

# PLASTIC ODYSSEY

THE EXPEDITION OF SOLUTIONS  
AGAINST PLASTIC POLLUTION

**PRESS KIT 2024**

## Partners

Main

L'OCCITANE  
EN PROVENCE

Field

apres  
demain

Official

CLARINS



matmut

Solidarity

FONDATION  
ENDEAVOUR

BUNZL

CMA CGM



« During a stopover in Dakar in 2016, not only was I struck by the plastic pollution in cities, but I was impressed by the ingenuity and ubiquitous culture of plastic recycling. I kept telling myself that if plastic recycling technologies, held by only a few specialists today, were to be democratized, not only would this pollution disappear, but thousands of jobs would be created. »

Simon Bernard, CEO and Co-Founder  
of Plastic Odyssey



## OUR GOAL

Enable people to earn  
a living from the  
waste that invades  
cities.



### Our Mission:

**Act ashore before waste gets dumped  
into the Ocean.**

#### How?

First, by « cleaning up the past » and promoting the recycling of plastic that has been produced.

Second, by « building the future » and reducing the production of waste.

### Our Vision

Identify where low-cost and easily replicable innovative solutions exist, to further develop their efficiency and distribute them in open-source across the world.

### The Lever

Turning waste into a valuable opportunity. Developing economic models of social entrepreneurship to create value and jobs while cleaning up the environment.



## I. PLASTIC POLLUTION





## I. PLASTIC POLLUTION

### THE ILLUSION OF CLEANING UP THE OCEAN

“

To Fight Against Plastic Pollution at Sea, We Must Act Ashore

”

#### Plastic Everywhere

Every minute, 20 tons of plastic end up in the Ocean, and every week we swallow an average of 5 grams of this plastic. (1)

#### Impossible Cleanup

When dumped into nature, plastic waste breaks down into fragments, which then become unrecoverable microparticles. (2)

#### Turning Off the Tap of Plastic Pollution

90% of marine pollution comes from coastal cities of 32 countries. (1)

(1) Plastic waste inputs from land into the ocean - Jenna Jambeck et al. Science 347, 768 (2015) (cf Annexe)

(2) A global inventory of small floating plastic debris - Erik van Sebille et al 2015 Environ. Res. Lett. 10 124006



## I. PLASTIC POLLUTION

### BUSTING 4 MYTHS ABOUT PLASTIC POLLUTION

Plastic that pollutes the ocean can  
be collected by boat

**FALSE**

The 7th continent of plastic is a  
pile of waste

**FALSE**

[Read report](#)



Plastic in the sea comes  
from ten rivers

**FALSE**

Fishing is the source of most  
plastic pollution

**FALSE**

Our approach:

**Plastic pollution must be addressed on land, before the waste enters the ocean.**

**Clean up the past and Built the Future!**

## I. PLASTIC POLLUTION SOLUTIONS ARE ASHORE

“ Clean Up the Past, and Build the Future ”

### RECYCLE & RECOVER

#### *Cleaning up past mistakes*

Recycling 1 out of 2 plastic wastes in the 32 most polluting countries would avoid over 45% of the Ocean's pollution. (1)



### REDUCE

#### *Building tomorrow's world*

Reducing the production of waste to 1.7 kg per day and per inhabitant would avoid 26% of Ocean pollution.

We develop 6 concrete solutions:





## II. OUR PROJECT

 PLASTIC  
ODYSSEY





## II. OUR PROJECT VISION

### “ Develop a Global Network of Local Initiatives ”

#### Small Scale, Large Impact

Identify, document, and promote locally designed solutions to reach a global impact.

#### Share Knowledge

Disseminate our technical developments, as well as all our innovations in open-source to benefit as many people as possible.





## II. OUR PROJECT THE VESSEL

## A Unique Tool to Experiment and Promote Solutions in the Field



**CLEAN UP THE PAST**  
**#recycle**

**BUILD THE FUTURE**  
**#reduce**

### Technical characteristics of the vessel

Length: 128 feet  
Width: 31 feet

Gross Tonnage: 464 UMS  
Engines: 736 kW

Crew: 8  
Technical and Scientific Personnel: 7

Media Team: 3  
Guests: 2

## II. OUR PROJECT THE EXPEDITION

### Focus On The Areas Most Affected By Plastic Pollution



3

—  
years of missions

30

—  
stopovers

Plastic Odyssey launches an exploration mission in the areas most affected by plastic pollution. The goal? Uncover solutions to fight against plastic pollution and experiment with innovative models on smaller scales to replicate these in other territories. 3 continents, 30 cities – and as many solutions tested and shared with the whole world.

