Action Plan
to prevent plastic waste in the Republic of Cyprus 2030

IUCN

Fondation Didier et Martine Primat

CYPRUS SUSTAINABLE TOURISM INITIATIVE

Searious BUSINESS

Together Cyprus

ACKNOWLEDGEMENT

It is with deep gratitude that the Plastic Waste Free Islands – Mediterranean (PWFI Med) project leaders wish to thank the various partners from government, private sector and industry, academia and research, civil society and non-governmental organizations that contributed to this work through their participation in workshops, meetings and related consultations within the country.

Above all, the IUCN PWFI Med project team acknowledges the generous support of the **Didier and Martine Primat Foundation.** This work could not have been accomplished, first and foremost, without the local partners and stakeholders who provided their valuable feedback. IUCN wishes to thank **Searious Business** for their effort in drafting this Action Plan, as well as the **Cyprus Sustainable Tourism Initiative (CSTI)** and the NGO **Together Cyprus** for their contribution to this work.

CONTENTS

Introduction
2

Scope of the Action Plan
3

Problem-Situation
4

Methodology
5

Action Plan Tourism
5

Action Plan Fisheries
8

Action Plan Waste Management
11

The Action Plan to prevent plastic waste in the Republic of Cyprus 2030 was elaborated by the IUCN Centre for Mediterranean Cooperation, with the support of Searious Business and the NGOs Cyprus Sustainable Tourism Initiative (CSTI) and Together Cyprus.

© Diferentroger / Dreamstime

INTRODUCTION

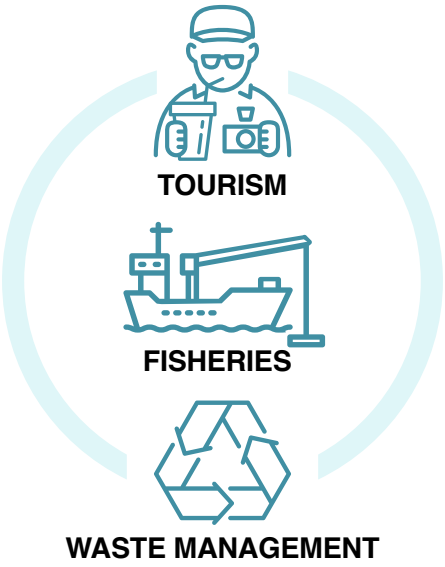
According to the National Guidance for Plastic Pollution Hotspotting and Shaping Action Report for the Republic of Cyprus[1], the plastic waste generation per capita is very high, and amounts to 94 kg/cap/year (> 53 kg/, cap/year, world average from Jambeck et al. 2015), of which up to 11 kg/cap/year are attributed to tourism. Around 8-10% of this plastic is either mismanaged or leaks into the environment. This is due to the fact that the island state in the Mediterranean Sea has a big tourism sector, with up to 4 million tourists on an annual basis, a fisheries sector with a high percentage of leakage of fishing gear into the sea, and a waste management sector which has just recently evolved into a more organized network of collection, sorting and processing. In order to tackle existing and future challenges of plastic waste generation and leakage into the environment, the three sectors need to tackle existing issues through the introduction of more circular strategies for plastic materials. This report outlines an Action Plan for the tourism, fisheries and waste management sectors, which can serve as a clear way forward for the Republic of Cyprus to avoid and reduce plastic waste generation and leakage into the environment.

© Philippos Drousiotis / CSTI

[1] IUCN-EA-QUANTIS, 2020, National Guidance for plastic pollution hotspotting and shaping action, Country report Cyprus **https://plastichotspotting.lifecycleinitiative.org/pilots/**

