

Small Mediterranean Islands at the Frontline: Advancing a Just Transition to a Circular, Plastic-Free Economy

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Executive Summary

This submission is a collective effort which aligns with EU and Mediterranean goals (Green Deal, EU Plastics Strategy, Marine Strategy Directive, EU Islands Pact, EU Mission 'Restore our Oceans and Waters 2030', the Regional Plan on Marine Litter Management in the Mediterranean (UNEP-MAP)) and calls for an integrated island strategy with a clear focus on circular solutions.

The aim of this document is to present a set of policy recommendations and key messages for policy stakeholders. Key recommendations include mainstreaming islands' needs into EU laws (insularity clause), dedicating funds for island circular projects, strengthening local governance and networks, building infrastructure (prevention and recycling, reuse new business models and deposit-return systems, marine litter collection), and instituting island-level monitoring.

Short-term actions should embed Interreg Euro Med [Loop Zone project](#) results into local regulations and fund pilots; medium-term should scale reuse and recycling infrastructure and tourism standards; long-term should fully integrate islands into EU waste and climate goals.

Introducing the Challenge: Marine Litter on Small Mediterranean Islands

Mediterranean islands face **acute plastic pollution** and waste pressures due to tourism and limited waste management infrastructure. The Mediterranean Sea is polluted by an estimated 730 tonnes of plastic waste every day, single-use plastics represent more than 60% of the total recorded marine litter on beaches and concentrations of microplastics at sea surface exceed 64 million floating particles per square kilometre in certain locations*. Small tourist islands (e.g., Formentera, Salina, Skiathos, Vis, Gozo) host thousands of visitors annually, causing local waste and water management systems to be overwhelmed.

The [Loop Zone project](#), implemented by a consortium of sectoral organisations and local authorities, is piloting a circular-economy "Low Plastic Zone" approach on five such islands to reduce single use plastic (SUP) products use in the hospitality sector (HORECA), including restaurants, bars and caterings (including take-away).

The model, built on a 3-pillar approach—policy, business support, and innovation—will be tested locally, transferred and accessible via a digital platform, and scaled through a regional island network. The goal: transform the tourism sector from a take-make-waste model to a circular economy that works for both people and the sea.

The table below presents information on the five islands participating in the Loop Zone project, detailing their population, annual number of visitors (indicating touristic pressure), waste generation per capita per year, estimated recycling rate, primary waste treatment method, and main ports.

Island	Country	Pop. (est. 2025)	Annual Visitors	Waste kg/cap-yr	Recycling (%)	Main Treatment	Waste	Key Port/Marina
Formentera	Spain	~11,690	~336,000 (2025)-	~930 (est.)	~50% (est.)	Local collection; shipped off-island for recycling/landfill		La Savina port (ferry)
Salina (Aeolian)	Italy	~2,500	~25,000 (est.)	~589(est.)	~30% (est.)	Local waste plan; shipped off-island		Santa Marina (ferry) Malfa marina (pending 2026)
Skiathos	Greece	~6,000	~500,000 (est.)	Between 551 and 726 kg/cap-yr	~10% (est.)	Local landfill, limited recycling		Skiathos port
Vis	Croatia	~3,500	~60,000 (est.)	~300 (est.)	~40% (est.)	Local sorting; waste shipped off-island		Vis port
Gozo	Malta	~41,000	~192,000 (est.)	~450 (est.)	~20% (Malta)	Transfer station Waste shipped off-island		Mgarr harbour (ferries)

Table 1: Loop Zone context island data (based on data from Loop Zone research plans)

* UNEP data: <https://www.unep.org/unepmap/resources/factsheets/pollution>.

