ALBANIN ISLANDS PLASTIC REDUCTION STRATEGY AND ACTION PLAN









Albanian Islands Strategy and Action Plan

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Prepared by: Spase Shumka (Agricultural University of Tirana), Laura Shumka (Albanian University), Kastriot Korro (Agricultural University of Tirana)

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Executive Summary

This strategy and Action Plan sets out a vision, aims and objectives intends in Albanian island protection from the plastic pollution and their integral functioning. These ecosystems are free from all unnecessary plastics by the year 2030. The document emphasizes the present circumstances in which this has become a pressing issue and sets out an initial action plan for addressing it. The strategy and action plan staring point is based on vulnerability of these types of bodies, present and projected threats due to human presence. The approach is considering national and European policy and good practice, as well as related legal framework. Current nature conservation status of the certain Islands (where it exist) and surrounding protected areas were also considered as complementary tools in achieving protection from plastic waste, together with specific actions to be implemented by the local self-government authorities, various partners and residents.

In an transitional economy as Albania with rapid changes and tourism development, increased consumption, the waste in general and plastics in particular are a problem in both aquatic and terrestrial environments. While the Albanian coastal marine environment (particularly river deltas) is "oversaturated" with plastics, the global predictions indicate that by 2050 there will be more plastic in the oceans than fish (WEF, 2016). The plastics impact on biota and human health through various food chains is well evidenced, while their presence in particular environments as Islands appeals for urgent prevention and protection. This is also vital action to be taken in overall policy for sustainable tourism development.

Why a strategy and action plan for plastic reduction in Albanian islands? The problem of plastic waste within these environments was becoming evident in the last decade once the number of visitors and human interventions are enormously increased. Due to their small size they are largely vulnerable, while the public concern is emerging steadily.

This action plan is aware that such work needs to be complemented by different actors and followed via clear policy and time-scaled measures. It looks to bring together public, private and community stakeholders. This document presents an integrated approach to the challenge of shifting from a traditional ways of plastic use towards a zero targets.

The vision of this strategy is "To recover, protect and advance the extraordinary natural and cultural values of Albanian islands-free plastic zones and offer further opportunities for an improved livelihood of the locally based communities in different regions where they are situated."

ABBREVIATIONS

BR Biosphere Reserve
CoM Council of Ministers

DCM Decision of Council of Ministers

DGFP Directorate General for Forestry and Pastures

GEF Global Environment Facility

MoE Ministry of Environment of Albania

MoTE Ministry of Tourism and Environment of Albania

MP Management Plan
MPA Marine Protected Area

NAPA National Agency of Protected Areas NGO Non-Governmental Organization

NP National Park
PA Protected Area

PAA Protected Area Administration

PCB/PCT Polychlorinated biphenyls and polychlorinated terphenyls

UNDP United Nations Development Programme
UNEP United Nations Environmental Programme

UNESCO World Heritage Sites (United Nations Educational, Scientific and Cultural

Organization

WCPA World Commission on Protected Areas

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The Action Plan and Strategy for the reduction of plastics in Albanian islands is part of the project "Together for zero plastics in the 10 Albanian islands". Most of the isles are subject of an increased number of visits following intensive growth of tourism, particularly at the coastal zone of Albania. During the summer season they are used by large number of tourists and in the last couple of years the human presence is steadily increasing. As a sequence of increased human presence the solid waste pollution and particularly plastics one is becoming a serious issue. The poor management of these resources and low rate of awareness is demanding a different approach and a solid integrated management. In a situation of lacking a national specific strategy and action plan for the plastics reduction, along with improved status there is a demand for an increased capacity of the respective administration.

The intention of the project "Together for zero plastics in the 10 Albanian islands" is to look on application of ground measures including legal instruments—for the protection of islands from plastic waste such as plastic bags, bottles or utensils. It looks on close cooperation with different actors and end-users.

The Mediterranean Sea is broadly considered as one of the most threatened environments in the world, since it is a subject to ubiquitous plastic pollution. As a result of high population densities, lack of consistent waste-management schemes, and large influxes of tourists and strategic merchant navigation, this environment is under significant pressure. The total plastic accumulated in the Mediterranean Sea is estimated in the order of magnitude of 1,178,000 tonnes, with a possible range from 53,500 to 3,546,700 tonnes (Boucher and Bilard, 2020). This has adverse impacts on the health of ocean ecosystems, the integrity of food supplies and people's livelihoods. Plastic pollution is a design, production, consumption and disposal challenge that must be tackled across plastic's entire lifecycle. Most efforts to minimize and mitigate the impacts of plastic pollution are focused on the mainland, particularly rivers and coastal areas. To date, not much attention has been paid to islands.

Increasingly the policymakers are appealing for more encompassing limitations on the production and consumption of single-use plastics and for improved post-use management (UNEP, 2020). The United Nations Environment Assembly, at its first, second, third and fourth sessions, in 2014, 2016, 2017 and 2019 respectively, adopted resolutions 1/6, 2/11, 3/7, 4/6 and 4/9 to address the environmental impacts of marine plastic litter and pollution from single-use plastic products. According to UNEP (2020), stressing the importance of the long-term elimination of the discharge of litter and micro-plastics to the oceans, the resolutions call on States Members to develop national actions to address the environmental impacts of single-use plastics. Resolution 4/9 also encourages States Members to develop and implement national or

regional actions, as appropriate, in order to address the environmental impact of single-use plastic products, to take comprehensive action with regard to single-use plastic products in addressing related waste through, where appropriate, legislation and to take other actions to promote alternatives to single-use plastics, improve waste management and develop sustainable consumption patterns.