## II. OUR PROJECT REDUCE

### “ Promote Alternatives to Plastic ”

#### **Implicate Companies and Industrials to Reduce the Use of Plastic**

The vessel's forepart is entirely dedicated to the testing and displaying of alternatives to the use of plastic.



The vessel's conference room presents a travelling and evolving exhibition of materials that can replace plastic at the industrial level.

**Presentation of the alternatives listed**



Kitchen, cabins and zero waste bathroom are used to test solutions that can be implemented in hotels or restaurants.

**On-board plastic reduction showroom**



## II. OUR PROJECT

### AWARENESS - 3 FORMATS TO INCREASE IMPACT



The Plastic Odyssey team offers fun mediation tools that complement school textbooks, to address the issue of plastic pollution through the prism of solutions, and to put young people in an exploratory posture.



The Treasure Trunks contain objects, ideas and testimonies from all over the world to prevent plastic from ending up in the ocean. At each stopover of the expedition, the Plastic Odyssey team opens its trunks to let the inhabitants discover these treasures, and presents the exhibition in a cultural place of the city.



Plastic Odyssey studies initiatives that have successfully reduced their plastic use, documents them, and shares this data with others who would like to replicate them around the world.





## II. OUR PROJECT RECYCLE



*Onboard recycling workshop*

### An open-source approach

The plans of the Plastic Odyssey machines will be published on a collaborative platform to be improved, shared and used by as many people as possible.

## Design Low-Tech Recycling Machines to Process Waste

### Easy to Use, Patent-Free, and Human-Sized Tools

For plastic waste to be recycled, several steps are required. Plastic Odyssey is developing a set of technologies that perform each of these steps. Inspired by solutions that operate in the field and improved with the technical expertise of our community, these machines aim to serve in-land based waste treatment centers.



Thanks to these machines, for example, the child's toy becomes a basin, the can becomes a roof tile, and the bottle becomes thermal insulation.

## II. OUR PROJECT

### RECYCLE - 3 FORMATS TO INCREASE IMPACT



#### ON BOARD

**Incubation** of entrepreneurs during the stopovers: 2 weeks of intensive training on board.

**+ Conferences and events** about recycling, entrepreneurship, pollution...

**+ Business meetings** with investors, customers and local suppliers.



#### ON LAND

**Manufacturing and implementation** of turnkey recycling factory containers.

Launch kits included:

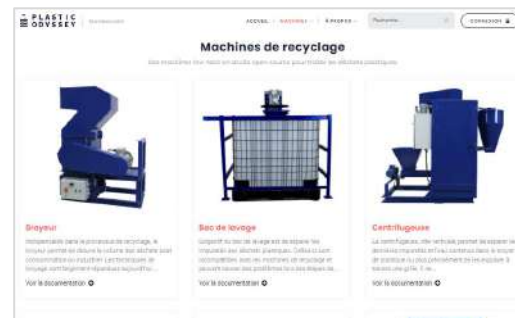
- business plan, communication kit, EPI and training
- studies and technical advice
- access to the Plastic Odyssey community



#### ONLINE

**The Academy** by Plastic Odyssey  
Bring together a community with:

- webinars
- case studies
- online platform to connect the community members
- training guides



## II. OUR PROJECT RECYCLE



*Example of object prototyping on board of the ship*

### Learn and share knowledge

The OnBoard Laboratory team selects between 8 and 10 projects at each session. Nearly 300 plastic recycling projects will be incubated around the world.



ON BOARD

### An incubation program on board the ship for recycling entrepreneurs

At each stopover of the expedition, the Plastic Odyssey ship welcomes several local recycling entrepreneurs on board to develop concrete and effective solutions to fight against plastic pollution.



The program is based on an international network of technical experts and allows each entrepreneur to prototype their objects directly on board thanks to the on-board recycling workshop. This dedicated space on the 200 m<sup>2</sup> ship is composed of 10 plastic valorization machines, including a washing tank, a crusher, a compactor, an extruder, a press, and a plate oven. The entire valorization chain is available to entrepreneurs so they can transform plastic waste into useful resources locally.

