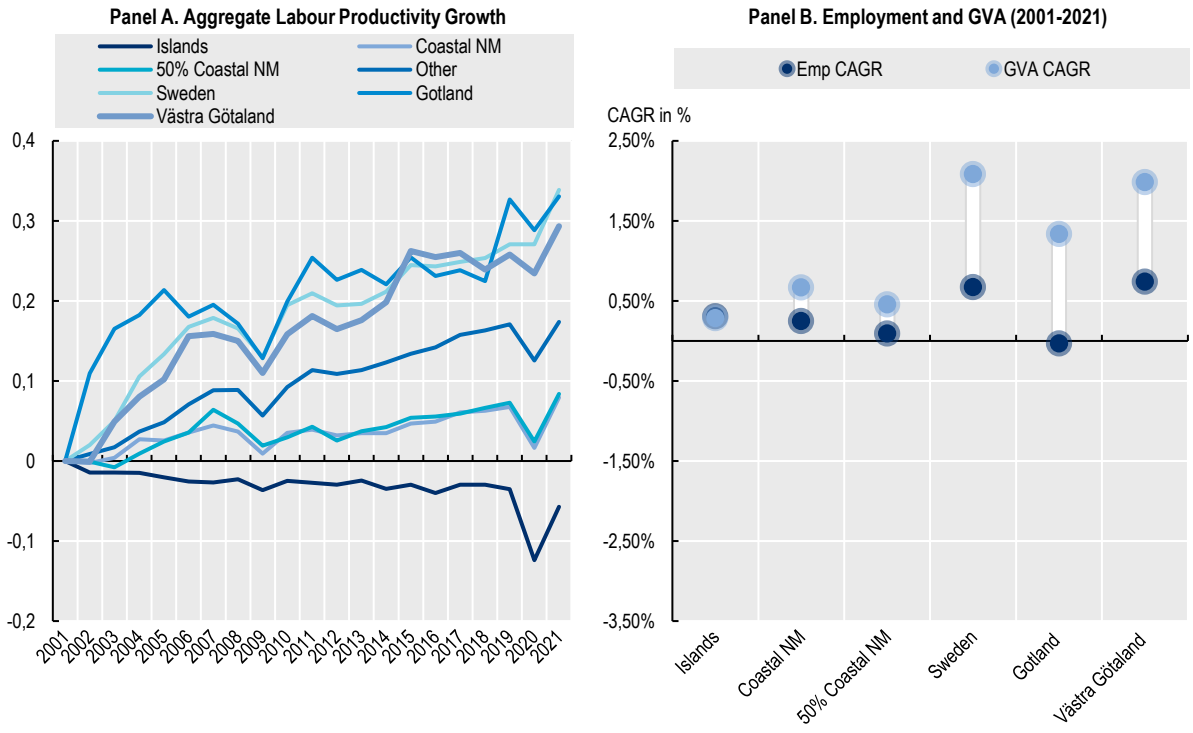
Labour productivity growth is strong in Sweden and in the two case study regions. Over the period of 2001 to 2021, labour productivity grew an aggregate 34% in Sweden, 33% in Gotland and 29% in Västra Götaland (Figure 1.15, panel A). This amounted to an annual compound growth of 1.4% in Sweden, 1.37% in Gotland and 1.23% in Västra Götaland. Increases were also observed in Coastal non-metropolitan regions (similar to the Västra Götaland region) but to a lesser extent. In Coastal non-metropolitan regions, labour productivity grew by 8% in terms of aggregate growth and 0.36% in terms of annual growth. However, Island regions saw a decline in productivity amounting to 6% or -0.28% annual decline, which did not follow the same trend as in Gotland that observed a growth in labour productivity.

The growth in labour productivity was largely influenced by relatively strong increases in the gross value added (GVA) in Sweden, Gotland, and Västra Götaland (Figure 1.15, panel B). In Gotland, GVA increased by 1.34% annually, while in Västra Götaland, gross value added increased by 1.98%. Similarly, GVA increased by 2.09% in Sweden. This growth was stronger than in similar benchmark regions. For example, in Coastal non-metropolitan regions, GVA growth was 0.67%, while in Islands GVA growth was 0.29%.

Employment increased with strong GVA growth in Västra Götaland, but to a lesser extent. Employment from 2001 to 2021 increased by 0.74% in Västra Götaland.[8] In comparison, Coastal non-metropolitan regions also saw an increase in employment, despite growth at a lower level of 0.25%. On the other hand, in Gotland, there was a small decline in employment (0.03%), despite an increase in gross value added. In comparison, this small decline was unlike the trend in other Island regions that saw an increase in employment of 0.31%.

[8] This growth was not as strong as the growth of GVA and therefore did not result in a decrease in labour productivity.

Figure 1.15. Sweden: Labour Productivity Growth, Employment and GVA (2001-2021)



Source: OECD Regional Indicators, based on classification of regions in Table 1.3 (in Annex).

Business dynamics

In Gotland and Västra Götaland, most firms are self-employed businesses. However, in Sweden overall—as well as in Gotland and Västra Götaland—the majority of workers are employed by firms with more than 10 employees.

The largest share of firms in Gotland, Västra Götaland, as well as in Sweden, Coastal non-metropolitan and Island regions are self-employment firms. In Gotland this accounts for 72% of firms, while in Västra Götaland self-employment accounts for 68% of firms (Figure 1.16, panel A), the same rate as in Sweden. Similarly, self-employment accounts for a high share of firms in other areas, although to a lesser extent than in the case study regions. In Coastal non-metropolitan regions, self-employment accounts for 63% of firms, 5% lower than in Västra Götaland. In Island regions, self-employment accounts for 60% of firms, 12% lower than in Götland.

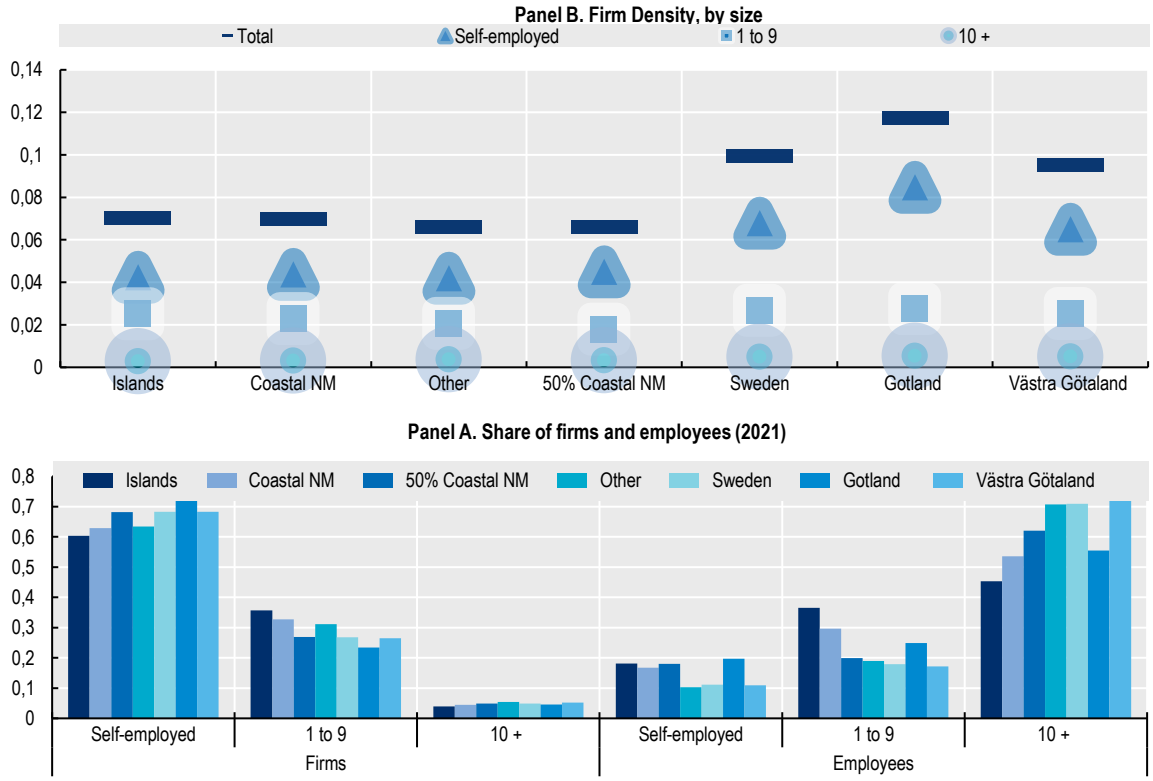
Small firms (those with between 1 to 9 workers) account for 23% of all firms in Gotland, which is 13% lower than on average in Island regions (36%). Similarly, small firms account for a smaller share of firms in Västra Götaland than in Coastal non-metropolitan regions. Västra Götaland has 26% of all firms with between 1 to 9 workers, while coastal regions only have 33% of all firms with between 1 to 9 workers (5% less than in Västra Götaland).

Firms with more than 10 workers account for the lowest share of all kinds of firms in the case study regions of Gotland and Västra Götaland, as well as all benchmark categories. Firms with more than 10 workers account for 4.5% of all firms in Gotland and 5.2% of all firms in Västra Götaland. These shares, while low in comparison to other firm size groups are higher than in benchmark regions. Firms with more than 10

workers they account of 3.9% of firms in Island regions and 4.4% of firms in Coastal non-metropolitan regions.

Despite having the lowest share of total firms, firms with more than 10 employees account for the largest share of all employment in Gotland and Västra Götaland. In Gotland they account for 55% of all employment, while in Västra Götaland, firms with more than 10 workers account for 72% of all employment. In comparison, firms with more than 10 employees accounted for a higher share of workers in the case study regions than comparable regions. In island regions, 45% of all employment was in firms with more than 10 workers, 10 percentage points lower than the share in Gotland. In Coastal non-metropolitan regions, 54% of all employment was in firms with more than 10 workers, 18 percentage points lower than the share in Västra Götaland. Despite differences in shares, the ratio of the share of workers to the share of firms with more than 10 workers is similar in both case study regions and their benchmarks. In Gotland, the ratio is 12.2, while in island regions the ratio is 11.7. In Västra Götaland, the ratio is 13.8, while in Coastal non-metropolitan regions the ratio is 12.1.

Figure 1.16. Sweden: Firm Demography (2021)



Source: OECD Regional Indicators, based on classification of regions in Table 1.3 (in Annex).

Firm density trends are higher in Gotland and Västra Götaland than in benchmark regions.

Firm density, a measure of regional competition, is higher in Gotland and Västra Götaland than in comparable case study regions in 2021. For example, in Gotland there are 12 firms per 100 individuals, while in Island regions there are only 7 firms per 100 individuals, which amounts to less than double the number of firms per capita in Gotland as compared to other Island regions (Figure 1.16, panel B). Similarly, in Västra Götaland, there are more firms per population than in Coastal non-metropolitan regions. Västra Götaland has close to 9 firms per 100 individuals, while other Coastal non-metropolitan regions have close to 7 firms per 100 individuals.

Firm density is particularly high among self-employed firms. In Gotland, there were 8 self-employed firms per 100 individuals in 2021, as compared to half the amount in Islands regions (4 self-employed firms per 100 individuals). In Västra Götaland, there were 6 self-employed firms per 100 individuals in 2021, as compared to a third less in Coastal regions (4 self-employed firms per 100 individuals).

Challenges of island economies: further examination

Sweden boasts the most islands worldwide, with 267 570 islands, making up 3% of the nation's land area. Islands are often the source of natural and cultural resources, with strong local heritage. However, their geographic situation also leads to challenges that hamper their development and competitiveness.

Island economies are facing similar economic challenges to those faced more generally by other regions across OECD countries, like demographic change, skills gaps or changes in trade patterns, though often more accentuated. Stagnant productivity is one example. Though it has been a widespread phenomenon for the last two decades, affecting all kinds of regions, a widening gap in productivity between islands and mainland regions has persisted.

This gap suggests that island economies may be more susceptible to economic shocks, possibly due to their reliance on limited industries and external factors, such as tourism and trade, which can be volatile.

Common challenges

Though islands globally vary greatly in size, location, population, and administration, one feature they share is that of "insularity" – involving physical isolation but also distinct social, cultural, and economic conditions. Islands thus face unique challenges and opportunities (Table 1.1 summarises commonalities).

Many challenges are common to rural remote areas, such as demographic challenges, limited financial capacity, and constraints in labour supply, education, and service provision. However, islands face additional specific issues linked to insularity such as transportation logistics to the mainland, supply and distribution of goods, and natural resource management including water, energy, and waste.

Table 1.1. Common challenges and opportunities confronting island economies

Themes	Challenges	Opportunities
Economic	• Lack of critical mass (e.g., local market size and narrow production base) • Geographic isolation and transport costs • Integration with national communications and energy networks • Low level of innovation • Lack of qualified labour and professional development	• Diverse tourism offers (natural, recreational, business, cultural, health and well-being) • High-quality, diverse food production (agriculture and fisheries) • Entrepreneurial spirit and ”can do” mindset • Blue economy
Environment	• Seasonality/sustainability of tourism • Vulnerability to climate change and natural hazards • Complex land use planning and sensitive environmental management issues (e.g. waste, water and sanitation)	• Green economy, renewable sources of energy • Natural resources and high levels of natural and man-made amenities • Unique biodiversity and ecosystem services
Social and institutional	• Ageing population, migration trends and ”brain drain” • High cost of services • Diseconomies of scale (higher unit costs for infrastructure and public services) • Expensive housing and poor access to housing for all stages of life	• Quality of life • Close social ties and community support structures • Territorial attractiveness / cultural heritage and histories

Source: OECD (2022), OECD Territorial Reviews: Gotland, Sweden

Insularity often entails limitations in economic activities, particularly on smaller islands. Two main challenges are the (i) small scale of markets and (ii) the geographic position. Small markets, small pools

of human resources, and limited capital, are typical of many islands and can become bottlenecks that slow down socio-economic development, particularly by liming economies of scale or agglomeration benefits. As for the geographic position, the peripherality, isolation and remoteness that often characterise islands also hinders the ability of these territories to reach similar level of services and work opportunities as in mainland. Inadequate and/or costly transport links with the mainland is a big challenge.[9]

Swedish islands, as a direct result of their geographic isolation, are subject to significant additional operating, capital and living costs compared to mainland locations. These costs include additional burdens on island-based households, businesses and governments (national and subnational), including for the provision of many essential island services. The costs of insularity, however, extend beyond those directly imposed by geographic disconnection. Island communities, institutions and cultures can also display insular characteristics that reduce efficiency, limit cooperation and stifle innovation, culminating in additional and compounding cost burdens.

As a result of insularity, islands typically have a large presence of primary sector activities like agriculture and fisheries and tertiary sectors like tourism. They are thus often affected by seasonal economic patterns. Furthermore, these activities often revolve around low value-added services and the use of limited resources, with limited economic diversification, bringing more exposure to economic volatility.[10]

Amid all these challenges, the features of island economies also give opportunities, including from seasonal patterns and the availability of natural and unique resources. A notable strength of Swedish islands like Öckerö and Gotland is their proactive stance on the green transition. They are pioneering innovations in green transport – including ships and airplanes – and green energy production. Even if the costs of insularity outweigh the benefits, this does not make their economies unviable. Overall, island communities in Sweden remain healthy, economically robust, and highly functional places with high life satisfaction. What they need is long-term planning and systemic cooperation to mitigate the costs of insularity, build resilience and pursue new economic opportunities.

Learning from Gotland and Öckerö

The available qualitative and quantitative evidence already provides a strong indication that Swedish islands are exposed to the costs of insularity and can be costly for their economies.

The emerging evidence on the ground is primarily drawn from interviews and workshops that the OECD is holding with experts from Öckerö and Gotland. These two island economies are home to more than half of Sweden's island population. Though the challenges and costs they face are unlike most of Sweden's 267 570 islands, given their relatively larger populations and high density, they offer an approximation of the major costs affecting island households, businesses and governments. These include housing, infrastructure, service delivery and consumer goods.

Lessons can be learnt from both. Öckerö and Gotland, like other islands, face common challenges. These include factors holding back growth and productivity like: (i) insufficient skilled workers living in the islands, (ii) small businesses with little access to market mass and funding; (iii) lack of economic diversification; (iv) expensive transports for people and goods. And both Islands feature strategic actions that demonstrate their commitment to fostering a sustainable and competitive economy through comprehensive planning, strategic business development, infrastructure enhancements, and active community engagement.

Yet, just like islands in Sweden are quite diverse, Gotland and Öckerö also show distinctive characteristics that make their challenges, and thus potential policy responses, different. Policy implications depend on a

[9] See Haase, D & Maier, A 2021, Research for REGI Committee – Islands of the European Union: State of play and future challenges, European Parliament, Policy Department for Structural and Cohesion Policies, Brussels.

[10] Lack of economic diversity accentuates the exposure of island economies to fluctuations in macroeconomic conditions and to global megatrends like globalisation, digitalisation and technological change, and climate change. See OECD (2022), OECD Territorial Reviews: Gotland, Sweden

series of factors: having fixed connections to the mainland, being close to agglomerations, being a separate municipality or part of a larger municipality. Gotland stands out because of the costs of transport. Whereas Öckerö has a free public infrastructure to access the mainland, paid for by the state, Gotland has a ferry that is operated on commercial terms. Therefore, Gotland's production (food, forest, other industries) and services (tourism) traded with the mainland face a unique disadvantage. Furthermore, Gotland situation can be more complex from a policy administration standpoint given that it is a municipality and a region.

Gotland economic performance and challenges

Gotland has a relatively well-developed regional economy and outperforms comparable benchmark regions from European Union (EU) islands and OECD remote rural regions across a wide range of indicators. Yet, it is less competitive than other Swedish regions. Gotland's productivity is below the national average but stands significantly higher than peer islands.[11] Gotland's economy shows several strengths. Supported by a good image nationally, key sectors like agro industry produce high-quality local products with a strong trademark. Tourism and industries working with material processing are also solid.

Opportunities

The Island is laying the foundations for long-term smart specialisation within five areas,[12] of which food and food industry, energy transition and tourism are Gotland's spearheads and natural areas of excellence.[13] Region Gotland and stakeholders in the tourism sector run a number of initiatives targeting the tourism potential on the island, some funded by the European Regional Development Fund (ERDF).Tourism also promotes trades that add value to it, such as handicrafts, design, and cultural heritage.

Economic activities linked to sustainability are also expected to create new sources of growth, via regenerative tourism, agriculture and other sectors (including energy). There are several projects managed by both Gotland Green Centre, Science Park Gotland and Tillväxt Gotland to stimulate the whole value chain from agriculture to industry and trade.

Challenges

Notwithstanding all the strengths, Gotland is facing challenges mainly linked to its insularity, including large transport costs, and lack of diversification. As a consequence, Gotland has fallen behind mainland Swedish regions concerning both productivity and population growth.[14]

The high cost and limited options of transportation affect the local economy and the ability of businesses to operate effectively - further compounded by the small size of the local market, which limits business opportunities and critical mass. High ferry fares are restricting both incomers, visitors and producing companies to invest in Gotland. Transport connections to the mainland also bring broader risks, including for food security. More than 85 percent of food produced in Gotland is exported to the mainland, and if transportation chains fail, local access to food will be dramatically reduced. A long-term perspective on self-sufficiency capacity through stimulating food industries, including agriculture and commercial fishing for consumption, is central to both economic growth and food security.

[11] OECD (2022), OECD Territorial Reviews: Gotland, Sweden.

[12] The 5 areas apply at the NUTS 2 level, developed jointly with other regions also belonging the same NUTS2, but Gotland has its own S3 strategy where there are only 3 priority areas,

[13] There is an ongoing cooperation with three mainland regions within the same NUTS 2 area as Gotland to pool resources and embark on joint specialisation in other areas where it is possible. The strand addressing tourism is headed by Gotland. Since Gotland is rather different from the three mainland regions, especially regarding the absence of manufacturing, Gotland's S3 specialisation is still guided by the three main S3 strategic priority sectors.

[14] See OECD (2022), OECD Territorial Reviews: Gotland, Sweden (https://www.oecd.org/publications/oecd-territorial-reviews-gotland-sweden-aedfc930-en.htm).

An essential challenge is the ability to maintain high quality and equal access to public services in an area with difficulties in co-operating with other municipalities and regions due to the lack of a fixed link to the mainland. For example, the need for specialised care on Gotland that is not justified by the number of inhabitants but by critical transport time to the mainland, such as obstetrics and infectious diseases clinics. Another example is the reduced possibility to collaborate with other municipalities on secondary school programmes education places in upper secondary education, for which the recruitment base is too small for Gotland to be able to hold the programmes.

Regarding insufficient economic diversification, the dominance of a few sectors becomes a challenge when it makes the economy vulnerable to sector-specific downturns and global shocks.[15] Potential adverse effects can emerge in:

- Cost. the entire food value chain has been severely affected by energy prices, fuel prices and price and availability of inputs (feed, fertilizer, pesticides, machinery, etc.) and, in the case of Gotland, freight prices on the ferry.
- Innovation. Lack of diversification can also slow down innovation and new economic activity. And with current economic activity dispersed across the island, rather than concentrated in specific clusters, innovation is further stifled.[16]
- Seasonal economic fluctuations. With tourism peaking in the summer months and contributing to 25% of the region's GDP, this seasonality results in significant fluctuations in employment. The majority of business across Gotland are micro-businesses highly linked to the seasonal economy and the trade cycle. This applies beyond tourism, notably in construction.[17] This affects both employment and long-term innovation.

More robust economic performance requires opportunities in new areas. Often this means building upon current activities, with incremental innovations. In agriculture, these can emerge from smart generational business transfer models that are economically sustainable, both in short term and over time. The tourism sector can target more international visitors during the shoulder seasons, also promoting international events and professional meetings. Though individual strategies exist for developing hospitality and tourism, agro-industries and food refinement, there is no formal, systemic strategy for economic diversification.

Promoting other sectors of economic activity requires attracting people and investments. A recurrent challenge mentioned in the Island is access to relevant workers. An ageing population is shrinking the local labour force, with high demographic dependency ratios (39% vs. 31% nationally). Furthermore, many workers on Gotland lack the necessary qualifications or digital skills for available jobs, with labour shortages in various trades and services.

Gotland local authorities recognize the importance of attracting new residents and businesses, via strong regional branding. Yet, there is a need for a coordinated structure, akin of a "*Business HUB Gotland*"[18] to streamline efforts related to in-migration, business establishment, and talent retention. The fragmented structure of current efforts is seen as a barrier to achieving these objectives.

[15] The agricultural sector on Gotland has been most hit by the effects from the Russian aggression against Ukraine, since there has been a decrease in the seasonal migrant workers coming to Gotland from Ukraine but also soaring costs for fuel and fertiliser.

[16] See OECD (2022), OECD Territorial Reviews: Gotland, Sweden.

[17] The largest employers (not counted public organisations) are within transport, food processing and construction – of which the construction sector is dependent on major large-scale infrastructural projects. In this case, micro-businesses become subcontractors.

[18] This is a term that has been used in conversations with local stakeholders to describe the idea of what Gotland needs in practice.

Öckerö economic performance and challenges

Öckerö demonstrates strong economic performance, with tourism and the maritime industry serving as key drivers of growth. Tourism has spurred local businesses, while the maritime sector – rooted in fishing, shipbuilding, consumer products, and education – continues to be a pillar of the island's economy.

Economic growth has been strong, and unemployment low. Over the past decade, Öckerö has seen the second-highest economic growth in Sweden. Tourism and maritime activities have led this expansion, with sectors like construction, trade, and business services also benefiting. Unemployment remains notably low: 1.9% among young people (16-24) in 2022, compared to the national rate of 3.6%, and 2.2% among the working-age population (18-65) versus 5.3% nationally.[19]

The island hosts around 1,500 companies, about 800 of which employ staff. While fishing remains a key part of the local economy, other maritime-related activities – shipbuilding, education, and the production of consumer goods – are also growing. These sectors are helping to stimulate broader economic development, particularly in construction, trade, and business services. Public sector jobs represent a large share of employment,[20] while employment in industry is led by manufacturing (11%), trade (11%), business services (9%), and construction (9%).

Opportunities

Looking ahead, the green economy and other global megatrends present both opportunities and challenges. Innovations, such as sugar kelp cultivation, are contributing to both economic growth and environmental sustainability. Renewable energy, particularly offshore wind power, is an area of interest but also a point of political contention, where opinions differ between the various political blocs. There are conflicts of interest between wind power development and natural conservation and the fishing industry.

Challenges

A changing landscape brings challenges. The pandemic significantly affected tourism, but the sector rebounded quickly by 2022. The crisis highlighted the challenges of island peripherality, but local resilience, innovation, and digitalization enabled new business models and increased winter residency. New challenges were brought by the Russia-Ukraine conflict, which has underscored the need for enhanced civil defence, resilience, and cybersecurity, especially for island communities like Öckerö.

Öckerö will need to address challenges related to its insularity to untap new opportunities. Despite strong growth, small businesses face hurdles. Finding skilled workers and managing high labour costs are two significant challenges. Targeted policies are needed to address workforce shortages, support skills development, and reduce labour costs to sustain economic growth on the island. A focus on vocational training and digital skills could help businesses have access to the talent they need to thrive.

Summing up: the direction of island economies and policy implications

Trends Summary

Island regions across the OECD are experiencing population growth without commensurate economic dynamism, raising concerns about the sustainability of this demographic trend. Between 2001 and 2021, island regions observed stronger population growth than other regional types. However,

[19] Source: Municipal Facts | Business Region Gothenburg (businessregiongoteborg.se)

[20] In 2022, the largest employment sectors were healthcare and social services (19%), followed by education (14%). These are primarily public sector jobs, but the island also contributes to regional healthcare services. Source: Municipal Facts | Business Region Gothenburg (businessregiongoteborg.se)

this was not matched by economic performance: GDP per capita declined and labour productivity lagged due to subdued gross value-added (GVA) despite positive, if modest, employment growth. This divergence highlights a *structural disconnect*: growing populations are not translating into improved output, productivity, or quality job creation. For each of the regions analysed in this study the conclusions were different, and therefore a joint conclusion may be counterintuitive. However, some general trends were observed.

Business dynamics underscore the need for targeted support for small enterprises and innovation ecosystems. Economically, island regions are shifting away from industry toward services, with growth in agriculture and finance, yet GVA is declining in most sectors. The trade and services sector now accounts for the largest share of employment and private sector GVA, while professional and scientific services are the fastest growing – though still small. Agriculture is a bright spot in GVA growth, alongside financial services. Notably, small firms (1–9 employees) dominate the employment landscape in island regions, yet they struggle to scale. While firm density – a proxy for economic vibrancy – is comparable to nearby coastal areas, this has not translated into stronger output.

In the specific case of Sweden, the performance of island regions stands out for its relative strength in productivity and output growth, but scaling and firm structure remain key considerations. Population increased in both Västra Götaland and Gotland over the last two decades. Crucially, these regions outperformed comparable areas in GDP and labour productivity growth (particularly during the 2001–2011 decade) due to increases in GVA and stable employment trends. Firm structures in Swedish islands mirror national norms, with a large share of self-employed firms, but employment is concentrated in larger firms (10+ employees), suggesting a better-developed enterprise ecosystem. In contrast to other case study countries, firm density in Swedish island regions is not only higher than national averages but also above benchmark regions. This relative dynamism likely contributes to stronger productivity performance and signals potential for further growth if supported by place-based economic strategies.