Further on the policymakers are also urging all actors to step up actions to achieve Sustainable Development Goal 14, which is, by 2025, to prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution (United Nations, 2015). This guide therefore aims to help States that are developing national legislation on plastic, including single-use plastics, in response to these resolutions.



Figure 1. Recorded presence of plastic waste in Island of Sazani

The state and quality of the environment in a particular ecosystem, both natural and man-made, is essential to tourism, particularly for those countries as Albania that strive a rapid economic development and prosperity. Meanwhile, the relationship of tourism with the environment is complex and in many instances contradictory one. It involves many activities that can have adverse environmental effects. Many of these impacts are linked with the construction of general infrastructure such as roads and paths, and of tourism facilities, including hotels, restaurants, shops and marinas. The negative impacts of tourism development can gradually deteriorate environmental resources on which it depends.

On the other hand the tourism has the potential to create beneficial effects on the environment by contributing to environmental protection and conservation. It is a way to raise awareness of environmental values and it can serve as a tool to finance protection of natural areas and increase their economic importance.

1.1. Islands Description, Location and Boundaries

The Albanides represents the assemblage of the geological structures in the territory of Albania, and together with Dinarides at the North and Hellenides at their South form the southern branch of the Mediterranean Alpine Belt, (Aubouen 1973, 1988, Frasheri et al. 2009, I.G.S. 1985). Two major peleogeographic domains form the Albanides: the Internal Albanides in the eastern part and the External Albanides in the western part of Albania (Figure 2).

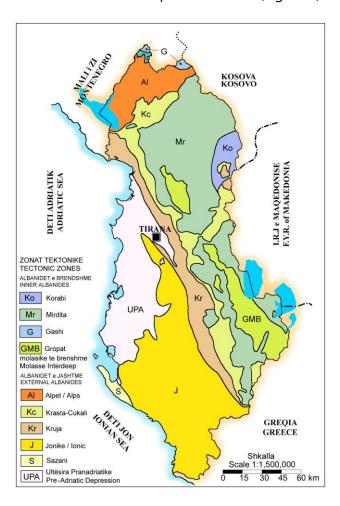


Figure 2. Schematic Tectonic Map of Albania (Frasheri et al., 2009).

The Internal Albanides formed part of the Subpelagonian Trough. The Internal Albanides are characterized by the presence of the immense and intensive tectonised ophiolitic belt, which is displaced from east to west as overthrust nappe. Internal Albanides has been affected by the paleotectonic stage. There are two viewpoints about the placement of the ophiolites: Allochtone character of the ophiolitic nappe (Auboin 1973, Frasheri 2000 and autochthon ophiolitic belt

(Beccaluva et al. 1994, Gjata 2000, Kane et al. 1999. Tectonic development of the Internal Albanides happened during Triassic and Jurassic.

The External Albanides were developed out of the western passive margin and continental shelf of the Adriatic plate. The External Albanides are affected only by the later paleotectonic stages, and are characterized by regular structural belts, which are associated with thrust and over tectonic. Geophysical data reveal that the Earth crust becomes thicker from central regions of Adriatic towards the Albanides in land (Valbona et al. 1997, Velaj 1999).



Figure 3. View of Isles: A. Sazani, B. Ksamili, C. Zverneci and D. Maligrad

Table 1. Main data for the Albanian Islands

No.	Name of Island	Surface area (Ha)	Central nearest point - coordinate
1	Sazan	5 700	40°29'36.09"N, 19°16'52.27"E
2	Kunë	1 400	41°45'47.00"N, 19°34'54.00"E
3	Malësori	40	42° 0'32.43"N, 19°27'47.62"E
4	Franc Jozeph	0.5	41°50'49.57"N, 19°22'29.67"E
5	Shurdhah	7.5	42° 4'15.00"N, 19°39'10.01"E
6	Paqe	0.3	42° 9'57.61"N, 19°52'43.97"E
7	Zvërnec	10	40°31'5.72"N, 19°24'1.95"E
8	Ksamil	9	39°46'27.57"N, 19°59'36.97"E
9	Maligrad	5	40°47'32.34"N, 20°56'0.91"E
10	Stillo	0.7	39°41'9.98"N, 19°59'23.04"E
11	Tongo	2.5	39°41'24.85"N, 20° 0'20.94"E



Figure 4. Location of Albanian isles

1.1.1. Sazani Island

The Island of Sazan is the largest island in Albania that is located between the Strait of Otranto in the north of Karaburuni Peninsula, forming the border between the Adriatic and Ionian Sea. The island has its own length of 4.8 km and width of 2.7 km, with a total surface of 5700 ha. Its specific features of climate, hydrology and geological conditions are base for characterization of island itself as unique for its vegetation and biodiversity. Sazani Island is composed of limestone rocks of the Cretaceous period and in the eastern part partially of terrigenic and cleistogenic deposits (Kashta et al., 2011). The western coast is fragmented and steep, with high cliffs up to 40 meters deep cut by a number of gorges, caves, and small bays, such as Bay of Paradise (Gjiri i