SCOPE OF THE ACTION PLAN

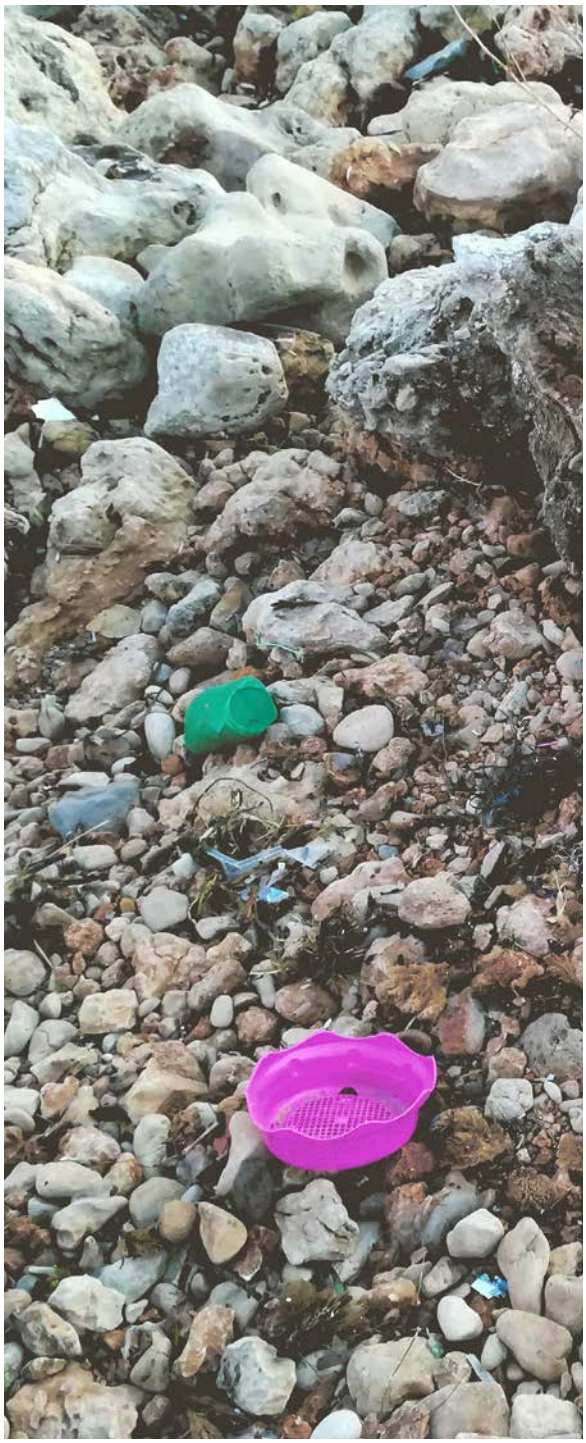
This report focuses on delivering clear guidance on plastic waste prevention for the Republic of Cyprus.[2] It has the function to serve as an action plan for Cyprus' decision and policy makers. The report focuses on the following three sectors:



Specifically, the attention is laid on how to reduce and reuse plastic materials in the first place, and if unavoidable, how to optimize and boost local recycling and enhanced plastic waste management, in order to identify a collective framework and a timeline for implementation. Special focus in the action plan is laid on the following factors:

— Improve knowledge of plastic waste generation in Cyprus and develop a set of actions and targets to reduce plastic consumption and enhance its reuse.

— Foster the adoption of plastic leakage reduction measures by tourism, fisheries and waste management sectors.



© Marta Pérez López / Plastic Free Menorca

[2] Department of Environment, Waste Management Strategy available at:
http://www.moa.gov.cy/moa/environment/environmentnew.nsf/page20_en/page20_en?OpenDocument

PROBLEM-SITUATION

Plastic waste generation and leakage into the environment is a worldwide problem with massive negative impacts. As a consequence, it also severely affects the Mediterranean Sea, and embedded, the island of Cyprus. On an annual basis, the Republic of Cyprus produces 92,588 tonnes of plastic waste, which adds up to 94 kg per capita per year.[3] This is well above the European average of 64 kg per capita per year. In order to draft efficient action plans, it is important to understand where the high waste generation comes from, and in which areas plastic production, use and disposal can be enhanced.

Even though the Republic of Cyprus has a relatively high waste collection rate (93%), most of it gets exported or disposed, which significantly takes away material value from Cyprus, instead of keeping it in the local economy. This causes two problems: firstly, it creates a huge economic loss for the Republic of Cyprus, as valuable materials end up as unused assets and quickly lose their initial value after the use phase. This creates missed financial opportunities for Cyprus. On top of that, the amount of space these materials need for their proper disposal takes away huge areas on the island, which Cyprus could otherwise use for something else – for example for spaces generating economic, recreational or cultural value.

According to the project-related quantification data from Quantis[4], the remaining 7% of the total waste generation on the Republic of Cyprus have been classified as mismanagement waste. On Cyprus, this typically addresses uncollected waste. However, the term also encompasses leakage of waste into the environment. In total, 756 tonnes of plastic leaked into the environment in 2018, causing major problem not only to marine wildlife and water quality but, in connection, also poses major risks to Cyprus tourism and fisheries sector.