In terms of broader OECD comparisons, Sweden's islands perform moderately well on basic economic and demographic indicators, but less so on long-term growth potential. The chapter shows that although Swedish islands are not among the worst performing in Europe, they are not leading on productivity growth or demographic rejuvenation either. There are early signs of positive change, such as modest in-migration and public sector investments in Gotland, but these are not yet sufficient to reverse longer-term structural challenges. The views from some stakeholders on the ground coincide with what the data is also telling: more diversification and specialisation, along with relevant talent attraction, is needed to improve economic prospects.

For Swedish islands, the key policy implications from these trends are threefold. First, continued support for mid-sized and larger firms can enhance employment outcomes and innovation capacity. Second, local entrepreneurship and self-employment – especially in growing service and agricultural sectors – should be reinforced through scaling mechanisms, access to finance, and skills development. Third, data from Gotland and Västra Götaland suggests that productivity gains are possible in island settings when supported by stable public services and targeted investment in high-value sectors. These lessons should inform national strategies that aim to harness demographic growth while securing long-term economic resilience for Swedish island territories.

Policy priorities in Sweden

Despite relative strengths, Swedish islands are facing structural demographic and economic challenges, requiring place-based policy responses that reflect both their diversity and shared vulnerabilities. Most notably, many Swedish islands – including Gotland, Öckerö, and smaller municipalities – are experiencing population stagnation or decline, with an ageing demographic profile. For instance, while Gotland has shown moderate population growth, others exhibit negative trends. Ageing is pronounced: in some island municipalities, more than 25% of the population is aged 65 or over, significantly

higher than the national average. These trends suggest a pressing need for policies that promote demographic renewal, youth retention, and sustainable in-migration. Population size and accessibility seem to explain much of the internal variation across island municipalities. Smaller and less accessible islands consistently underperform. Those with higher population density and better connectivity tend to have stronger socio-economic indicators. Conversely, isolated islands with low accessibility face steeper challenges. This suggests that accessibility-related constraints – while not explicitly analysed in infrastructure terms – are nonetheless influential and should be factored into planning.

Labour market structures on Swedish islands are relatively undiversified and dominated by public sector employment, which provides stability but limits economic dynamism and innovation. The analysis highlights that the employment share in public administration and education is notably higher on islands compared to the national average. Conversely, private sector activity, especially in high-productivity sectors like information technology or advanced manufacturing, remains limited. This economic structure – characterised by a high share of small, self-employed businesses and seasonal industries – contributes to lower labour productivity. As a result, many Swedish island municipalities report productivity levels below the national median. Economic dependence on seasonal sectors and geographic isolation hinder inclusive growth. Islands are generally less diversified, with tourism, public services, and construction dominating. Limited innovation ecosystems and the absence of specialised support structures for entrepreneurship restrict the capacity of island economies to adapt to future challenges.

In sum, Chapter 1 calls for differentiated, island-sensitive policy frameworks in Sweden that address demographic decline, economic resilience, and institutional capacity. These frameworks should be grounded in data, tailored to local conditions, and implemented through multilevel coordination between municipalities, regional authorities, and national agencies. The evidence points to the need for differentiated, place-based policy responses that support economic diversification, demographic renewal, and targeted public investment. In particular, Swedish island municipalities would benefit from improved data systems to monitor local performance and tailor strategies. Policy responses must include place-based planning, better use of disaggregated data, and dedicated coordination mechanisms. Addressing these challenges requires national and regional authorities to adopt tailored strategies for islands. This includes embedding island-sensitive provisions into national rural and digital strategies, enhancing data collection, and strengthening multilevel governance to ensure local needs are represented.

The data imperative

To better understand and support Swedish islands, it is essential to build a robust and policy-relevant classification system based on functional, demographic, and geographic indicators. This involves distinguishing island territories by population size, proximity to the mainland, connectivity, and administrative status. Such a framework would enable clearer comparisons between different types of islands – such as larger islands like Gotland with regional governance powers, and smaller, municipality-administered islands like Öckerö. International examples offer useful guidance. Countries such as Croatia and Scotland have developed legal and policy frameworks that include specific classifications for “inhabited islands,” “small islands,” or “island communities”. These frameworks not only support more targeted policymaking but also help ensure political representation and eligibility for funding support. Sweden currently lacks such a system, which limits coordination across island municipalities and restricts visibility at the national level.

Developing effective policies for island territories requires clear, consistent, and policy-relevant definitions of what constitutes an island region. This chapter shows that while basic definitions (such as being entirely surrounded by water at high tide) are widely accepted, variations in population size, administrative affiliation, proximity to the mainland, and infrastructure connectivity lead to inconsistent classification across countries and institutions. This fragmentation hinders international comparability, limits effective benchmarking, and undermines the coherence of policy design for island development (see

Annex 1 for a more detailed technical discussion and applications across EU countries). Definitional clarity is a foundational step for effective policy**.** Without it, efforts to promote inclusive, place-based development for Swedish islands will lack precision and traction. The establishment of granular, harmonised island typologies is not merely a technical exercise – it is essential for ensuring that island communities are recognised, resourced, and represented in national and regional policymaking.

Sweden's national frameworks do not yet provide an island-specific classification, which reduces the visibility of Swedish islands in international and comparative policy analysis. As noted in the chapter, while Sweden does have municipalities composed entirely or partially of islands (e.g. Gotland and Öckerö), its statistical reporting and regional planning do not systematically differentiate between island and non-island territories. This limits the scope for tailored, evidence-based island policies aligned with the distinct challenges and assets these places face. The absence of granular, harmonised data – particularly disaggregated by island territory and economic sector – limits policy design and evaluation. Establishing clearer indicators and expanding the statistical infrastructure for rural and island areas in Sweden would improve accountability and support evidence-based policymaking.

Adopting a hybrid classification - building on Eurostat and ESPON typologies but integrating national and municipal-level data - would enhance Sweden's ability to design fit-for-purpose interventions. For example, the Eurostat definition excludes regions that contain both mainland and island parts, such as many NUTS 3 regions in Sweden, which obscures the realities of insularity. Similarly, bridged islands are excluded under some definitions, despite the persistence of island-specific vulnerabilities. As the report discusses, islands like Krk in Croatia or Skye in Scotland show that physical connections do not eliminate insular challenges, particularly in terms of market access or public service delivery.

The Swedish policy context would benefit from a more flexible classification that accounts for local economic structure, population dynamics, and functional accessibility. The examples from Croatia and Scotland show how legal definitions are enshrined in national legislation, including distinctions for "inhabited islands" and "island communities." Such typologies enable targeted policy responses for small and depopulating islands that would otherwise be missed. In the Swedish context, this could help address differences between Gotland, which operates as a full regional authority, and smaller municipalities like Öckerö or Sotenäs, which have more constrained governance capacities within their broader region.

Moving forward, Swedish authorities could consider establishing a national framework for island classification aligned with both local policy needs and international standards. This would enable better monitoring, improve access to targeted EU funding, and support horizontal coordination among municipalities facing similar challenges. Additionally, integrating data on coastal and near-coastal areas, where island populations reside but are administratively embedded in mainland regions, can bridge statistical gaps and ensure no communities are excluded from island-relevant planning.

Annex 1.A. Defining islands

A general definition provided by Encyclopaedia Britannica defines an island as "*any area of land smaller than a continent and entirely surrounded by water*" (Britannica, 2022[11]). However, classifying islands for harmonised cross-country analysis, that is built from the perspective of islands' self-identified priorities, is still a challenge (Baldacchino, 2007[10]). There are various approaches, some of which have been harmonised on the regional level (TL3 and NUTS3[21]).

Geographical considerations

Once a place satisfies the basic condition of being surrounded by water (at high-tide), existing definitions are often based on criteria related to a.) proximity to continental landmasses (peri-continental versus open ocean), b.) population (or human presence), and c.) association to other landmasses (island state versus island region). The distinctions in classifications are summarized in Table 1.2.

Table 1.2. A selection of definitions and caveats in Island classifications

Defining variables	Description	Definitions	Caveats	Reference
Proximity to landmass	Legally defined coastal maritime zone	Defines peri-continental *versus* open ocean islands	Includes uninhabited islands.	(Depraetere and Dahl, 2007[12])
Association with other landmasses	An "island state" is a state that is entirely made up of "island(s)"	Island states, Island nations or Island countries *versus* Island regions	Includes uninhabited islands and may overlook challenges of distance.	(Collins, 2022[4]; WorldAtlas, 2022[5])
Population size	Definitions based on thresholds of population : *Large*: More than 50 000 permanent inhabitants *Medium*: Between 5 000 and 50 000 permanent inhabitants *Small*: Between 50 and 5 000 permanent inhabitants *Very Small*: Fewer than 50 permanent inhabitants	Large, Medium-sized, Small and Very Small Islands	Only based on population.	(ESPON, 2013[17]).
Population, surface and distance	Minimum surface of 1km^2 , min distance of 1km^2 with a resident population of more than 50 inhabitants and *no fixed physical* link with the mainland	Island versus non-island	Addresses inhabited and proximity challenges, but resident population numbers may not be suitable for all countries. Bridged islands are considered non-islands, as are coastal regions with a large population living on islands.	(Eurostat, 2018[14])

Note: In addition, ESPON also further defines regions as one of the following : "performing'", "intermediate" and "lagging'", according to their economic performance. Source: Authors' own elaboration.

[21] The NUTS classification (Nomenclature of territorial units for statistics) is a hierarchical system for dividing the EU's territory in order to collect, develop and harmonise statistics on European regions. The NUTS classification has three main levels: major socio-economic regions within a Member State (NUTS 1); basic regions, for the application of regional policies (NUTS 2); and small regions, for more focused use (NUTS 3). References to Territorial Levels (TL 1, 2 or 3) are sometimes used for the purpose of extending beyond European regions, but consist of the same administrative delineations as the NUTS classifications.

Economic and policy considerations

Classifying islands according to their comparable geographic, socio-economic, and administrative characteristics offers useful distinctions among 'types' of islands that can inform place-based tailored economic policy. The strength of territorial definitions depends on their usefulness for policy, and a trade-off between harmonization and *fit for purpose*. This suggests that a mixed approach may be the most appropriate for comparing several island regions. While all options have advantages and challenges, the ultimate selection of the typology used should be based on the needs of the communities. Examples of bespoke islands definitions include those of Scotland and Croatia presented in Box 1.1.

Box 1.1. The definition of "island" in Scotland (UK) and Croatia

Scotland, UK

The Islands (Scotland) Act 2018 gives the definition of "island", of "inhabited island" and of "island community" for Scotland (UK):

- "island" is a naturally formed area of land which is: i) surrounded on all sides by the sea (ignoring artificial links), and ii) above water at high tide;
- "inhabited island" is an island permanently inhabited by at least one individual;
- "island community" is a community composed of at least two persons who live permanently on the island. The community must have common interests and a common identity or geography.

Croatia

In Croatia, the Islands definitions are based on the Islands Act 2018. Islands are firstly identified as a natural formed area of land surrounded by sea. It gives the definition of islands as "inner", "middle (channel)" and "outer (open sea)" through the following criteria:

- An Island's area in km2, based on the Islands Act
- The length of the island's coastline
- The administrative affiliation of the island, implying the location of the island or island settlement within one or more local self-government units (city or municipality) on the home island, on the mainland or on a larger neighbouring island
- The position of the island in relation to the mainland.

Inner islands include all islands in close proximity to the mainland, regardless of whether they are connected by a bridge or not. *Middle* islands are islands located between two rows of islands, if an island belongs to an island group characterized by parallel rows in relation to the neighbouring mainland, which are separated by inter-island channels. In addition, an *outer* island is the one separated from the mainland by at least two rows of islands. Furthermore, an island is also considered *outer* if it is surrounded on all sides by the open sea (e.g., Lastovo, Palagruža).

Source: (Scotland, 2018[16]) ; Correspondence with official delegates from Croatia.

In addition to more granular definitions based on specificities of islands, further extending a tailored approach could also contain information on the industrial economic specialisation, which might, for example, encompass islands with *knowledge intensive services industry, a more developed manufacturing base, more dependency on primary activities,* or those *specialised in tourism.* In addition, different situations can also be with respect to accessibility to services and the urban endowments of islands, for instance: i) islands with their own urban system (e.g. Sicily in Italy); ii) islands that are part of the influence

area of mainland cities (e.g. coastal islands of Croatia); iii) archipelagos and other situations of double insularity (e.g. Gozo, Malta's sister island or Greece's insular space where many smaller islands act as satellites of bigger ones and depend upon them much more than on the mainland). In the two latter cases, the critical issue is whether the market provides access to essential services that are normally provided in urban areas and makes it possible to create a labour market that extend beyond individual islands (ESPON, 2019[19]).

Islands as part of wider regions

The Eurostat definition of islands presents some advantages, namely, for harmonisation. The definition of European Unions' NUTS 3 island region entails that an Island region consists entirely of an island, although it can be formed by one island or more islands, or be part of a bigger island including two or more NUTS 3 regions. This includes regions such as Corsica (France), Crete (Greece), Sardinia (Italy), Sicily (Italy) or Ireland.

The comparative base provided by the Eurostat definition goes beyond the main characteristic shared by islands, notably, that they are surrounded by water, and puts limits of size, minimum human presence and proximity or connection to the continent (Planistat & Dunbar, 2003[15]). However, if the territory of a region also includes parts on mainland, it is classified as a non-island region. In this case, islands belonging to that region are not recognised as island units. Examples include places in Croatia, where NUTS level 3 regions are composed of both islands and mainland, or Estonia, Germany and Poland, where all islands are part of coastal NUTS 3 regions.

The utilisation of the NUTS 3 territorial nomenclature in the EU has led to the exclusion of a large number of islands from the statistical analysis (Haase and Maier, 2021[2]). In this respect, many EU Institutions and stakeholders, (e.g. the European Economic and Social Committee), believe that the criteria used by Eurostat are too narrow for development policy purposes and should be reviewed and made more flexible and comprehensive and flexible (EESC, 2017[4]).

Furthermore, several key issues arise from using definitions only based on Eurostat's Island regions. For example: i) coastal islands (that are islands within one kilometre from mainland) may face similar challenges (e.g. posed by marginalisation) like any other island; ii) a fixed connection with mainland does not prevent an island from experiencing similar difficulties to those islands without a permanent link (e.g. demonstrated by the Isle of Skye in Scotland, or on the islands of Pag and Krk in Croatia whose bridges are often closed due to strong wind); iii) the requirement of counting a permanent population threshold would exclude many smaller island communities going through depopulation (for example, many islands in Scotland, Croatia and Greece) that face similar, challenges compared to those with larger populations. For this reason and others, a more flexible definition and investigating some of the overlap and flexibility between island and other definitions may be of interest.

An integration of island and coastal region classifications for non-metropolitan regions

As described previously, some regions with islands are categorised as non-island regions, due to administrative boundaries that include a relatively larger share of the mainland. This can be challenging for analysis on Islands, as some regions are split between the two types of places with different economic and demographic patterns. Coastal definitions, that provide some insight into regions which may have a strong portion of their population on islands, may provide some additional insights despite not being the perfect solution to supplementing the Island definition to address the challenge of large regions with some Islands. The ideal solution is to work on more granular definitions of Islands, such as on the municipal or the grid level incorporating with functional area delineations. Until definitions based on this type of approach are harmonized and more widely accessible, an alternative approach could take a hybrid approach that captures fully-Island regions and Coastal non-metropolitan regions.

In addition to the Islands definition already discussed in the previous section and Source: OECD Regional Indicators, based on classification of regions in Table 1.3, Eurostat provides a basic typology of coastal regions that are NUTS level 3 regions within the EU. Coastal areas are classified as regions with a sea border (coastal), regions with more than 50% of the population living within 50km of the coastline (close to coast), and an exceptional status for Hamburg. The rest identified as "non-coastal." More formally, NUTS level 3 regions are defined according to one of the following three criteria:

- any NUTS level 3 region with a sea border (coastline);
- any NUTS level 3 region that has more than half of its population within 50 km of the coastline, based on population data for 1 km² grid cells;
- the NUTS level 3 region for Hamburg in Germany.

For the first criteria, almost all EU countries have a coastline, with the exception of Czechia, Luxembourg, Hungary, Austria and Slovakia that are landlocked. For the second criteria, the distinction is based on the number of inhabitants living in 1 km^2 grid cells that are within 50 km of the coastline and the number of inhabitants living in each NUTS level 3 region. This information is then used to compute the share of the total population in each NUTS level 3 region that lives within 50 km of the coastline, with those having a share of over 50% being classified as coastal regions. This classification in practice includes regions who do not a coastline themselves but are close to a coastline. The last criteria classifies the special case of Hamburg, which has a strong maritime influence and has most small islands off the coast of Germany (Neuwerk, Nigehörn and Scharhörn) as being administratively part of the city of Hamburg. Exceptions like this one suggest that functionality may play an important part of how regions see themselves in future classification but remains currently the only exception to the statistical classification from Eurostat (Eurostat, 2024[8]).

Based on the Eurostat definition, over a third (36%) of EU-28 NUTS level 3 regions are considered coastal. Coastal regions account for 491 NUTS 2016 level 3 coastal regions in the EU-28, out of 1348 total NUTS3 regions. Of these, 396 regions have a coastline, 95 regions have no coastline but more than 50 % of their population living within 50 km of the sea (Eurostat, 2024[8]).

To better address those regions identified as coastal, that nevertheless consist of an important share of islands, the rest of this paper takes a hybrid approach, prioritizing TL 3 (NUTS level 3) regions identified as Islands, and adds a differentiation of non-Island regions to include the category of coastal regions and coastal regions that have at least 50% of the population living within 50 km^2 of the coast. Next, the definition excludes metropolitan areas, to avoid capturing the large metropolitan agglomerations that are often on a body of water. The choice to avoid the inclusion of coastal metropolitan regions in the full analysis, is because of the relatively high levels of gross domestic product (GDP) of some metropolitan coastal regions, which include high GDP and capital regions such as Barcelona (ES511), Rome (ITI43), Stockholm (SE110), Hamburg (DE600) and Lisbon (PT170). While a more granular classification that includes bridged, or unbridged islands would also be preferable, such as in the case of Croatia, the approach taken in Table 1.3 presents the advantage of harmonisation across different countries. For the rest of the report, the regional classification identified as island region type in Table 1.3 will be adopted. For comparability purposes, the analysis will only be focused on European island regions.

Table 1.3. Definitions used for Islands regions

Islands Classification (EC)	Num and share, 2021	Average regional GDP	Coastal Classification (EC)	Num and share, 2021	Average regional GDP	Island region type (without metropolitan regions)	Num and share, 2021	Average regional GDP, 2021 (approx.)
Island regions	47 regions or 4%	8 000	Other regions	(see below)	(see below)	**Island regions**	47 regions or 4%	8 000
Non-island regions	1 038 regions or 96%	16 000	Coastal with >=50% of population living within 50km of coastal region	280 regions or 26%	14 000	Coastal and close to coastal (without metro) or **Coastal non-metropolitan regions**	170 regions or 16%	9 600
			Coastal regions	44 regions or 4%	19 000			
			Non-coastal regions	761 regions or 70%	15 000	**Other regions** (including metro)	868 regions or 80%	17 700

Note: Average regional GDP is in millions constant USD PPP. Metropolitan regions refer to regions classified within the OECD's Regional typology for metropolitan and non-metropolitan regions. For comparability purposes, the classification excludes all "island nations" such as Malta, the United Kingdom and Ireland, and only included. Non-European OECD countries such as Norway, Turkey, and Switzerland were also excluded from the analysis.
Source: Authors' own elaboration in consultation with project partners.

Box 1.2. Integrated classifications of Islands and non-metropolitan Coastal regions

This study acknowledges the complexities involved in the administrative classification of island economies into regional administrative units. It bases its classification on Eurostat's Nomenclature of Territorial Units for Statistics Level 3 (NUTS 3) definitions. NUTS 3 regions are small regions used for specific diagnoses and are part of a hierarchical system that divides the EU's territory into three levels: NUTS 1 (major socio-economic regions), NUTS 2 (basic regions for regional policies), and NUTS 3 (small regions for specific diagnoses). The OECD's Territorial Level 3 (TL3) builds on these same NUTS 3 definitions.

The OECD classifies region types into metropolitan and non-metropolitan regions. Metropolitan regions combine small (TL3) regions when 50% or more of the regional population live in a functional urban area (FUA) above 250 000 inhabitants and as “non-metropolitan” otherwise.[1]

The classification for this process begins with prioritizing Island regions, followed by the integration of coastal regions and regions where at least 50% of the population lives within 50 kilometres of the coastline. The classification for Island regions[2] and Coastal regions[3] are based on Eurostat definitions. Subsequently, all regions classified as “metropolitan regions” based on the OECD's typology are excluded to improve comparability. The resulting categories are:

1. Island regions;
2. Coastal non-metropolitan regions; and
3. all other regions.

The Coastal non-metropolitan regions are combined with those that are close to Coastal in the initial analysis, and separated in the more detailed country analysis section. All metropolitan regions are included in the category for all other regions.

Source: [1] Adapted from: Fadic, M., et al. (2019), "Classifying small (TL3) regions based on metropolitan population, low density and remoteness", OECD Regional Development Working Papers, No. 2019/06, OECD Publishing, Paris, https://doi.org/10.1787/b902cc00-en.
[2] Eurostat (2024), Territorial typologies manual - coastal regions, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Territorial_typologies_manual_-_coastal_regions#Classes_for_the_typology_and_their_conditions (accessed on 25 October 2024).
[3] Eurostat (2018), Territorial typologies manual - island regions - Statistics Explained, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Territorial_typologies_manual_-_island_regions (accessed on 12 May 2022).

References

Baldacchino, G. (2007), *A World of Islands: An Island Studies Reader.*, Agenda Academic (Malta) & Institute of Island Studies (Canada), 2007, http://islandstudies.com/publications/a-world-of-islands/. [1]

Britannica (2022), *Encyclopedia Britannica*, https://www.britannica.com/ (accessed on 1 June 2022). [2]

Collins (2022), *Collins Online Dictionary | Definitions, Thesaurus and Translations*, https://www.collinsdictionary.com/ (accessed on 12 May 2022). [4]

Deidda, M. et al. (2014), "Insularity and economic development: a survey. Working Papers CRENoS, 14(07)". [14]

Depraetere, C. and A. Dahl (2007), "Island Locations and Classifications". [3]

EESC (2017), "Official Journal of the European Union, European Economic and Social Committee on "The islands of the EU: from structural disadvantage to inclusive territory", 2017 / C-209/02", *2017/C 209/02*. [12]

EPRS (2016), *European Parliamentary Research Service (EPRS), Islands of the EU: Taking account of their specific needs in EU policy, January 2016*. [15]

ESPON (2019), *ESPON Bridges, Balanced Regional Development in areas with Geographic Specificities, 2019*. [8]

ESPON (2013), *The Development of Islands – European Islands and Cohesion Policy, 2013*. [6]

Eurostat (2024), *Territorial typologies manual - coastal regions*, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Territorial_typologies_manual_-_coastal_regions#Classes_for_the_typology_and_their_conditions (accessed on 25 October 2024). [13]

Eurostat (2018), *Territorial typologies manual - island regions - Statistics Explained*, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Territorial_typologies_manual_-_island_regions (accessed on 12 May 2022). [7]

Haase, D. and A. Maier (2021), "Islands of the European Union: State of play and future challenges Policy Department for Structural and Cohesion Policies Directorate-General for Internal Policies EN STUDY". [11]

Planistat & Dunbar (2003), *Planistat Europe and Bradley Dunbar, Analysis of the island regions and outermost regions of the European Union: Part I - The island regions and territories, 2003*. [10]

Scotland (2018), *Islands (Scotland) Act 2018, https://www.legislation.gov.uk/asp/2018/12/contents*. [9]

WorldAtlas (2022), *World Map / World Atlas / Atlas of the World Including Geography Facts and Flags - WorldAtlas.com*, https://www.worldatlas.com/ (accessed on 13 December 2021). [5]

2 Policies for Island Development

This chapter examines Gotland and Öckerö as representative case studies, highlighting both innovative practices and persistent policy gaps across Swedish islands. While Gotland has advanced in strategic planning and green transition, and Öckerö shows local agility, both face challenges in infrastructure, economic diversification, and coordination with national strategies. The chapter calls for stronger alignment between local efforts and national support, better use of data, and expanded capacity for implementation. It reinforces that success requires integrated, place-based strategies, scalable innovations, and multilevel partnerships to translate local ambition into sustainable, inclusive outcomes across all island territories.

.

Introduction

Inclusive and equitable regional development is a priority for the Swedish government. That includes the advancement and development of its many island communities.

Representing roughly 3% of the nation's land area, Sweden's islands are strong contributors to the overall economy in areas such as tourism and agriculture (OECD, 2022[2]). At the same time, and like other areas of Sweden – including remote and sparsely populated territories – they face development challenges linked to their geography and frequently higher operating and service delivery costs than their mainland peers (OECD, 2023[3]). Consequently, island economies often lag other regions across several economic

indicators. High service delivery costs, along with seasonality in their demographics, can affect their labour and housing markets, education and healthcare services, connectivity, and overall productivity.

Recognising also their unique features and potential for leveraging natural and cultural resources, the government aims to identify success factors and integrate specific policies for islands within the broader national rural and regional strategy framework. This approach is vital for nurturing the sustainable and inclusive growth of these unique communities. The logic is that by increasing the competitiveness and attractiveness of diverse regions, the whole country becomes more competitive.

This report seeks to inform the development of targeted, island-specific policies aimed at enhancing the competitiveness and well-being of Swedish islands in an evolving economic landscape. Using Öckerö Municipality and Region Gotland as case studies, it incorporates insights from local stakeholder surveys to pinpoint current challenges, assess ongoing initiatives, and highlight key success factors. Drawing on OECD policy discussions relevant to regional and rural development, particularly within island economies, the report provides a critical evaluation of existing policies in achieving core economic goals such as diversification and sustainable innovation. Additionally, it identifies gaps within the current policy framework. The findings offer practical policy recommendations and strategic guidance to bolster economic resilience and sustainability for island economies in Sweden and beyond.

The chapter first describes the policy context for regional development in Sweden and makes the case for a tailored approach to Island development. It then analyses in dedicated sections the policy landscape, actions and gaps in both Gotland and Öckerö. The chapter concludes with a summary of best practices and policy lessons and priorities for the two Island case studies – and for Island economies more generally.

Addressing island's challenges with tailored interventions

Chapter 1 analysed the demographic and economic trends in Island economies in Sweden – and more widely across the EU. The policy discussions held by the OECD in Öckerö, Gotland, and Stockholm emphasised the unique economic, social, environmental, and governance challenges faced by island economies. These territories, often more affected than other by global events such as the pandemic and geopolitical tensions, have seen significant shifts in their business landscapes, affecting sectors like tourism, and small and medium enterprises. The ongoing crises have necessitated adaptations in internationalisation strategies, military preparedness, and service provisions.

Such discussions have led to two main conclusions:

- Islands need to be considered as a distinct territorial category in national strategic frameworks.
- Islands need place-based development approaches.

Considering islands as unique territories, as well as active contributors to national strategic frameworks, policies and county development plans, can improve the possibility that islands meet development local, regional and national objectives. This may also limit potential inter-territorial inequalities that islands may experience. National policies need to reflect the unique needs of island economies, which they often do not. For instance, Sweden's current use of population density as a criterion for regional support does not effectively address the unique conditions of islands, which may not have low density but still experience remoteness and rural characteristics, and thus could benefit from regional support mechanisms.

There is also a case for adopting place-based policies. National policies that are place blind inherently lack the capacity to recognise and address the diverse and unique characteristics of islands and island regions. These policies are often formulated at a broader scale, overlooking the geographical, ecological, and socio-cultural particularities that distinguish one island from another. As a result, they may fail to acknowledge the vulnerabilities, challenges, and opportunities that islands face, leaving local communities without the necessary support and solutions required to thrive sustainably.