Parajses) and the Devil Gorge (Gryka e Djallit). In the east, the coast has gentle slopes with St. Nicholas Bay ((Ggjiri i Shënkollit), where the harbor and military facilities are, as an important geomorphological feature, and more to the south-west slanted folds of limestone that plunge into the sea. The island has a rugged topography, with two main hills, at an altitude of 334 (northern hill) and 307 meters (southern hill) (Tomàs-Vives, 2014). Further on the same author emphasizes that the island of Sazani is characterized by very diverse vegetation, forming a mosaic of many different plant communities in a relatively small area (570 hectares).



Figure 5. Location and view of Sazani Island

1.1.2. Kune Island

The Island of Kune is situated in the area of Kune-Vain Lagoon at the Albanian Adriatic coast. It lies in the Delta of old Drini River and has a surface of 1.4 km². The area is distinguished by diverse habitats and species, including Mediterranean shrubs, ash and willow forests. Following the recent bird winter observation (Bino, T., 2021), the island hosts more than 70 different bird species. Further on there are recorded 22 species of reptiles, 6 species of amphibians and numerous representatives of mammals.



Figure 6. Location and view of Kune Island

1.1.3. Malësori Island

Among the other features Buna River is distinguished for the lowland flow and isles presence. With its area of 40 hectares the Island of Malësori is situated within the Buna river in vicinity of Shkodra a city in northern Albania. Several villages are situated around the island; the nearest of is Darragjat situated in a distance of less than 5 km from Shkodër Lake, one of the largest lake in Southern Europe.



Figure 7. Location and view of Malësori Island

1.1.4. Zverneci Island

The Islands of Zvernec consist of two islands with a total surface of 10 hectares, the larger Zvërnec Island 8.7 hectares and small Zvërnec Island with 1.3 hectares. They are located in the Narta Lagoon, southern Albania. The wooded island is characterized by pine trees and is connected to the mainland by a 207 metres long bridge. It has a length of 430 m and a width of 300 m. Zvërnec is also a main tourist attraction in southern Albania, with it well preserved 13th century Byzantine, Zvernec Monastery. Zverneci islet in the south of the Narta lagoon is covered with evergreen forest of Cupressus sempervirens. The woody layer is dominated by Cupressus sempervirens and in a low scale by the species of Qurcus ilex, Quercus pubescens and Pinus spp. The vegetation cover is very dense. The shrub layer is dominated by the species of Myrtus communis, Pistacia lentiscus, Laurus nobilis, Rubus spp., Phillyrea angustifolia, Olea olaster, etc. The herb layer is rarer and the most frequent species are: Chrysopogon gryllus, Asparagus acutifolius, Dactylis glomerata, Desmazieria rigida etc. Under this zone, dominated by Cupressus sempervirens the cliffs (soft rock) support a plant community dominated by halophylic species much as: Suaeda maritima, Limonium oleifolium, Limonium vulgare, Arthrocnemum glaucum, Halimione portulacoides, Elymus pycnanthus, characteristic species of the association Suaedetum maritimae.



Figure 8. Location and view of Zverneci Island

1.1.5. Shurdhah Island

The cascade reservoirs installed in 70' of last century along the River Drini created grounds for new isles as well. Shurdhah is located in the Vau i Dejës Reservoir drained by the Drin river in northern Albania, having a surface of 7.5 hectares. Ruins of an ancient Roman castle can be found within the island. Today, only the ruins of a medieval church are present.

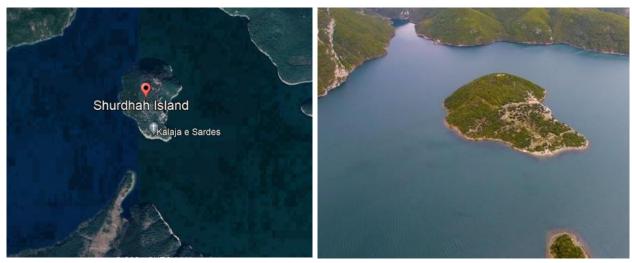


Figure 9. Location and view of Shurdhah Island

1.1.6. Ksamili Island

The Ksamili Islets are four small islands located in southern Albania, along the Albanian Riviera having a surface area of 9 hectares. The islands are remote and can only be accessed by boat. The village of Ksamil, after whom the islands are named, is located to the east of the islands. During the last three decades the elands were facing serious interventions affecting their natural integrity.