In the tourism sector, plastic not only poses a major risk to the industry, but also represents a huge dependency. 10,495 tonnes of the overall waste generation of Cyprus can be attributed to the tourism sector alone, which is roughly 8.8%. With its 4 million tourists per year, this makes this sector highly significant for this action plan. The second industry of high relevance for inclusion in this action plan is the fishing industry on Cyprus. Due to their length and weight, they rank third in absolute leakage, with 84 tonnes per year. Even though these numbers are relatively small, plastic leakage from fishing nets into the sea causes devastating environmental impacts for marine wildlife. A so-called ghost net can, if leaked into the sea, trap hundreds of thousands of animals within, reducing population sizes significantly. This is why this action plan incorporates solutions for the prevention of plastic waste leakage from fishing nets specifically.

Lastly, the action plan focusses on waste management. Even though the focus is laid on prevention and reducing of plastic materials and plastic waste, proper waste management needs to be included in the action plan in order to guarantee a holistic approach.

[3, 4] IUCN-EA-QUANTIS, 2020, National Guidance for plastic pollution hotspotting and shaping action, Country report Cyprus
https://plastichotspotting.lifecycleinitiative.org/pilots/

METHODOLOGY

The actions outlined in the plan follow the model of the "National Guidance for Plastic Pollution Hotspotting and Shaping Action", a common methodological framework to enable countries to prioritize interventions to abate plastic pollution. The model is based on the definition of hotspots-interventions-instruments in the various stages of the value chain, classifying the interventions and instruments according to the categories of the Guidance.

The actions have been identified through a desktop study, followed by a field trip to share the study with different stakeholders and get their feedback and with the complementary quantification data by Quantis. This methodology will serve as a holistic "way forward" for decision makers and, once established, the actions will allow for a significant enhancement of plastic waste reduction in the three sectors.

ACTION PLAN TOURISM

The aim of this Action Plan is to provide a set of actions to undertake in order to effectively reduce and avoid plastic waste generation and leakage into Cyprus' environment and surrounding waters. The focus of this Action Plan lays on the tourism sector, therefore the implementing agencies will include: hotels, resorts, restaurants, bars/cafes, tour operators and cruise lines.

The support for the implementation of this Action Plan will include economic incentives for the tourism sector, as well as legal ban and taxation of certain harmful materials, from the national government.

Key note: the Cyprus Sustainable Tourism Initiative (CSTI) and the NGO Together Cyprus will engage with and seek the commitment of the Deputy Ministry of Tourism, at least one Tourism Board (e.g. Larnaka Tourism Board) and at least one hotel chain (e.g. Atlantica Hotels), and the hotel associations.

The local stakeholders and competent authorities (Deputy Ministry of Tourism) endorsing this Action Plan shall commit to:

1. Reduce consumption of single-use plastics by 50% in the tourism sector by 2030.
2. Reduce plastic production and consumption by 20% in the tourism sector by 2030.
3. Reduce micro-plastic pollution by 25% in the tourism sector by 2030 through voluntary agreements.
4. Increase plastic segregation and recycling in the tourism sector by 50% by 2025.

1. Reduce consumption of single-use plastics by 50% in the tourism sector by 2030

ACTION 1

Reduce single-use PET bottles' consumption through sales of tap water in hotels

- Provide or sell tap water in glasses or reusable bottles in hotels, in order to achieve a 50% reduction of single-use PET water bottles provided or sold in hotels by 2030, and halve the plastic waste generation per hotel per year in Cyprus by 2050.

ACTION 2

Reuse cups and food containers in hotels (on a voluntary basis)

- Implement reusable PP cups and food containers in hotels, in order to achieve a 20% reduction of single-use items provided or sold in hotels by 2030, and halve the plastic waste generation per hotel per year in Cyprus by 2050.
- Provide economic incentives to hotels for purchasing eco-designed cups and containers.

ACTION 3

Reduce single-use PET bottles' consumption through renting reusable water bottles and beach supplies in hotels (on a voluntary basis)

- Offer hotels guests the possibility to rent reusable water bottles, as a complementary solution to offering filtrated tap water.
- Provide economic incentives to hotels for purchasing eco-designed water bottles.