Each island possesses its own set of resources, strengths, and limitations that shape its development trajectory. Implementing policies that are customised to the local conditions of each island is vital for maximising their opportunities and addressing their specific challenges effectively. By acknowledging the distinct attributes of each island, policymakers can identify and capitalise on their assets, whether they are natural resources, cultural heritage, economic strengths, or strategic location.

Transport connectivity already makes Gotland and Öckerö quite different in their challenges, for instance. Likewise, other islands will also have different needs. To tackle the multifaceted challenges posed by insularity, a dedicated, place-based island approach has the advantage of:

- Implementing more tailored solutions for local needs.
- Better testing and measuring the impact of policies and investments.
- Coordinating efforts across policy areas and related government departments.

Individual island development plans, formulated by relevant subnational actors, represent a way to pursue place-based solutions. They need to be linked to the national strategy for regional development and help support broader objectives. The national strategy creates the space for taking a place-based approach - both in its design (by undergoing a collaborative process, which Sweden does) and then in its implementation, according to the context, priorities and territorial needs of each island.

Tailoring policies to local conditions allows for greater community involvement and ownership, as island residents are more likely to support initiatives that resonate with their realities and aspirations. This approach enhances the chances of successful policy execution and encourages active participation from local stakeholders, thereby increasing the overall effectiveness and positive impact of development strategies on island communities, including in economic and wellbeing indicators.[22] This place-based policy customisation ensures that islands can withstand environmental and economic shocks while preserving their unique identity and heritage, making them more resilient in the face of adversity.

Regions and municipalities already have decision-making power in land-use planning and across several policy areas supporting regional development, including skills and employment. Nevertheless, enhanced national support remains essential, including for financial resources and institutional capacity building. Although Öckerö and Gotland have effectively identified their challenges and developed tailored plans, the implementation of these strategies remains challenging. Gotland, for instance, has adopted a comprehensive regional development strategy “Our Gotland 2040”. Economic diversification is a key concern, and promising areas include sustainable tourism, regenerative practices, and enhancing local value chains through coordinated regional strategies. Yet, OECD conversations with local stakeholders suggest that insularity makes policy implementation difficult. The lack of critical mass of land, people, competence, and capital, as well as the lack of administrative capacity and alignment and integration of sectoral policies, would constitute structural barriers for the realisation of national goals – and those from the EU like the European Green Deal on islands.[23] Those conversations with local stakeholders also suggest that there is limited capacity to convene relevant local, regional and national stakeholders to discuss relevant policy questions (e.g. skills, digitalisation, green transition).

Proactive co-operation and co-ordination between different levels of government can help unlock the development potential of islands and leverage their natural and cultural resources, particularly in the context of the ongoing transitions to cleaner energy and digital technologies, which require place-based and tailored solutions. Multi-level governance collaboration can also facilitate addressing key challenges in islands like access to skills. Region Gotland, for instance, has a collaborative agreement with the

[22] Well-being measures need to be explicitly brought into the policy-making process. Building on the OECD Framework for Measuring Well-Being and Progress, the OECD is advancing this agenda through various analytical work. See https://www.oecd.org/statistics/measuring-well-being-and-progress.htm.

[23] .https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal_en

Swedish Public Employment Service[24] to enhance employment and skills provision, particularly for long-term unemployed, low-educated individuals, and international migrants.

In short, there is a need for a differentiated approach to national and subnational-level policy making that can take specific island needs into account. Adjustments to how existing strategic frameworks are applied, vertical co-ordination and consultation, and funding and financing arrangements for regional development are all areas identified by the OECD where an approach applying an 'island-lens' could make a difference to island economies and the well-being of island residents.

Assessing policy action in Gotland and Öckerö

An assessment of current policy action in each of the two featured islands is covered in the next two sections respectively. Policy action in each place is assessed in the context of current national and regional strategic visions and development priorities in the selected regions. The focus is not on evaluating specific policies (which can be assessed independently in terms of their strategic alignment, measurable goals, feasible implementation and impact evaluation), but on qualitatively assessing, at a high-level, the whole suite of strategies, programmes, policy interventions and investments taking place.

The policy analysis for each island identifies strengths, key success factors and policy gaps in three main policy areas (Figure 2.1): (i) Optimal Infrastructure & Land Use; (ii) Competitive Landscape and (iii) Sustainable Place. Furthermore, the good functioning of strategic initiatives and planning is a necessary foundation to co-ordinate policies across these areas, and it is also assessed based on criteria like:

- dedicated strategies with clear medium and long-term objectives[25]
- coordination among levels of government and across other territories,
- degree of synergy of actions across different policy areas.

Figure 2.1. Areas of Policy Action

Source: Author's elaboration

These areas of action are interrelated and complement each other. They also cover actions across several sub-areas; for instance, both skilled people and business performance are important for economic competitiveness, so area 'Competitive Landscape' includes policies to support both People and Businesses. The assessment of each policy area is guided by usual key performance indicators relevant to each (Table 2.1). These indicators normally lead to more prosperous places, which in turn translate into higher wellbeing of residents. There are other policy areas that also contribute to the wellbeing of islanders

[24] In Swedish: Arbetsförmedlingen.

[25] These include EU programming aspects for the 2021-2027 period such as the Partnership Agreement ecosystem, European Structural and Investment Funds (ESIF) interventions, Smart Specialisation Strategy, and other pertinent initiatives.

like the efficient provision and delivery of public services. The policy areas here emphasised are those that will help Island economies prepare for the future.

Table 2.1. Key Performance Indicators for Assessing Island's Policies

Policy Area	Key Performance Indicators
Strategic planning and initiatives	Alignment with an Island Vision
	Alignment and coordination with national policies
	Stakeholder engagement
Competitive Landscape	Business creation
	Skilled workforce and employment rate
	Local innovation
Optimal Infrastructure and Land use	Infrastructure investment
	Transportation efficiency
	Digital connectivity
Sustainable Place	Environmental quality (e.g. emissions)
	Renewable energy generation and use
	Resource management: e.g. water, waste
	Quality of life and residents' wellbeing
	Growth of green economic activity
	Access of residents to quality jobs in green sectors

Source: Author

Current Policies in Gotland

This section describes the strategic and policy actions being taken in Gotland for regional development, also identifying key success factors and policy gaps. The section is broken down by main policy areas, each describing how Gotland is responding to the challenges identified in Chapter 1. Each policy area subsection presents an upfront summary assessment, followed by a detailed description of specific initiatives and best practice.

Strategic initiatives for Gotland's prosperity

Context and challenges

Addressing Gotland's challenges and pursuing new opportunities requires a clear vision of where the Island's economy is heading, and strategies to effectively pursue policies and investments in key areas.

The *OECD Territorial Review of Gotland* (OECD, 2022) identified challenges for achieving strategic and collaborative governance, including the region's lack of a comprehensive strategic approach to infrastructure planning and investment and insufficient administrative capacity for the implementation of policies and programmes. Furthermore, the distribution of responsibilities among different government levels is often unclear.

Policy Actions

Table 2.2 summarises strengths in the strategic actions being currently taken by Region Gotland, as well as weaknesses (i.e. policies or governance actions that are not comprehensive) and policy gaps (i.e. things that local authorities are not doing).

Table 2.2. Assessment of Strategic Planning & Initiatives

Strengths	Weaknesses	Policy Gaps
• Integration of regional development strategy with national strategies. • Alignment of Gotland's food industry strategy to the respective national strategy. It has an action plan that refers directly to Our Gotland 2040 and Smart Specialisation strategy. • Aligning strategy and operation with steering approach and public consultations. • Regularly updating the regional development plan Our Gotland 2040 for relevance. • EU funding and strategic use of funds (e.g. in sustainable food or hospitality). • Collaboration with neighbouring regions.	• Limited long-term impact analysis of regional development projects. • Dependence of local actors on regional co-funding, which limits scale of initiatives. • Underutilisation of EU funds (given local organisational and competence limitations). • Though the Comprehensive Plan accommodates for national interests and regional needs, including for land use, there is no mechanism that arbitrates such interests. • Region Gotland "holds the plan" for regional development by law, but it is less clear to what extent it influences national authorities. • Communication and resources within Region Gotland can be improved for effective policy implementation and national commitments.	• Double insularity unique challenges (e.g. with Fårö), with no clear solutions for lack of critical mass and higher costs to deliver services. • Insufficient organisational capacity to coordinate existing local strategies. • Strategies for stronger business ecosystems are lacking detail. • No mention of specific strategies for digital transformation. • Further focus on social services (incl. healthcare infrastructure) to strengthen the island's ability to attract and retain residents.

Source: Author

Gotland is pursuing a comprehensive strategic approach to fostering economic growth and sustainability, levering local strengths. Current strategic actions to guide regional economic development include:

- *Setting the vision*: The "*Our Gotland 2040*" strategy, the primary framework guiding economic, environmental, and social development on the island, aligns local priorities with the National Strategy for Sustainable Regional Development 2021-2030. It focuses on climate, energy, business innovation, and social inclusion. The Smart Specialisation Strategy further supports innovation and business development by aligning with national and international best practices.
- *Defining smart specialisation*: Gotland's Smart Specialisation Strategy for 2021-2027, developed with inputs from various regional and national stakeholders, focuses on leveraging local strengths. Three key areas are tourism, food industries and the energy transition. The island benefits from EU funding for projects aimed at enhancing the food, hospitality, and climate sectors, with initiatives like Science Park Gotland and Gotland Green Center serving as innovation hubs. Furthermore, Gotland also has long-term cohesion initiatives with other regions in the same NUTS2 area[26], to pursue opportunities in more sectors like wood materials, industrial development, digital services.
- *Building a local plan*: Region Gotland has worked on a revised Comprehensive Plan informed by a wide public consultation that took place in 2022. Updates on sustainability and other policy areas have been incorporated.[27]

Key Success Factors

Region Gotland and other stakeholders are taking actions to align local and national strategies as well as translating strategies into operations with local input:

- *National guidance*: Local action is often framed and guided by national strategies, including in spatial planning and land use. In specific policy areas like digital transformation, Region Gotland

[26] The following regions are included: Jönköping Kronoberg, and Kalmar.

[27] The Plan and Building Act was changed in 2020 with a clear requirement for both the municipalities and the county administration boards to keep the Comprehensive Plan up to date. Though the requirement places high demands on the municipalities to have adequate resources to meet the commitment, the consultations involved make actions more tailored to local needs Adoption by the Regional Council of the update was expected during the production of this report.

has pursued its work for developing a new comprehensive plan based on the digital model of the Swedish National Board of Housing, Building and Planning.[28]

- *Inter-regional collaboration*: Gotland collaborates with Småland regions[29] to pool resources and build common structures, particularly in areas lacking the critical mass to sustain clusters independently. This collaborative approach aims to enhance economic resilience and innovation.
- *Forward-looking governance*: A new governance model has been adopted in Region Gotland with the aim of aligning short term political priorities with the regional development strategy in the long term (until 2040). This model contains various planning modules and follow-up processes, which ensures coordinated efforts within the organization's political committees.
- *Monitoring, adjusting and learning*: Region Gotland and regional stakeholders and interested parties reassess the challenges currently within the framework of the implementation of the regional development strategy.
- *Public Consultations*: Strategic planning involves public consultations and dialogues with stakeholders during the elaboration of the regional development plan and the comprehensive plan. This inclusive approach aims to ensure that diverse perspectives are considered in the planning process. While public consultations are part of strategic planning, continuous stakeholder engagement during implementation phases appears insufficiently emphasised and it will continue to be crucial for the effectiveness of policies.

Policy Gaps

- *Detailed strategies for strengthening the business ecosystem*: Overall, the strategies to overcome the challenges of attracting high-skilled labour and achieving economies of scale are not clearly articulated, leaving significant gaps in the overall strategic approach. Comprehensive support for fostering a thriving innovation ecosystem, including funding, mentorship, and infrastructure, is not fully detailed. Strategies for digital transformation which are crucial for modern economic growth, seem absent.
- *Complex planning amid national interests*: The increasing stress on certain national interests (e.g. the armed forces' need for space) makes the planning processes more complex and thus it requires more time to make it possible for adopting new plans.[30]
- *Organisational limitations and underutilisation of EU funds*: though development actors in Gotland use EU funds (ERDF, ESF and Horizon), [31] the active search for funds is still limited to the "regular programmes" like the ERDF. Conversations with stakeholders on the ground suggest that this is the result of insufficient knowledge and expertise to apply for funds, and limited organisational and resource capacity, and international networks.[32] International collaborations by Region Gotland and other development actors on the island is a challenge due to insularity.

[28] The national agency is working with digitization based on the EU's digitization policy and digital detailed plans are now a legal requirement.

[29] This involves three regions in the same NUTS2 area.

[30] Local plans often require explicit articulation of how national goals are met. In the comprehensive plan, the municipality must present the basic characteristics of its intended use of land and water areas; how the built environment is to be used, developed and preserved; what consideration is to be given to public interests; and what the intention is regarding how national interests and environmental quality standards are to be served. The plan must also indicate how the municipality intends to take into account national and regional goals, plans, and programmes of significance for sustainable development within the municipality.

[31] Gotland leverages multiple EU funding sources like the European Regional Development Fund (ERDF), European Social Fund (ESF), and Horizon Europe to support local projects. This includes initiatives like Sustainable Speis, in collaboration with farmers and small-scale food industries, and Sustainable Plejs, which focus on sustainable tourism and hospitality industries.

[32] These challenges were highlighted in direct conversations of the OECD with local authorities.

Policy Area: Optimal Infrastructure & Land Use

Context and challenges

Physical assets, which cover available land as well as infrastructure for transport, energy, digital technologies and more, are essential for regional development. Gotland has many of these assets:

- A port expanded in 2018 now supports larger cruise ships.
- Fibre optic broadband throughout the island (88% of households have access to the network),[33]
- Fast charging for electric cars and lorries as well as charging stations for small electric aeroplanes.
- Renewable energy systems (biogas, solar and wind).

Recent significant investments in infrastructure (digital, ports, net-zero transportation, etc.) and the regional development strategy (Our Gotland 2040) have set the island up for future progress.

Gotland's accessibility by ferry and plane is by far the biggest transport infrastructure challenge. Since this challenge is somewhat out of the control of regional authorities, not many policy actions are identified in this section. But this continues to be one of the key determinants of the Island's future prosperity. Gotland needs a long-term, stable perspective on sustainable accessibility at a reasonable price, particularly for ferry traffic.

There are other infrastructure upgrading and expansions that Gotland can tackle to continue providing appropriate level of service and thus position itself for new opportunities:

- infrastructure reaching the end of its useful life, such as the energy cable;[34]
- technological changes and the increasing impacts of climate change, including an increased need for renewable electricity generation,
- further expand infrastructure to meet new demands, including pressure on local water supplies[35] and a shortage of affordable and rental housing.[36] Attracting new residents and tourists, and an increased presence of the military, bring extra pressure.

In addition to specific events, like whether the local cement plant continues to operate, which depends on a currently pending environmental permit and will play a significant role in future energy needs and infrastructure development, there are also externally driven forces that condition Gotland's future development path and the types of infrastructure it will need:

- The increasing impact of climate change and impacts on water supply.
- The recent return of the military to the island and the increasingly tense security situation in the Baltic Sea.[37]

While these developments are largely outside the region's power, the region can do more to strategically prepare for the consequences of alternative scenarios. Gotland needs to overcome several challenges to maintain its infrastructure fit for purpose. In addition to limited resources for transport infrastructure, there are challenges that are more specific to the island:

---

[33] All residential and workplace locations on Gotland have access to broadband infrastructure, with 98.55% of homes and 97.99% of workplaces having 1 Gbit/s connectivity. Gotland leads other Swedish regions in broadband access. The national goal for 2025 is 98% coverage with 1 Gbit/s, which Gotland already meets. There is a national ongoing public inquiry on speeding up investments in 5G. Source: Utredning för att snabba på utbyggnaden av 5G och fiber i Sverige - Regeringen.se

[34] The current subsea cable from the mainland – the main infrastructure supplying electricity on Gotland - is now nearing the end of its expected life.

[35] Climate change, increasing demand for water and the EU water directive put pressure to undertake major new water infrastructure investments.

[36] Seasonal homes dominate new housing (between 2010 and 2020, 58% of building permits were for second or holiday homes) since they are the most profitable form of new construction.

[37] following the large-scale aggression of Russia against Ukraine

- *Scarce land for new investment*: there are many competing interests for the use of land, from businesses, industry and national priorities. This can slow down investments in key sectors. For instance, for renewable energy to take on a larger role in the island's electricity supply, it needs to overcome its intermittent nature and limited or contested locations for deployment.
- *Lack of economies of scale in infrastructure*: peak demand for infrastructure on Gotland occurs in the summer months, resulting in some infrastructure having excess capacity for a significant portion of each year. This results in relatively high unit costs for water, sanitation and other forms of infrastructure when compared to places with more stable demand.
- *Limited capacity for shared infrastructure*: as an island, most forms of infrastructure are designed to only serve Gotland, leading to potential reductions in economies of scale and network effects, including a lack of ability to share and access infrastructure of neighbouring regions.
- *Lack of control on building uses*: the challenge with regard to the legislation[38] is that it is not possible for Region Gotland to control whether the buildings become residences for permanent use or holiday homes, within the framework of the Plan and Building Act.[39]
- *Different technical solutions for a diverse island:* investments for water management are largely a regional responsibility but different technical solutions will likely be required on different parts of the island because conditions vary significantly.
- *Challenges regarding technology/connectivity*: Gotland currently lacks the necessary soft infrastructure to fully implement smart region initiatives. Efforts are required to drive integration solutions and invest in technology-independent, robust digital systems to enhance sustainability and privacy protection.

Policy Action

Table 2.3 summarises strengths in the strategic actions being currently taken by Gotland, as well as weaknesses (i.e. policies or governance actions that are not comprehensive) and policy gaps (i.e. things that local authorities are not doing).

Table 2.3. Assessment of Policy Action for Optimal Infrastructure & Land Use

Strengths	Weaknesses	Policy Gaps
• Existence of evidence-based approaches for strategic transport issues. In addition to the Regional Council forum for transport dialogue, the Stockholm-Mälar region process is aligned with the National Transport Plan. • There is a national digitalisation strategy (with updates to be presented in 2025), and regions across Sweden are also working to adopt the EU digital compass.	• Insularity makes sharing investments (across regions) difficult. • Limited funding for new infrastructure projects and unclear financing responsibilities for others (e.g. for a proposed reserve port at Kappelshamn). • Lack of funding for digitisation investments in public services. • No coherently prepared for alternative scenarios to the energy cable.	• EU funding is not currently used for transportation infrastructure. • Though digitalisation is mentioned in Our Gotland 2040, there are no measures in the Action Programmes for the Regional Development Strategy on digitalisation. • There is not a vision for becoming a Smart Island.

Source: Author

[38] In terms of legislation, there are 2 major strands that regulate the land and water: The Environmental Code is characterised as prohibition legislation, while the Plan and Building Act is characterised as enabling legislation.

[39] During the period 2010-2020, 572 residential buildings of a permanent nature have been built on Gotland and in 25% of these there is no individual registered. In the coastal zone, someone has registered in half of the residential buildings (53%).

Current strategic actions to improve infrastructure:

- *Multilevel coordination*: various public actors play roles in infrastructure development on Gotland, with coordination between regional and central government bodies being essential.
- *Major infrastructure investments*: Gotland continues to invest, including in the port, particularly to improve the long-term connectivity for Gotland post-2027. The main bottleneck in Visby port is the lack of space for sustainable fuels like electricity and biofuel. To address this, Visby port will expand by 18,000 m², which is part of the 10-year investment plan. All these investments are increasingly guided by strategies and plans that seek national coordination.
- *County transport plan*: beyond the national transport plan (2022-2033)[40], which focuses on national roads and railways, which Gotland does not have, the county plan focuses on the development of the regional road network and co-financing measures on the municipal road network.
- *Cooperation and regional actions*: Trafikrådet, a regional forum (traffic council), aims to coordinate strategic transportation issues, focusing mainly on the communications to and from the island.
- *Strategy for alternative transport*: Region Gotland is developing a regional cycling plan that is expected to be established in 2025. The aim is to promote increased and safe cycling on the island.

Box 2.1. Swedish planning system

As per the Planning and Building Act, the Swedish planning system consists of the regional plan, the comprehensive plan, the area regulations and the detailed development plan. The national maritime spatial planning is regulated in the Environmental Code. Only the area regulations and the detailed development plan are legally binding documents; however, the regional plan and the comprehensive plan can be seen as indicating the overall direction of the municipality over a significant time period and as guidance in the development of the detailed development plan and in the permit granting process.

At the regional level, there is a possibility to elaborate a physical plan according to the Planning and Building Act (PBA). Presently, Region Stockholm, Region Skåne and Region Halland elaborate regional spatial plans according to the PBA. Most other regions work with spatial planning in their regional development work. National policies seek to increase the opportunities for regions to take strategic planning processes into consideration in their regional development work.[41]

Source: OECD Territorial Review of Gotland 2022

Key success factors

The OECD Territorial Review of Gotland already identified priorities for key infrastructure areas as well as strategic recommendations to improve infrastructure renewal efforts:

- Adopt a more visionary and foresight-oriented approach to anticipating the effects of global trends and national decisions beyond its control (e.g. the fate of the local cement plant, the provision of a new submarine cable to supply electricity and increased military presence).
- Better align infrastructure planning and investment decisions to regional development priorities, including in Our Gotland 2040. Planned priorities with implications for infrastructure include

[40] At the national level, the process for a transportation bill is ongoing. A bill will be presented in the Riksdag before the summer of 2024. After that, the government will instruct the Swedish Transport Administration to draw up a national plan for the period from 2026.

[41] Between 2024 and 2028, a government assignment to the Swedish Agency for Economic and Regional Growth, the Swedish National Board of Housing, Building and Planning, the Swedish Transport Administration and the County Administrative Boards will investigate how to do it effectively.

improving accessibility, being at the forefront of the climate and energy transition and conserving water and the environment.

- Support infrastructure solutions specific to local needs across the island, involving local initiatives and seeking synergies with local service providers. More remote communities especially lend themselves to innovative actions directly suited to local needs.

Other actions that facilitate policy effectiveness:

- *Small community development organisations*: they play an essential role in developing local infrastructure and providing for certain needs. Some are taking up roles to provide services (i.e. economic development, housing and leisure services) that are typically provided by the regional or municipal government. These local efforts largely rely on voluntary work.
- *Competitive telecommunications*: the broadband infrastructure on Gotland is built on parish associations, leading to competitive market prices due to strong bargaining power with operating companies. However, these networks are vulnerable as they function as "fibre islands" with minimal interconnections, lacking redundancy. The national broadband grant, only accessible to operators, supports new infrastructure rather than connecting existing networks, with limited eligibility on Gotland. Annual funding calls have changing criteria, and there's a suggestion to approach The Swedish Post and Telecommunication Authority to use Gotland as a test island for connecting all fibre associations' grids and nodes.

Policy Gaps

- *Limited funds to spend in transport infrastructure*: the Swedish transport infrastructure planning consists of a national plan and a county plan. In the national plan, funds are allocated to new investments in national roads and railways, but also to, for example, maintenance. Gotland has no national roads and no railways and is therefore excluded from large parts of the funds available in the national plan. [42] In the county plan, funds are allocated to the regional road network and to co-financing for a certain type of measures on the municipal road network, but Gotland also receives the least funds for state-owned regional road network.
- *Strategy for digitalisation and connectivity needs*: Digitalisation does not feature within Gotland strategic plans. Gotland's geographic location necessitates robust and redundant broadband channels to ensure societal resilience, especially with the expanding military presence and national security interests. The local fibre infrastructure is now facing challenges in redundancy, with local fibre associations lacking backup options if the main cable fails. Despite successful fibre rollout since 2010, more complex requirements now demand coordinated efforts to improve local and regional broadband infrastructure for both development and security.[43]

  Smart Island vision and strategy: Gotland has the ambition to leverage digitalisation for a sustainable society, focusing on integrating open and shared data across various sectors such as transport, waste management, energy, and healthcare, in addition to public services. Yet, Gotland still lacks a clear vision and strategy for becoming a Smart Island. The necessary soft infrastructure required for maintaining a digital, smart region is also lacking (e.g. human, social systems and governance factors that enable efficient digital operations). The opportunities can be important, and Gotland should adopt a “Digital-First” policy, ensuring all future infrastructure, business incentives, and public services are designed with smart technologies in mind (Box 2.2).

[42] Some form of national funding is expected for a proposal to create a reserve port. the Kapellshamn’s port (located on northern Gotland), which the Swedish Armed Forces owns. But the Swedish Transport Administration, among others, does not advocate this, but believes that it should be financed in a special scheme because it is primarily a contingency (preparedness) purpose.

[43] A 2024 survey will assess the current broadband infrastructure to address these issues and enhance connectivity.

Box 2.2. Promoting a Smart Island Vision

A Smart Island vision can offer a comprehensive digitalisation roadmap, integrating advanced technologies with infrastructure and governance to boost competitiveness, sustainability, and life quality. Potential benefits of a digital, smart island:

- better positioned to enhance economic competitiveness and innovation. High-speed broadband, 5G networks, and digital platforms enable local businesses to scale, improve productivity, and connect to global markets.[44]
- More resilient and with more efficient public services. Smart governance solutions—such as digital citizen services, e-health platforms, and AI-driven predictive maintenance for infrastructure—can improve service delivery while reducing costs.[45]
- More sustainable. The integration of real-time environmental monitoring, IoT-based energy grids, and smart mobility solutions can help Gotland achieve sustainability goals and optimise land use. Smart water management can support the agricultural sector, water conservation, and renewable energy transition, making the island more resilient to climate change.[46]

A structured Smart Island strategy needs both hard and soft digital infrastructure:

- Develop high-speed digital infrastructure: expand broadband and 5G coverage to remote areas; implement IoT-enabled smart grids for energy efficiency; support open data platforms for innovation and transparency.
- Strengthen digital skills and innovation capacity: introduce digital training programmes for businesses and citizens; create a Smart Island innovation hub to foster digital start-ups; invest in e-learning platforms to improve remote education.
- Embed digitalisation in public policy: implement smart governance tools for data-driven decision-making; develop AI-powered public services, including predictive urban planning; introduce real-time monitoring of environmental and economic indicators.

Smart governance can also enhance the process of policy making:

- Implementing a smart system to monitor policy Impact.[47]
- Using digitalisation for real-time insights & decision-making.[48]
- Making digitalisation a cornerstone of future Island development.[49]

Source: Author

Policy Area: Competitive Landscape

Context and challenges

Competitiveness of a local economy brings prosperity to residents, by being able to produce goods and services that are valued in their local and national contexts, and internationally. And this is driven by having a competitive landscape where both *businesses* and *people* can thrive.

[44] In the Faroe Islands, the government invested heavily in digitalisation, creating a 100% fibre-optic broadband network. This has enabled remote work, e-commerce, and digital services, boosting economic diversification. In Jersey (Channel Islands), a digital-first economic strategy has positioned Jersey as a hub for fintech and digital services, leveraging e-governance and AI-driven regulatory frameworks.

[45] For instance, Finland's Åland Islands have implemented e-government solutions to streamline administrative processes, enhancing accessibility for residents and businesses. Madeira in Portugal implemented an AI-based telemedicine platform, improving healthcare access for remote communities.