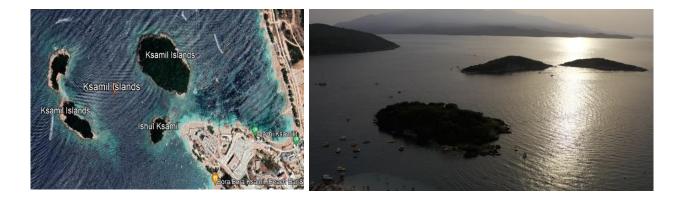


Figure 10. Location and view of Ksamili Island

1.1.7. Maligrad Island

The Island of Maligrad is situated within the Lake Prespa, forming a part of the Prespa National Park in eastern Albania. It has a surface area of 5 hectares. The island host many caves suitable for wildlife and a circular cliff. Assessed threats to freshwater habitats of standing water –

habitats type 3150 Natural eutrophic lakes with Magnopotamion or Hydrocharition – type, shores, also the protected plant species: Aldrovanda vesiculosa L. and Lindernia procumbens L., fauna species Otter (Lutra lutra), Prespa Spined Loach (Cobitis meridionalis), Prespa Minnow (Pelasgus prespensis), Prespa Roach (Rutilus prespensis), and Prespa Trout (Salmo peristericus), Dice Snake (Natrix tesseleata), Macedonian Crested Newt (Triturus macedonicus), and Birds Directive species: Pygmy Cormorant (Microcarbo pygmaeus), Dalmatian Pelican (Pelecanus crispus), Little Egret (Egretta garzetta), Great Egret (Ardea alba), Squacco Heron (Ardeola ralloides), Black-winged Stilt (Himantopus himantopus), Common Kingfisher (Alcedo atthis), and the wintering water bird populations.



Figure 11. Location and view of Maligrad Island

1.1.8. Tongo Island

The small island is located within the Albanian Ionian coast in southern Albania. It is a rocky island, and its waters are rich in aquatic life. The island is situated about 300 m far from the Greek coast. It has a surface area of 2.5 hectares.



Figure 12. Location and view of Tongo Island

1.1.9. Stillo Island

Stillo is a small, rocky and sparsely island located near the Cape of Stillo, Vlorë, and southern Albania. During the communist regime, the island was used as a military zone 1992 and access was prohibited. Although not the most southern point of Albania, it consists of the southernmost tip of the entire coastline of Albania. Its total area is 0.7 hectares, with an approximate length of 80 m and a width of 100 m.



Figure 13. Location and view of Stillo Island

1.1.10. Page Island

The Islet of Paqe is located within the Koman Lake in northern Albania, near the Albanian Alps and Fierzë. It is found in one of the lake's river canyons. Paqe Island is only 160 m long, having a surface of 0.3 hectares. The islet is small with many trees on top of it. There are many islands within the Fierza Lake as well as in Koman Lake, that are much larger and more stony tectured than Paqe Islands sandy ground.



1.2. Current legal Status

The Government of Albania has approved a System of Environmentally Protected Areas. Currently the area of the Network of Protected Areas of Albania reaches 504,826.3ha, over 17.56% of the total area of the country. Of the total area, the Coastal and Marine Protected Areas constitute 119,224.7ha, or 23.6% of the total surface of the country's protected area system, of which 13,261.2ha is only marine area. Also, 98,180.6ha, are with the status of Ramsar areas, which cover 3.42% of the total area of the country (MoTE, 2019).

Table 2. Current legal state of the Isles

Name of the Island	Current Status of Protection
Sazani	Karaburun-Sazan Marine National Park, DKM No.
	289, date 28.04.2010 with surface 12428 ha.
	The main ecosystem is represented by coastal and
	marine. The island of Sazani itself is not included in
	the National Park, so at present the terrestrial part
	of Sazani has no legal protection status. The marine
	area that is under protection as National Park
	(IUCN category II) covers 2,721.87, which is more
	than half of the island's surrounding waters,
	excluding Saint Nicholas Bay.
Kune	Nature Park Kune-Vain-Tale, DKM No. 432, date
	28.04.2010 with surface 4393 ha.
	The main ecosystem is represented by coastal
	lagoon.
Zvërnec	Protected Landscape Vjosë-Nartë, DKM No. 680,
	date 22.10.2004 with surface 19738 ha.
	The main ecosystem is represented by coastal
	lagoon.
Malësori	Protected Landscape Bunë-Velipojë, DKM No. 682,
	date 02.11.2011 with surface 23027 ha.
	The main ecosystem is represented by the River
	Buna and and coastal lagoon.
	Ramsar site, 2006
Franc Jozeph	Protected Landscape Bunë-Velipojë, DKM No. 682,
	date 02.11.2011 with surface 23027 ha.
	The main ecosystem is represented by the River
	Buna and and coastal lagoon.
	Ramsar site, 2006
Maligrad	National Park Prespa, DKM No. 80, date 18.02. 1999
	with surface 27750 ha.
	The main ecosystem is represented by the lake and

	different terrestrial components.	
	Ramsar site, 2013	
	Nature Monument, DCM Nr.676, date 20.12.2002	
Ksamil	National Park Butrinti, DKM No.134, date	
	20.02.2013 with surface 9424 ha.	
	The main ecosystem is represented by the lake and	
	coastal marine components.	
	Ramsar site, 2003.	
	Nature Monument, DCM Nr.676, date 20.12.2002	

The basis of this system consists mainly of: 2, Strict Nature Reserves (4,800ha); 14, National Park (230,707.20ha); 721 units with the status of Natural Monument (1,970.0ha); 24, Managed Nature Reserves / Nature Park (151,770.40ha); 6, Protected Landscape (97,333.60ha) and 4, Protected Area of Managed Resources (18,245.00ha).