Background and Policy Context

This paper is made in response to the European Commission’s call for evidence for an **EU Islands Strategy**. It also supports the parallel “EU Strategy for Coastal Communities”. The EU Islands Strategy is conceived under the **European Ocean Pact** (June 2025) and should dovetail with the **Green Deal**, **EU Plastics Strategy** (including the SUP Directive), and **Marine Strategy Framework Directive (MSFD)** on marine litter. Islands are expressly identified as needing tailored policy with the EU’s own advisory bodies calling for a legally anchored “Islands Pact” (with an insularity clause) to integrate island constraints (e.g., isolation, service deficits, seasonality and tourism dependency) across EU policies. The **Clean Energy for EU Islands** initiative and other Green Deal funds (Cohesion, EMFAF, JTF, InvestEU) can provide financing that must be linked to circular-waste objectives. In short, preventing

marine litter on islands fits multiple EU aims: decarbonised, competitive blue economies; protected marine areas ecosystems (MSFD Descriptor 10); and resilient island societies. The Loop Zone project exemplifies how EU funding (Interreg Euro-MED Sustainable Tourism Mission) can help jumpstart this transition.

Small Mediterranean tourist islands suffer **seasonal waste surges and increasing amounts of plastic entering the environment**. Thousands of visitors to the project's pilot islands generate tons of tourist waste each summer. The hospitality sector's linear model ("take-make-waste") produces enormous SUP litter: plastic cups, bottles, straws, cutlery, wet wipes, cigarette buds, etc. Even though 75% of citizens back SUP bans, implementation lags. Existing EU laws (SUP Directive, Waste Framework Directive or the EU Packaging and Packaging Waste Regulation (PPWR)) mainly focus on national reductions, but on isolated islands **local systems are overwhelmed**. Many islands lack the capacity to prevent, reuse, recycle or treat peak-season waste, so plastic ends up in landfills or directly in the sea. MSFD monitoring and JRC surveys show beaches strewn with plastic debris in summer, and costly litter removal is common on island resorts.

The social-economic impacts are stark: tourism revenues fund island livelihoods, but **polluted beaches and harbours threaten the brand and biodiversity** of these "oases". Fishing and aquaculture nets, sewage system infrastructures and ports/marinas facilities can be damaged by floating single use plastic (SUP) products. Marine litter also places additional burdens on maritime services, requiring time and resources for monitoring and cleanup.

Beyond waste management pressures, small Mediterranean islands face a structural imbalance between tourism-driven economic growth and the capacity of local ecosystems and infrastructure to absorb its impacts. This temporary multiplication of the population leads to significant increases in waste generation, water consumption, energy demand and transport pressure, often within a very short timeframe. Seasonal tourism often creates unstable labour markets, characterised by short-term employment and a growing dependence on seasonal workers. At the same time, increasing tourism demand can drive up housing prices and living costs for permanent residents, making it more difficult for local communities to maintain long-term demographic stability.

Local waste management systems on islands are typically designed around the needs of permanent residents and therefore struggle to cope with seasonal peaks. In many cases, waste must be transported to the mainland for treatment due to limited processing capacity on the island itself. This logistical dependence significantly increases costs for local authorities and reduces the resilience of island waste management systems.

These pressures highlight a key structural issue: small island communities are expected to manage environmental challenges generated largely by external tourism

flows, while having significantly fewer financial and administrative resources than mainland regions.

Notably, islands host a high proportion of public infrastructure (ports, treatment plants) per capita, meaning inefficiencies hit island budgets harder. These strains also exacerbate year-round living issues: high property prices (due to tourism), labour shortages (seasonal service jobs), and climate risks (heatwaves, saltwater intrusion) compound the problem. Rapid tourism development can generate significant pressure on local landscapes, housing markets, infrastructure, and cultural heritage. If unmanaged, these processes risk gradually eroding the very characteristics that make island destinations unique and attractive.

Safeguarding the authenticity of island landscapes, cultural heritage and traditional ways of life should therefore be recognised as a central objective of future EU island policies. Sustainable tourism strategies must address not only environmental impacts such as plastic pollution, but also broader socio-economic and spatial pressures that affect the long-term viability of island communities.