Among the challenges identified in Section 2, there are some hindering the business ecosystem:

- Financial barriers are pervasive. Finance access is mainly available for exceptional business ideas. Region Gotland has limited resources and lacks a designated function to support investments.
- Clusters on Gotland are hard to sustain. Initiatives to promote cluster cooperation are important to build volumes that are attractive to buyers in larger markets. Yet, cluster policies are hard to implement given seasonality and the great predominance of micro business and lifestyle business.
- Many technical skills are not available locally, and the availability of post-secondary and vocational and technical education is limited. Talent attraction, driven by lifestyle and practical considerations on housing and administrative support,[50] is thus crucial for the ambitions of the Island.

These challenges reflect in sectors with growth potential for the Island. For instance, opportunities in game design require the attraction of businesses to employ highly skilled graduates from local programmes.[51] It would be beneficial already if a few companies started entering the region to provide mass and spillover effects on other businesses. Yet, the limited supply of skills hinders business attraction in the first place.

Policy Actions

Table 2.4 summarises strengths in the actions being currently taken by Gotland to enhance its competitiveness, as well as weaknesses (i.e. policies or governance actions that are not comprehensive) and policy gaps (i.e. things that local authorities are not doing).

Table 2.4. Assessment of Policy Action for Competitive Landscape

Strengths	Weaknesses	Policy Gaps
• Strategies to play on Gotland's strengths (Smart Specialisation Strategy with priorities within tourism). • Already thinking about talent attraction and measurement, e.g. the Relocation project. • Increasing emphasis on Gotland's branding, e.g. in Gotland's Tourism Strategy. • Resources for sectoral coordination like Gotland Energy Centre (GEC).	• Fragmented business ecosystem with short-term efforts. • Region Gotland has limited resources financially to fund business attraction. • Absence of large industries on Gotland limits the potential for specialised training programmes, necessitating multipurpose educational offerings. • Insufficient skills cooperation with other season destination regions and municipalities. • Only a few SMEs and micro businesses benefit from the business support system and make use of Science Park Gotland's services and programmes.	• Though work on talent attraction is underway (e.g. within the framework of the Relocation project), more systematic actions are needed to make it work in practice. Gotland's image as a professional island needs to be strengthened. • No policies for retaining the youth or enhancing educational opportunities in the Island. Work is underway to explore partnerships with universities to meet regional skills needs. • No detailed approach for comprehensive, coordinated innovation support: including funding, mentorship, and infrastructure. • Need for assets like GEC to attract investment in various sectors. • Unclear path for leveraging new technologies like AI for economic growth.

Source: Author

[46] In Spain's La Palma, a smart water management system leveraging IoT sensors and AI has significantly reduced water waste. Samsø in Denmark achieved 100% renewable energy independence by integrating smart grid technology and digital monitoring systems.

[47] Malta's has developed a real-time digital dashboard that consolidates data from sectors like tourism, traffic, and public services. This enables policymakers to respond quickly to changing trends.

[48] The Faroe Islands' Smart Fisheries Management use real-time ocean monitoring to track fish populations, ensuring sustainable quotas and improving economic outcomes for local fisheries.

[49] Guernsey's Digital Strategy has mainstreamed digitalisation into all public planning documents, ensuring that new projects include digital components like AI, automation, and cloud-based services.

[50] Local policy informants of this study tell us how for students from the gamification programme at UUCG, in addition to housing affordability, support in settling is also important: e.g. help with residence permits, social security numbers, bank accounts, and business establishment support.

[51] In the gaming programme at the UUCG there are highly skilled students that graduate but no one or few to employ them on the island.

Gotland is pursuing a mix of strategies and policy initiatives to support business investments and innovation as well as the development of skills and talent attraction. Current strategic actions in Gotland to attract talent, skills and investments include:

- *Strategic planning for talent attraction*: attracting working age people with relevant skills is part of the strategic regional development processes. Gotland is starting to devise more cohesive approaches for talent attraction, in collaboration with regional and local stakeholders.
- *Future planning capacity*: regionally, Region Gotland intends to have annual competence dialogues with industries from a multitude of trades to get relevant data, including on what kind of incentives and efforts are underway that the entrepreneurs can take part in.
- *Strategic planning for relevant training*: this includes efforts to boost local interest in technical education, which is currently low - with most applicants to the existing technical programmes coming from abroad.[52] The planning documentation submitted to the Swedish National Agency for Education is based on a forecast from Statistics Sweden of labour needs, particularly related to vocational training. The Agency replied with a proposal for upper secondary education.
- *National-local coordination for employability*: In 2023, an agreement was signed between Region Gotland and *Arbetsförmedlingen* (the Swedish Public Employment Service, a national authority with active presence on Gotland). The aim is to facilitate individuals' establishment in working life and improving skills provision. With this agreement, there is now one strategic steering group and one cooperation working group.

Current programmes in Gotland to improve skills and employability:

- *Talent attraction*: in connection to the Relocation Gotland project, Region Gotland is participating in a national programme called *Co-Create*[53] to establish a method and process for talent attraction at a regional level. There are ongoing plans to improve outreach and integration through channels like EURES[54], aiming to enhance the capacity to attract and retain skilled individuals. Relocation Gotland aims to create a digital immigrant service to attract talent nationally and internationally.
- *Educational offering*: current efforts focus on expanding training options to match skills to job opportunities (Box 2.3). Region Gotland has created Lärcentra, a centre for islanders to upskill and via a wide range of post-secondary and adult vocational training programmes.[55] Efforts to enhance human capital also include sectoral initiatives. For instance, in the context of the Energy Island project, funds have been received from the EU within the framework of the Just Transition Fund to boost competences needed for the green transition.[56] Also efforts are being taken for introducing a technical foundation year into higher education to widen the skills base for employment.[57]
- *Employability services*: *Torget* (the Square) is a one stop shop in Gotland for the unemployed. It started as an initiative for the newly arrived, but soon expanded to others who needed it to navigate local administration and other support. Akin to a "*Citizens' Public Centre*", staff members assist the unemployed in job search and access to training and other services. Programmes like "women's extra service" also facilitate jobs for foreign-born women in the public sector. Region Gotland also

[52] Of the 1200 students, 25 per cent are international students. There are applicants to the Technology programme, but few girls. On the other hand, there are in general very few applicants to the university programme at UUCG.

[53] Co create is a program under the auspices of Future Place Leadership. It is an initiative that maps the propensity and obstacles among young adults and adults to move to Gotland (post-secondary education level target group).

[54] European Employment Services.

[55] It has also been offering a university programme to train social workers since autumn 2024 and is exploring contact with other universities and colleges for cooperation on other courses where there is a regional need. It is a complement to the educational offer at UUCG.

[56] In its first stage, the goal is to boost the awareness about competences needed. Plans for education and training will then follow.

[57] A technical foundation year does not appear to be possible via UUCG, but contact has also been made with KTH regarding this programme.

funds targeted initiatives like *Jobbvägen*, which offers individual support from a working life coach for job search, health, study and career guidance and study visits to employers.

Box 2.3. Education in Gotland

Region Gotland oversees education from preschool through upper secondary, including adult training and guidance. Uppsala University Campus Gotland (UUCG) offers higher education, collaborating with Region Gotland to train professionals like nurses and teachers under a partnership agreement. UUCG plays a crucial role in ensuring Gotland's long-term educational needs.

Uppsala University Campus Gotland, part of Uppsala University, offers a wide range of academic programs in humanities, law, technology, social sciences, and more. With about 2,000 students enrolled full time (with approximately 1300 on campus) and over 230 staff members, UUCG supports education and research across multiple disciplines.

Several organisations on Gotland offer Higher Vocational Education (YH), focusing on practical and theoretical training tailored to industry needs. Region Gotland collaborates closely with employers and other educational providers to deliver these programmes effectively. Other courses in Vocational Training are also offered that are aimed at tourism, social care/healthcare and the energy transition.

Lärcentrum is an important platform through which a wider range of training at YH and other higher education level are offered.

Adult education, managed by Region Gotland, provides opportunities to enhance qualifications, pursue higher studies, or gain new professional skills. It includes basic adult education up to grade nine equivalency, vocational training, and Swedish language courses for immigrants.

Source: own elaboration based on official sources.

Current programmes by Gotland to improve the business environment:

- *Business ecosystem support:* various programmes and services are available to support SMEs, though engagement from micro businesses is limited. Initiatives like NODE and Science Park Gotland focus on climate-neutral futures and innovation. Science Park Gotland, in particular, has been recognized for its excellence in incubation support, fostering local entrepreneurial activities.
- *Entrepreneurial support*: Junior Achievement Sweden (JA Sweden), a non-profit organisation working to promote entrepreneurship among Swedish students and to facilitate relationships between industry and the Swedish school system is active on Gotland. Gotland Forward is a project where Region Gotland, along with the business community and other regional actors, collaborates to encourage young people to recognize new opportunities (Box 2.4).[58]
- *Access to finance*: A locally coordinated venture capital network assists businesses in accessing funding. *Tillväxt* Gotland coordinates the network, SPG assists the companies before the pitching, and the venture cap agents are mostly Gotlandic.

Key Success Factors

- *Planning*: as a regional development actor, Region Gotland must produce assessments of skills and talent needs and set priorities. It is a new statutory task from August 2022. Gotland is doing

[58] This is complemented by *Hållbar Hälsa*, a project for promoting health and wellbeing among young people, which helps support their participation in entrepreneurial activities.

this across several sectors. The project Energy Island, for instance, addresses the issue of competencies required for the green transition.

- *Cooperation between regional and national actors*: National institutions and policies continue to support local businesses and workers. For instance, the unemployed can receive support via the National Employment Agency to start their own business.[59] Nevertheless, the trend is for more responsibilities to be transferred from the national level to municipalities and regions.[60]
- *Regional collaborations*: there are several cross-border collaborations taking place, particularly to promote and attract talent (see Box 2.4). Particularly beneficial would be cooperations with other season destination regions and municipalities.[61] In the area of education, the Municipal Learning Centres can create, via educational and satellite city collaborations, local educational opportunities with a relevant study social context for the student. The latest example on Gotland is a social work programme in collaboration with the University of Gävle.
- *Collaborations with private sector*: Region Gotland is exploring ways to join forces for talent attraction, with public-private coordination to identify relevant competences internationally.
- *Measuring progress*: Gotland has several measures to measure and track the island's image, talent attraction and skills.[62]
- *Communicate and brand the lifestyle of the island*: many of Gotland strategies are based on being transparent about the insular setting and trying to turn it into an advantage instead. The island's scenery, landscape and lifestyle, together with Swedish lifestyle characteristics in general (openness, attitudes to work, family balance, etc.) are considered big attractors. The fact that many artistic and creative people already live on Gotland, highly seen as a culture hub, gives the island a soft power in terms of lifestyle and creativity.

[59] There are also agreements between the labour market parties on support for the individual in the event of a job shortage or career change, and workers can receive study transition support via the Swedish Board of Student Finance (CSN).

[60] Apart from Swedish Public employment Service and Region Gotland, there are other actors of importance: Försäkringskassan (Swedish Social Insurance Agency), SALAR for policies and coordination on municipalities and regions, and FINSAM – The Act on Financial Coordination of Rehabilitation Efforts (Finsam).

[61] One international example is a volunteer organisation called RE:Thinkers from Aarhus, Denmark, which focuses on public health and strengthened attractiveness. Source: Volontär ReThinker i Århusregionen | VisitAarhus

[62] These include NOVUS' Trade Mark Index; Sweden Statistics; Region Gotland's questionnaire of students at the UUCG (2023); Talent City Index Fokus Gotland; Talent City Index Focus on business and freelancers; Youth Barometre (national with figures for every county); Placebrander (report); cooperation within Region Gotland for improved wellbeing "Aktivera Gotland"

Box 2.4. Example of inter-regional collaboration to promote talent

Gotland Forward is an initiative that exemplifies inter-regional collaboration and is co-financed by the European Social Fund. It involves collaboration between *Tillväxt* Gotland, Region Gotland, and the National Employment Agency on Gotland (*Arbetsförmedlingen*). The police and private businesses are also actively participating in the project. The project comprises three parts:

1. Jobbvägen Södra Gotland: it targets working-age individuals who are looking for work and need complex support to achieve self-sufficiency through employment and/or education.

2. “Everyone is Needed": a business-driven effort to promote skill supply in Gotland's business sector. This initiative matches young people and young adults aged 16-35, who are in or at risk of exclusion, long-term unemployment, and other challenges, with job opportunities.

3. "Match the Skills": it focuses on Gotland's employers seeking tailored support to find the skills they need – for instance, those needed for the energy transition. The aim is to broaden recruitment and bring more employment opportunities for residents.

Source: official sources.

Policy Gaps

On employment, skills and talent attraction:

- *Need for multipurpose training options*: though Region Gotland aims to bridge the gap from school to university, especially in engineering, the lack of large industries on Gotland limits specialisation opportunities.
- *Increase funding for municipal learning centres*: central funds tend to go to higher education institutions and education providers, and not to municipal learning centres. The latter bring a significant opportunity for Gotland to provide training that the region needs and develop digital skills. Funding also needs to be given to providers of satellite location training with few participants[63] and to digital training facilitated by Region Gotland.
- *Need for clarity of responsibilities*: the municipalities across Sweden have signed agreements with the Employment Agency. The agreement mainly covers interventions aimed at different groups, such as young and newly arrived migrants. However, no extra resources are included from the national level for this. The employment agencies thus hand over more and more of the responsibility to the municipalities. A risk could be that when the municipalities lack resources, they cut back on employment and labour market measures, because it is not something that is mandatory according to the Municipal Act.
- *Cooperation across regions*: a lesson so far regarding international talent attraction is that Gotland needs to cooperate with the rest of the country (internationally one thinks first of a country to migrate to and secondly where in the country). National authorities are starting to coordinate initiatives for international talent attraction, though there is still a lack of collective work across

[63] e.g. YH where Region Gotland locally does not receive funding, but it only goes to the main training provider.

regions.[64] Gotland could possibly be a testbed for legislation and regulations[65] that hinder immigration of skills. Gotland and other regions need to learn from each other.

On business development:

- *Need for coordinated effort to enhance the business ecosystem*. There is a need for a joint structure that can bring together relevant stakeholders, topics, and actions for the Island, including on talent attraction, retention and business establishment. Perhaps a function such as a "Business Hub Gotland*".*
- *Need for a business strategy*: Gotland needs to better identify the businesses that have the most potential to expand. The business support system is well established, though it is seldom used by micro businesses. This is also where the need for an establishment plan and strategy comes in.
- *Need for tailored solutions to foster innovation*: many researchers are stationed in Uppsala on the mainland, so their focus geared towards academic research but not so much towards applied sciences, which would be more relevant for Gotland.
- *Actions to capitalise on the potential for processing raw materials:* for instance, in the agricultural sector, there is limited interest in further processing the raw materials produced on the island. This is partly due to economic structures where the raw material itself generates as much profit as the processing (with less input). Local businesses, farmers and other stakeholders need good communication regarding the advantages of increasing the degree of secondary production on an island with good conditions both in quality and in brand. Public catering plays a major role in stimulating local processing, but it needs process resources to develop beyond its normal remit.

Policy Area: Sustainable Place

Context and challenges

Having already reduced its reliance on Oil and Coal over the years, with close to zero local dependency upon fossil fuels across several sectors,[66] Gotland aspires to be a model for energy and climate transition, recognising the need for a regional finance plan to manage both the costs of green transition and the impacts of the climate crisis.

Whereas climate action and the green transition are expected to generate new jobs and growth, it also implies a societal transition which might be costly in the short run. Challenges in Gotland to continue promoting sustainability efforts include:

- *Coordinating key players:* since the heavy ETS-industries have their own plans adopted for green transition, the government needs to support the infrastructures that enable those plans (e.g. supported by the Just Transition Fund). Half of the energy in Gotland is used by the industry (mineral industry) within the ETS system (emissions and the pricing of it), and more than three quarters of the emission emanates from there.[67]

[64] The government has recently contributed funds to national authorities such as SI and Business Sweden to strengthen the image of Sweden. In the spring of 2024, the Swedish Agency for Economic and Regional Growth was also commissioned to conduct a current situation analysis regarding the work of government agencies and regions' challenges regarding international recruitment, to create more efficient and coordinated processes.

[65] Practical issues such as the right to open up a bank account without a social security number.

[66] Close to zero local dependency upon fossil fuels in the sectors of power production, heating homes and buildings, public transports and other public services allows an effortless fossil fuel free daily life in Gotland. For instance, Gotland' Energi AB GEAB has reduced its oil-based power production and retired the combined heating power plant in Visby. Heidelberg Materials in Slite has made some emissions reductions since 2005. However, industrial emissions now represent an increasing share of emissions. Source Swedish Meteorological and Hydrological Institute:

[67] While in1990 less than 64 % of the total climate-gas emissions from Gotland emanated from the industrial sector, this sector during the period 2015 – 2022 caused 77 % of the climate-gas emissions. Source: SMHI national reporting

- *Balancing multiple interests, including for land use*: more clarity is needed in the legal framework and the application of planning principles on how to balance multiple (and sometimes conflicting) interests.[68] The regional development plan has many goals that must meet the planning principles, but the regional development strategy Our Gotland 2040 has not weighed any goal conflicts around those principles. The key conflicts relate to the same issues as identified in the OECD territorial review 2022: wind power and nature conservation, the armed forces' need for land[69] and water supply in the context of potentially more building for homes and businesses.
- *Need to support small businesses:* small companies tend to lag with the green transition, according to the Swedish Agency for Growth.[70] Access to skills is a crucial challenge, and currently there is no collective strategic work around green skills. It is also costly. The Swedish Farmers´ Federation estimates that it will cost SEK 80-85 billion to invest in the green transition and then SEK 10 billion annually for Swedish farmers.[71]
- *Scale constrains for circular economy*: challenges include high transportation costs, limited local production and small scale of circularity processes.
- *Infrastructure not fit-for-purpose:* for instance, a delay in the cable installation[72] until 2030 or 2031 could hinder Gotland's ability to supply carbon-neutral cement, risking its market edge. This delay might also hazard the time schedule for the transition of the northern Swedish mining industry, particularly LKAB, as a main customer in need of “green” cement.

Policy Action

Table 2.5 summarises strengths in the actions being currently taken by Gotland to improve as a ‘sustainable place’, as well as weaknesses (i.e. policies or governance actions that are not comprehensive) and policy gaps (i.e. things that local authorities are not doing).

Table 2.5. Assessment of Policy Action in the Area of Sustainable Place

Strengths	Weaknesses	Policy Gaps
• Cooperation structure in place, with a common steering group to become an “energy island.” • Resource-efficient spatial planning as enabler of sustainability. • Region Gotland currently working on updating Regional Energy Plan. • County Administrative Board conducts projects around sustainable transport that generate knowledge. • Advancement of circular economy practices. • Gotland Energy Center collaborating with diverse private actors and academia.	• Lack of industry-relevant education makes the industrial transition difficult. There is high dependence on external skills. • Region’s limited capacity for driving sustained innovations. • Low influence of local authorities in ETS system to shape green transition plans. • Finding economically viable solutions for climate-neutral food production. • Lack of regional data on land use and forestry emissions.	• Need for a regional finance plan for the green transition. • No collective strategic work around green skills. The support provided via the JTP Groundwork is ongoing, but not implemented yet. • Aligning energy roadmap measures with Our Gotland 2040 is underway, but a difficult task in a currently shifting energy policy landscape at the national level. • No regional analysis or policies to achieve more symbioses in circular economy. Biogas is one example with a large potential for circularity.

[68] Though there is nothing in the legal framework that in principle prevents achieving Gotland’s planning objectives, lack of clarity on how to meet national interests can lead to ineffective or lack of action. Insularity and the fact that Gotland forms a single municipality mean that many conflicts are handled within Region Gotland.

[69] Reestablished in the Island after 15 years of being disbanded, the military needs housing, energy and water and sewerage infrastructure.

[70] Source: Företagens Gröna omställning, which is a report with 37000 SMEs in Sweden responding to questions related to access to competence. Most companies believe that the green transition requires new skills. Further training of existing staff and company management is considered a priority.

[71] Examples of investments include increased biogas production, precision fertilisation technology, restoration of overgrown natural pastures and construction of irrigation ponds. Costs include the use of biofuels, fossil-free mineral fertilisers, and the cultivation of intercrops for carbon sequestration.

[72] The Capacity Gotland plan aims to upgrade the grid from 70 kV to 135 kV by 2040. By 2030, the goal is to connect the new cable's point on Gotland to the Slite plant. The upgrade seeks to meet the increasing electricity demand, primarily for industrial transition (and future e-fuels production for transportation).

Current strategic actions in Gotland to improve sustainability:

- *Comprehensive strategy to sustainability and green transition:* Gotland's strategy focuses on integrating advanced technologies, improving infrastructure, and supporting sustainable practices across transport, the agriculture sector, and the built environment – the latter already being more efficient based on past efforts.[73] Region Gotland is currently working on an updated regional energy plan.[74] The "Gotland in Transition" pledge initiative, launched with the CAB, includes information campaigns and public recognition for commitments to action. Through comprehensive planning, the local government is re-planning society for a green transition, integrating factors such as water management and skill development. The island plans to become a hydrogen hub powered by wind energy. Key milestones include achieving fossil-free electricity for households and businesses, and drastically reducing oil, gasoline, and diesel imports. Our Gotland 2040 strategy outlines opportunities for leading in sectors like electric aviation.
- *Plan to become carbon neutral*: Gotland has specific emissions reduction targets, aiming to reduce carbon dioxide emissions by 15% annually and reach near-zero emissions by 2040.[75] This will be pursued through significant industrial investments and local carbon dioxide storage (e.g. from burning local limestone) in the sea bottom, primarily off the western Norwegian coast.[76]
- *Plans to use land for sustainability efforts*: The comprehensive land use plan is being updated to address new challenges, including climate change, defence re-establishment, and groundwater issues. This revision aims to optimise land use and support sustainable development.
- *Resource-efficient spatial planning as sustainability enabler:* resource efficiency is the key concept in the draft proposal for a new Comprehensive Plan – for land use, spatial planning, and other policy areas. It is also highlighted in the Regional Development Plan and involves concentrating future housing, infrastructure, and services in Gotland's main small towns to maximise the use of existing water, energy, road, and other infrastructure.
- *First ever climate adaptation plan:* developed in 2023 based on needs identified in the work with the comprehensive plan,[77] the requirements are based on three climate effects, flooding from torrential rain, sea level rise and erosion. The plan will be developed further with more climatic effects and to more geographical areas on the island.
- *Strategic vision for green talent attraction*: The green transition is seen in the Island as another amenity or factor of importance to attract creative minds and skills. There are campaigns like "*The world's ugliest lawn*" to show that Gotland is a dedicated region regarding sustainability. In 2024 Gotland is a beneficiary in the JTP Groundwork programme aiming to attract the competences needed in the green transition.[78]

[73] Domestic heating and heating in public buildings do not seem one of the biggest challenges, since they do not use fossil fuels anymore. Local biofuels from sawmills & forestry residues are used in district and community heating. District heating in Visby and other towns is already biofuel-based. In Slite there is waste heat from the plant Electrical heat pumps are frequent in domestic housing. Region Gotland has had ongoing work in energy efficiency for a long time in public premises, and it has been financially feasible.

[74] It is mandatory for municipalities to have an energy plan. Most municipalities include a climate module, though it is not mandatory.

[75] Aligned to the EU's Emissions Trading System, industrial emissions of fossil carbon must be taken care of until 2040 in an EU-joint reduction path. If the EU's target is followed, it will mean close to zero emissions by 2040. Furthermore, Region Gotland, following the recommended carbon dioxide budget according to the Paris agreement, has set this goal for its own operations – and have identified this need for the society as a whole.

[76] In the permit application by the cement industry, carbon dioxide from limestone burning will be industrially processed on the island, converted to liquid, and shipped to Norway for storage under the North Sea (where fossil gas was previously extracted).

[77] The CAB on Gotland has coordinated work on climate adaptation in the county. The County Administrative Board has an internal action plan for the agency's work with climate adaptation that applies to the years 2022-2024. At the moment, there is no collective regional action plan for climate adaptation in the county.

[78] JTP Groundwork, technical assistance for TJTP implementation to JTF regions.

- *Emphasis on nature conservation*: Region Gotland has adopted a Green Plan for the city of Visby and the towns on Gotland that was adopted on 18 September 2023. Furthermore, the process of elaborating a revised Comprehensive plan for Gotland covers the conservation issues.

Current programmes in Gotland to improve sustainability:

- *Support renewable energy endeavours*: Gotland promotes renewable energy through the Gotland Energy Centre, which guides citizens and businesses. The Energy Island project and NODE Gotland encourages investments in large-scale green tech infrastructure.
- *Enable sustainable transport:* initiatives range from bike lanes, charging stations for non-fossil fuel vehicles and developing Bus Rapid Transit (including in rural areas), to incorporating hydrogen and biomethane in shipping[79] and even becoming one of the first destinations in Sweden for electric commercial passenger flights.
- *Supporting circular economy*: Biogas production, leveraging the island's large agricultural activities, is a prime example. Biogas is used for vehicle fuel and the residue applied to fields. Non-organic waste is incinerated locally,[80] contributing to energy production.[81] The island also emphasises district heating from biofuels (based from sawmill residues), and some small businesses in the hospitality and construction industries are adopting circular practices. Public procurement initiatives aim to promote circular business models and increase self-sufficiency, while also addressing construction, land use, and lifestyle changes to achieve sustainability. Tillväxt Gotland runs a project on circular economy called Molekyl, which is an EU-funded collaboration project between Gotland and Kalmar. The aim is to support and train representatives of the industries in finding symbioses with other companies in circular business models.[82]
- *Centralisation of wastewater treatment, with more innovation*: the strategy for Region Gotland has been to shut down small treatment plants and pump it to larger facilities. such centralisation aims to improve municipal efficiency by reducing staff requirements and avoiding the high costs of maintaining and upgrading older, smaller plants. Wastewater is also treated through the so-called Gotland model[83], which has been successful both economically and ecologically. In places like Ljugarn, capacity has been increased and biological cleaning enhanced to meet environmental regulations and objectives - aligned to Gotland's centralised treatment strategy. The island is also experimenting with new technologies. At the Storsudret test bed, it experimented with a container-based wastewater treatment system that partially purified wastewater into drinkable water.[84]

[79] Partnering with Trafikverket to include hydrogen investments and local biomethane production in public procurement of shipping services to and from Gotland.
[80] Gotland burns its non-organic wastes (Cementa, the mineral plant in Slite, imports a lot of waste to burn from the mainland and from Norway too). An increased focus on reuse rather than recycling is very important to assess the effects of circularity.
[81] Thanks to the biogas plant, Gotland can also process biological household waste and turn it into energy and fertiliser.
[82] This concretely means that the companies identify and ensure methods to benefit from each other's residual products, such as energy, water or by-products, towards a more sustainable production.
[83] It starts with pre-cleaning in a sedimentation pond, followed by a series of dams, and finally disperses treated water onto fields, effectively preventing leakage into the Baltic Sea.
[84] Scaling up this technology is costly and energy intensive. Another approach will be implemented in Langs Hage, where groundwater is purified from a bacterial contamination and then sent to the drinking water network. There are ethical considerations regarding public acceptance of recycled water and legal issues concerning pricing. To address this, recycled water could be marketed as technical water at a lower cost to consumers.

Box 2.5. Water management in Gotland

Background: Sweden is divided into five water districts, each managed by a county administrative board acting as the water authority. Gotland falls under the Southern Baltic Water District.[85]

Challenges: Gotland faces significant issues with drought and water scarcity despite increased annual precipitation[86], problems expected to worsen with rising temperatures.

