

CALL FOR APPLICATIONS PLASTIC ODYSSEY LAB

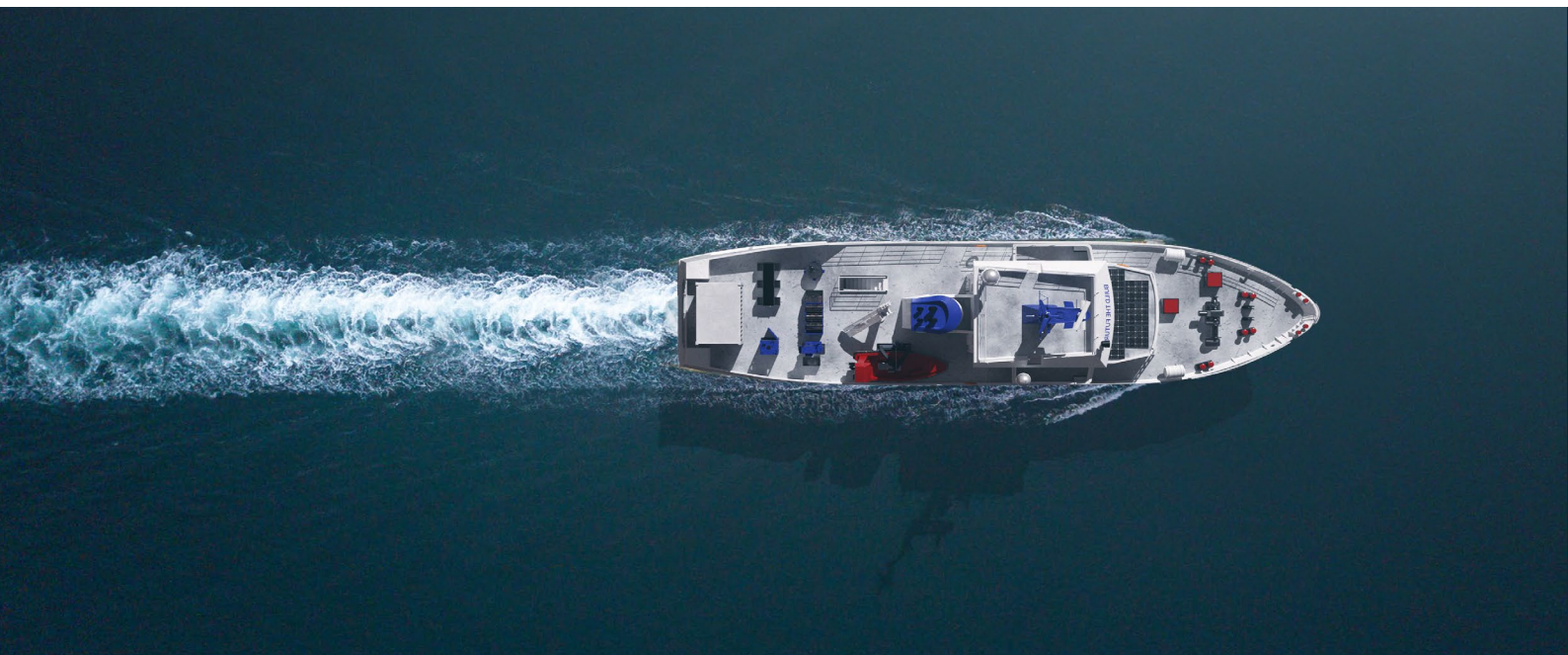
PLASTIC ODYSSEY

Plastic Odyssey is a collective adventure in the fight against plastic pollution that brings together researchers, engineers, scientists, experts in many fields, citizens, women, and men who aim to take action across the globe.

Our ambition? To connect all of these actors of change to share great ideas, multiply local initiatives anywhere around the globe, and accelerate the transition towards a world free of plastic.

In 2021, Plastic Odyssey will begin its 3-year expedition around the world starting with a tour de France from Dunkirk to Marseille! Our vessel will take on board a team of 20 multidisciplinary explorers, as well as an experimental recycling workshop.

Upon this occasion, Plastic Odyssey is launching a call for applications to welcome in an incubation program aboard the ship, candidates wishing to experiment and develop solutions for the recycling of plastic waste.



THE INCUBATION PROGRAM

Candidates will be welcomed aboard the Plastic Odyssey vessel to tackle an identified waste issue and develop one or more plastic waste recycling solutions.