Based on the Strategic Policy Paper for Biodiversity Protection (MoTE, 2016), the Ministry of Tourism and Environment (MoTM) and the National Agency for Protected Areas (NAPA) are working to, by the end of 2020, the surface of the protected areas network reach over 20% of the territory of the country, for the improvement of their management and the provision of Management Plans.

Until the beginning of 2015, the management of protected areas was the responsibility of the Ministry of Environment (MoE), and was included in the structure and tasks of the Forest Service Directorates (DFS) in the districts. With the creation of the National Agency of Protected Areas (NAPA) on February 4, 2015, the management of protected areas system took a whole new approach. NAPA and structures at the local level have a great responsibility and challenge to face the current situation and the perspective, where to take the protected areas and their management. This is also due to the fact that protected areas, in Albania, are evidenced in various forms and sizes (land, water, sea, local and cross-border); in public, municipal and private ownership; in 6 categories of administration; Ramsar wetland area of international importance; Biosphere Reserve (RB) and as UNESCO World Heritage Sites (United Nations Educational, Scientific and Cultural Organization), i.e. a complexity and natural heritage that should be clearly reflected in the national environmental program.

Regarding the administration and management of the Marine Protected Area, the Decision of the Council of Ministers no. 289 establishes that measures for ensuring the protection, monitoring and development of submarine ecotourism in the National Park Karaburun-Sazan will be taken by the Ministry of Environment in cooperation with the Ministry of Tourism, the Ministry of Defense and scientific and coastal institutions. The Decision assigns the management of Karaburun-Sazan National Park to the administration of the existing Protected Area Llogara-Karaburun, which is the Forestry Service Directorate.

Table 3. Relevant international agreements and policies in relation to management of PA

Agreements and policies	Year of accession or ratification by Albania	Relevance to management of PA
Convention on Biological Diversity (CBD 1992)	1994	Aims to conserve biological diversity, sustainable use of its components and fair and equitable sharing of benefits arising from genetic resources.
CBD Aichi targets (to be met by 2020) Target 11 Target 12	2010	Target 11. Include 17% of terrestrial and inland water, and 10% of coastal and marine areas in systems of protected areas Target 12. Prevent extinction of threatened species and improve their conservation status
Barcelona Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (1975, amended in 1995)	1990/2001	Aims to protect the Mediterranean marine and coastal environment while boosting regional and national plans to achieve sustainable development
Protocol Concerning Specially Protected Areas and Biological Diversity in the Mediterranean (1995)	2001	Aims to promote the conservation and sustainable management of marine and coastal areas with natural or cultural values and to promote the conservation of endangered or threatened species
Bern Convention on the conservation of European wildlife and natural habitats (1979)	1999	Aims to conserve wild flora and fauna and their natural habitats and to promote European cooperation
Bonn Convention On the Conservation of Migratory Species of Wild Animals (1979)	2001	Aims to conserve terrestrial, aquatic and avian migratory species throughout their range
Eurobats: Agreement on the Conservation of Populations of European Bats (1991)	2001	Aims to protect all European bat species through legislation, education, conservation measures and international cooperation
United Nations Convention to Combat Desertification (1994)	2000	Aims to reverse and prevent desertification/land degradation and to mitigate the effects of drought in affected areas in order to support poverty reduction and environmental sustainability

1.3. Legal Framework

Generally, the legal framework related to the protection of Albanian islands is defined by the international conventions and legislation applicable to protected areas and biodiversity. In this respect a list of the relevant legal instruments, together with a brief description of their main objectives and implications for the management of the protected area are presented in the Table 2 (considered under the conservation status), as specified in the official Order no 148 dated 21/02/2013 for the Standard Structure of Protected Areas Management Plans in Albania.

Further on refereeing to the focus issues, here is no national strategy for plastic reduction in Albania. So far the management, reeducation and other associated item are integral part of the general waste management.

Based on the **National Strategy and National Plan on Waste Management**, the quantitative targets include as following:

- By 2020: stop growth of the amount of municipal waste produced
- By 2015: achieve a 25 % recycling and composting rate of municipal waste (by 2020: 55 %)
- Recover energy from 15 % of municipal waste
- Reduce land-filling of municipal waste from around the current 90 % to around 30 %
- Provide widespread waste minimization advice to businesses
- Develop markets for recycled materials
- Deal more sustainably with waste
- Improve resource use (UNEP 2016: 9)

The decision on the necessary measures for collection and treatment of bio waste, criteria and deadlines for their reduction include:

- Until 2021: 50 % reduction in total weight of bio-waste produced in 2014
- Until 2026: 35 % reduction in total weight of bio-waste produced in 2014

The decision on differentiated waste collection at source, include:

- Local government units, by the end of 2020:
- Preparation, reuse and recycling of solid waste, including paper, metal, plastic and glass should reach a minimum of 50 % of the total weight of waste generated in 2014

The Ministry of Environment (MoE/currently MoTE) has committed itself to the following targets (to be achieved no later than 31 December 2019):

 A recovery rate, including incineration with energy recovery, of 60 % by weight of packaging waste

- An increase in recycling rate from 55 % to 80 % by weight of packaging
- Waste Recycling targets of 60 % by weight for glass; 60 % by weight for paper and board; 50 % by weight for metals; 22.5 % by weight for plastics, including material that is exclusively recycled back into plastics; 15 % by weight for wood.