Actions:

- Current strategies: guided by the Environmental Code, the Act on Public Water Services, and the Planning and Building Act, a revised Water Management Policy from 2024 outlines six policy strands and 28 regional strategies for the municipal water and wastewater operations.
- Public campaigns: to raise awareness about water conservation among residents and visitors.
- Innovations to reduce water usage: for example, Arla's milk powder production process now repurposes residual water for other uses. Tourism is proving more challenging.
- Infrastructure projects: Test Bed Storsudret stores stormwater. Gotland has two desalination plants to mitigate groundwater depletion and prevent brackish water infiltration into wells.
- Building permits: they are granted only in areas with reliable water access.

Resource limitations: Region Gotland has limited resources and expertise for sustaining and implementing innovative water management solutions beyond initial testing phases. Currently, innovation efforts rely on external initiatives and support from organisations like RISE and IVL, as well as national innovation funds and the market.

Collaboration and initiatives: Gotland's groundwater resources are managed through a collaborative effort between Region Gotland, the County Administrative Board, and Uppsala University Campus Gotland (UUCG) under the Gotland Blue Centre initiative.

Source: The source for the text on the Water districts is from Vattenmyndigheterna: www see English | Vattenmyndigheterna

Key Success Factors

- *Coordinated approach*: in addition to collaborating with national agencies and authorities (e.g the Swedish Energy Agency), Gotland's approach to advancing energy systems involves several key initiatives that are inter-connected: Energicentrum Gotland, NODE Gotland, and finally the three-year Energy Island Gotland project, all managed by a *unified steering group*.
- *Learning from other regions*: inspired by cooperative models from other regions, energy initiatives promote wind power and other renewable energy sources.[87] The plan includes learning from similar projects on Bornholm and Åland for energy production via marine planning.[88]
- *Measurement of emissions and impacts*: Gotland is measuring and quantifying impacts and costs of initiatives, ensuring that short-term costs are balanced against the long-term benefits of

[85] which also includes parts of Östergötland, Jönköping, Kalmar, Blekinge, Kronoberg, Skåne, and small sections of Örebro and Södermanland. The water authority for this district is located in Kalmar.

[86] The distribution is uneven, leading to prolonged droughts in spring and summer and heavy winter downpours. This pattern causes high winter inflows but reduced spring and summer inflows, extending periods of low water flow.

[87] The model for cooperation is inspired by ACCEL (Västra Götalandsregionen) and AGON (Region Norrbotten), which both are regional cooperation arenas for an accelerated energy transition. The goal is to achieve 70 TWh of electricity production through marine planning around Gotland.

[88] Source: Energigemenskaper behöver bättre och tydligare förutsättningar (energimyndigheten.se)

mitigating climate change. The region will in a near future start using the Climate View digital system to track and evaluate emissions and the impacts of various regional development activities.[89] This system also models future scenarios and assesses the wide benefits of different actions, such as health improvements from increased biking.

- *Collaborative piloting in rural areas*: The Gotland Energy Centre runs several projects. An example is the research project RURACTIVE, which is carried out in collaboration with Uppsala University, and has funding from Horizon Europe, to empower rural communities to act for change. Energicentrum Gotland will carry out one of the 12 pilot studies created across Europe to promote a fair and sustainable conversion of rural areas.
- *Private efforts for energy efficiency.* Housing and commercial units have shifted away from fossil fuels, utilising local biofuels and electrical heat pumps, with ongoing energy efficiency improvements in public buildings - proven financially feasible since the 2023 energy crisis.
- *Public procurement as a driver of circularity*: it is a means to promote a direction towards circularity and more sustainable practices.

Policy Gaps

- *Optimising investments:* there is a need to have a 'regional green balance sheet' connected to the objectives and targets. With the high costs of mitigating the coming effects of the climate crises, local stakeholders seek to be on top of the costs and benefits of all environmental initiatives.
- *Measure results and impacts:* increased knowledge integration between ERDF[90] and EAFRD[91] can optimise the impact on a rural environment like Gotland.
- *Policies to promote green skills*: There is a significant shortage of technicians on Gotland, affecting both public and private sectors, with young people showing little interest in technical studies and existing staff being drawn to higher-paying consultancy jobs.
- *Limited capacity locally*: Local authorities do not have enough influence in ETS system. The region's limited capacity for sustaining and implementing these innovations highlights the need for external support and a more integrated approach between production, maintenance, and innovation efforts. Businesses also need more support; some farmers are experimenting with hydrogen and electrification, though costs remain a barrier despite the access to subsidies from the rural development program on Gotland - which is insufficient to cover all needs.

Current Policies in Öckerö

This section describes the strategic and policy actions being taken in Öckerö, also identifying key success factors and policy gaps. The section is broken down by main policy areas, each describing how Öckerö is responding to the challenges identified in Chapter 1. Each policy area subsection presents an upfront summary assessment, followed by a detailed description of specific initiatives and best practice.

[89] While overseas (scope three) emissions are not measured, Region Gotland tracks the carbon footprint of local services like meal provision. Emissions from land use for agriculture and livestock are challenging to measure and are thus not included in the EU's fast-track measures.

[90] European Regional Development Fund.

[91] European Agricultural Fund for Rural Development.

Strategic Initiatives for Öckerö prosperity

Context and Challenges

The vision of Öckerö municipality is that all ten islands of the municipality should thrive. Addressing Öckerö's challenges and pursuing new opportunities requires a clear vision of where the Island's economy is heading to, and strategies to effectively pursue policies and investments in key areas, particularly coordinating with national and other local actors.

Such coordination is not without challenges. The OECD Territorial Review for Gotland had already identified challenges for achieving a well-functioning strategic & collaborative local governance, which also apply to Öckerö. These include: (i) distribution of responsibilities among different government levels that is unclear, leading to inefficiencies and (ii) lack of comprehensive strategic approaches to infrastructure planning and investment. Similar concerns are identified in Öckerö on the ground. There is, in general, the challenge to coordinate policies across policy areas and in collaboration with businesses and other local stakeholders. Insufficient competence and institutional capacity as well as limited financial resources can be impediments (Box 2.6 describes the local finances of the Island).

Policy Action

Table 2.6 summarises strengths in the actions being currently taken by Öckerö to enhance its strategic planning, as well as weaknesses (i.e. policies or governance actions that are not comprehensive) and policy gaps (i.e. things that local authorities are not doing).

Table 2.6. Assessment of Strategic Planning and Initiatives

Strengths	Weaknesses	Policy gaps
• A common vision, as a collaborative effort involving all political parties. • Solid steering model, with a vision, objectives for the current term and various policy documents (led by the Comprehensive Plan). • The Comprehensive Plan is regularly updated, with consultation with residents for political direction. • Regional collaborations in Gothenburg to pursue strategic goals. Active in several networks to promote the municipality as part of the Gothenburg archipelago. • Have initiated a visit and business council in the municipality.	• No local smart specialisation strategy, which is primarily addressed at the regional level through Business Region Gothenburg. • Limited municipal resources. • The municipality does not have a person responsible for EU coordination. • No central structure for applying for national or EU grants.	• SMART goals for strategies. • Need for a diversification strategy, which is missing. • Systematic policy analysis and evaluation.

Source: Author

It is primarily the municipality's comprehensive plan, business strategic plan and the budget and assignment document that together cover the economic development of the islands.[92] Current strategic actions include:

- *Comprehensive Planning*: Öckerö Municipality has a comprehensive plan that outlines long-term strategic development actions, and guides decisions related to land and water use, as well as construction and preservation of the built environment. The comprehensive plan is built upon five planning strategies: human-centric approach, densification, preservation of natural and cultural environments, development of ports, centres, and businesses, and addressing the opportunities and challenges of the ocean.

[92] Gothenburg region, Business region Gothenburg, Västra Götaland region, and the County Administrative Board are all important actors.

- *Strategic revisions*: the comprehensive plan undergoes frequent revisions to ensure it remains relevant and aligned with the municipality's growth targets and challenges,[93] including climate change, connectivity to Gothenburg, and the needs of the growing and ageing population. It includes expansive development and construction projects for both private and business contexts, focusing on growth in the marine, maritime, and tourism industries.
- *Interregional joint development efforts*: a common roadmap has been developed between the Västra Götaland Region, Öckerö Municipality, Gothenburg City, and the Swedish Transport Administration. Öckerö is active in several regional networks such as United Bohuslän and Gothenburg and Company and has initiated a visit and business council to promote the municipality as part of the Gothenburg archipelago. The municipality participates in forums like these by engaging in regional working groups within, for example, the Gothenburg Region, Business region Göteborg and other forums within the Västra Götaland Region.

Box 2.6. Local Finances in Öckerö

The main part of the municipality's revenue (2022: 93%) comes from own sources, which consist of tax revenue, fees, and charges. National funding sources (2022: 7%) include equalisation grants, general, and targeted state subsidies.

The Municipal Council can decide on the municipal tax rate as well as levels of fees and charges. The government decides on equalisation systems and subsidies, which can be either general or targeted.

The municipality receives contributions from income equalisation. The purpose is to reduce economic disparities, ensure equitable service and welfare services across the country, and promote economic balance and social justice within the country. The municipality also receives several general and targeted state subsidies in education, healthcare, social care, and migration. Targeted state subsidies, for example, have enabled developments in skills enhancement measures and the promotion of digital development. There is also the possibility to apply for infrastructure grants for municipal development.

Source: author's elaboration with numbers provided by official sources.

Key Success Factors

- *Common vision involving all political parties*. Prior to each new term of office, the municipal council establishes a set of mandate goals that the administration will strive to achieve during the upcoming term. The goals are formulated by the political majority.
- *Strategic regional collaboration*: The agreement with Gothenburg and neighbouring regions where Öckerö is promoted as part of the Gothenburg archipelago supports the Island's brand and in its marketing as a destination.[94] The municipality's business development strategies and participation in Business Region Gothenburg help bolster economic development through comprehensive data and strategic initiatives.
- *Community involvement and citizen participation*: The municipality encourages citizen participation through "island proposals," where residents can digitally submit and vote on suggestions related

[93] The municipality's comprehensive plan is currently undergoing revision during Q2 2024.

[94] For instance, the establishment of the Archipelago Route in collaboration with the tourist board in West Sweden.

to municipal responsibilities.[95] Twice a year, island consultations and community dialogues are held, providing a platform for residents to voice their concerns and participate in decision-making processes. An annual citizen survey is conducted to gather residents' opinions and experiences regarding safety, which helps inform policies to enhance security and reduce crime.

- *Use of EU funds*: The municipality has utilised EU funds in several different projects. This type of funding plays a significant role in the municipality's development and its ability to progress in specific areas. Öckerö is a small municipality with limited resources, and targeted grants are, therefore, an important tool to be able to carry out projects in areas that might otherwise have had to be deprioritized.
- *Performance measurement and monitoring*: in general, the municipality monitors indicators established in collaboration with the Swedish Association of Local Authorities and Regions (SKR) and the Council for the Promotion of Municipal Analyses (RKA).[96]

Policy Gaps

- *Lack of clear metrics*: while there is a comprehensive plan in place, the emphasis on specific measurable outcomes or performance indicators is lacking. Effective long-term planning should include clear metrics for tracking progress and success. The plan can enhance the introduction of goals that are specific, measurable, achievable, relevant, and time-bound (SMART), along with regular monitoring and evaluation mechanisms to ensure continuous improvement and adaptation to emerging challenges.
- *Need for diversification strategy*: the strategic focus appears heavily concentrated on tourism and maritime sectors. While these are critical, over-reliance on a few sectors can pose risks to economic stability. Diversifying the economy by fostering other industries, such as technology, creative industries, and green energy solutions, can mitigate risks and enhance resilience.
- *Explicit inclusive participation*: although there are mechanisms for community engagement, the extent to which diverse community voices are represented and influence policy decisions is not clear. While there are some mechanisms for citizen involvement, such as the "island proposals," the answers do not provide a comprehensive strategy for increasing citizen engagement in decision-making processes. Ensuring inclusive and equitable participation from all community segments, including marginalised groups, and systematically incorporating their feedback into policy decisions is crucial for social cohesion and inclusive growth.
- *Lack of comprehensive local analysis*: the response to the question about comparing their smart specialisation strategy with other regions highlights a gap: "This is an analysis not conducted at the local municipal level but is primarily addressed at the regional level through Business Region Gothenburg". This indicates a lack of detailed, localised analysis which could lead to strategies that are less tailored to the specific needs and opportunities of Öckerö.

Policy Area: Optimal Infrastructure & Land Use

Context and Challenges

Infrastructure in Öckerö needs expansion, and updates, to remain fit for purpose. Demographic changes within Öckerö municipality and the affected areas within Gothenburg, as well as societal developments

[95] It can concern anything that the municipality is responsible for and has the authority to decide on, such as recreational activities, schools, urban planning, and elderly care.

[96] Two key surveys actively followed by the municipality are Agenda 2030 and the municipality's quality in brief (Kommunens kvalitet i korthet, KKiK).

affecting transport options and destinations, lead to various impacts on traffic movements on road 155, Öckerö's only road connection to Gothenburg.[97]

Box 2.7. Governance structure for land and physical development

The municipality's comprehensive plan constitutes the strategic foundation for its long-term development of land areas. It identifies potential building areas with a medium-term time horizon (to 2040) and long term (beyond the year 2040).

The Department of Strategic Community Development (ASSU) is responsible for issues related to the municipality's physical development. The Planning and Building Act governs the process of developing detailed plans and comprehensive plans, which are the tools the municipality uses for the development of land and water areas.

Internal coordination is carried out through the process group of strategic community development (SSP) in matters that are on the border between various administrations within the municipality. The municipality is part of regional networks within the Gothenburg region concerning both comprehensive planning and infrastructure and public transportation networks.

National and regional plans for infrastructure development involve larger infrastructure projects funded by the state. Öckerö municipality is only affected regarding road 155, ferries, and the question of a potential future fixed land connection.

Source: own elaboration based on official sources.

Öckerö's investments in road maintenance and the ferry network are enhancing physical connectivity. Yet, high costs (e.g. for maintaining the road network[98]) and logistical challenges continue to impact the island. Ferry traffic, managed by the Swedish Transport Administration (Trafikverket), is crucial for the Island's activity but limited by capacity and accessibility issues. Time restrictions for mobility between the different islands and service disruptions can happen.[99] Two of the municipality's islands are not serviced by the Trafikverket's road ferries, so the residents rely on public transport, which leads to high transportation costs to the mainland.[100] Västtrafik's passenger ferry services are essential for non-motorized traffic between islands. However, proposals to establish waterborne public transportation between Öckerö municipality and the city centre in Gothenburg have been met with resistance due to cost concerns.[101]

Another key area is digital infrastructure. While broadband coverage is relatively high,[102] small-scale operations and geological factors complicate infrastructure development, especially on smaller islands. Redundancy is difficult to achieve due to the need for parallel submarine cables.

[97] The average commuting time within the commuting zone of the Gothenburg area is about 1 hour from the interconnected islands and the northern islands, while the car-free islands take about 2 hours.

[98] Maintaining the road network, including street lighting and winter road maintenance, is particularly challenging and costly. The municipality relies on private actors due to insufficient in-house staff, leading to high transportation costs and low competition.

[99] For example, freight companies delivering mail argue that the route from the interconnected islands to the northern islands and the car-free islands is not passable.

[100] Which costs around 10,000 SEK per year.

[101] The waterborne public transport that needs to establish is primarily between Öckerö municipality and the city centre in Gothenburg. The transport within the islands of the municipality is sufficient for now.

[102] According to the Swedish Post and Telecom Authority (PTS) Broadband Map: 55-95% (our own estimate is approximately 60%). According to PTS, over 95% have 'access to, including absolute proximity to broadband.' This pertains to our own operations. On the business side, there are also other providers, mainly Telia/Skanova. On the private side, there is Air2fibre ('wireless fiber') as well as the rollout of 5G.

Addressing these challenges requires better coordination across levels of government and with stakeholders in the transport sector.[103] Coordination between municipal, regional, and state actors is effective but often overlooks the unique needs of island municipalities. The "åtgärdsvalsstudie (ÅVS)" approach is used for infrastructure development but faces limitations in accommodating specific local requirements. Furthermore, there is often limited interest by central government in investing in the municipality's infrastructure, potentially due to its status as an end destination. This results in prolonged commuting times and reliance on ferry traffic.

Policy Action

Table 2.7 summarises strengths in the actions being currently taken by Öckerö to optimise its infrastructure and land use, as well as weaknesses (i.e. policies or governance actions that are not comprehensive) and policy gaps (i.e. things that local authorities are not doing).

Table 2.7. Assessment of Policy Action for Optimal Infrastructure & Land Use

Strengths	Weaknesses	Policy gaps
• Collaboration with regional bodies and participation in regional fora to identify island-specific needs, and to articulate roadmaps for action. • Leveraging state and EU strategies. • Clear methodology to prioritise investments.	• While coordination is effective, little consideration is given to the specific needs of island municipalities - though regional discussions are increasing. • Small-scale operations on small islands pose significant challenges related to geological factors.	• Lack of a clear framework for integrating AI and other emerging technologies. • Strategies for better adaptation to new digital realities.

Source: Author

Öckerö's main policy actions in infrastructure focus on enhancing road maintenance and ferry services, collaborating with private actors due to limited in-house capabilities, and negotiating with Trafikverket for better ferry traffic management. Digital initiatives include rolling out broadband, adopting smart technologies, and creating a digital greenhouse for internal digital skill development. There is also a push for compliance with GDPR and better management of digital systems. The municipality is working with regional bodies to address these challenges and improve overall infrastructure connectivity and efficiency.

Current actions to improve infrastructure include:

- *Building roadmaps for action*: Öckerö municipality recently participated in an ÅVS alongside the neighbouring city of Gothenburg, Västra Götaland Region, and the state agency Trafikverket. The result was an 'agreement on a roadmap for improved sustainable connections between Öckerö and Gothenburg beyond 2040.' The ÅVS and agreement are mainly delimited to a section of the national road 155, including the part served by a road ferry.
- *Detailed plan for Öckerö's new centre:* it seeks to enhance the municipal centre with 400 new residences in Björkö and the development of a new centre in Öckerö with residential, commercial, and service functions.
- *Road connections*: the municipality is involved in a feasibility study for road 155, which is the only road connection to the mainland, in collaboration with the Swedish Transport Administration and other regional entities.

[103] Trafikverket has the responsibility for ferries from the mainland to an island if there are public (state owned) roads on the island. Local and regional public transportation is always the full responsibility of the regions.

- *Industrial infrastructure*: a detailed planning at Södra Långesand will expand the industrial area to meet high demand for smaller and medium-sized business premises.
- *Broadband adequacy*: municipal council decided in 2011 on a strategy for the municipality's IT infrastructure and access to broadband, which all municipal residents should be able to choose to connect to. The municipality's property company is to build, own, and manage the fibre network on all 10 islands in the municipality. By 2020, the fibre rollout was complete. As the cost of deploying fibre on some of the municipality's islands was high relative to the number of permanent residents, there was an agreement on co-financing by the municipality.

Key Success Factors

- *Planning and assessing*: the municipality's planning program, the action choice study for road 155,[104] a project to plan for future electricity supply, and a pilot project regarding boat transport between the islands to improve the accessibility of municipal services.
- *Enhanced coordination*: strengthen participation in regional forums and collaborative studies like ÅVS to ensure island-specific needs are considered in infrastructure planning.
- *Participation in various regional forums*: with different state and regional actors such as the Swedish Transport Administration (Trafikverket) and Västtrafik
- *Increase collaboration with private sector*: for instance, to improve road maintenance efficiency and reduce costs. Alternative funding mechanisms to support these efforts are being explored.
- *State and EU engagement*: advocate for increased state and EU funding for island infrastructure projects, emphasising the unique challenges faced by island municipalities.
- *Use of a specific methodology to assess investments*: known as the 'fyrstegsprincipen' or four-step principle, it involves passing three steps before building something new is considered.[105]

Policy Gaps

- *Establish waterborne public transportation*: the municipality seeks to influence new connections to the mainland through blue infrastructure. This could solve many of the municipality's infrastructure issues and potentially save significant investments related to bridge connections and road network strain. However, Västtrafik's response has been that it is much cheaper to operate buses than boats, and the municipality would have to bear the cost it would entail.
- *Develop digital connectivity strategy*: though national efforts are underway to develop a connectivity strategy, small-scale operations on small islands pose significant challenges related to geological factors (abundant rock, blasted rock, municipal roads with limited infrastructure). This makes it difficult to create redundancy due to the need for parallel submarine cables. The region's 2025 broadband strategy needs to better account for these challenges.

Policy Area: Competitive Landscape

Context and Challenges

Öckerö's economy shows many strengths, including in tourism and marine activities. According to the EU Regional Innovation Scoreboard 2016, Western Sweden emerges as an innovation leader in Europe. The

[104] The municipality, together with the Swedish Transport Administration, the Region of Västra Götaland, the Gothenburg Region, Västtrafik, the County Administrative Board of Västra Götaland, and the City of Gothenburg, has conducted a feasibility study for road 155, which is the municipality's only road connection to the mainland.

[105] In the first two steps ('think if' and 'optimise'), measures akin to mobility management are primarily chosen. The third step, 'rebuild,' involves less extensive physical changes and additions to the infrastructure.

proximity to Gothenburg is a strength for Öckerö municipality. In this year's business climate ranking, measuring the business climate, Öckerö municipality ranks 19th out of Sweden's 290 municipalities.[106]

The main overarching challenge is that the local economy is heavily reliant on the marine and maritime sectors. Diversifying the economy while maintaining the competitiveness of these traditional sectors is a significant challenge. Local stakeholders see an increased population,[107] especially in the working-age group and among children, as vital to economic growth. Yet, Öckerö needs to overcome two main factors affecting local competitiveness:

- *Skills shortages:* these affect in particular the green economy, hindering green innovation and the uptake of clean technology.
- *Lack of specific innovation policies tailored for islands*: this makes it difficult to foster innovation locally. The municipality relies heavily on regional collaborations and networks, such as those within Business Region Gothenburg, to promote knowledge and technology transfer.

There are also infrastructure considerations, like office space. The demand for smaller and medium-sized premises is high among the municipality's business operators, and the availability of such premises is considered a crucial condition for the development of the local business community.

Policy Action

Table 2.8 summarises strengths in the actions being currently taken by Öckerö to improve its competitiveness, as well as weaknesses (i.e. policies or governance actions that are not comprehensive) and policy gaps (i.e. things that local authorities are not doing).

Table 2.8. Assessment of Policy Action for Competitive Landscape

Strengths	Weaknesses	Policy gaps
• Comprehensive Plan focused on attracting people and skills to the Island. • Initiatives to integrate young people into the labour market through collaboration with schools, employment offices, and social insurance offices. • The strategic program for business also includes measures to be implemented to achieve growth. • Networks to promote the flow of knowledge, technology, and ideas locally. • Gothenburg region as innovation cluster.	• The municipality does not have a specific strategy for working with immigration based on skills. However, this is a matter handled within Business Region Göteborg, where the municipality is involved. • Regional 'spillovers, from investments in neighbouring municipalities, not fully capitalised.	• Lack of specific innovation policies tailored for islands. • The strategic approach lacks a clear emphasis on fostering innovation and technology adoption across sectors. • Need for better anticipation of local trends. No local forecast is conducted for the administrative and local labour markets of Öckerö municipality.

Source: Author

Current strategic actions:

- *Population-oriented Comprehensive Plan*: the Comprehensive Plan aimed at population growth has been adopted, including new residential developments and brand strategy efforts to attract young residents and families.[108]

[106] Source: www.kolada.se.

[107] The municipality's residents, aged 25-64, have a higher level of education (2022: 9%) than the national average (2022: 11.8%).
The municipality has a low percentage of domestically born individuals with two foreign-born parents (2022: 1%) compared to the national average (2022: 6.5%); also, low level of foreign-born individuals aged 18-64 (2022: 8.6%) compared to the national average (2022: 26.6%). Souce: (www.kolada.se)

[108] Several decisions from the political sphere seem to align in the same direction, such as mandate goals, budget allocations, planning conditions, plans, and development projects. This provides a clear indication of political will.

- *Economic plans for Öckerö's new centre*: the municipality, based on its location, has good conditions to establish a centre for marine and maritime research and entrepreneurship with access to test beds for innovation development. In the development of the detailed plan for Öckerö's new centre, there are considerations about creating conditions for such a centre.
- *Business strategic programme*: aimed at fostering economic growth and creating new jobs, the goal is to create 900 new jobs by 2035, with specific measures included in the programme. Locally in the municipality, Öckerö has a business development unit actively working to support the business community and assist both aspiring and established companies. In close collaboration with Öckerö Företag (the business association) and the Visitor and Business Council, the goal is to create one of Sweden's best business climates.
- *Strategic approach to education*: for 25 years, Öckerö has leveraged its maritime-oriented high school to attract students regionally and nationally, despite its small size. The established maritime education profile is poised for expansion into adult education, driven by national industry recognition of Öckerö as a key player. Collaboration with a nearby metropolitan region facilitates access to extensive vocational and supplementary education for adults, although the municipality independently conducts adult education for specific eligibility. This strategic focus aims to enhance vocational training and integrate residents into the maritime industry.
- *Pursuit of sustainability and inclusion*: policies focus on the development of green technologies, sustainability, digitalization, and research and development. The municipality leverages its maritime education profile to promote sustainability and innovation in maritime activities.

Current programmes to attract talent and skills include:

- *Programmes for employment integration*: the municipality's Labour Market Unit and Coordination Association has launched the "Gränsgångare" programme to support workers facing barriers to employment, working with various agencies to facilitate self-sustenance through work or studies.
- *Collaboration for relevant education*: Öckerö collaborates with the Gothenburg region for adult education, enabling residents to access educational programs across the region since 2003. This collaboration offers optimised use of municipal resources through coordinated financing, quality control, and marketing, providing a broad range of educational opportunities, including vocational training with language support for newcomers. The proximity to Gothenburg enhances access to extensive higher education institutions such as the University of Gothenburg, Chalmers University of Technology, University of Borås, Sahlgrenska Academy, School of Business, Economics and Law, and the Academy of Fine Arts, offering diverse programs and specialised training.
- *Initiative for young enterprise*: part of the municipality's education and leisure activities, this initiative is expected to create opportunities for increased entrepreneurship and the development of small businesses over time. A project is ongoing to investigate the implementation of "Junior Achievement" in the municipal upper secondary schools, but it has not yet been introduced. However, the majority of the municipality's upper secondary students attend schools in Gothenburg, where certain programs include Junior Achievement as part of the curriculum.
- *Housing development*: The municipal real estate company has completed a new residential area on Björkö in 2023, with occupancy starting in spring 2024. Rental apartments attract approximately 50% from municipalities other than Öckerö, and there is also a significant proportion of young individuals moving in. The focus here is on providing a variety of sizes and tenure forms to accommodate different age groups in various stages of life.

Key Success Factors

- *Policy Alignment: s*everal decisions from the political sphere seem to align in the same direction, such as mandate goals, budget allocations, planning conditions, plans, and development projects. This provides a clear indication of political will.
- *Business and innovation support*: the municipality collaborates with various regional and national bodies to support business development and innovation. Efforts include the potential establishment of a centre for marine and maritime research and entrepreneurship, and collaboration with academia and financial institutions.
- *Collaborative local networks*: the networks promote the flow of knowledge, technology, and ideas between different actors. They involve collaborations between the municipality's business development unit and the business association, collaboration with the region regarding public health, within Business Region Gothenburg, and other networks within the Gothenburg region and the Västra Götaland region. There are also collaborations with academia and Kommuninvest, a Swedish financial institution owned by Swedish municipalities and regions.
- *Comprehensive support for individuals*: In addition to labour market integration services, increased collaboration among municipal units leads to joint support across housing, healthcare, and education. Further efforts involve the Labor Market Unit assisting individuals receiving sickness benefits or activity compensation to enter the job market, often with financial support like wage subsidies. Öckerö municipality has a very active associational life that the municipality supports with facilities and grants, with a focus on associations for children and youth. An associational policy program provides a framework for this supportive work.