This program will enable applicants to benefit from the expertise of Plastic Odyssey and its partners. The selected candidates will also be able to prototype recycled plastic objects from emblematic waste, all while developing a viable business model for their product.

The Projects

The projects we are looking for revolve around the development of new value chains for plastic waste to meet locally identified needs. For example, this may involve creating an object from a specific type of plastic waste or replacing certain practices and uses of materials (virgin plastics, polluting materials, non-renewable raw materials, etc.) with recycled plastics.

The maturity and state of progress of the submitted projects are broad: idea, concept, prototyping, priming, deployment, scale-up.

Plastic Odyssey Lab will prioritize projects whose solution(s) also respond to an environmental and/or social issue existing in a given territory. The highlighting of this solution in the submitted application is highly recommended.

The onboard workshop was designed to process the following plastics:



Rigid and flexible HDPE



Rigid and flexible PP



Rigid and flexible LDPE



Rigid PS

Other plastics are tricky to recycle onboard, which is why they should be excluded from the presented projects:



PVC

- **Thermosetting and brominated plastics**

- **PS Expanded**



The Plastic Odyssey Lab Program

The program was designed to last between 2 and 4 weeks, to be determined according to each project. Candidates will embark with the team onboard the Plastic Odyssey vessel, a former oceanographic ship transformed into a floating recycling laboratory.

Selected candidates will have access to different parts of the vessel:



Access to work areas will be regulated and shared with the Plastic Odyssey team.

Boarding will take place between June and August 2021. Candidates are asked to provide their dates of availability when applying. Boarding dates will be defined on a case-by-case basis according to the schedule of the applicants and will be announced to the candidates no later than March 30th, 2021.

Plastic Odyssey would like to encourage applicants who cannot free up the given time to apply anyway. Solutions could be figured out on a case-by-case basis, depending on the relevance of the project.

The Time Onboard Will Be Divided Between Two Distinct Work Phases

Allocated Time for the Technique

Semi-autonomous training in the use of the machines and the recycling workshop, mentoring on the properties and characteristics associated with different plastics, prototyping, and design techniques.

Allocated Time for Entrepreneurship

Conducting market research, business models, mentoring in business development, social entrepreneurship, and circular economy.

The State of Mind of the Program

The projects submitted must correspond to the intrinsic values that drive Plastic Odyssey.

Here are our three founding principles:

-  **Open source:** the experiments carried out should be completed in an open logic, to share knowledge with a worldwide community of innovators. The open source scope will be discussed on a case-by-case basis, with applicants.
-  **Frugal innovation:** the projects developed during this program must take into account the depletion of resources and design according to the following principles: usefulness, accessibility, and sustainability.
-  **Virtuous solutions:** the solutions designed must be part of a virtuous approach, i.e. combining the resolution of environmental issues while meeting a need (avoiding the reproduction of waste).

The incubation program takes place as the Plastic Odyssey vessel makes its way through its various stopovers. The candidates will, therefore: experience the adventure and daily life of the crew members, have access to the events that take place during these stopovers, and will meet the partners and personalities welcomed on board.

The Expected Deliverables

Plastic Odyssey Lab's program was designed to be as concrete as possible. Over a given period, applicants will have the opportunity to prototype objects and define associated business models.

Even if there is no obligation of output, the selected candidates will have to fully invest in their experimentation during the allotted time.

At the end of the incubation program, the work and achievements could be exhibited to the general public at a restitution event. They may also be highlighted in a report about the incubation program.



TERMS AND CONDITIONS

Applicants will be asked to pay a flat fee of 10 € per day for food and lodging on the vessel for the duration of the program. They will share daily life and activities with the rest of the team, for an extraordinary collective adventure!

The Selection Process

Candidates must submit an application file using the dedicated form (see below). The Plastic Odyssey team will make a pre-selection based on these files. Short-listed projects will be invited to present their design before a jury composed of Plastic Odyssey and its support committee. At the end of these presentation interviews, the selected projects will officially be announced.