The relevant legislation includes:

• Law on Integrated Waste Management (2010)

The Law on Integrated Waste Management aims: to protect the environment and human health and to guarantee the proper environmental management of waste through the prevention and minimization of waste, or the reduction of negative impacts from waste generation by applying an integrated waste management system; the improvement of resource use efficiency; and the reduction of general negative impacts from the use of resources (UNEP 2016: 10).

According to Law No 10463, dated 22.09.2011, on integrated waste management, Article 14, the Ministry of Environment designs programmes to prevent the creation of waste in accordance with the objectives and principles of environmental protection determined in Law No 10431, dated 09.06.2011, on environmental protection, with the requirements of this law and, in particular, the hierarchy of integrated waste management, as defined in Article 6 of this law.

The deadline for the design of the first programmes to prevent waste generation was no later than 1 January 2017. Programmes to prevent waste generation are distinct parts of the National Plan of Integrated Waste Management.

Regional and local plans integrating waste management are developed in accordance with all relevant programmes for waste prevention. Programmes to prevent waste generation are developed in accordance with Appendix 5 attached to Law No 10463, dated 22.09.2011, on integrated waste management (Eionet 2015).

- National Plan and National Strategy on Waste Management (2011)
- Draft act 'on batteries and accumulators and their waste' (2011)
- Draft act 'on the packaging and packaging waste' (2011)
- Law No. 9010 on environmental treatment of solid waste (2013)

The Law aims to ensure the protection of environment and human health against pollution and damage resulting from solid waste. To this end, it sets out rules governing the environmental treatment of solid wastes at every stage: creation, collection, separation, transportation, recycling, processing and disposal. The Law further aims at waste reduction and the reduction of the hazardous and dangerous impact of waste. It includes the following Chapters: General Provisions (I), Integrated Management

- Regulation No.117 of 2013 on the criteria used for determining when certain types of metal scrap cease to be waste.
- Decision on the necessary measures for collection and treatment of bio-waste, criteria and deadlines for their reduction (2014)
- Law on Hazardous Waste Management (2006)
- Law on Environmental Protection (2011)
- Regulation on treatment of construction waste from generation, transport to their disposal (2007)
- Decision of the Council of Ministers No 387, dated 06.05.2015, 'Rules for the control of PCB/PCT disposal, decontamination or disposal of equipments that contain PCB/PCT and/or waste disposal of used PCB/PCT'
- Decision of the Council of Ministers No 1104, dated 28.12.2015, 'on the approval of the requirements for preventing the discharge of waste generated by ships and surpluses from cargoes at sea'
- National Strategy on Integrated Waste Management (2018-2030) (2018)

PART 2. EVALUATION OF THE ISLANDS INTEGRITY AND INSTITUTIONAL FRAMEWORK

During the last three decades, the use of plastic materials in Albania has shown a significant increase along with economic and demographic developments during this period. This is easily identified by the large quantities of plastic materials consumed and from increased demand for plastic material from the recycling industry. The vast majority of raw materials for recycling is imported. Following Liço et al., (2015) for period of years 2009-2014 the quantity of imported plastic materials (raw materials, products and post consumer) in amounts from 57.000 to 60,300 tonnes/year.



Figure 15. Isles integrity affected by current and previous infrastructures

In Albania from approximately 40.756 tones/year of solid plastic waste approximately 11% of them is estimated to be recycled, mostly plastic bottles and bags. Currently in our country do not exist composting plants for biodegradable waste and incineration plants of non-recyclable urban waste or industrial waste plants for the utilization of their energy in the manufacturing industry.

Having this situation in the continental part of the country, clearly that the water courses and water bodies as a final recipients are facing the most significant impact. Along with that the big islands and those targeted mostly by tourists visitors as Sazani, Ksamili, Maligrad, etc., face similar problem with whole country, and being water locked their littorals are also subject of the plastics pressure.

The institutional framework is complex. On one side, some of the sites as Sazani currently has a military status and requires the agreement of a shared vision and compromise, which can only

be a reality under a strong commitment and a full coordination effort between the different institutions concerned: the Ministries of Defence and of Environment, the National Coastal Agency, the Regional and Local Authorities, and national and local stakeholders (Tomàs-Vives, 2014).

Current territorial reform was placing Islands in different municipalities, while some of them (See table 3) are part of the national protected system and administrated by NAPA. In fact by this should be seen as a positive development that should facilitate reaching a consensus among all the relevant institutions on the future status of the island and on considering its high natural, historical and cultural values as an added value to the whole local and Albanian society (Tomàs-Vives, 2014). Further on the role of the Regional and Local Authorities, NGOs, etc., is very important, as they can play the leading role in the promotion of more sustainable socioeconomic activities in the region/municipality that can accelerate clean Islands and plastic free ones.