Policy Gaps

- *A mature brand strategy: a*t the strategy days in 2023, demographic development was one of the agenda items. The result of the work included the decision by the political leadership to task the administration with developing a brand strategy to guide efforts in attracting new residents, with a focus on the young and families. A project has been initiated and is expected to be completed by 2024. “This is a long-term effort but extremely crucial to achieve the desired development."
- *Regional ‘spillovers’ not fully capitalised*: Investments in neighbouring municipalities, such as in Gothenburg/Torslanda and the Port of Gothenburg, provide opportunities for growth and development even in Öckerö municipality.
- *Innovation strategies*: the strategic approach lacks a clear emphasis on fostering innovation and technology adoption across sectors. Policies to promote research and development, digital transformation, and the adoption of emerging technologies can drive innovation and enhance economic competitiveness.
- *More strategic view of skills*: there is a significant challenge in finding a suitable workforce, which is a common issue but not extensively addressed in the strategic planning. Implementing targeted workforce development programmes, vocational training, and partnerships with educational institutions can help bridge skill gaps and meet labour market demands.

Policy Area : Sustainable Place

Context and Challenges

Öckerö Municipality faces several sustainability challenges, including resource constraints, water management, reliance on external water and energy sources, and vulnerability to climate change. Climate change resilience is important for Öckerö, given that many essential functions and residences are in low-lying areas susceptible to flooding and extreme weather. The municipality's access to land is limited, and

key industries such as commercial fishing, as well as marine and maritime activities, are directly dependent on being close to water.

The municipality is actively working on various policy actions, including nature conservation programs, water management strategies, wastewater treatment improvements, and initiatives to promote renewable energy and clean mobility. Collaboration with regional and national authorities, strategic planning, and targeted funding are crucial for overcoming these challenges and advancing towards sustainability goals.

Whereas climate action and the green transition are expected to generate new jobs and growth, it also implies a societal transition which might be costly in the short run. Challenges in Öckerö include:

- Resource constraints for sustainability efforts: efforts in nature conservation, for instance, are hindered by resource constraints, requiring state and international contributions.
- Dependency on external sources: Öckerö relies on water from Gothenburg, posing risks if incidents occur on the mainland.[109] This also means that more pressure boosting stations will be needed in the future as future developments will occur at higher elevations due to limited land area.
- Ageing infrastructure: the municipality's old pipeline network results in high operational costs and water management inefficiencies.
- Space constraints: limited space and vulnerability to sea-level rise complicate wastewater management.
- Geographical limitations: the island's location restricts regional exchanges for circular economy initiatives. Limited land area also brings challenges in developing clean mobility solutions.

Policy Action

Table 2.9 summarises strengths in the actions being currently taken by Öckerö to improve its sustainability, as well as weaknesses (i.e. policies or governance actions that are not comprehensive) and policy gaps (i.e. things that local authorities are not doing).

Table 2.9. Assessment of Policy Action for Optimal Infrastructure & Land Use

Strengths	Weaknesses	Policy gaps
• Utilisation of guiding documents and support from higher levels of government. • Addressing challenges through the planning process and evaluating proposed solutions with relevant authorities. • Nature conservation vision from a local perspective • Measures to reduce climate impact, including an updated emergency water plan to ensure access during crises	• Limited local energy production and reliance on mainland supply. • Resource constraints for nature conservation initiatives • Öckerö municipality does not have its own water management. • The municipality faces challenges in implementing the comprehensive investments required to achieve technological leaps that lead to the municipality becoming carbon neutral.	• Limited feasibility and lack of concrete plans for large-scale renewable energy projects (though local authorities are already moving in that direction). • Lack of knowledge and funding for building climate resilience.

Source: Author

Öckerö seeks to adapt to climate change, and related risks, and is also seeking to become greener and reduce emissions. Öckerö Municipality has signed the regional initiative Klimat2030 with the goal of being part of a fossil-independent region by 2030.[110] The municipality also has its own Vision with long-term goals to be climate-smart and fossil-free.

[109] Stormwater entering the sewage system reduces treatment capacity, causing untreated discharges into the sea.

[110] This means that greenhouse gas emissions should decrease by 80 percent from the 1990 level by the year 2030. Additionally, emissions of greenhouse gases from the consumption of West Swedes, regardless of where in the world they occur, should decrease by 30 percent compared to 2010.

Sustainability and climate actions in Öckerö are taking place in collaboration with the national government, and paying attention to nature conservation, with programmes to establish nature reserves and inventorying marine natural values. Öckerö uses strategic documents to guide long-term sustainable development, though local strategies for specific sectors (e.g. circular economy) would be needed.

Current strategic actions:

- *Comprehensive plan with sustainability goals*. Öckerö Municipality has a comprehensive plan that outlines the long-term strategic development of the physical environment. This plan is essential for guiding decisions related to land and water use, as well as construction and preservation of the built environment. The Comprehensive Plan is built upon five planning strategies: human-centric approach, densification, preservation of natural and cultural environments, development of ports, centres, and businesses, and addressing the opportunities and challenges of the ocean (Box 2.8 describes the Marine Plan).
- *Plan for nature conservation*: the municipality has a nature conservation program for terrestrial areas where natural values have been inventoried and described. Additionally, there is an action plan with 12 measures aimed at preserving the natural values identified in the nature conservation program. The measures include developing a nature conservation plan, establishing nature reserves, inventorying marine natural values, and working with indicator species.
- *Incorporation of climate change risk into Comprehensive Plan*: in August 2018, new requirements were introduced regarding the content of the comprehensive plan concerning the municipality's perspective on the risk of damage to the built environment due to flooding, landslides, avalanches, and erosion related to climate change, and how such risks can be reduced or eliminated.
- *Action plan against emissions*: this includes requirements in procurement, energy efficiency, reduced waste volumes, transition to fossil-free energy, and more. The municipality does not have its own carbon budget or a specific strategy solely focused on emission reduction. There is a carbon budget for the region.
- *Water management strategies*: with emergency water plan to ensure access during crises,[111] and plans to replace manually read water metres with digital ones to quickly identify leaks.

Actions in terms of infrastructure include:

- *Wastewater treatment improvements*: including plans to expand the Pinan treatment plant and separate stormwater from wastewater, and sealing pipes and wells to minimise stormwater ingress.
- *Reducing emissions in transportation*: This includes services for carpooling, public charging infrastructure, improved opportunities for cycling, and more.

[111] including management of local private wells.

Box 2.8. The Marine Plan and blue initiatives

In the comprehensive plan, the municipality is required to present the fundamental aspects of the intended use of land and water areas for the entire municipality.

Öckerö municipality's water areas are intended to be addressed in a follow-up assignment called Blue Comprehensive Plan.[112] However, the follow-up assignment has not yet been carried out.

Since 2018, the Marine Plan for the Western Sea has been developed, providing guidance on the best use of the sea based on 13 different usage areas. The marine plans guide which uses take precedence and what adaptations are needed. Currently, the marine plans are being revised.

Between 2016-2019, the inter-municipal coastal zone planning project produced the strategic document "In-depth Structural Image for the Coastal Zone," a common agreement on how the coastal and marine area between Kungsbacka in the south and Uddevalla in the north should be developed long-term.

Both the Marine Plan for the Western Sea and the in-depth structural image for the coastal zone constitute strategically important foundations for the municipality in the ongoing work on sustainability and water areas within the comprehensive plan.

Source: Author's own elaboration based on official sources.

Key Success Factors

- *Investigation of local needs*: for instance, there is an ongoing investigation into future energy needs and potential for renewable energy projects.
- *Targeted grants*: e.g. seeking guidance and funding from the Swedish Civil Contingencies Agency
- *Teaching sustainability since early ages*: in preschool, there is a strong emphasis on working with core values that create a sense of security for the children. The children are actively involved in the local environment, and sustainability issues are addressed (Box 2.9).

[112] Öckerö municipality 's comprehensive plan from 2018, only the intended use and long-term development of the municipality's land areas are specified.

Box 2.9. Sustainability education

In 2023, the preschool opened a sustainability centre where children and staff can develop their innovative thinking, with sustainability as a foundation. In primary school the focus in on values, for a good basis for further studies. Initiatives are in place to work on local environmental issues. A collaboration with the European network Blue Schools focuses on the sea. To participate, schools must have a solid plan on how to pedagogically integrate marine issues into the curriculum. Annually, the event ""Arena arbetsliv"" is held, where all students in grades 8 and 9, along with their parents, are invited to meet businesses in the municipality. This is an opportunity to establish contacts with potential future employees and partners and identify talents that can become valuable assets for the businesses.

Source: Author's own elaboration based on official sources.

Policy Gaps.

- *Limited renewable installations*: there are no concrete plans or mandates within the municipality to invest in solar panel installations, except for occasional buildings' roofs within the municipality owned real estate company. It is unlikely that the municipality will invest in offshore wind power, and the municipality's land areas provide limited conditions based on the environmental assessment principles applicable to land-based wind power. The municipality has favourable conditions for geothermal heating, which is an efficient form of heating, so a strategy is needed in this area.
- *Need to develop circular practices locally*: while working towards increased collaboration in the region as our size constitutes a limitation.

Summary of Policy Lessons

Gotland and Öckerö feature strategic and policy actions that demonstrate their commitment to fostering a sustainable and competitive economy through comprehensive planning, strategic business development, infrastructure enhancements, and active community engagement. Table 2.10 and Table 2.11 summarise the main actions and policy gaps for both, respectively.

Gotland has a robust planning framework, anchored in its comprehensive regional plan, but strategic implementation would benefit from better cross-sector alignment and multi-level governance coordination. While digitalisation efforts and community engagement are commendable, there is limited integration of sustainability goals across sectoral strategies. Infrastructure planning in Gotland is advanced, particularly in energy and mobility, yet it lacks a fully developed integrated transport strategy and a strong land-use framework that accounts for climate resilience. The island demonstrates strong economic potential, particularly in green sectors, but firm creation is low and business support systems remain underdeveloped. Sustainable place-based development efforts are visible, including the focus on bioenergy and climate neutrality, but local innovation systems require strengthening to match ambition with delivery. The policy gap lies in translating strategic visions into actionable, coordinated investment across sectors, with better vertical coordination with national actors and increased support to small businesses and knowledge hubs. Investment in local capacity and mechanisms for policy integration could be key enablers.

Table 2.10. Policy Overview in Gotland by policy area

Policy Area	Overview of policy action	Policy gaps
Strategic planning and initiatives	Robust vision and planning but with room for clarifying national-local roles & responsibilities and better measurement of impact. Strong alignment with national strategies and comprehensive local development plans as outlined in Our Gotland 2040 Smart specialisation strategy in place. Gotland's strategic planning reflects a strong commitment to sustainable development, stakeholder engagement, and leveraging EU funding for regional growth.	Need for more dynamic and adaptive strategies to respond to rapidly changing global and local conditions, including in the area of digital transformation. Double insularity unique challenges, with no clear solutions for "lack of critical mass" and "higher costs to deliver services", Region Gotland has a comprehensive land use plan, though national goals and interests need to be better arbitrated in between.
Optimal Infrastructure & Land Use	Strong infrastructure with critical areas needing updates. . Gotland's actions are progressively improving some of its infrastructure and connectivity. Also, emerging initiatives like the regional coordination through Trafikrådet (Traffic Council), and recent plans like the regional bicycle plan, aim to improve the physical infrastructure. Digital projects like the Digital Elderly Care Project and DISA are advancing digital inclusion and smart community planning. However, improvements are limited by insufficient funding and strategic integration at the national level, in comprehensive digital strategies.	Main Policy Gaps: (i) Funding: limited financial support for both physical and digital infrastructure projects; (ii) strategic integration: lack of cohesive strategic direction for digitalization beyond basic infrastructure; (iii) addressing the end-of-life issues of existing infrastructures, such as the subsea energy cable
Competitive Landscape	Efforts to enhance education, support business creation, and promote smart specialisation, but the business ecosystem still needs more coordinated support. Gotland's actions to improve competitiveness show promise but face significant challenges. Efforts to promote year-round tourism, develop regional branding, and enhance human capital through vocational training programs are positive steps. Initiatives like the Energy Island project and the creation of a "Business HUB Gotland" aim to attract businesses and skilled individuals. However, the region's small market size, high transportation costs, and seasonality in tourism remain hurdles. Additionally, the lack of a coordinated structure for business support and fragmented efforts in in-migration and talent retention limit effectiveness. The reliance on micro-businesses, often with limited growth intentions, further constraints economic expansion.	Main Policy Gaps: (i) Coordinated structure for business support and talent attraction (which links to the challenge of developing a comprehensive housing strategy); (ii) Enhancing engagement and support for micro-businesses; (iii) Improving alignment between educational programs and labour market needs (which relates to the challenge of strengthening digital infrastructure and services). Ensuring liquidity for larger projects will further support Gotland's economic and social sustainability.
Sustainable Place	Focus on reducing emissions and expanding circular economy, though challenges remain for enforcing land use and adopting sustainability practices. Gotland has made notable strides in sustainability, particularly through its comprehensive water management policies and innovative wastewater treatment projects. Efforts in the circular economy are highlighted by initiatives such as the Green Plan and strategic collaborations aimed at water-saving technologies. The transport sector is seeing improvements with increased emphasis on reducing emissions and promoting public transport..	Main Policy Gaps: (i) insufficient local resources and expertise; (ii) high costs and public resistance to new technologies; (iii) slow transition from outdated systems; (iv) enforcing land use and environmental regulations; need for increased awareness and acceptance of sustainable practices. Significant gaps remain in resource allocation and the adoption of new technologies. The transition from outdated infrastructure to more sustainable solutions is slow due to limited local expertise and high costs

Source: Author

Öckerö's strategic approach combines strong local steering with the advantages of regional coordination. The municipality has an established vision for future development (defined by all parties) and a set of mandate goals (defined by the steering majority) supported by three overarching steering documents: the comprehensive plan, the five-year operational plan, and the business strategy programme. Strategies are not stand-alone but are deliberately designed to map into and reinforce regional frameworks. This integration can be a strength by aligning local strategies with regional and national priorities and frameworks. Öckerö gains leverage and impact in areas where collaboration is essential, such as infrastructure, labour market development, and sustainability. In infrastructure and land use, Öckerö has

launched projects related to energy transition and transport efficiency, yet it is constrained by limited jurisdictional capacity and access to planning tools. Its economic development actions have focused on sustainable tourism and local services, and while innovation capacity and linkages with national entrepreneurship networks are underutilised, progress is being made in strengthening innovation ecosystems – a notable example is the dedicated effort to establish an innovation hub for the blue economy in the new Öckerö centre. The municipality actively promotes climate adaptation, yet resilience-building remains fragmented. A critical policy implication is the need for institutional empowerment and resourcing of smaller municipalities like Öckerö, which face capacity bottlenecks in implementation despite high ambition. Inter-municipal cooperation, delegated responsibilities, and targeted financial support can help Öckerö play a stronger role in shaping and delivering local economic and environmental transformation.

Table 2.11. Policy Overview in Öckerö by policy area

Policy Area	Overview of policy action	Policy gaps
Strategic Planning & Initiatives	Demonstrates several proactive initiatives aimed at fostering economic growth and sustainability, particularly through targeted investments in educational facilities, business development programs, and regional collaborations. The comprehensive plan focuses on key areas such as tourism, maritime industry, and residential development, which are essential for local economic vitality. Moreover, the municipality's participation in networks like Business Region Gothenburg and the implementation of community engagement mechanisms, such as "island proposals" and citizen surveys, indicate a commitment to inclusive growth and responsive governance. Yet, the lack of detailed, localised economic analysis and clear delineation of responsibilities within the municipal and regional governance structure suggests potential inefficiencies in policy implementation and coordination.	Main policy gaps: (i)Insufficient comprehensive strategy for increasing citizen engagement in decision-making processes. (ii) Limited focus on diversifying the local economy beyond tourism and maritime sectors. Need for strategies to foster new industries and innovation. Lack of detailed plans to attract and retain a younger, skilled workforce. (iii) Climate strategies not well defined
Optimal Infrastructure & Land Use	Actions in Öckerö have shown mixed results in improving infrastructure. The municipality faces significant challenges in maintaining road networks and managing winter road maintenance due to high costs and reliance on private actors. Efforts to improve ferry services and public transportation through collaborations with regional bodies like Trafikverket and Västtrafik are ongoing, but there are limitations in meeting accessibility and capacity needs. Digital initiatives, including broadband rollout and smart technologies, are advancing digital connectivity, although challenges remain in ensuring comprehensive coverage and redundancy.	Main policy gaps: (i) lack of sufficient funding for continuous infrastructure maintenance and upgrades; (ii) limited state investment in local infrastructure projects, affecting long-term development; (iii) absence of a clear framework for incorporating AI and emerging technologies, (iv) need for robust measures to ensure redundancy and reliability in digital services.
Competitive Landscape	Öckerö's strategic actions, including residential development, regional collaborations, and targeted skills programs, are positively impacting business creation and innovation. The focus on maritime and green technologies, alongside substantial investments in education and public safety, enhance its appeal and economic activity. Initiatives like the potential marine research centre and integration programs for young people align with improving competitiveness and skill access. Measures also include quality of life initiatives: this includes investments in community life and safety initiatives, to attract people to the island.	Main policy gaps: (i) lack of specific innovation policies for island contexts; (ii) over-reliance on maritime sectors; need for broader economic diversification; (iii) insufficient local resources for rapid upskilling and green technology adoption; (iv) limited strategies to buffer against global disruptions; also (v) Insufficient digital literacy programs for vulnerable groups, including the elderly.
Sustainable Place	Öckerö Municipality has taken several effective actions to improve sustainability and promote the green economy, including nature conservation programs, improved water and wastewater management, and initiatives for renewable energy and clean mobility. The municipality's efforts to integrate regional and national support, update emergency water plans, and promote digital tools for water management are commendable. However, the lack of a comprehensive plan for renewable energy, limited local energy production, and insufficient funding and knowledge for climate resilience remain significant challenges.	Main Policy Gaps: (i) lack of concrete plans for large-scale renewable energy projects.(ii) insufficient funding and knowledge for building climate resilience.(iii) need for enhanced local and regional collaboration for circular economy practices; (iv) limited investments and planning for comprehensive clean mobility solutions.

Source: Author

Key success factors for policy

The case studies of Gotland and Öckerö describe specific challenges in each location, many of which are common among island economies. By analysing the current policy landscape, including strategic initiatives and current policy actions and programmes, key success factors are identified.

National Government

National guidance: Local action is often framed and guided by national strategies, including in spatial planning and land use. For instance, in specific policy areas like digital transformation, Region Gotland has pursued its work for developing a new comprehensive plan based on the digital model of the Swedish National Board of Housing, Building and Planning.

Cooperation between national and regional actors: National institutions and policies continue to support local businesses and workers, in addition to the local initiatives in each Island. Also, national-regional collaboration is essential to jointly meet national and local goals.

Regional and local Government

Forward-looking governance: for instance, a new governance model in Region Gotland that balances political priorities in the short term to achieve the goals of the regional development strategy in the long term.

Common vision involving all political parties: e.g. Öckerö has an established vision (defined by all parties) for future development together with a set with mandate goals (defined by the steering majority).

Public consultations: for instance, consultations during the elaboration of the regional development plan and the comprehensive plan have led to an inclusive approach to citizens engagement to ensure that diverse perspectives are considered in the planning process.

Collaborations with private sector: e.g. Region Gotland's coordinated efforts for talent attraction, better targeting the skills and investments needed.

Inter-regional collaborations – and learning from other regions: collaborative approach to enhance economic resilience and innovation. For instance, Gotland collaborates with Småland regions to pool resources in areas lacking the critical mass to sustain clusters independently. Öckerö's has an agreement with neighbouring regions, to be promoted as part of the Gothenburg archipelago. Branding the lifestyle of islands can lead to more attraction of businesses and people.

Monitoring, adjusting and learning: for instance, Region Gotland and regional stakeholders and interested parties reassess the challenges currently within the framework of the implementation of the regional development strategy. Piloting policies and measuring progress leads to increase policy effectiveness.

Good practices by policy area

The experience in both Islands across the three policy areas featured in this report also give practices that are proving effective.

Policy Area	Good practices
Land & Infrastructure	• Planning & assessing: adopt a more visionary and foresight-oriented approach to exploring the consequences of different scenarios. • Smart Island vision, integrating open and shared data across various sectors such as transport, waste management, energy, and healthcare. • Align infrastructure planning and investment decisions to regional development priorities. • Support infrastructure solutions specific to local needs, involving local initiatives and seeking synergies with local service providers. • Multilevel coordination for infrastructure development. • Small community development organisations as drivers of local infrastructure development and providing for certain needs.

Competitive Landscape	• Strategic planning for talent attraction (with a local brand strategy). • Strategic planning for education. • Future planning capacity: e.g. regionally, Region Gotland intends to have annual competence dialogues with industries from a multitude of trades to get relevant data. • Inter-regional collaborations for business and talent attraction. • National-local coordination for employability (and local provision of employability services). • Business ecosystems and entrepreneurial support on the ground (in addition to access to national finance). • Tailored solutions to foster innovation via programmes for strengthening business ecosystem. • Collaborative local networks to promote the flow of knowledge, technology, and ideas.
Sustainable Place	• Comprehensive strategy to cut emissions. • Plan to become carbon neutral. • Plans to use land for sustainability efforts. • Resource-efficient spatial planning as sustainability enabler: • Strategic vision for green talent attraction • Plan for nature conservation. • Incorporation of climate change risk into Comprehensive Plan. • Investigation of local needs (e.g. future energy needs and potential for renewable energy). • Targeted grants. • Teaching sustainability since early ages.

Strategic Policy Priorities for Gotland and Öckerö

Gotland benefits from a comprehensive regional planning framework, with clearly articulated visions and coordination between regional and municipal levels. However, gaps remain in operationalising these plans, particularly in ensuring horizontal coherence across sectors. Local strategies would benefit from stronger integration of sustainability goals and clearer implementation roadmaps. Strengthening multilevel governance, especially coordination with national agencies and neighbouring regions, is essential. Gotland can consider focusing on leveraging its institutional role and integrated governance potential. As a regionally governed municipality, Gotland can pilot reforms in strategic foresight, climate resilience, water infrastructure, and biodiversity planning. Strengthening business diversification and aligning skills training with local labour needs are also critical.

Öckerö recognises the need to further strengthen local innovation capacity. It is thus deliberately working to go beyond a narrow focus on sustainable tourism and local services, by promoting innovation ecosystems that enhances Öckerö's role within other sectors. While the initiative to establish an innovation hub for the blue economy in the new Öckerö centre is still in development, it represents an important strategic step aimed at fostering long-term innovation within the marine and maritime sectors. A key goal is to pursue a cluster approach, bringing together business, academia, and the municipality to create stronger knowledge flows, support entrepreneurship, and connect local initiatives with regional and national networks. Enhancing local foresight and planning tools, possibly through inter-municipal cooperation, would help prioritise the right investments. Furthermore, Öckerö can consider prioritising mobility upgrades, housing alignment, and local economic diversification. The municipality's geographic complexity and ferry reliance call for coordinated transport solutions. A long-term strategic vision is needed, alongside investments in entrepreneurship support, marine sector development, and citizen engagement platforms.

Both municipalities require stronger coordination with regional and national actors, and mechanisms to embed citizen participation in policy design. Targeted support programmes, digital engagement tools, and collaborative planning frameworks will be essential to unlock the islands' full development potential.

Policy implications for Island economies

Island municipalities show ambition but face implementation gaps. The case studies of Gotland and Öckerö demonstrate that while local strategies exist, they are often siloed, under-resourced, and not fully aligned with national or regional frameworks. Furthermore, limited administrative capacity and intergovernmental fragmentation weaken strategic delivery. Many municipalities struggle with foresight, monitoring, and stakeholder coordination. This results in challenges in delivering integrated solutions for land use, infrastructure, tourism, and sustainability.

Key strategic areas demand coordinated action. Common issues across Islands include housing pressure, particularly in peak seasons; land use constraints due to environmental sensitivity; inadequate transport reliability; and low youth retention. Innovation support and data systems are generally weak or inconsistent. Policy priorities for all island economies must include stronger capacity for planning, sustainable infrastructure, improved digital and transport connectivity, youth and SME support, and mechanisms for cross-island collaboration. A shift from reactive to anticipatory policy frameworks is needed, built on robust data and meaningful multilevel collaboration.

3 Governance for Sustainable Island Policy

.

This chapter stresses the urgent need for improved multilevel governance to address the fragmented delivery of island policies in Sweden. It identifies institutional gaps in coordination, capacity, and vertical policy alignment that undermine long-term planning and implementation. The chapter recommends establishing a national coordination platform, fostering intermunicipal collaboration, and embedding island-proofing into national strategies. Drawing on OECD best practices, it highlights that effective decentralisation requires data, capacity building, and structured dialogue. Stronger governance is positioned not as a separate goal, but as a critical enabler of all other policy priorities - from infrastructure and competitiveness to environmental resilience.

.

Multi-level governance for island development in Sweden

Inclusive and equitable regional development, including to advance the development of island communities[113], is a priority for the Swedish government, and it has consistently adopted a place-based approach to regional development given the diversity of its territory – from metropolitan to sparsely-populated and remote areas. Furthermore, the multi-level governance system[114] already in place to support regional development is, for the most part, strong and well-developed (OECD, 2023[3]). It includes a clear national level strategy for regional development, robust funding and financing mechanisms, clearly attributed responsibilities for policy design and implementation, effective multi-level co-ordination mechanisms, and broad consultation practices. The National Audit Office has also been proactive in identifying areas for further improvement, such as the monitoring and evaluation of regional development policy across and among levels of government (Swedish Government, 2024[2]). Box 3.1 provides a general overview of a few of the system's key frameworks, institutions and co-ordination mechanisms as applicable to regional development.

When it comes to island economies, there is room for Sweden to sharpen its place-based approach. Sweden's 267 570 islands represent roughly 3% of the nation's land area and 0.9% of its population (World Population Review, 2024[3]). Moreover, 500 islands spanning each of Sweden's 21 regions are inhabited (Statistics Sweden, 2023[1]). In addition, they make an important contribution to Sweden's economy in areas such as tourism and agriculture (OECD, 2022[5]). At the same time, and like other areas of Sweden – including remote and sparsely populated territories – they face development challenges linked to their geography and frequently higher operating and service delivery costs than their mainland peers (OECD, 2023[3]).

To make the most of what island economies can offer residents, and consistently apply a place-sensitive approach to territorial development, Sweden may need to adjust some of the arrangements in its multi-level governance system (Swedish Government, 2021[4]; OECD, 2023[5]). Doing so could give a boost to island economies, and through this, could help avoid – or at least mitigate – the impact of two potential challenges arising from the current system. The first is a risk of reinforcing rather than reducing the inequalities that some Swedish islands currently face relative to mainland territories. The second is a risk that the lack of sufficient island voice could contribute to place-blind national decision making and action that could adversely affect island development outcomes.

There are three specific aspects of the multi-level governance system that would require attention to help overcome island-specific challenges: i) how strategic frameworks can better account for island development needs and priorities; ii) how cross-government co-ordination and dialogue mechanisms can better amplify the voice of islands; and iii) how islands can make the most of available funding and financing opportunities for regional and local development. This chapter puts the spotlight on these three areas, examining what is currently in place, the impact on Sweden's islands, and finally offers recommendations for potential action.