The Loop Zone Project: Approach and Early Results

The Loop Zone project (2025–2029, €4.0M, 12 partners) directly addresses these challenges. It applies a '**Low Plastic Zone**' (**LPZ**) concept on five tourist islands (Formentera, Salina, Skiathos, Vis, Gozo) by aligning local stakeholders (municipalities, HORECA sector and NGOs) around very concrete goals. The three-pillar model has **(1) policy support, (2) business/sector support, and (3) innovation support**. Key features include:

- **Pilot Design (Study):** MedWaves (the UNEP-MAP regional centre) leads analysis of existing policies and plastic use. Each island conducts baseline assessments of SUP flows (hotels, restaurants, take aways shops) and waste handling. A tailored Decision Support System and monitoring framework (MEL) are set up to measure plastic use and project impacts.
- **Local Action (Test):** Tourism operators receive training and tools to **measure their plastic footprint** and switch to reusables or sustainable alternatives. Business support encourages new circular economy models (e.g., reuse and refill services, deposit refund schemes or service models) to replace SUPs. Islands enforce local ordinances (e.g., bans or fees) in line with EU reduction targets. These pilots test integrated waste-reduction strategies covering supply chains, waste segregation, new reuse business models and tourist behaviour.
- **Scaling (Transfer):** Successes are shared via digital platforms and an island network. Best practices are transferred to other islands and coastal areas beyond the pilots. MedWaves engages with policy forums (UNEP-MAP, INC plastics treaty, regional Conventions) to feed lessons into broader frameworks.

The project expects **measurable outcomes**: significant reductions in SUP consumption on pilot islands, tested 3-step solution models for HORECA, and strengthened local capacity to tackle plastic waste. The consortium includes both policy and on-island partners (municipalities, tourism associations), ensuring that actions are evidence-based and context-specific.

Notably, Loop Zone sits within the “Sustainable Tourism Mission” of Interreg Euro-MED. It therefore draws on proven strategies to make tourism greener.

Key Barriers and Opportunities

Small islands face **barriers to circular economy adoption**:

- Fragmented governance (multiple municipalities, limited staff), small markets deterring private investment, and low political visibility.
- Enforcement of EU directives and policies is uneven in practice on small islands. For instance, even though the SUP Directive prohibits many plastic items by 2026, local by-laws or alternatives may be absent.
- Risk of implementation of greenwashed alternatives that appear sustainable or circular, but do not fit island supply chains and operational reality.
- Funding: EU funding often goes to large infrastructure (e.g., energy grids), while smaller, community-driven circular projects lack tailored support.
- Socially: operators resist change unless alternatives are proven and affordable; residents need buy-in (e.g., prevention and recycling are only effective if locals participate).
- Seasonality (tourism pressure): is a structural driver of waste generation and infrastructure stress.
- Territorial planning (water, energy, waste, biodiversity) must often not include a circular economy approach, despite these issues are deeply interconnected on small islands.

However, islands also offer **opportunities for systemic innovation**:

- They are discrete territories where new models can be trailed and visible (a single island-wide deposit refund scheme or beach cleanup campaign can succeed faster than in a continent). Their clearly defined geographic boundaries, strong community networks and high visibility as tourism destinations make them ideal testing grounds for innovative environmental policies and circular economy solutions.

- Their communities often share a strong identity around clean seas and landscape, which can be harnessed to adopt labelling schemes, such as Low Plastic Zone, “blue Med citizenship” or “adopt a beach scheme”.
- Participatory governance mechanisms (e.g., island committees), can be key for ensuring ownership and long-term success of initiatives.
- Tourist businesses have incentives to maintain their image, creating demand for “green” services. For islands, protecting environmental quality is closely linked to destination branding and long-term tourism competitiveness. This creates a strong incentive for local authorities and tourism operators to adopt circular practices, reduce plastic pollution and promote responsible tourism models that align economic activity with environmental protection.
- Finally, EU initiatives increasingly recognize islands. The forthcoming Islands Strategy itself signals political will to overcome historical neglect.