PART 3. STRATEGY AND ACTIONS

The UN appeals that only 9% of all plastic produced globally is recycled and pollution from plastics is currently recognized by the public and policymakers as one of the most serious issues that threaten both terrestrial and aquatic ecosystems (UN, 2018).

The zero pollution ambition EU Action Plan: "Towards a Zero Pollution for Air, water and Soil" is a cross-cutting approach contributing to the UN 2030 Agenda for Sustainable Development and complementing the 2050 climate-neutrality goal in synergy with the clean and circular economy and restored biodiversity goals.

Based on current conservation state, the various human impacts and projected increased presence and use, preparation of strategy and action plan for free plastic areas is needed to ensure both the conservation of the heritage (biodiversity values, historical, cultural and

landscape one, etc) and the attractiveness for visitors. This is the aim of the strategy and action plan.

Based on the analyses of all Islands and in line with Tomàs-Vives, Pere(2014) the proposed scenario for the Sazani island is drafted considering a future designation of Sazani island as a natural protected area and the implementation of a coordinated management between the future island protected area and the Karaburun-Sazan Marine National Park. Further on similar approach is followed for other islands considering either neighboring protected areas or proposing specific status for the conservation and advancement.

3.1. Vision of Albanian Island as protected areas

The proposed vision is: To recover, protect and advance the extraordinary natural and cultural values of Albanian islands-a free plastic zones and offer further opportunities for an improved livelihood of the locally based communities in different regions where they are situated.

Having in mind that the recovery and integral conservation of Albanian isled is a long-term endeavor, the foreseen goals include:

- Preparation, definition and recognition of islands and an integral part of the existing protected areas or giving an individual adequate conservation status;
- Zero plastic use and presence in all considered islands of Albania
- The conservation, recovery and recognition of the unique natural and cultural values of the islands, as a contribution to regional, national and global values conservation with clean environment and no plastic use;
- Increased visibility of the Albanian islands and converted to centers of excellence for conservation, education and prosperity;
- Integrating the Albanian Islands in the development tourism and rural development scenarios, through education and increased awareness; the principles of revenue controlled by the protected areas administration convert all islands to a model of integrated conservation into sustainable development and local prosperity of the surrounding communities.

3.2. Objectives of the Strategy and Action plan

- 1. Policy framework for the conservation of the islands as an integral part of the existing protected areas or specific status.
- 2. Policy frameworks prioritizing prevention over waste management as an integral part of sites management as an integral part of protected areas system.
- 3. Specific references to 'plastic pollution prevention/elimination' within relevant policy frameworks, management objectives of protected areas and National Strategy and National Plan for Waste management.
- 4. Incorporation and implementation of national and international obligations where possible (e.g. marine litter, toxic chemicals, climate change, and waste trade).
- **5.** Inter-sectoral integration and policy coherence specific to plastic pollution-the protected areas administration coordinated activities with other sectors of economy including local administration as municipalities.

Table 4. Albanian Isles Plastic Reduction Action Plan - 2021-2030

Action No.	Specific Action	Target	Notes	Timescales		
Cleaning up and n	Cleaning up and management of plastic waste					
Action 1	Define the direct management authority in line to current status of the Isle.	The authority identified, action plan adopted and incorporated in daily management practices.	The initiative for authority identification needs to be taken by MoET.	January 2022		
Action 2	Upgrade the Isles (particularly marine one, and not only) litter cleaning and remove waste on the isles and surrounding water surface.	Work with city partners, in particular, to increase the number included actors.	This need coordination work among different actors, as NAPA, MPA, NGOs, Local authorities	April 2022		
Action 3	Introduce the monitoring and mapping out the seabed along isles using equipment such as drones, by the protected areas administration and other management authorities.	Monitoring protocols approved and in force by the management authorities	The coordination with MoTE has to consider issuing of specific monitoring protocols.	April 2025		
Action 4	Collect waste on the isles and surrounding water and at selected places in the appointed unite for further processing purposes (recycling, etc).	Work with city partners, in particular with NGO sector, to increase the number included actors.	This need coordination work among different actors, as NAPA, MPA, NGOs, Local authorities	May 2022		
Action 5	Carry out a clean-up and awareness campaign, either alone or in cooperation with local civil society organizations and volunteers in regular bases.	Work with city partners, in particular with NGO sector, to increase the number included actors.	This need coordination work among different actors, as NAPA, MPA, NGOs, Local authorities	May 2023		
Action 6	Install the waste containers (different size ones) in the islands. Examine the possibility of deployment in areas outside	Plan of placement/distribution plan	This need coordination work among different actors, as NAPA, MPA, NGOs, Local authorities	May 2022		

	of municipal jurisdiction where there is a clear need for waste bins.			
Action 7	Assess the opportunities for establishing agreements with public and private waste companies for receiving marine and freshwater waste, particularly plastic one.	Draft Agreements	There are opportunities for the managers to lead the way with innovative research and business developments. As society moves away from a reliance on PET plastic, there is a clear need to ensure that alternative products are sustainable and do not in turn create new problems.	September 2023
Action 8	Help cruise ships/particularly tourism ones (this of particular interest for high number of visitor destination as Sazani Island) and deliver waste and increase recycling.	Work with MPA, small harbors management unites	This action need to be coordinated with Actions 5, 6	June 2024
Consumption and	l environmental management		<u> </u>	
Action 9	Map out the use of single-use plastic products in the areas of islands, following their current presence and use.	Prepare and deliver an engagement piece to reach a maximum number of residents and foster a plastic reduction conversation across communities.	Work with MoTE and Business Sector (recycling, production, incinerators, etc) and NGOs	June 2023
Action 10	Advice that all visitors and endusers of the island facilities to reduce the plastic use and food packaging, replacing with alternative materials.	Plan of activities/part of the daily working plans of the PAs authorities and Information & Education centers	This need coordination work among different actors, as NAPA, MPA, NGOs, Local authorities	May 2025