The subnational analysis and recommendations in the report are based primarily on case studies of two island economies, Region Gotland and Öckerö Municipality. On certain topics, however, where the findings regarding Gotland and Öckerö may not be representative of other Swedish islands, additional analysis and recommendations are also provided (Box 3.3).

[113] An island community refers to a community consisting of two or more individuals that permanently inhabit an island, and thereby share a common interest, identity and/or geography.

[114] Multi-level governance refers to the institutional and financial interactions across and among levels of government, as well as non-governmental actors, when designing and implementing policies with subnational impact.

Box 3.1. Key frameworks institutions/actors, and co-ordination mechanisms supporting regional and island development in Sweden

Frameworks

The **National Strategy for Sustainable Regional Development throughout Sweden 2021-2030** is the primary strategic framework document for regional development in Sweden. It identifies the relevant actors, resources and priorities for regional development, and articulates how regional development policy should be co-ordinated with other relevant national policies. Other national-level frameworks, such as **Coherent Rural Policy Bill**, support the National Strategy for Sustainable Regional Development by outlining policy interventions and funding arrangements to support specific types of territories with particular needs. At the subnational level, regional governments are also required to develop and implement a **regional development strategy** that addresses their specific territorial needs.

Institutions/actors

At the national level, the **Ministry of Rural Affairs and Infrastructure** is the main institutional actor driving regional development policy, and is responsible for its co-ordination across government. More than 30 other national public bodies are also involved in supporting the development of regions, including the **Ministry of Climate and Enterprise** and the **Swedish Agency for Economic and Regional Growth**.

At the subnational level, **County Administrative Boards** (CABs) are responsible for co-ordinating national government activities within the county, monitoring the implementation of national government policies and strategies, as well as managing some EU funds. **Regional and municipal governments** are tasked with delivering a wide range of public services to citizens. They also have various planning responsibilities. For instance, municipal governments are responsible for developing Comprehensive Plans, which provide a basis for spatial decision making on land and water use within their territories.

In addition to government actors, civil society and other types of organisations play a leading role in regional development. The **Swedish Association of Local Authorities and Regions** (SALAR) represents the interests of regional and municipal governments to the national government, and helps advance multi-level co-ordination, dialogue and knowledge exchange. It also hosts regular forums that support horizontal co-ordination and peer-to-peer learning between regional and local governments on sectoral issues.

Co-ordination mechanisms

Sweden has a series of well-established co-ordination mechanisms to ensure that the National Strategy and its regional development objectives are met in a coherent and consistent fashion at all levels of government. In terms of vertical co-ordination and co-operation one of the most visible arrangements is the **Forum for Sustainable Regional Development**, which promotes dialogue, knowledge-sharing and learning among national and regional governments, as well as national government agencies. At the subnational level horizontal co-ordination mechanisms can vary from region to region. For instance, in Region Gotland, horizontal co-ordination is primarily ensured through a regional development council, which supports dialogue and knowledge-sharing between relevant actors**.** Public and non-governmental actors operating at the territorial level participate in the council on a voluntary basis.

Source: (Swedish Government, 2010[6]) (Swedish Government, 2018[7]) (Swedish Government, 2021[4]) (OECD, 2022[2]) (SALAR, 2023[8]) (OECD, 2024[9]) (Swedish Government, 2024[10])

Reinforcing strategic frameworks for island development in Sweden

National-level strategic frameworks for regional development perform a number of functions. In particular, they provide guidance for national and subnational policy makers alike on the development challenges facing different types of territories and strategic objectives for territorial development. They also provide guidelines on how policy and service delivery initiatives should be designed, implemented and co-ordinated in order to effectively meet strategic objectives for territorial development (OECD, 2023[5]).

Sweden's National Strategy for Sustainable Regional Development 2021-2030 does just this. It clearly sets out critical regional development challenges it wishes to address in the period – environmental problems and climate change; demographic change; increased development gaps within Sweden and with other EU Member States (Swedish Government, 2021[4]). It also highlights areas of action – or high-level objectives – which address a diversity of areas, including equal opportunities for housing, work and welfare throughout the country; skills supply and development; innovation, enterprise and entrepreneurship; and improving accessibility through digital communications and transport systems (Swedish Government, 2021[4]). The Strategy also identifies a series of preconditions for effective strategy implementation, including capacity, multi-level governance considerations, and continual learning (Swedish Government, 2021[4]). Policy makers working with islands, however, are confronted by several challenges linked to strategic frameworks and strategy development practices.

First, while national strategies tend to be high-level, they can shine a spotlight on specific issues – an approach Sweden has taken in its National Strategy when it comes to rural and sparsely populated areas. Yet, there is a gap when it comes to islands. The National Strategy for Sustainable Regional Development does not recognise islands as a distinct territorial category. This raises the risk that line ministries and national public agencies, which depend on the strategy as guidance to help ensure that their policies and programmes incorporate a territorial lens, may not be well-equipped or incentivised to address the specific policy, service delivery and investment challenges facing islands.

Second, there are a lack of national-level data that can help to pinpoint what the specific policy, service and investment challenges facing different types of islands actually are. This limits the ability of national and subnational policy makers to develop evidence-informed policies and programmes that specifically target the needs of different islands. This section addresses each of these issues in turn, while providing recommendations that can help to address them.

The value of recognising islands as a distinct territorial category in strategic frameworks

The National Strategy for Sustainable Regional Development throughout Sweden 2021-2030 identifies challenges and strategic areas of action that are relevant to island development. The three main challenges that the strategy aims to address – environmental problems and climate change, demographic change and increased inter- and intra-regional development gaps – are pertinent to many island communities (Swedish Government, 2021[4]). Common island challenges in Sweden can include a particular vulnerability to climate change (e.g. through rising sea levels and coastal erosion risk), a shortage of working-age permanent residents and higher costs for housing, infrastructure investment and service delivery than on the mainland (OECD, 2023[3]).

The strategic areas of action identified in the Strategy are also relevant for supporting island development in many cases. For instance, the "[improved] accessibility through digital communication and transport systems" action is highly relevant to many Swedish islands. In Gotland's case, for instance, geographic isolation can entail higher costs for the transport of goods and people to and from the mainland, and a more limited potential for local business to participate in national and international markets. In addition, the "equal opportunities for housing, work and welfare throughout the country" action articulated in the Strategy is relevant to both Öckerö and Gotland, where ensuring access to affordable housing and equitable access

to public services (e.g. education and social care) has presented a challenge, particularly on remote, outer islands (OECD, 2024[9]).

The Strategy also recognises that the challenges it aims to overcome, such as inter- and intra-regional gaps, can only be effectively addressed by taking account of the economic conditions of different territories. It cites a number of development challenges facing territories in Sweden, and identifies two distinct territorial categories that require particular attention by policy makers:

- Sparsely-populated and rural areas, which are characterised by low density, a failing labour market, a high degree of demographic imbalance, a low range of public and private services and limited integration into global value chains;
- Cities and urban areas, which are characterised by high density, congestion effects, and an unbalanced housing market.

Overall, the Strategy provides extensive guidance to line ministries and public bodies on different ways to address territorial challenges that contribute to or generate inequalities across Sweden. However, when drawing attention to territorial types that may require a particularly place-sensitive approach in policy and service delivery, it does not identify islands as a distinct territorial category. In part, this may be because the challenges and strategic areas of action the Strategy focuses on are ones from which many islands could also benefit. Yet, this approach also presents a risk.

The omission of islands as a distinct territorial category in the Strategy may result in insufficient guidance or incentive for national policy makers to apply an island lens to policies, programmes and services that may "behave differently" on an island. This can result in islands being overlooked for support measures developed for territories with similar challenges (e.g. high costs for essential service delivery), but with eligibility criteria that islands cannot meet. One example arises with the Coherent Rural Policy Bill, which supports territories with specific needs related to their geographical isolation – a challenge faced by many island territories, as well as their rural and sparsely-populated counterparts on the mainland (OECD, 2023[3]). Among the support measures it outlines is a regional transport subsidy to compensate companies in the four northernmost Swedish regions for cost disadvantages related to their isolation.

Given that the transport subsidy defines geographical isolation at the regional level, only companies based on island territories within the four northernmost Swedish regions are eligible to receive it. Adopting a regional-level definition of geographical isolation overlooks the fact that companies on other Swedish islands that are located at a significant distance from the mainland also face cost disadvantages, given: i) the additional time required to travel by sea compared to by land, ii) additional freight costs of seaborne transport and iii) in certain cases, the lack of direct sea connections (OECD, 2024[9]). The measure, therefore, has been designed in a way that prevents many island communities facing the same challenges it aims to address from benefiting from its support.

A further risk stemming from the Strategy is that it defines two distinct territorial categories (i.e. rural and sparsely-populated areas; cities and rural areas), but excludes others. This could lead to line ministries and other public bodies taking account of the development challenges that some island territories are facing, but not the development challenges facing others. This, in turn, could work against the Strategy's objective of reducing territorial inequalities. Region Gotland provides an example.

When considering islands, while some may fall into the two territorial categories identified in the Strategy, many may not, and others, like Gotland, may represent a combination. In all instances, though, the islands still may face territorial development challenges, such as higher operating and service delivery costs, than their mainland peers that would benefit from targeted national-level attention. For instance, Region Gotland occupies the middle third of Sweden's regions by population density. It also provides access to a wide range of public services (and is notably required to do so by virtue of being a region) and does not suffer from significant congestion effects. As such, it would be unlikely to be considered as either a rural or sparsely populated area, or as a city and urban area. Therefore, it fails to meet the classification of a

territory that deserves special support. At the same time, it faces significant challenges related to its geographical isolation, including housing and labour market shortages, difficult access to and elevated costs of delivering complex public services (e.g. healthcare, waste and water management) relative to the mainland due to a lack of potential economies of scale (Statistics Sweden, 2024[12]).

Ensuring that an island lens is more effectively applied in regional development programming

There are a number of steps that policy makers at all levels of government could take to help ensure that national-level strategic frameworks and regional development programming effectively apply an island lens, and by doing so, better contribute to meeting the Strategy's objectives, including addressing territorial inequalities between different types of Swedish territories.

First, there is a need to improve the quality of publicly-available island-level data, in order to strengthen the evidence base for island-specific interventions by national policy makers. Although Sweden boasts an an impressive array of subnational-level data at the regional and municipal levels, island-disaggregated data are not published (with the exception of Gotland, Öckerö and a handful of other island municipalities). This represents a notable coverage gap, given there are over 500 inhabited islands spanning every single region in Sweden (Statistics Sweden, 2023[1]).

There are a number of options that the government could consider to improve island data coverage. For instance, Statistics Sweden could expand its database to ensure full coverage of islands as individual statistical units. This approach would be very comprehensive and would allow policy makers to develop a highly granular picture of island development. An alternative option would be for Statistics Sweden to periodically publish island-level data on indicators of particular importance. These indicators could be decided upon by the Ministry of Rural Affairs and Infrastructure in consultation with SALAR.

Second, once island-level data have been gathered and published, the Ministry of Rural Affairs and Infrastructure could task the Swedish Agency for Economic and Regional Growth with using the data to develop a typology of island challenges, assets and needs. This would involve using indicators to classify islands into different categories, thereby providing a clear framework that policy makers could draw on to apply an island lens to policies that support regional development. It would provide an evidence base that could help ensure that the distinct needs of island communities are being taken into account by national-level actors. Once a draft typology has been developed, the Swedish Agency for Economic and Regional Growth could also consult island regions and municipalities to secure their feedback on whether, based on available island data, the typology could be further refined to better capture the breadth of island challenges, assets and needs.

Island typologies have already been developed in other OECD countries. In Scotland (United Kingdom), for instance, the Scottish Government developed a Scottish Islands Typology in order to better understand the different factors affecting island life. It is based on a number of indicators that can help to assess the capacity and resilience of different islands, including population breakdowns, on-island access to local public and private services, and ferry connectivity. Based on the available data, islands were assigned scores for each indicator, following which an assessment was made about the similarities and differences between different types of islands. They were then grouped into ten different island categories, in order to provide context to policy makers on how policies and programmes might be needed to be implemented on different types of islands to improve policy coherence, given local realities (Box 3.2).

Box 3.2. The Scottish Government's Scottish Islands Typology

The Scottish Government's Scottish Islands Typology aims to improve understanding of the development challenges facing different island communities using data on population, local amenities and ferry connectivity with mainland Scotland. Population data help identify the potential human capacity and market size of each island, while data on local amenities provide an indicator of island residents' ability to fulfil their basic daily needs without relying on ferry travel. Data on ferry connections, which include crossing times and the average number of crossings on a daily basis, indicate the access that island residents have to goods and services elsewhere.

An assessment of the data has allowed policy makers to group islands into ten different categories (below), based on their geographic and development characteristics.

1. Connected Independent Islands
2. Independent Hub Islands
3. Independent Outer Isles
4. Reliant Inner Isles
5. Semi-Reliant Islands
6. Reliant Outer Isles
7. Outpost Islands
8. Mainland-Connected Islands
9. Unserviced Islands
10. Previously Inhabited Islands

The data, in turn, are used to improve policy makers' understanding of island capacity, and how support can be targeted to specific islands. For instance, they are a resource that informs Scotland's ex-ante Island Communities Impact Assessments. These assessments must be conducted when designing and implementing policies and programmes, in order to encourage policy makers to take greater account of island specificities. They can also be used to help track progress on islands against national and subnational-level strategic objectives.

Source: (Scottish Government, 2024[17])

Third, the government could encourage national policy makers to consider the development conditions of islands, including by referring to the islands typology, when developing or implementing policies and programmes with a territorial impact. In this regard, the Ministry of Rural Affairs and Infrastructure could amend the territorial perspective section of the National Strategy for Sustainable Regional Development to recognise the different island categories that are identified in the typology. Policy makers could be encouraged to refer to the islands typology for further guidance when designing policies or programmes affecting islands.

Fourth, the government could consider introducing legislation requiring line ministries and national public agencies to publish an island communities impact assessment, when developing policies or programmes that may have a significantly different effect on islands relative to the mainland. In particular, the impact assessment could require line ministries and national public agencies to publish information regarding adjustments to national policies and programmes that are being made to mitigate or improve their impact on island communities (see the section on cross-government co-ordination and consultation mechanisms to support island development).

Fifth and finally, island regions and municipalities, in turn, could use SALAR to provide national public actors with periodic feedback on whether the adjustments that are being made to “island-proof” national policies and programmes are appropriate. For this purpose, a network of regional and municipal strategists could be established within SALAR, in order to allow regions and municipalities to share details of national policies or programmes that they consider to not account sufficiently for island-specific challenges. Based on this information, SALAR could then compile periodic reports for national public actors on additional island-proofing needs in national policy making.

Some countries, such as Croatia, have developed a standalone, national islands strategy to guide island-related interventions. Although this approach could also be an option for Sweden, given the number of islands and their differentiations, the current Strategy already covers many of the challenges that islands face. Adding a specific strategy for islands would add a layer of complexity in terms of co-ordination, implementation, and monitoring. Ultimately, it could complicate the overall territorial governance system, requiring require additional resources while failing to leverage the benefits of the existing regional development framework.

Box 3.3. Recommendations to further reinforce strategic frameworks for island development in Sweden

Recommendations for national-level action to ensure that an island lens is more effectively applied in Sweden's regional development programming:

- Improve the public availability of data on Sweden's many inhabited islands, in order to strengthen the evidence base for island-specific interventions. This could be accomplished with the support of Statistics Sweden, either by:
  - Expanding its database to ensure full coverage of islands as individual statistical units; or by
  - Publishing island-level data on indicators of island importance (to be determined by the Ministry of Rural Affairs and Infrastructure and SALAR in consultation with island representatives).
- Create a typology of island challenges, assets and needs, which can be used to help policy makers apply an island lens to policies that support regional development.
  - This could be led by the Ministry of Rural Affairs and Infrastructure and undertaken together with the Swedish Agency for Economic and Regional Growth. It could be developed on the basis of island data and in consultation with island territories.
- Identify ways to encourage national policy makers to consider the development conditions of islands when developing or implementing policies and programmes with a territorial impact.
  - The Ministry of Rural Affairs and Infrastructure could amend the territorial perspective section of the National Strategy for Sustainable Regional Development to recognise different island categories that are identified in the typology.
  - The government could consider adopting legislation requiring line ministries and public agencies that are developing or implementing national policies or programmes to conduct an impact assessment on island communities.

Subnational-level recommendations to ensure that an island lens is more effectively applied in Sweden's regional development programming:

- Island regions and municipalities could use SALAR to periodically provide national public actors with feedback on whether appropriate adjustments are being made to "island-proof" national policies and programmes.

Set up a network of regional and municipal strategists within SALAR that shares details of any national policies and programmes they consider to not account sufficiently for island-specific challenges. Based on this information, SALAR should compile periodic reports for national public actors on additional island-proofing needs in national policy making.

Source: Author

Cross-government co-ordination and consultation mechanisms to support island development in Sweden

Sweden has developed a range of vertical co-ordination and dialogue mechanisms to support regional development (Box 3.4), which can be valuable to island communities in a number of ways. First, they are an opportunity for periodic exchange between the national and subnational government levels on territorial development challenges and objectives. This helps establish priorities for action and can contribute to greater policy coherence. Second, the consolidation of subnational government lobbying and advocacy activities within a single body like SALAR provides a powerful platform from which regions and municipalities can speak with one voice to the national government, in order to help guide national- and subnational-level policy making for territorial development.

Box 3.4. Vertical co-ordination and dialogue mechanisms in Sweden

The Forum for Sustainable Regional Development

The Forum for Sustainable Regional Development meets between seven and eight times a year to foster exchange between national and regional-level policy makers regarding their respective regional development challenges, objectives and the implementation of actions to meet those objectives. Four of these meetings are held between elected representatives (including government ministers at the national level, and two politicians from each regional council, one from the governing party and the other from the opposition). A further three meetings are held between senior civil servants at national and regional levels. Issues for discussion within the Forum vary based on need, but regularly include topics such as legislative developments or funding opportunities for regional development.

The Swedish Association of Local Authorities and Regions

The Swedish Association of Local Authorities and Regions (SALAR) is a leading actor and co-ordination body in national-subnational relations. It advocates for the collective interests of subnational governments in policy negotiations with both national and supranational actors, including the national government, national government agencies, the Swedish Parliament and the European Commission. It also hosts regular fora that support horizontal co-ordination between regional and local governments on sectoral issues, while also promoting peer-to-peer learning.

Other co-ordination arrangements

All regional governments can explore the option of developing co-ordination arrangements of their own with national level bodies as a means to address sectoral policy issues. For instance, a multi-level transport council was established in 2009, in order to formalise co-ordination between relevant actors on fares, timetables and other traffic and service issues that concern Region Gotland. Participating members in the transport council include Region Gotland and relevant national public agencies, as well as other local and regional stakeholders.

Source: (SALAR, 2023[8]) (OECD, 2024[9]) (Swedish Agency for Economic and Regional Growth, 2024[18]).

Despite well-developed mechanisms for cross-sector and multi-level dialogue, these may not be amplifying the voice of islands so that it reaches regular national-level decision making for regional development. The result appears to be a wide range of national-level policy decisions being made with limited consideration of their applicability on islands or to island communities. This section discusses these challenges in detail, before providing policy recommendations that can help address them (Box 3.6).

Greater consultation with island communities on national-level policies is needed to help meet regional development objectives

There are a number of reasons why existing co-ordination and consultation arrangements may not be amplifying the voice of islands in a way that can help ensure that the design of national-level policies and programmes is coherent with island realities. While the Forum for Sustainable Regional Development allows for periodic exchange between national public actors and regional governments on regional development issues, and SALAR's advocacy at the national level helps to support the collective territorial interests of subnational governments, current co-ordination and consultation mechanisms provide limited opportunities for the regional and municipal governments of island territories to engage in regular dialogue with national public actors on island-specific challenges. There is evidence to suggest that this may be leading to national policy making that is not sufficiently place-sensitive.

For instance, the abovementioned cross-government consultation mechanisms do not provide regular opportunities for island regions and municipalities to be consulted on the wide range of national decisions being made that could disadvantage their territories relative to the mainland, such as the zoning of island land. Interviews indicated that national decision-making on the zoning of island land, be it for extractive, environmental, military or cultural purposes, is often made with limited input from island territories, despite the shortage of available land on many island territories. This lack of consultation risks contributing to a lack of land on islands being available to use for economic development purposes. For instance, developers may face challenges building new housing to accommodate island workers and their families, while businesses may face difficulties identifying new industrial sites to expand their production capacity (OECD, 2024[9]).

With regards to public services, moreover, there are also examples of where the lack of national-level consultation with island communities has affected policy implementation by creating logistical barriers to service delivery and potentially affecting access to basic services. One example links to Swedish health guidelines during the COVID-19 pandemic, which could have had serious health repercussions for island residents. For a time, all COVID-19-positive patients were prohibited from travelling on public transport, including ferries – a policy which could have precluded residents of smaller islands from being able to receive medical care on the mainland (OECD, 2024[9]).

Another education policy example pertains to the tight restrictions placed by the national government on distance learning, except when pupils have a mitigating medical, mental or social condition. There is a risk that having such tight restrictions could undermine equal access of quality education for schoolchildren living on remote and underpopulated islands (SALAR, 2021[19]). While it is true that in-person learning is more effective than online learning, and emergency situations often call for emergency measures, there is a need for additional consultation with island authorities to identify how such measures might affect their communities, and identify ways to adapt them in a way that takes account of differing island realities.

A second challenge with current vertical co-ordination and consultation arrangements relates to bandwidth for island-related advocacy. For instance, as an advocacy body for municipal priorities, perspectives and needs, SALAR is highly respected and able to balance the territorial interests of all 290 – mostly landlocked – municipal members. Yet, it has relatively limited capacity as an organisation to advocate specifically for island needs, given the broad spectrum of national decision-making where such advocacy may be necessary, as the aforementioned examples illustrate (OECD, 2024[9]). If unfilled, therefore, this capacity gap risks creating a vacuum of island voice within national policy making, which could result in the development of certain national policies and initiatives that may not be fully coherent with local island realities.

Given this, there is a need for more responsive vertical co-ordination and consultation arrangements that can amplify the voice of islands on regular national-level decision making that could affect their well-being.

Developing such arrangements is also important, moreover, in the context of supporting the national government's objective of reducing territorial inequalities within Sweden.

Strengthening cross-government consultation mechanisms to amplify island voice

There are a number of ways in which Sweden's vertical co-ordination and consultation arrangements can be strengthened to bolster the voice of islands in national policy design and implementation. This can include making adjustments to the way in which existing co-ordination mechanisms operate (e.g. SALAR), in order to improve their facilitation of dialogue between different levels of government on insularity-related issues. It can also include developing new dialogue and consultation mechanisms that can help ensure an island perspective is more systematically considered in national-level decision-making.

With regards to the former element, one way in which the government could help ensure that the "island voice" is more strongly heard in regional development policy making is by approaching organisations like SALAR to co-organise an annual islands forum. Such an event could bring together the national government (i.e. the Ministry of Rural Affairs and Infrastructure and other relevant line ministries and public agencies), subnational governments with island territories and non-governmental actors working on islands (e.g. academia, civil society and the private sector). It could offer a platform for exchange among government and non-governmental actors on strategic priorities for island development. It could also serve as an opportunity to promote peer-to-peer learning among subnational governments on how island challenges can be addressed. SALAR could work with its membership in order to shape the agenda and identify key themes for discussion that are reflective of island needs.

A similar mechanism has been adopted in other countries. For instance, the UK government hosts an annual islands forum, which includes the participation of council leaders and representatives from island territories, as well as ministers and senior officials from the Scottish Government, the Welsh Government and the Northern Ireland Executive. The forum provides an opportunity for different levels of government to discuss common island challenges and share learning (UK Government, 2024[22]).

With regards to the latter element, a number of new dialogue and consultation mechanisms could be considered, in order to ensure a more systematic consideration of island challenges in the design of national policies and programmes. First, the national government could consider introducing legislation requiring line ministries that are developing or implementing national policies or initiatives to conduct an impact assessment on island communities, when these are considered to have a "significantly different effect" on island communities relative to the mainland. The benefit of this approach is twofold. On the one hand, it would help ensure systematic consultation with island stakeholders regarding decision-making that might unfairly disadvantage them due to their geography. On the other, by only focusing on decisions with a "significantly different effect" on islands, limits could be placed on additional (i.e new) red tape that could constrain efficiency in policy design and implementation. This is an approach taken by the Scottish Government (UK) (Box 3.5).

Box 3.5. Island Communities Impact Assessments in Scotland

The 2018 Islands Act requires the Scottish Government, Local Authorities and other public bodies that are designing or implementing policies and initiatives that could have a significantly different effect on island communities to conduct an Island Communities Impact Assessment. The law aims to encourage policy makers to take greater account of challenges (e.g. those related to distance, physical geography, connectivity and/or demography) that may unfairly disadvantage islanders.

Island Communities Impact Assessments consist of a number of steps, including the following:

- Developing a clear understanding of objectives (e.g. how a policy might have a differential impact on island communities, variations in its impact across different islands, potential mitigation measures);
- Gathering island data and identifying relevant stakeholders for consultation;
- Holding the consultation with relevant stakeholders (e.g. local government officials, island experts);
- Using a standardised online template to develop the impact assessment. which must clearly outline island-related effects of the policy and supportive actions that can help to improve island outcomes;
- Publishing the impact assessment on the official website of the relevant public body.

Policy makers developing and carrying out decisions that are *not* considered to have a significantly different effect on islands are only required to provide a brief explanation on why they believe this to be the case.

Source: (Scottish Government, 2024[21])

Second, the national government could consider setting up a dedicated cross-government committee on island affairs, which could support information-gathering and exchange between national and subnational governments on island-specific matters. This approach has been adopted in Finland, where a statutory Advisory Committee for Island Affairs, composed of national, regional and local elected officials from all parliamentary parties, has been established by the national government to help monitor and improve island conditions through effective co-operation with island territories (Finnish Advisory Committee for Island Affairs, 2024[24]). The Committee is supported by a technical secretariat, composed of both public and non-governmental actors. It reviews proposals made by regional and local governments to support island development, conducts research on challenges facing islands and formulates island-related policy recommendations for the national government. The establishment of such a committee could provide a structured dialogue body through which island territories in Sweden could engage with national actors on island-related issues, while also strengthening the ability of the national government to monitor and address island development challenges.

Third and finally, the national government could consider a mechanism, similar to that seen in France, that provides opportunities for subnational governments to submit proposals to the national government regarding the possibility of adapting the way in which legislative and regulatory frameworks are applied within their territories. This could help to address the “democracy deficit” that certain stakeholders expressed feeling with regards to national decision-making on islands (OECD, 2024[24]). In particular, it could provide island regions and municipalities with a chance to make the case to national public actors for national laws and regulations to be implemented in a more place-sensitive way within their territories, in order to better meet local needs and priorities.

In France, for example, the 3DS Law grants local authorities the power to submit proposals to adapt legislative or regulatory provisions on their territory, under certain conditions, in order to address specific territorial needs. The approval of such proposals, in turn, depends on the national government's assessment of the advantages and disadvantages of allowing regulatory divergence, as well as legal feasibility (French Government, 2022[23]). Any adaptation is subject to prior consultation and approval by the national government. One possibility for Sweden would be to pilot this type of approach with a specific piece of legislation and/or for a specific island or set of islands.