## II. OUR PROJECT RECYCLE



### The first recycling micro-factory developed by Plastic Odyssey for BGS Recyclast

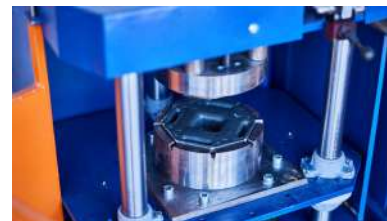
- Transition to a semi-industrial scale
- Improvement of working and safety conditions
- Economic sustainability of the activity
- Marketing and commercial development



ON LAND

### A network of micro-recycling factories to transform plastic waste

The Plastic Odyssey Local Factories are inspired by innovations and systems used on the ground worldwide. They bring together in a container all the necessary machines to transform waste into new material or objects.



Our factories concentrate best practices we have studied and the know-how of partners we have met over the last 5 years. They have all been tested in industrial environments around the world. Machine configurations are standardized, modular and adapt to the needs of each entrepreneur.

In addition to a turnkey factory, we provide solutions for financing, technical and commercial support to ensure entrepreneurs succeed and have a lasting positive impact on their community and the environment.



## II. OUR PROJECT RECYCLE



*Technical training guides*

### Free resources to download

- The recycling ecosystem
- Going from waste to product
- Creating my recycling center
- Building a sustainable model



ONLINE

## Free online training for the recyclers of tomorrow

The Recycling Academy program aims to train local entrepreneurs in the basics of plastic waste recycling.



With the Recycling Academy, we offer an online training program to familiarize yourself with the challenges of plastic recycling and learn the basics to develop your own plastic waste processing plant with semi-industrial production capacities.

## II. OUR PROJECT RECOVERY

### “ Turns Plastic Waste into Fuel ”

#### ≡ A Full-Scale Demonstrator

To prove that waste holds value, the Plastic Odyssey vessel is carrying several recycling technologies on board for testing and demonstration purposes.

Among these machines, an **on-board pyrolysis** will be used during stopovers to **produce fuel consumable** directly on board.



*Pyrolysis is a process that consists of heating plastic without oxygen to break down long polymer molecules (in solid form) into lighter ones (liquid and gas): With 1Kg of plastic, we can obtain up to 1L of fuel, diesel, and petrol.*

#### ≡ The Journey of Waste During Stopovers

##### **Collect**

and sort plastic waste ashore before using it on the vessel.

##### **Recycle**

collected plastic to demonstrate the operation and utility of each machine.

##### **Produce fuel**

with non-recyclable plastic with the onboard pyrolysis, for storage and use onboard.

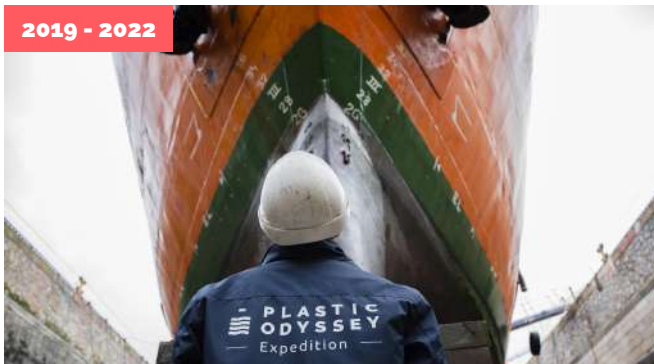
On-board pyrolysis



### III. TIMELINE

**PLASTIC  
ODYSSEY**

2019 - 2022



**SHIP DOCKYARD**

2018 - 2022



**MACHINES DEVELOPMENT**

**" Every day is a new challenge, but also a new step towards reducing plastic pollution and poverty. "**

Simon Bernard, CEO and Co-Founder of Plastic Odyssey

2022 - 2025



**EXPEDITION**

2023 - 2028



**INTERNATIONAL EXPANSION**

### III. DIFFERENT STAGES OF THE EXPEDITION TIMELINE

#### Preparation

November 2018	Field study trip, Thailand
February 2019	Field study trip, Burkina Faso
October 2019	Purchase of the vessel Field Study Trip, Egypt
November 2019 - December 2021	Shipyard Assembling of the onboard recycling station and pyrolysis