© Marta Pérez López / Plastic Free Menorca

2. Reduce plastic production and consumption by 20% in the tourism sector by 2030

ACTION 4

Reduce avoidable plastic items in hotels

- Reduce the following plastic items in the tourism industry by 2030:
  - Reception: e.g. plastic decoration, balloons, giveaways
  - Bar & Kitchen: e.g. cling film, aluminium foil, plastic bags
  - Rooms and bathrooms: e.g. plastic-wrapped towels or toilet paper
  - Cleaning supplies: e.g. single-use plastic gloves
- Incentivise companies not to produce short-lived, plastic-based goods.
- Provide market incentives for the tourism sector to use recycled materials.
- Create monetary value for plastic waste by internalising the cost of waste management in product price.
- Develop and implement digital solutions for the tourism sector, in order to replace e.g. plastic pens and PVC key cards with digital key cards and paperless receptions.

ACTION 5

Reduce plastic packaging waste from personal care products in hotels

- Install refillable dispensers in hotels' bathrooms (for shampoo, body wash and conditioner) in order to replace the personal care products in miniature and non-recyclable plastic packaging.

3. Reduce micro-plastic pollution by 25% in the tourism sector by 2030 through voluntary agreements

ACTION 6

Phase-out cosmetics containing micro-plastics provided by hotels

- Ban harmful materials (e.g. synthetic microbeads in cosmetics) and all products containing micro-plastics, if good alternatives already exist (e.g. sunscreen, body lotion and body wash), by 2030.
- Tax intentionally added micro-plastics (e.g. microbeads in cosmetic products provided by hotels), by 2030.

4. Increase plastic segregation and recycling in the tourism sector by 50% by 2025

ACTION 7

Enhance single-use PET bottles' recycling

- Implement PET bottle-to-bottle recycling, in order to collect 50% of the bottles in a single stream by 2025 and avoid that they end up in mixed plastic waste, being either incinerated or exported for landfilling. This way the value of the material remains high and can be recycled for food grade applications.
- Provide market incentives for producers to use recycled raw material for the production of PET plastic bottles (25% by 2025 and 30% by 2030).
- Develop local collection hub solutions in the tourism sector.

ACTION 8

Implement a segregation at source program in hotels

- Segregate at source 50% of LDPE, HDPE and PP in hotels by 2025 (Cyprus has the facility to recycle these plastic materials locally), thus avoiding that plastic packaging ends up mixed in the PMD (plastic, metal, drink cartons) stream through the Green Dot collection program.
- Provide training to staff in the tourism industry.
- Build capacity in the tourism sector and create synergies with the recycling companies.

ACTION PLAN FISHERIES

This Action Plan aims to provide a set of actions to undertake in order to effectively reduce plastic waste generation and pollution in the Republic of Cyprus. The focus of this Action Plan lays on the fisheries sector, therefore the implementing agencies will include: individual fishers, fishing companies, aquaculture companies as well as port authorities and employees.

The support for the implementation of this Action Plan will include: economic incentives for the fisheries sector, legal ban of certain harmful materials, as well as regulation and taxation of fishing nets' purchase and material content, from the national government.

Key note: the Cyprus Sustainable Tourism Initiative (CSTI) and the NGO Together Cyprus will engage with and seek the commitment of the Fisheries Department, Green Dot and fishers' associations.

The local stakeholders and competent authorities (Department of Fisheries) endorsing this Action Plan shall commit to:

1. Reduce loss and leakage by 30% of fishing nets by 2050.
2. Increase recycling by 20% of fishing nets and recovered sea-plastics by 2025.
3. Reduce consumption by 30% of plastic fish packaging by 2030.

© Marta Pérez López / Plastic Free Menorca

1. Reduce loss and leakage by 30% of fishing nets by 2050

ACTION 1
Reduce consumption of fishing nets

- Implement an Extended Producer Responsibility (EPR) Scheme for fishing gear containing plastic materials by 2025.
- Subsidise fishers for implementing innovative fishing techniques by 2025.
- Establish a national net database and introduce an annual fishing gear inventory by 2030.
- Regulate the net purchase by 2030.
- Ban longline fishing by 2030.

ACTION 2
Enhance repair of fishing nets

- Incentivise fishers to get a professional net repair and implement a reduced VAT on repair services by 2025. Many fishers currently try to repair their fishing nets when they are damaged, as investing in new ones has a huge cost factor for them. However, this is not always done in a professional manner, and nets often break again, thus increasing the risk of net loss in the sea.
- Introduce and implement a virgin material tax in combination with a value added tax (VAT) relief on repair and refurbish services by 2030.

