

OCEAN PHOENIX PROJECT

GENERAL PRESENTATION



www.oceanphoenixproject.com

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**Plastic Waste Recovery Program in the North
Pacific Ocean and Other Oceans around the World**

- . a patented, innovative and efficient naval concept*
- . an industrial solution to a global ecological challenge*
- . an economically viable solution*

Serge Menard

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General Presentation of the Ocean Phoenix Project



1 – Ocean Phoenix Project Rationale

Extending over a vast stretch of the North Pacific Gyre is a concentrated “soup” in which experts expect several millions of tons of floating plastic debris to have accumulated in-between two levels of water as a layer ranging from 10 to 30 meters thick. The adhesion of the North Pacific layer results from the movement of two ocean currents and is the largest landfill site in the world; growth projections from 2008 anticipate that it could double in size over the following decade.

This debris is swirling slowly in a "trash vortex" drifting along with the winds and currents. Located 500 nautical miles from the Californian coast, it stretches across the North Pacific, beyond the Hawaiian Islands, and continues to grow almost up to Japan, threatening the coastal groundwater of several continents.

This Pacific stratum is the largest manifestation of a phenomenon that affects all the world's oceans as the waste floats in each and every sea, including the Polar Regions. Certain areas were observed to contain more plastic than plankton.

In 1997, oceanographer Charles Moore discovered the area the trash-vortex occupies. Consisting of non-biodegradable waste which has been accumulating for at least 50 years under the waters' surface, it is composed of plastic and comprises 90% of the total volume of waste floating in the world's oceans.

Some countries desire to take action; however, the present geopolitical climate, as well as the difficulty in rapidly achieving agreement between countries does not facilitate the involvement of state governments.

Compounding the issue is the fact that none of the technical solutions proposed to this day have appeared feasible enough to rally the global community under one banner.

Time is short. Due to the effects of sunlight (solar radiation) and ocean currents, the plastic waste rapidly shrinks into plankton-sized micro-plastics that are much more difficult to remove, all the while ocean currents sweep them into broader areas, which they then promptly contaminate. It is of utmost importance to eradicate these layers of waste before they can cause further damage.

Failing to reverse this pollution, which is unprecedented in all of human history, would result in the additional consequence of skyrocketing environmental, social, and financial costs being laid upon nations and public entities alike.

In light of all that has been discussed above, cleaning the oceans is clearly a vital and urgent priority. It will be expensive, but a persistent worsening of the situation would lead to an irreversible and insoluble global catastrophe, and consequently lead to an exorbitant outcome.

We propose the Ocean Phoenix as a realistic and viable solution: a giant factory-ship ready to meet the greatest environmental challenge of our time, and one which all are invited to discover through their perusal of this document.

It is our intention to provide a significant contribution to this crisis in concert with any organization that shares our objectives and possesses technology capable of contributing to the mission, but we are also prepared to tackle this challenge alone if need be.

It is therefore up to everyone to simply witness history, or to actively contribute to its positive evolution and make history!

2 – Scientists' Perspective

The vast majority of the international scientific community sees the recovery of ocean pollution as an immense undertaking, perhaps even as one that is nigh impossible, owing to the considerable spread of the waste and its stratification in layers ranging from 10 to 30 meters deep.

This same community also holds that the means necessary to finance such an initiative would be so colossal as to make the endeavor unfeasible, which would no doubt be true were it not for the innovative technology at the Ocean Phoenix's disposal.

This initiative is indeed a challenge of colossal proportions, but our analysis and preliminary calculations allow us to consider it one perfectly feasible to overcome with specialized methods, and for costs that, while significant, will be far lower than what most experts predict. In addition, these costs will be staggered over a period of at least ten years.

Given the current situation, Ocean Phoenix provides a timely solution, and its implementation will impact people as well as states, regions, small and large cities, and various individual and corporate sponsors who are now invited to participate and play an important supporting role in this project of unprecedented magnitude.

It is therefore incumbent upon every individual to decide whether he or she wishes to remain as a merely passive witness of human history or to actively contribute to the amelioration of this ecological crisis of epic proportion, and thus play an active role in the history of mankind.

3 – Ocean Phoenix Team

Serge Menard

The Founder: Inventor & Leader of the project



Born in 1954, Serge Menard is a Norman Frenchman who has mainly resided in southern France for the past ten years.

After an education in mechanical engineering, the Founder's career went in an atypical direction.

He had always maintained ties with the marine industry, first through a fishery owner he had known for twenty years, then through the development of a major initiative in offshore aquaculture with the support of a consortium of industrialists based in Upper Normandy, France. This process put him in contact with naval engineers, offshore oil technicians, and marine biologists working in the private sector or at universities.

Having acquired a wealth of knowledge from this experience, the Founder began to focus on naval and offshore designs intended to protect the oceans, offshore aquaculture, and to support the marine industries of developing third world countries.

In 2003 he designed and patented a supersized ship (essentially a mobile port) named the 'Sea Angel'. This 460-meter long ship is capable of retrieving stranded supertankers even in adverse weather conditions, thereby averting potential oil spills.