The Selection Criteria

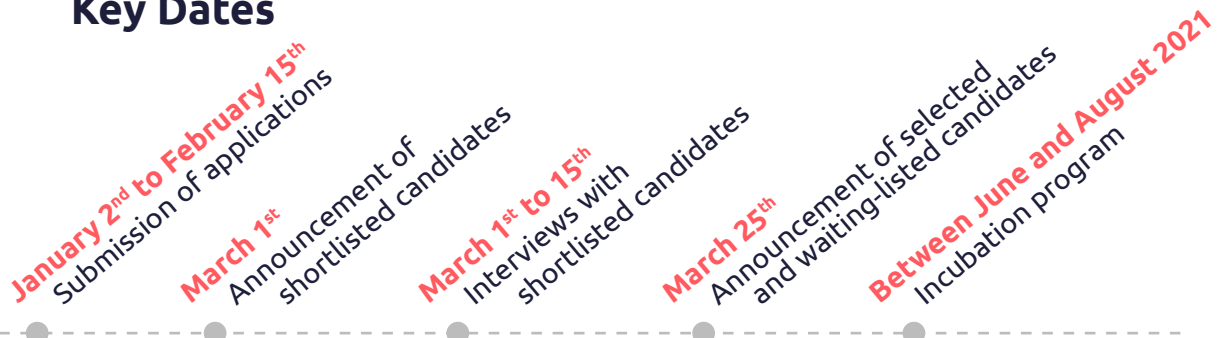
The candidates submitting a project can have a wide variety of profiles: makers, craftsmen, entrepreneurs, designers, engineers, researchers, etc. The selection is not based on the profile of the applicant but on the coherence of the project with the proposed working method.

Particular attention will be paid to:

- The general coherence of the project and its clarity
- The anchoring of the project in the founding principles of the program's state of mind
- The relevance of the identified problem and the proposed response (innovation, social and environmental impact, etc.)
- The technical feasibility and economic viability of the proposed solution

Projects with a local and territorial dimension, identified both in the challenge and the solution, will be studied with particular attention. Indeed, Plastic Odyssey's action is precisely in the adaptability of plastic recycling techniques to both the context and local populations.

Key Dates



How to Apply?

→ Click on the link to fill out the form and attach the required documents.
<https://cutt.ly/PlasticOdysseyLAB>

A presentation file of the project, in the format of your choice (pdf file, video, model), including at least the following elements:

- A problem to which the project leader wishes to respond, its context, and why it is important to address it
- The geographical context in which the project takes place
- The considered solution
- The axes of development to be worked on during the program
- The necessary equipment, technical needs, and the help that Plastic Odyssey and/or its ecosystem could bring to it
- The business model considered and its advantages/disadvantages
- Potential project partners
- The envisaged deliverable at the end of the program

A portfolio, book of previous achievements, references, or a Resume (CV) to provide additional information on the candidate, and support the application.



For any questions, please send an email to lab@plasticodyssey.org with the subject line "Call for applications - information."

APPENDICES

The Human Resources Made Available

The Plastic Odyssey Lab will enable applicants to benefit from the support of the Plastic Odyssey team. The selected candidates will have access to Plastic Odyssey's network: an ecosystem that has been built over the last three years, composed of a wide range of players.

The onboard team will be composed of sailors, plastics and mechanical engineers, technicians, media representatives, scientific mediators, researchers, awareness-raising specialists, etc. This team will be available to exchange with the candidates and guide them throughout the adventure.

At the same time, regular mentoring sessions will be organized, in person or remotely, with the actors of the Plastic Odyssey network: recycling entrepreneurs around the world, technical experts, partners, circular economy experts, plastics specialists, etc.

The selected projects will benefit from the visibility with the general public. They will be highlighted to partners and the general public during Plastic Odyssey's France expedition and will be the subject of publications on the website and social networks, as well as the production of audiovisual content.





The Technical Equipment Made Available

Three technical workspaces (more than 200m² in all) will be available to selected candidates during their stay onboard.

A Recycling Workshop

- A knife shredder
- A film agglomerator
- A washing tank
- A centrifuge
- A single-screw extruder
- Profiled dies (round, square, rectangular)
- Machined molds
- Mechanically welded molds
- A 50T hydraulic press with plates
- An oven for plates and molds
- A drying table
- An oven-turbine
- A pyrolysis unit

A Laboratory

- An infrared spectrometer
- A fuel analysis station
- A 3D printer
- A photo studio (white booth with light and camera)
- A database of plastic materials and plastic waste

A Mechanic Workshop

- A CNC milling machine
- A conventional tour
- One MMA + TIG welding station
- Standard mechanical tools (screwdriver wrenches, sockets, etc.)
- From portable electric: drill, screwdriver, grinder, circular saw, jigsaw, saber saw, impact bolt gun.
- A 30T workshop hydraulic press
- One drum
- A 10 bar compressor