2. Increase recycling by 20% of fishing nets and recovered sea-plastics by 2025

ACTION 3
Implement a net-to-net-recycling system

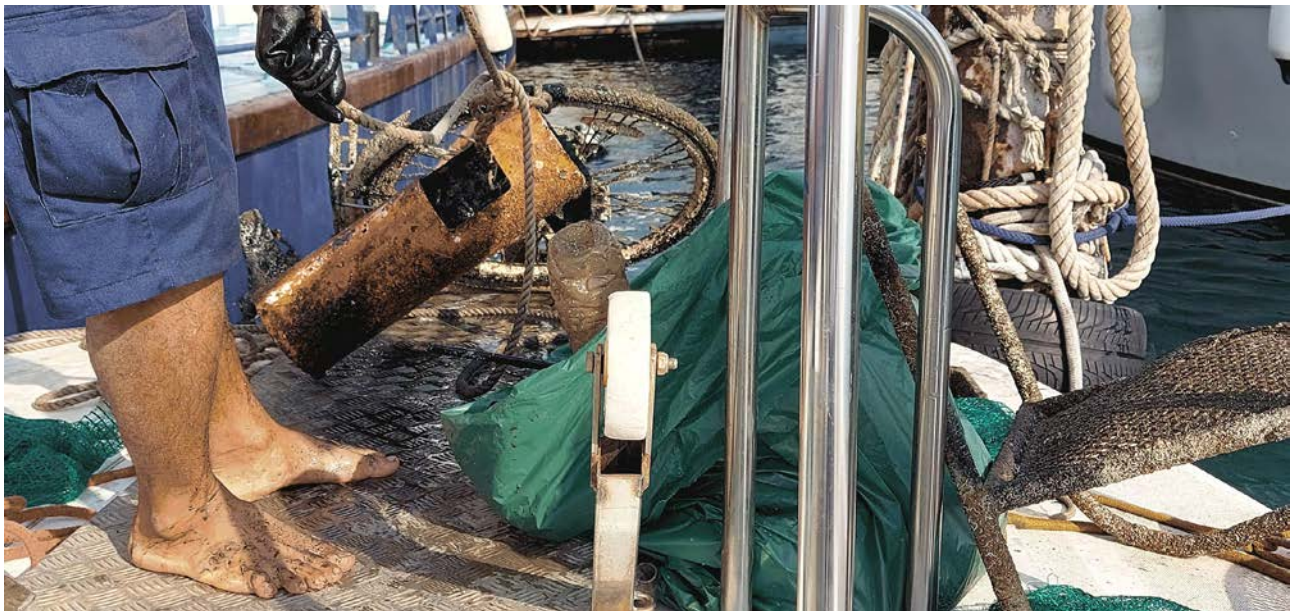
- Establish a net-to-net-recycling system by 2025. Nets can be collected in their respective single streams (Polypropylene and Nylon-6), and recycled into new nets again. Cyprus can collect and store used fishing nets, and then send them to a processing facility (e.g. in Denmark or Slovenia). The nets can be mechanically or chemically recycled at those facilities into new fishing nets. Currently, there is no opportunity for the recycling of fishing nets in Cyprus. If nets reach their end of life, they get discarded, where they get mixed with other waste, losing their initial value and becoming unrecyclable.
- Introduce minimum content of recycled material in fishing nets and put in place specific collection points by 2025.
- Inform fishers about collection points and encourage them to return their fishing nets.

ACTION 4
Incentivise purchase of recycled fishing nets

- Incentivise purchase of 20% of fishing nets made with recycled content by 2025. Currently, there is no opportunity for the recycling of fishing nets in Cyprus. If nets reach their end of life, they get discarded, where they get mixed with other waste, losing their initial value and becoming unrecyclable.
- Provide economic incentives for fishers to purchase recycled nets by 2025.
- Provide market incentives for producers to use recycled materials to produce fishing nets by 2025.

ACTION 5
Enhance sea-plastics recovery

- Provide fishers with incentives or rewards to collect the plastics at sea by 2025. The recovered plastic can then, if still in good conditions, be locally recycled or disposed of properly.
- Establish an evaluation mechanism for the sea-recovered plastics by 2025.



© Philippos Drousiotis / CSTI

3. Reduce consumption by 30% of plastic fish packaging by 2030

ACTION 6

Reduce plastic containers' consumption through transport in bulk

- Establish reusable and recyclable bulk transport packaging for the transport and storage of fish on vessels, trucks and in storage halls by 2030. Many plastic buckets and containers are still currently used to transport fish from the vessels to the facilities.
- Design innovative bulk packaging solutions by 2025.
- Provide economic incentives for purchasing eco-designed fish containers by 2025.