Action 11	Facilitate and build a culture for the reduced use of plastic and disposable products, through close ties with markets and education centers (Vlora, Butrint, Shkodra, Lesha, Prespa, etc), to help in phasing out the use of unnecessary, single-use plastic in municipal bodies.	Plan of activities/part of the daily working plans of the Pas authorities and Information & Education centers	This need coordination work among different actors, as NAPA, MPA, NGOs, Local authorities	May 2025
Action 12	Provide guidance to municipal bodies and others who run municipal canteens, in finding suitable, environmentally friendly replacement products for unnecessary, single-use plastic.	Guideline for municipal plastics reduction use/ Feasibility report concluded by October 2025.	This need coordination work among different actors, as NAPA, MPA, NGOs, Local authorities	March 2026
Action 13	Develop a guide for «plastic- free» events, in collaboration with relevant actors ones large visitors groups or events are carried in the Islands.	Guide for plastic free events drafted	MPA in Sazan promotes first this action and later on expanded in other areas	May 2024/June 2028
Action 14	Facilitate for the greatest possible reuse, recycling, recovery and sharing.	Legal provisions/bylaws dedicated to Albanian Islands/order of MoTE	Issuing this important document helps to set the scene for Isle's plastics reduction aspirations and to illustrate the management authorities to working together to reduce single-use plastics.	June 2027
Knowledge inform	nation and collaboration		I	1.4 0004
	Undertake a series of activities	Support pilot projects to	This need coordination	May 2024

Action 15	for making island environment and islands itself to wider public, vulnerability and threatening factors to their integrity.	address the issue of plastics. Seek funding, where available, to support research and/or pilot projects for circular work with regards to plastics.	work among different actors, as NAPA, MPA, NGOs, Local authorities	
Action 16	Obtain better knowledge of the scope and main sources of plastic pollution in the Islands in collaboration with relevant management, research institutions and others.	Study approach	This need coordination work among different actors, as NAPA, MPA, NGOs, Local authorities	June 2024
Action 17	Carry out campaigns and information work, aimed at the citizens and Island visitors, on how to reduce unnecessary use of plastic.	Pilot projects in the Islands area	This need coordination work among different actors, as NAPA, MPA, NGOs, Local authorities	June 2025
Action 18	Use different celebration days, as World Environment Day, Earth Day and Biodiversity Day to reduce plastic littering, whilst encouraging participation from citizens and the business community.	Schedule of days activity prepared in advance and advertisements done	This need coordination work among different actors, as NAPA, MPA, NGOs, Local authorities	21 st April / 22 nd May/ 5 th June / each year
Action 19	Work closely with surrounding community's schoolchildren's knowledge about plastic littering and recycling by focusing on plastic as a theme in the teaching program developed by the National Environmental Agency in close cooperation	Prepare and deliver an engagement exercise to reach young people and foster a plastic reduction conversation.	The plastic reduction agenda has been a strong interest of young people. This was evident in the recent campaign to ban the use of plastic in cruise ships and boats, initiated by the students of	May 2024

	with protected areas management or local municipalities		schools in isles surrounding area	
Action 20	Increase efforts to change the behavior of those who use nature for recreational purposes, so that they take better care of their environment	Undertake a series of case studies on events held in the surrounding Isles inhabited centers which carry out best practice on plastics reduction, in order to inform policy and practice for future events. This will build on innovative practice in the circular economy, including work with the schools.	The need to address the issues of plastics reduction at events held across the cities close to islands came through clearly from the public consultation. This is an area which, by its very nature, tends to work on a throwaway basis and there is therefore a pressing need to establish better practice.	May 2029
Action 21	Support pilot projects, research and development on plastic reduction and alternatives and promote circular practices across the city with on plastics.	Support pilot projects to address the issue of plastics. Continue to support pilot projects looking to plastics alternatives. Seek funding, where available, to support research and/or pilot projects for circular work with regards to plastics.	There are opportunities for the communities to lead the way with innovative research and business developments.	January 2030

PART 4. MONITORING AND EVALUATION

The Albanian Isles Plastic Reduction Strategy and Action Plan will be monitored at three month intervals and after a one year period each action will be assessed and reviewed. Where necessary each action will then be refined or extended as appropriate. The task for the monitoring belongs to management authorities that need to be defined as action plan propose, belonging to Local government, NAPA or MPAs (Action 1).

An annual update on progress will be presented to different partners and further actions agreed for the following year. This will ensure that the action plan can keep pace with national policy and legislation as well as enhancing the momentum which has been built in the island management authority for further change.

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