Box 3.6. Recommendations to strengthen cross-government consultation mechanisms in Sweden and amplify island voice

National-level recommendations to bolster the voice of islands in national policy design and implementation:

- Sweden should build on its existing vertical co-ordination and consultation arrangements to bolster dialogue between the national government, on the one hand, and subnational governments of island territories and non-governmental actors working on islands, on the other. Various options can be explored by the national government, including:
  - Proposing that SALAR organises an annual islands forum, in order to support exchange between the national government, subnational governments of island territories and non-governmental actors working on islands;
  - Introducing legislation requiring line ministries that are developing or implementing national policies or initiatives to conduct an impact assessment on island communities;
  - Setting up a dedicated cross-government committee on island affairs, which could support information-gathering and exchange between national and subnational governments on island-specific matters;
  - Granting local authorities the power to submit proposals to adapt legislative or regulatory provisions on their territory in order to address specific territorial needs (subject to prior consultation and approval by the national government).

Subnational funding and financing arrangements to further island development

The current subnational fiscal system in Sweden provides important benefits to island communities (Box 3.7). Notably, Sweden's cost equalisation grant compensates territories, including island regions and municipalities, for structural differences – including geography – in their costs of public service provision (OECD, 2021[26]). Overall, Sweden's fiscal equalisation system and the wide range of block and ear-marked grants provided to subnational governments help all territories, including islands, fulfil their service delivery mandates effectively. This is in keeping with the Swedish government's principle that all citizens should have equal access to public services regardless of where they choose to live (OECD/UCLG, 2022[27]).

Box 3.7. System of subnational government financing in Sweden

Sweden's regional and local governments are responsible for providing a wide range of public services and social benefits. Subnational governments in Sweden account for 48.7% of general government expenditure and 25.6% of GDP, significantly higher than the equivalent OECD averages (of 36.6% and 17.1% respectively). These high shares in part reflect the responsibility that subnational governments have for paying the wages of teachers, as well as social and health employees (OECD/UCLG, 2022[27]).

Healthcare and education comprise the largest items for subnational government spending, followed by general public services. Sweden's subnational governments are also responsible for 46.8% of subnational public investment.

Subnational governments in Sweden have substantial financial resources at their disposal to support their service delivery mandates. They are funded by a mixture of grants and subsidies from the national government, tax revenues (shared and own-source), user charges and fees, income from other assets (e.g. property) and other revenue sources.

Own-source revenues account for 62% of subnational government revenue. Subnational tax revenue is composed almost entirely of Personal Income Tax (PIT) and "real estate fees", which approximate a property tax. Grants and subsidies from the national government include block and earmarked grants as well as revenue from the fiscal equalisation system, which aims to redistribute resources between municipalities and regions, in order to compensate for large differences in citizens' taxable income and costs of service provision.

Source: (OECD/UCLG, 2022[27]) (OECD, 2021[26])

Yet, despite Sweden's robust framework for subnational finance and investment, it may be more difficult for island territories and communities to make the most of the support offered. First, there is a risk that the current lack of consultation with island-level stakeholders regarding the calculation of the cost equalisation formula could lead to potential underfunding of the service mandates of island territories. Second, there is a risk that the eligibility criteria of certain EU funds, and the lack of human resource capacity to apply for funds among potential island beneficiaries, could risk widening development gaps with the mainland. This section discusses these challenges in turn, before turning to policy recommendations that can help to address them (Box 3.9).

The need for additional discussion with subnational-level stakeholders in the calculation of the cost equalisation formula

There is a perception that Sweden's current fiscal equalisation formula fails to accurately measure the differential service delivery costs on islands relative to the mainland (Public Partner, 2023[31]; Swedish Parliament, 2024[32]). Sweden's fiscal equalisation system is reviewed by a parliamentary committee every few years – when there is a need for it or as a result of political priorities,[115] but monitoring and discussions between reviews is limited (OECD, 2021[26]). The relative infrequency of these reviews, along with the lack of ongoing discussions with subnational-level stakeholders, means that there are limited opportunities for any issues related to the formula's measurement of differential service delivery costs on island territories

[115] The latest review is the first complete review for a very long time. And unique as it also includes equalisation outside the equalisation system (the equalisaton for measures according to the act concerning support and service for persons with certain functional impairments) as well as targeted government grants.

to be identified and adjusted for. This situation, in turn, risks presenting island territories with challenges in meeting their service delivery mandates, as any mismeasurement of differential service delivery costs could lead to insufficient compensation being provided to them through the cost equalisation system.

Gotland provides a practical example of the equalisation formula problematic. By virtue of its isolation from the mainland and its dual status as a region and a municipality, Gotland is required to provide a wide range of complex – and often costly – public services (e.g. urgent and specialist medical services, and emergency transport services to the mainland) for its relatively small population of 60 000 residents, as well as significant numbers of part-time residents and tourists. The costs are compounded by Gotland's distance from the mainland, limiting its ability to enter into inter-municipal or macro-regional cooperative arrangements. It thereby misses out on opportunities to build scale and bring down costs by pooling financial resources for more cost-effective service delivery. Some research has suggested Gotland's distance from the mainland, which effectively constitutes a cost of insularity, is not currently being fully taken into consideration by the cost equalisation formula (Public Partner, 2023[29]; OECD, 2024[9]).

In this regard, it is worth noting that the parliamentary committee's most recent review of the fiscal equalisation system, published in July 2024, proposed changes to the cost equalisation formula in order to better compensate island territories for their costs of insularity.[116] In particular, it recommended that the formula be updated so that municipalities where a higher proportion of residents live on islands with: i) fewer than 1 500 inhabitants and ii) no bridge connection to the mainland are eligible for additional compensation relative to other territories (Swedish Parliament, 2024[30]).

Improving island access to EU Cohesion Policy funds

All Swedish territories, including islands, are potential beneficiaries of various EU funds. However, Sweden's eligibility criteria for granting certain funds, such as Cohesion Policy funding, may place potential beneficiaries on islands at a disadvantage relative to those on mainland territories. This disadvantage is rooted in the project selection criteria that reward extensive inter-municipal or macro-regional cooperation, with more points (Swedish Agency for Economic and Regional Growth, 2024[31]).

Given the geographic position and general size of Sweden's islands, the ability of beneficiaries to design projects that involve macro-regional co-operation is limited. Furthermore, inter-municipal co-operation can also pose a challenge. For Gotland and Öckerö, it is not possible as these two islands are their own municipalities, and co-operation with mainland municipalities is at best impractical. Öland may be the only island that in and of itself could meet an inter-municipal cooperation criterion (as it comprises two municipalities - Borgholm and Mörbylånga). The remaining islands are administratively part of mainland municipalities. These municipalities could indeed design projects that meet an eligibility or selection criterion of inter-municipal co-operation. Yet whether the island portion of the municipality – or their business and residents – would directly participate or benefit is less evident. Given that Cohesion Policy funding is meant to reduce inter- and intra-regional inequalities, ill-adapted selection criteria leave island territories less able to apply for funding risk widening development gaps with the mainland.

Relatedly, the lack of human resource capacity in certain Swedish island municipalities could further affect their ability to apply for and manage EU Cohesion Policy or other funding sources, limiting their investment capacity for development. While smaller municipalities are more likely to lack sufficient staff and skills to be able to carry out EU funding-related tasks effectively, owing to their limited size, such activities can also present a challenge for larger municipalities. For instance, interviews indicated that Region Gotland has limited resources in terms of time and available staff to work on EU funding-related tasks (OECD, 2024[9]).

[116] This does not affect Gotland much. Other parts of the proposed changes are more relevant, especially compensation for long distances, weak population base and small-scale operations.

Therefore, there appears to be a need to better match programming and selection criteria with the needs and capacities of island administrations.

Amplifying the voice of islands in subnational financing and investment mechanisms

In order to help ensure that current subnational funding and financing arrangements appropriately support the fiscal and investment needs of islands, there are a number of steps that policy makers could take. For instance, when periodic reviews of the fiscal equalisation formula take place, the national government could work more closely with island territories to ensure that the costs of service delivery are accurately measured. A relevant national public body could be tasked with leading this work, such as the Swedish Agency for Economic and Regional Growth. It could, for example, launch a working group on islands, which could be comprised of political and technical officials representing island territories at the national and subnational levels, as well as non-governmental actors (e.g. academic researchers, NGOs).

The group could develop research on island costs, as well as proposals for how the equalisation formula and other subnational-level grants might be adjusted to capture such costs more effectively. These proposals could then be presented to the national government for consideration, either through a newly established islands forum or through SALAR's regular dialogue with national officials.

An alternative approach could be for the national government to establish a system of continuous monitoring of the equalisation formula, involving a range of stakeholders, including subnational governments with island territories. This would allow for more real-time debates regarding the costs of service delivery on islands. Continuous monitoring can also make it easier to introduce temporary adjustment measures, should they be deemed necessary by relevant stakeholders, until the next vintage of the cost equalisation system is in place (OECD, 2021[26]).

Both approaches would support a more constructive dialogue between national and subnational stakeholders on how to account for the costs of island insularity, which could inform the future design of the fiscal equalisation system and other subnational-level grants.

Improving opportunities for island communities to access EU funds

Improving opportunities for island communities to access EU funding opportunities, to support investment for their development, could help mitigate any potential for increasing territorial inequalities on islands. This could be achieved, for example by: i) reviewing the national programming process, as well as the eligibility and selection criteria for EU Cohesion Policy funds in Sweden and adjusting them, where possible, to better match the realities of island territories; and ii) strengthening the capacity of beneficiaries on Swedish islands to apply for EU funding opportunities. For example, support for innovation could also include non-technology driven innovations or a different 'point-reward' mechanism for islands that cannot realistically participate in inter-municipal or cross-regional project calls).

With regards to programming, there may be opportunities for national and EU policy makers to ensure a more effective implementation of Article 174 of the Treaty on the Functioning of the European Union (TFEU) at Member State level. This Article maintains that the role of the European Regional Development Fund (ERDF) is to contribute to reducing inter-regional development disparities, with particular attention to be paid to regions that suffer from "permanent natural or demographic handicaps, […including…] islands" (Official Journal of the European Union, 2021[30]). At the same time, it has been suggested that there may be an inconsistent application of this principle to different EU islands facing insularity challenges, and where EU Member States make specific provisions in Programmes for their islands-regions to be able to access funding through the instrument, this generally reflects the special status of these islands within the Member State's constitution (INSULEUR, 2022[31]).

Several steps could be taken to ensure that the provisions of Article 174 TFEU are being widely applied across EU Member State islands. For instance, when designing their Programmes for the 2028-2034 EU Programming Period, policy makers from Member States, such as Sweden, could be encouraged to develop specific programmes that aim to address the permanent natural or demographic handicaps of islands. This could provide a basis for the design of ERDF funding calls that specifically aim to address the insularity-related challenges affecting certain island governments and communities.

The European Commission could also play a role in supporting this process during the screening of Partnership Agreements and Programmes, by reminding Member States of their obligations to proactively support regions that suffer from permanent natural or demographic handicaps. Island regions and municipalities could further support this process in Sweden by working with SALAR to develop joint proposals, aimed at Managing Authorities, on the types of programmes that could be designed to help address island-specific needs.

In order to strengthen the capacity of subnational governments with island territories to apply for EU funding opportunities, the Swedish Agency for Economic and Regional Growth could test the concept of employing a small number of dedicated island co-ordinators, that have experience and knowledge of the local conditions and challenges. In particular, they could focus on helping less capacitated islands access EU Funds, and could leverage specialist expertise in areas such as proposal-writing. Funding for this purpose could either be provided through the Technical Assistance budget or by the national government.

Island co-ordinators could perform a number of tasks, such as providing subnational governments with information on EU funding and financing opportunities that could be of interest to island stakeholders, and offering periodic trainings on how to design more competitive project proposals for EU funding. They could also strengthen the quality of draft project proposals developed by subnational governments by providing feedback. At the same time, any such team would need to be removed from decisions on the allocation of EU funding, in order to avoid accusations of project selection bias. On islands, in particular, care would also need to be taken to avoid potential conflicts of interest.

A comparable approach has been adopted by Croatia, where eleven island co-ordinators have been appointed to cover every coastal region. As part of their tasks, island co-ordinators are responsible for helping island territories secure EU funding for development projects, for instance by identifying relevant funding opportunities and assisting subnational governments with proposal-writing. As such, they play a key role in channelling funding to help address the diverse and unique needs of island communities (Box 3.8).

Box 3.8. The role of island co-ordinators in Croatia

Croatia has appointed 11 island co-ordinators to cover every coastal region, as is foreseen in the 2019 Regulation on the number of island co-ordinators and coverage of the island area for which each island coordinator performs the prescribed tasks. Each island co-ordinator is responsible for co-ordinating activities within their designated island or group of islands. Operating at the regional level, co-ordinators report to the Ministry of Regional Development and EU Funds. The 11 island co-ordinators form a network, enabling them to exchange knowledge, experiences, and best practices to better address the challenges of Croatia's island communities.

Tasks and responsibilities

Island coordinators in Croatia have the following tasks and responsibilities:

- Liaison and communication: island co-ordinators act as a liaison between island communities and various levels of government (national, regional, and local). They facilitate cross-government communication and ensure that the needs and concerns of island residents are conveyed to the relevant authorities.
- Co-ordination of development projects: they co-ordinate the planning, implementation, and monitoring of island development projects on the islands. This includes ensuring that projects are aligned with regional and national development plans and that they address the specific needs of island communities.
- Resource allocation: island co-ordinators support the allocation of resources, ensuring that funds and other resources are distributed effectively and efficiently to support island development projects. They also help island communities to secure additional funding from various sources (e.g. the EU).
- Policy implementation: They play a crucial role in the implementation of policies related to island development. This includes ensuring that policies are adapted to the specific context of the islands and that they are executed in a timely and effective manner.
- Monitoring and reporting: island co-ordinators support monitoring the progress of development projects and policies on the islands. They collect data, track performance, and report on outcomes to relevant authorities. This helps with assessing the impact of initiatives and enabling necessary adjustments to be made.
- Community Engagement: Engaging with island communities is a key part of the role. Island co-ordinators facilitate public consultations, gather feedback from residents, and ensure that community input is incorporated into development plans and projects.
- Problem solving and support: They provide support to local governments and other stakeholders on the islands in addressing challenges and overcoming obstacles related to development initiatives. This can include providing technical assistance, facilitating partnerships, and resolving conflicts.
- Advocacy and representation: Island co-ordinators advocate for the interests of island communities at various forums and represent the islands in discussions and negotiations with higher levels of government and external partners.

Source: (OECD, Forthcoming[31])

Box 3.9. Recommendations to strengthen subnational financing arrangements for island development in Sweden

National-level recommendations to help amplify the voice of islands in the design of subnational financing and investment mechanisms:

- The national government could work closely with island stakeholders (i.e. island regions and municipalities, as well as academic experts) to help ensure that subnational funding and financing arrangements appropriately support island fiscal and investment needs, including by:
    - Creating a cross-government working group on islands that develops research and proposals to improve accounting for island costs in the design of subnational financing arrangements; and/or
    - Establishing a system of continuous monitoring of the equalisation formula, involving a range of relevant stakeholders (including island regions and municipalities).

National-level recommendations to help improve opportunities for island communities to access EU funding:

- The national government could consider new ways to help improve opportunities for island communities to access EU funding. This could include, for example:
    - Reviewing programming and eligibility requirements for EU funding in Sweden (e.g. Cohesion Policy funds, EU programmes under direct and indirect management) to ensure they match the realities of island territories;
    - Developing specific funding calls that aim to address the permanent natural or demographic handicaps of islands;
    - Employing a small number of island co-ordinators within the Swedish Agency for Economic and Regional Growth that can work with island territories to strengthen their capacity to apply for EU funding (e.g. by sharing information on relevant calls, offering trainings on proposal-writing, providing feedback on draft project proposals).

EU-level recommendations to improve opportunities for island communities to access EU funding:

- The European Commission can encourage Member States to improve opportunities for island communities to access EU funding, including by:
    - Using the Partnership Agreements and Programmes screening process to remind Member States of their obligations to support regions that suffer from permanent natural or demographic handicaps.

Subnational-level recommendations to improve opportunities for island communities to access EU funding:

- Island regions and municipalities could encourage the national government to improve opportunities for island communities to access EU funding, including by:

Using SALAR to develop joint proposals aimed at Managing Authorities on specific programmes that could be designed to help address island-specific needs in Sweden.

Concluding policy remarks

Island communities in Sweden face specific development challenges face relative to the mainland. Such challenges are linked to their geography, frequently higher operating and service delivery costs, and seasonality in their demographics. These factors can affect island labour and housing markets, education and healthcare services, connectivity, and overall productivity. There is, therefore, a need to consider islands as unique territories, as well as active contributors to national strategic frameworks, policies and regional development plans. This could improve the possibility that they meet development objectives and also limit any current or potential inter- and intra-regional territorial inequalities that islands may experience. This speaks to the importance of adopting a more place-sensitive approach to national policy making, in order to better take specific island needs into account. Adjustments to how existing strategic frameworks are applied, as well as vertical co-ordination and consultation and funding and financing arrangements for regional development, are all areas identified by the OECD where a more place-sensitive approach could make a difference to island economies and the well-being of island residents.

Sweden's multilevel governance framework is not fully adapted to island-specific challenges. The chapter identifies gaps in vertical and horizontal coordination, as well as in stakeholder inclusion. Island municipalities often lack voice in national strategies and have limited access to tailored support. Policy alignment is hindered by unclear mandates and fragmented responsibilities. Effective island development demands coherent planning across sectors -- yet current arrangements result in duplication, gaps, and missed synergies.

Strengthening governance frameworks requires a dedicated island coordination platform, improved policy integration, and enhanced capacity at local levels. Institutionalising regular dialogue between municipalities and national actors, clarifying roles, and building cross-island cooperation mechanisms will be essential to improve policy coherence and delivery. For these purposes, data availability and coordination mechanisms must be improved. There is no common national platform or dedicated island coordination body. This limits knowledge sharing, benchmarking, and policy innovation.

.

References

Finnish Advisory Committee for Island Affairs (2024), *Saaristoasiain neuvottelukunta [Advisory Committee for Island Affairs]*, https://www.saaristopolitiikka.fi/saaristopolitiikka/sank (accessed on 18 October 2024). [21]

French Government (2022), *Law No. 2022-217 of February 21, 2022 relating to differentiation, deconcentration and providing for various measures to simplify local public action*, https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000045197395 (accessed on 17 July 2024). [23]

INSULEUR (2022), *European Regional Development Fund & Cohesion Fund 2014-2020 – ex post evaluation*, https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13301-European-Regional-Development-Fund-Cohesion-Fund-2014-2020-ex-post-evaluation/F2820496_en (accessed on 22 July 2024). [31]

Kolada (2024), . [14]

OECD (2024), *Comments on the Draft Sweden Diagnostic provided by stakeholders in Sweden to the OECD, September 2024*. [38]

OECD (2024), "Fostering higher-order thinking skills online in higher education: A scoping review", *OECD Education Working Papers No. 306*, https://www.oecd.org/en/publications/fostering-higher-order-thinking-skills-online-in-higher-education_84f7756a-en.html (accessed on 2024 August 1). [18]

OECD (2024), *Interview responses provided by stakeholders in Sweden to the OECD, during the OECD islands mission, April 2024*. [10]

OECD (2024), *Responses to the OECD islands project questionnaire provided by stakeholders in Sweden*. [22]

OECD (2023), *Inception report: Improving the quality of multi-level governance and strengthening the resilience of island economies of Croatia, Greece and Sweden*. [4]

OECD (2023), *Recommendation of the Council on Regional Development Policy*, https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0492 (accessed on 30 July 2024). [1]

OECD (2023), *Recommendation of the Council on Regional Development Policy*, https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0492 (accessed on 30 July 2024). [6]

OECD (2022), "OECD Territorial Reviews: Gotland, Sweden", *OECD Territorial Reviews*, https://doi.org/10.1787/aedfc930-en (accessed on 11 July 2024). [3]

OECD (2021), "Keeping regional inequality in check in Sweden", *OECD Economics Department Working Papers*, https://www.oecd-ilibrary.org/economics/keeping-regional-inequality-in-check-in-sweden_e4bec28f-en#:~:text=Regional%20inequality%20is%20low%20in,whose%20inhabitants%20feel%20left%20behind. (accessed on 29 July 2024). [33]

OECD (2021), “Keeping regional inequality in check in Sweden”, *OECD Economics Department Working Papers*, https://www.oecd-ilibrary.org/economics/keeping-regional-inequality-in-check-in-sweden_e4bec28f-en (accessed on 29 July 2024). [24]

OECD (2019), “Making Decentralisation Work: A Handbook for Policy-Makers”, *OECD Multi-level Governance Studies*, https://doi.org/10.1787/g2g9faa7-en (accessed on 23 October 2024). [40]

OECD (2014), *Recommendation of the Council on Effective Public Investment Across Levels of Government*, https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0402 (accessed on 30 July 2024). [34]

OECD (Forthcoming), *Improving the quality of multi-level governance and strengthening the resilience of island economies of Croatia, Greece, and Sweden: Draft policy report - Croatia*. [32]

OECD/UCLG (2022), *2022 Country Profiles of the World Observatory on Subnational Government Finance and Investment: Sweden*, https://www.sng-wofi.org/country-profiles/ (accessed on 18 July 2024). [25]

Official Journal of the European Union (2021), *Regulation (EU) 2021/1058 of the European Parliament and of the Council of 24 June 2021 on the European Regional Development Fund and on the Cohesion Fund*, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32021R1058 (accessed on 22 July 2024). [30]

Public Partner (2023), *Ö-kostnader i utjämningsperspektiv [Island costs in an equalization perspective]*, https://dokument.gotland.se/IntegrationService.svc/doc/content/40199 (accessed on 19 July 2024). [27]

Region Norrbotten (2020), *Regional utvecklingsstrategi för Norrbotten 2030 [Norrbotten Regional Development Plan 2030]*, https://www.norrbotten.se/globalassets/amnen/politik-och-demokrati/regionfullmaktige/sammantraden/2019/13-februari/regional-utvecklingsstrategi-2030.pdf (accessed on 29 July 2024). [35]

Region Stockholm (2022), *Regional utvecklingsplanering för Stockholm 2050 [Regional Development Plan for Stockholm 2050]*. [37]

Region Västra Götaland (2021), *Regional utvecklingsstrategi för Västra Götaland 2021 – 2030 [Regional Development Strategy for Västra Götaland 2021 – 2030]*, https://mellanarkiv-offentlig.vgregion.se/alfresco/s/archive/stream/public/v1/source/available/sofia/rs10001-385633856-18/native/Regional%20utvecklingsstrategi%20f%c3%b6r%20V%c3%a4stra%20G%c3%b6taland%202021%e2%80%932030.pdf (accessed on 29 July 2024). [36]

SALAR (2023), *Swedish Association of Local Authorities and Regions*, https://skr.se/skr/englishpages.411.html (accessed on 11 July 2024). [9]

SALAR (2021), *Distance and distance learning*, https://skr.se/skr/skolakulturfritid/forskolagrundochgymnasieskolakomvux/skrssatsningarutvecklaskolan/fjarrochdistansundervisning.9551.html (accessed on 12 July 2024). [17]

Scottish Government (2024), *’Island-Proofing’ your work: Introducing Island Communities Impact Assessments (ICIA)*, https://www.gov.scot/publications/island-proofing-work-introducing-island-communities-impact-assessments-icia/pages/3/ (accessed on 15 July 2024). [20]

Scottish Government (2024), *Scottish Islands Typology: overview 2024*, [1

https://www.gov.scot/publications/scottish-islands-typology-overview-2024/pages/4/ (accessed on 5 February 2024). [5]

Statistics Sweden (2024), *Befolkningstäthet i Sverige [Population density in Sweden]*, https://www.scb.se/hitta-statistik/sverige-i-siffror/manniskorna-i-sverige/befolkningstathet-i-sverige/ (accessed on 22 July 2024). [13]

Statistics Sweden (2023), *93 000 inhabitants on islands without mainland connection*, https://www.scb.se/en/finding-statistics/statistics-by-subject-area/environment/land-use/land-use-in-proximity-to-shoreline/pong/statistical-news/land-use-in-proximity-to-shoreline-populated-islands-without-a-mainland-connection-by-bridge-2020/ (accessed on 30 July 2024). [2]

Swedish Agency for Economic and Regional Growth (2024), *5. Så bedömer och fattar vi beslut om er ansökan [5. How we assess and make a decision on your application]*, https://tillvaxtverket.se/tillvaxtverket/sokfinansiering/handbocker/handbokforeuprojekt20212027/ansoka/5sabedomerochfattarvibeslutomeransokan.3595.html (accessed on 17 October 2024). [29]

Swedish Agency for Economic and Regional Growth (2024), *Forum för hållbar regional utveckling [Forum for sustainable regional development]*, https://tillvaxtverket.se/tillvaxtverket/seminarierochnatverk/natverkochsamverkan/allanatverk/forumforhallbarregionalutveckling.2833.html#:~:text=Forumet%20%C3%A4r%20regeringens%20m%C3%B6tesplats%20med,utvecklingsarbetet%20mer%20effektivt%20och%20resultat (accessed on 11 July 2024). [16]

Swedish Agency for Regional and Economic Growth (2024), *Ansvar för EU-fonder [Responsibility for EU Funds]*, https://tillvaxtverket.se/tillvaxtverket/omtillvaxtverket/eufonder/sajobbarvimedeufonderna.5911.html (accessed on 29 July 2024). [26]

Swedish Government (2024), *Ministry of Rural Affairs and Infrastructure*, https://www.government.se/government-of-sweden/ministry-of-rural-affairs-and-infrastructure/ (accessed on 11 July 2024). [11]

Swedish Government (2024), *Presentation by the Ministry of Rural Affairs and Infrastructure for the OECD during the OECD islands mission in Sweden, April 2024*. [12]

Swedish Government (2021), *Nationell strategi för hållbar regional utveckling i hela landet 2021-2030 [National Strategy for Sustainable Regional Development 2021-2030]*, https://data.riksdagen.se/fil/6ABB6793-F941-41BF-BF60-78D05641BCB8 (accessed on 3 July 2024). [5]

Swedish Government (2018), *En sammanhållen politik för Sveriges landsbygder [Coherent Rural Policy Bill 2018]*, https://www.regeringen.se/rattsliga-dokument/proposition/2018/03/en-sammanhallen-politik-for-sveriges-landsbygder--for-ett-sverige-som-haller-ihop/ (accessed on 3 July 2024). [8]

Swedish Government (2013), *The Constitution of Sweden*, https://www.government.se/contentassets/7b69df55e58147638f19bfdfb0984f97/the-constitution-of-sweden/ (accessed on 2024 October 17). [39]

Swedish Government (2010), *Law on Regional Development Responsibility and Regulation*, https://www.riksdagen.se/sv/dokument-och-lagar/dokument/svensk-forfattningssamling/lag-2010630-om-regionalt-utvecklingsansvar_sfs-2010-630/ (accessed on 3 July 2024). [7]

Swedish Parliament (2024), “Nätt och jämnt - Likvärdighet och effektivitet i kommunsektorn [Fair and even - Equality and efficiency in the municipal sector]”, *Betänkande av Utjämningskommittén - [Report of the Equalisation Committee]*, https://www.regeringen.se/rattsliga-dokument/statens-offentliga-utredningar/2024/07/sou-202450/ (accessed on 16 October 2024). [28]

UK Government (2024), *4th Islands Forum opens up collaboration on housing for islands*, https://www.gov.uk/government/news/4th-islands-forum-opens-up-collaboration-on-housing-for-islands (accessed on 15 July 2024). [19]

.