ACTION 7

Increase the use of reusable fish packaging

- Promote the use of reusable fish and seafood containers by 2030. Polystyrene containers are still currently used in the fishing and aquaculture industry, thus contributing to micro-plastic pollution.
- Design innovative reusable packaging solutions by 2025.
- Ban food and beverage containers from expanded polystyrene by 2025.

ACTION 8

Increase the use of reusable plastic bags and foil in packaging

- Promote the use of reusable plastic bags, which can be wrapped around fish boxes, and then travel to the local retailers or storage places. In aquaculture farms, the currently most used items are plastic bags to wrap fish containers for transportation.
- Design innovative reusable packaging solutions by 2025.

© Philippos Drousiotis / CSTI

ACTION PLAN WASTE MANAGEMENT

This Action Plan provides a set of actions for Cyprus' waste management sector. The aim of this Action Plan is to provide information on how to effectively reduce plastic waste generation and plastic pollution on the island. The implementing agencies will be waste management companies, supermarkets and logistic hotspots, through voluntary agreements.

The support for the implementation of this Action Plan will include funding for the waste management infrastructure, economic incentives for producers, supermarkets and logistic companies, as well as regulation and taxation of certain materials for recycling, from the national government.

Key note: the Cyprus Sustainable Tourism Initiative (CSTI) and the NGO Together Cyprus will engage with and seek the commitment of the Department of Environment, Green Dot, the Union of Municipalities, the Union of Communities and the recycling companies.

The local stakeholders and competent authorities (Department of Environment) endorsing this Action Plan shall commit to:

1. Reduce macro-plastic pollution by 50% in the waste management sector by 2030.
2. Increase the reuse of plastics by 50% by 2030.
3. Increase plastic segregation and recycling by 50% by 2030.

1. Reduce macro-plastic pollution by 50% in the waste management sector by 2030

ACTION 1

Introduce a container deposit scheme for PET, HDPE and PP bottles to increase collection and decrease littering rates

- Develop Deposit-Refund scheme by 2025 for beverage containers like PET, HDPE and PP bottles, which are unrecyclable and currently bought without a deposit.
- Standardise format of containers to facilitate take-back schemes by 2025.
- Set EPR scheme led by public-private partnership by 2030.

© Seabed and beach clean up Cyprus / CSTI_BeMed

ACTION 2

Install waste collection points for 100% coverage and segregation

- Set up new neighbourhood waste collection points (green points) by 2025. Currently, only 80% of plastic waste generated in Cyprus gets collected through Green Dot. There is a lack of segregated collection, especially in rural areas and remote communities, where waste gets illegally dumped or burnt.
- Implement "pay-as-you-throw" programs (following the pilot case of the Municipality of Aglantzia).
- Raise citizens' awareness through public education campaigns.

2. Increase the reuse of plastics by 50% by 2030

ACTION 3

Implement circular B2B logistics on a voluntary basis

- Introduce 50% of reusable packaging in logistic hotspots, like Limassol port and Larnaca airport, by 2030. Logistics currently rely on single-use plastics.
- Provide economic incentives for purchasing eco-designed packaging products for logistics by 2025.

ACTION 4

Provide reusable food containers in supermarkets on a voluntary basis

- Introduce reusable food containers by 2025, which can be rented for a small deposit and then returned. Upon return of the containers, customers receive their deposit back. Currently, most of the food served in supermarkets is sold in single-use plastic containers.

3. Increase plastic segregation and recycling by 50% by 2030

ACTION 5

Enhance local plastic recycling

- Build partnerships with local plastic recyclers and keep recyclable plastic materials on the island so the materials can be re-purposed into new products. Most of the plastic waste collected in Cyprus is currently exported overseas for recycling. However, the tracking of materials is not sufficient to monitor the effectiveness of recycling.

ACTION 6

Promote design for recycling

- Ban colours, additives and material mixes in some plastic materials by 2030, in order to achieve a high recyclability and make waste management easier and cost effective. Currently, there are very few mandatory requirements for plastic packaging design.
- Regulate Design for Recycling Guidelines' implementation by 2030.

ACTION 7

Increase plastic segregation at source

- Encourage the segregation of different plastic waste streams at the source of waste generation. Currently, several plastic materials do not get segregated at the source of waste generation, thus losing their value and becoming unsuitable for food-grade recycling.

IUCN

Fondation Didier et Martine Primat

CYPRUS SUSTAINABLE TOURISM INITIATIVE

Searious BUSINESS

Together Cyprus