#### Expedition

January 2022	First navigation Dunkirk - Saint-Nazaire
February 2022	Field study trip, Conakry (Guinea)
February - May 2022	Shipyard 3/3, sea trials
September 2022	Start of the expedition (Marseille)
October - December 2022	Mediterranean Mission (Lebanon, Egypt, Tunisia)
2023	West Africa and Latin America
2024	Asia Pacific
January - June 2025	East Africa

#### Recycling solutions

2021	R&D and reverse engineering Recycling machines prototypes, open source sharing of our recycling machine plans
2021- 2022	Testing and improvement Deployment of pilot recycling centers and development of of "turnkey" containerized recycling centers
2023 - 2025	International deployment Large-scale manufacturing of containerized centers and industrialization 4 pilot projects in Africa



### III. DIFFERENT STAGES OF THE EXPEDITION

#### FIELD DEVELOPMENT: 2021 - 2026 - FOCUS ON AFRICA

**2021 - 2022**

#### 3 pilot projects for recycling micro-factories launched in Africa

Development **support** and **technical expertise** for **4 pilot projects in Africa** to install low-tech recycling machines.

📍 **Guinea - Togo - Djibouti**



#### Establishment in Senegal

**2023**

#### 6 pilot projects

Launch of a pilot with 6 entrepreneurs all experienced in the production of recycled products or collection. With them, we will build a model adapted to Senegal.

**2024 - 2025**

#### 30 micro-factories

For this second phase of 30 micro-factories, we will demonstrate that it is possible to train young people and go into remote communities where the skill did not exist.

**Over 500 jobs created**  
**About 5,000 tons of waste recycled per year**

### III. DIFFERENT STAGES OF THE EXPEDITION

#### WORLDWIDE DEPLOYMENT

#### Aim of the Stopovers

- 1 Find successful existing models and document them.
- 2 Encourage the development of profitable recycling micro-factories.
- 3 Disseminate solutions for replication.

#### Course of The Expedition

##### Two Types of Stopovers

###### Long (📍)

Duration: 3 weeks

Actions: press conferences, official visits, demonstration workshops, field studies, collaboration with local waste management ecosystems...

###### Short (📍)

Duration: 3 to 7 days

Actions: press conference, waste collection on an island or in an isolated town to fill up the vessel with plastic and reach the next stopover.

“ Over 30 Main Stopovers Across 3 Continents ”



#### A partnership with the Solar Impulse Foundation

Plastic Odyssey is an ambassador of the Solar Impulse Foundation to select the best innovations and help them obtain the "Efficient Solution" label



## IV. THE TEAM



**Simon BERNARD**

Chief Executive Officer

Trained as a Merchant Navy officer, Simon was the driving force behind the idea of the project of which he is now president. Speaker at major conferences, he is the project's spokesperson. Simon performed a TEDx on Plastic Odyssey in 2019.



**Alexandre DECHELOTTE**

Chief Communication Officer

Trained as a Merchant Navy officer, Alexandre co-founded Plastic Odyssey and now leads the project's Communications. He is the privileged contact for the project's partners, with whom he works to undertake concrete actions to lead the project forward.



**Bob VRIGNAUD**

Chief Technology Officer

Engineer experienced in processes but also in social entrepreneurship, Bob co-founded the Plastic Odyssey project and now manages its R&D. He is the privileged contact for the project's technical partners that he brings together to share knowledge and expertise and to find solutions to the plastic pollution problem.



**Morgane KERDONCUFF**

Stopover Manager



**Benoit BLANCHER**

Head of PO Factories



**Jean-Baptiste GRASSIN**

Field Project Manager



**Baptiste LOMENECH**

Recycling expert



**Tom BÉBIEN**

R&D Manager

## IV. THE TEAM SUPPORT

### | Support Committee



**Brune POIRSON**

Former French Secretary of State, Vice-President  
of the United Nations Environmental Assembly



**Guillaume BRIANT**

Associate Lawyer  
Stephenson Harwood AARPI



**Didier LE BRET**

French Diplomat, Former Ambassador  
Partner at ESL & Network



**Marc VAN PETEGHEM**

Naval architect, Founder of VPLP,  
co-founder of Watever



**Patricia RICARD**

President of the Oceanographic  
Institut Paul Ricard



**Roland JOURDAIN**

Sailor, co-founder of the  
Explore Endowment Fund

### | Ambassadors



**Guillaume NERY**

French Freediver



**Alice DAVID**

Actress



**Cyrielle HARIEL**

French Journalist





## V. OUR PARTNERS

Simon BERNARD alongside Reinold  
and Adrien GEIGER  
(L'Occitane en Provence - Main Partner)