Enabling Approaches for a Just EU Island Strategy

To turn islands into **engines of circular development**, LooP Zone consortium considered the following concrete measures:

- **Mainstream an “insularity clause” in EU policy.** As the European Economic and Social Committee (EESC) recommends, formally embed islands’ needs in EU laws. For example, require that the SUP Directive’s national action plans include island-specific enforcement and exemptions (e.g., ferries carrying waste back). Ensure Cohesion and Green Deal programs explicitly fund island circular transitions (e.g., grant criteria favour projects that reduce marine litter on islands). Integrate islands into the EU’s new Emissions Trading System revisions by granting flexibility to small, isolated grids.
- **Adopt legally anchored Island Strategies.** Launch the promised EU Islands Pact/Act by summer 2026, with a dedicated working group on waste and plastics. Mandate each Member State to prepare an “Island Plastics Strategy” for its insular territories, in line with the Plastics Strategy and MSFD. Encourage simplified permitting for island recycling facilities (e.g., mobile plastic processing units) and eco-innovative circular economy strategies. Legislate for advanced fiscal measures and incentives for plastic alternatives which are inherent to the regulatory scope of local authorities.
- **Establish sustainable finance streams.** Allocate portions of EU funds to island circular projects, earmarking key project funding streams. Encourage national co-financing via existing mechanisms for both recovery and recycling. Promote blended investment by certifying “Circular Island” bonds or green tourism credits. Simplify co-funding ratios for very small projects. Ensure that island municipalities and residents do not bear disproportionate share of the costs of tourism-related waste and circular transition, given the important contribution of islands to national and regional economies.

- **Strengthen governance and networks.** Build on Loop Zone example by forming a Mediterranean Islands Circular Economy Network. This network would enable islands to share data, knowledge, and implementation roadmaps. Support island clusters and umbrella groups (e.g., SMILO, BeMed) to better channel small islands needs at EU level. Locally, require that island councils designate a Circular Economy Officer to coordinate inter-sectoral waste and tourism policies. Embed community stakeholders (both private sector and CSOs) in planning (e.g., through Local Action Groups).
- **Capacity-building and innovation support.** Fund training programs for island SMEs (hotels, restaurants) on waste prevention and reduction practices. Use Loop Zone business support programme and national chambers of commerce networks to incubate island “green start-ups” and promote circular reuse business models (reusable packaging, refill kiosks, waste upcycling crafts). Encourage universities and local research institutes to pilot reusable item innovations adapted to islands.
- **Infrastructure investments.** Provide islands with modern waste sorting centres and composting units. Ensure all ports/marinas upgrade waste reception for ships so that islands can offer incentives (free collection) to visiting recreational boats. Introduce drinking water fountains and deposit-refund schemes for bottles on islands. Co-finance solar-powered mini-desalination plants to free freshwater and electricity resources for reuse in tourism (thus indirectly reducing plastic bottle use). Explore micro-grid integration of waste-to-energy (biogas) facilities sized for each island’s waste profile to compound a sustainable waste management activity.
- **Community engagement and education.** Launch island-wide awareness campaigns tying pollution to local heritage. Label products “island made” if they meet circular criteria. Engage tourists via travel platforms to book “green” or SUP products free certified hotels. Involve NGOs in citizen science related to plastics presence in local ecosystems. Provide recognition that include waste reduction metrics and exploit them for green marketing. Ensure that local transitions are just: for example, train HORECA workers both on theoretical aspects and in reuse protocols and subsidize low-income households for purchasing durable goods, via local supporting schemes.
- **Monitoring and metrics.** Implement robust indicators specific to islands, among others, the followings:
 - *Marine Litter Density:* counts of plastic items per kilometre of beach or per underwater survey (aligns with MSFD Descriptor 10, regional monitoring guidelines). Considering that the agreed MSFD EU coastline macro litter threshold value is 20 items per 100 metres of coastline.
 - *Tourism Waste Intensity:* kg of plastic waste per tourist-night (normalizing waste generation by visitor flow).
 - *SUP product alternatives:* number of local alternatives or reuse business models to SUP products, available in the island



- *SUP Consumption*: number of single-use plastic units (amenities, bags, bottles, straws...) supplied to island businesses per year.
- *Reuse/refill/Recycling Rate*: % of total island waste diverted from landfill (tracked via local waste agency data).
- *Circular Economy Uptake*: number of businesses adopting reusable items or certified products.
- *Social Indicators*: employment outlook in green sectors, citizen engagement levels, participatory governance mechanisms.