 **PLASTIC  
ODYSSEY**



**Plastic Odyssey Can Have a Colossal Impact,  
Their Idea Made Us Dream**



Adrien Geiger on BFM Business TV  
Group Sustainability Officer of L'Occitane en Provence - main partner



## V. OUR PARTNERS & PATRONS

### *Main Partner*

**L'OCCITANE**  
EN PROVENCE

### *Field Partner*



### *Official Partners*

**CLARINS**



**matmut**



### *Main Patron*

**FORVIA**  
Foundation

### *Solidarity Partners*



## V. OUR PARTNERS

### Main Media Partners

vivendi

**CANAL+**  
GROUPE

**CANAL+**  
**DOCS**

**PM**  
PRISMA MEDIA

**GEO**

**dailymotion**

### Social Partners

ULYSSE  NARDIN

 **ERGET GROUP**

**BIODERMA**  
LABORATOIRE DERMATOLOGIQUE

GROUPE  
**RIEM BECKER**  
MANUFACTURE GASTRONOMIQUE

  
**RICHEL**  
GROUP

 **DELFINGEN**

 **ENOWE**

**Domorrow**  
Agir pour les générations futures

  
**SARA**

 **ELECTRO  
DEPOT**

  
Geogas

**RUBIS**  
**ENERGIE**

 GROUPE  
**IMA**

## V. OUR PARTNERS ENGAGEMENTS

### Main Partner

*The main sponsor of the expedition is the highest level of financial partnership. Committed to us for 5 years, the main partner is associated with the project through concrete actions and participates very regularly in the development of the expedition.*

L'OCCITANE  
EN PROVENCE



*"Plastic Odyssey, their ambition made us dream."*

Adrien Geiger, Group Sustainability Officer

### L'Occitane en Provence, Main Partner of Plastic Odyssey

Despite the growth of the brand, **L'OCCITANE en Provence's** plastic consumption levelled off in 2018. It's now going further, committing to cutting plastic use by 10% on 2018 levels by 2025, saving an estimated 240 tonnes. Put simply, **L'OCCITANE's** pioneering approach has allowed it to continue growing the business while reducing its plastic footprint.

It is also playing a leading role in a number of initiatives: cutting cellophane from its products; replacing two million plastic spatulas (provided with certain products or in store) with a cardboard equivalent since 2020; and now offering eco-refills of 26 products. These refills contain on average 80% less plastic than the original packaging, saving around 200 tonnes each year

Find out more on the [L'Occitane en Provence](#) website



## V. OUR PARTNERS ENGAGEMENTS

### Field Partner

*The "Field Partner" category is located at the highest level of financial partnership, just like the main partner. Committed to our side for a period of 3 years, our field partner is associated with the project through concrete actions exclusively oriented towards the development of recycling centers on land and participates very regularly in the progress of the expedition.*



***"Recycling used plastic by recovering it and creating jobs corresponds perfectly to the values defended by Après-Demain SA. "***

Thierry Mauvernay  
President, Managing Director

### ***Après-Demain, Plastic Odyssey's field partner***

**Après-Demain SA** is a private family-owned company based in Switzerland and the parent company of a group composed of a Life Sciences cluster, Debiopharm™, asset diversification clusters and a Philanthropy cluster.

Private and independent company committed to having a positive impact on the long term by taking care of people and the planet to preserve the future.

Après-Demain is already very committed to environmental protection (impact, renewable energies) and supports Plastic Odyssey since 2022 for a period of 3 years.

More information on: [Après-Demain](#)

## V. OUR PARTNERS ENGAGEMENTS

### Official Partners

*The official sponsors of the expedition support the project financially at the second highest level and benefit from a strong visibility associated with the project. They are committed to the project for a period of 3 to 5 years.*

**CLARINS**

***"A wonderful project, as inspiring as it is concrete."***

Christian Courtin Clarins, Chairman of the Supervisory Committee.

#### Clarins and Plastic Odyssey share a strong vision: respect for nature and people.

Christian Courtin Clarins has pioneered important environmental changes within the Group. Shocked by marine pollution while sailing in Asia, he took a pioneering decision in 1999 to ban plastic bags from all his points of sale.

**matmut** 

***"What an inspiration to act in favor of the preservation of our planet!"***

Stéphanie Boutin, Deputy General Manager of La Matmut

#### Matmut's CSR commitments

This partnership is part of Matmut's proactive approach to CSR. The company, aware of the major environmental challenges we are facing today, has, for many years now, been committed to reducing its ecological footprint by carrying out several actions with its members and employees.



***"I hope that, in the end, this project will escape them."***

Philippe Brassac, Chief Executive Officer of Crédit Agricole S.A.

#### Shared beliefs in the fight against plastic pollution

Plastic Odyssey's approach is to use local experiences as a starting point to develop solutions on a global scale. It is particularly relevant for a decentralized, mutualist Group like Crédit Agricole, which combines international presence with proximity to its local communities.

## V. OUR PARTNERS ENGAGEMENTS

### Solidary partners

*The solidarity partners of the expedition support the project in the form of sponsoring. They associate their brand with the project and bring us concrete contributions on a regular basis.*



Present in 32 countries and 4 continents, the BUNZL Group is the world leader in the sale and distribution of hygiene and safety products. Bunzl France is committed to Plastic Odyssey in order to actively contribute to the reduction of plastic pollution on a global scale.



The Endeavour Foundation provides services to people with intellectual disabilities who need help at home, at work and in their daily lives. Endeavour joins the Plastic Odyssey project as a three-year solidarity partner to develop field projects in Burkina Faso and West Africa.



CMA CGM is a world leader in containerized maritime transport and logistics. The CMA CGM Group is committed to the energy transition by taking concrete and pioneering decisions to reduce the impact of their activities on the climate, air quality and biodiversity.

## V. OUR PARTNERS ENGAGEMENTS



NAOS, with its Bioderma brand, is a major player in skin care, through its three brands: Bioderma, Institut Esthederm and Etat Pur.



Erget Group is a leading expert in corporate risk and specialized markets in France and internationally and has supported Plastic Odyssey since 2021.



A family-owned investment structure supporting entrepreneurial projects, Enowe is committed to increasing its positive, social and environmental impact.



Electro Dépôt, distributor specializing in household appliances and multimedia, is committed to less carbon and more solidarity.



SARA focuses on air, water, soil and subsoil protection and waste management.

## Social partners

*The social partners of the expedition support the project in the form of sponsoring. They bring us concrete contributions and commit themselves daily with their structure.*



Rubis Energie has set itself the goal of being a committed and civic-minded partner with commitments to decarbonization and energy transition.



Event catering, ready to deliver, Japanese culinary art: Riem Becker Group, gastronomic manufacture in Île-de-France, since 1924.



GEOGAS is a company specialized in LNG transportation and has been a partner of Plastic Odyssey since 2021.



Richel group, supplier of agronomic solutions, is committed to plastic recycling and the circular economy.



The philanthropic endowment fund that supports projects of general interest for the environment and the ecological and solidarity transition.



Ulysse Nardin is the Manufacture inspired by the Ocean, producing freaky timepieces for explorers in pursuit of freedom.



DELFINGEN is a global automotive supplier and leader in on-board network protection solutions and fluid transfer tubes.



The IMA Group is committed to a CSR approach in order to generalize good social, societal, environmental and economic practices throughout the Group, pillars of sustainable development.





VI. MEDIA



## VI. MEDIA CONTENT



### Web series

#### Object

Expedition diary for an immersion in the daily life of the team and locals

#### Broadcasting

Canal +, YouTube channel, Pure Player Web, media partners

[WATCH THE FIRST EPISODE](#)



### Events

#### Object

Conferences and workshops, official visits

#### Broadcasting

Live broadcasting of the expedition's highlights on social networks

changeNOW



### Articles and book



#### Purpose

Academic articles bringing together learning and Plastic Odyssey methodology  
Expedition diary recorded by the founders relating the adventure (partners exclusivity)  
Comic book recounting the stakes of plastic pollution and Plastic Odyssey's raison d'être.

#### Broadcasting

Website, Medium, Social networks, print publication



### Documentary Series and TV Reports

#### Subject

Coverage of Plastic Odyssey's stopovers and shore actions

#### Broadcasting

Prime time national TV channel and international distribution



#### Producers

Les Gens Bien, Plastic Odyssey





## Contact

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