Its design was approved by the Bassins d'Essai des Carènes du Val de Reuil belonging to the D.G.A. (Délégation Générale à l'Armement), a testing site under the oversight of the French Ministry of Defence which most notably evaluates aircraft carriers, attack submarines and multi-mission frigates.

The Founder counts among his numerous projects a recently patented and completely ecological offshore marine farm whose patent has recently been extended internationally. He also has a variety of other projects waiting in the wings that can be developed in the near future.

All of his projects are in accord with the standards of modern ecology and sustainable development and have the oceans as their focal point but for now, the Founder has the Ocean Phoenix's launch as his top priority, in light of the grave consequences presented by ocean pollution.

Dag Naess **Partner**



A partner and friend of Serge Ménard, he is ready to participate in the development of the project from the very beginning of the Companies and industrial launch. He has been the CEO of several companies and has also served as the administrative, financial and human resources director of a large industrial group. His training, his experience and his versatility predestined him to assist Serge Ménard in the direction of the technical control of the group.

Qualifications:

1989-1998: Formed in ERP (Enterprise Resource Planning), MRP (Manufacturing Resource Planning) and SAP.

Honorary Positions:

2000-2002: President of the Norwegian Businessmen in France Association
2006-2008: Member of the Advisory board of the National Federation of Aquaculture (France).

Languages: He is fluent in speaking and writing Norwegian (his native language), as well as English, French, German, Swedish, and Danish.

Christophe J. Poizat
Partner



A partner and friend of Serge Ménard, Christophe has been involved in high-level missions as an ICT expert commissioned by leading industrial groups such as: General Electric, Fiat, BNP Paribas, Keyspan and agencies such as: US Department of Education, State of Arizona, Australian Taxation Office.

Christophe also has extensive experience in the field of high-level commercial transactions.

Christophe has lived on four continents: Europe, USA (7+ years), Asia (2+ years), Australia (2+ years), Middle East (2+ years), currently based in the South of France.

Languages: Fluent in speaking and writing French (native language) and English.

Support Group

The Founder has been supported over the years by a number of individuals who have lent their assistance to the project. Their contributions have sustained the project's development. Among them can be found CEO's, marine biologists, engineers, marine officers, and, more simply, the Founder's personal acquaintances. Some among their number may be recruited to work in the management teams that will be established in the near future.

4 – General Presentation of the Concept



The Ocean Phoenix will retrieve, compress, and pack waste in accordance with road transportation regulations, this taking place before the transferral of the waste to an accompanying support ship that brings it onshore for recycling.

Highly autonomous and possessing the means to produce rapidly and continually (on a 24/7 basis), the Ocean Phoenix can be a key component in the fight against ocean pollution.

The waste recovery devices are fitted with adjustable filters. These filters simplify the calibration process, designed to let local marine fauna easily extricate themselves from the device.

The final calibration of the devices will be done concordantly with reputed scientists and oceanographers so as to guarantee that the devices do not negatively impact the marine environment.

On the off chance that the device should capture a fish, the device will raise it in such a manner that it will not suffer excessive compression. The slide prepared for this eventuality would then immediately release it. This is only if the scientists on board deem this to be the most prudent course of action, as the fish would most likely be contaminated.

The intentional simplicity of the concept guarantees its efficiency and its resistance in the face of the elements. This design will also allow for extensive use of the Ocean Phoenix without interruption of its waste recovery process. This is indispensable if the mission is to be completed within a reasonable frame of time.

The considerable dimensions of this ship and its deep draft endow it with impressive stability and high speeds. It will remain operational even in the most severe weather conditions, ensuring constant and optimal waste recovery.

In order to provide a better idea of the Ocean Phoenix's capabilities, one need only compare the volume of water that enters its tank to that of Niagara Falls. Treating a volume of 16,500 m³ per second, the Ocean Phoenix has an output 2.8 times greater than Niagara Falls during its peak season.

In light of this comparison, the unique capabilities of the Ocean Phoenix become more readily perceivable.

In addition to these heretofore-unseen attributes, we must also make note of its high polyvalence. The Ocean Phoenix does not discriminate between shipping containers, multi-ton logs (occasionally found where currents converge), plastic waste (and other forms of debris) as well as micro-plastics, practically the size of plankton.

Recent studies indicate that the North Pacific layers range from 1.4 to 3.4 million square kilometers.

A fleet of 20 ships could treat an area of roughly 3 million km² in 10 years, or more with supplemental ships, depending on the total area of the waste layers.

The treatment of the total surface area of the planet's ocean plastic waste will likely require a fleet estimated at 40 Ocean Phoenix vessels. Since other pollution areas have been discovered recently, it is likely a larger fleet will be needed.

However impressive the Ocean Phoenix's capabilities might be, we are well aware that eliminating 100% of marine pollution is not a realistic expectation.

Nevertheless, it is of utmost importance to eliminate the largest possible amount of waste (90%, or even more) in order to avert a global and irreversible contamination that would take the oceans centuries to recover from. The survival of vast swathes of coastal populations depends upon our swift intervention.

5 – Strengths of the Concept

- Its proficiency in recovering plastic waste of all shapes and sizes, including micro-plastics which can break down and intermingle with plankton to form a layer that adversely affects marine environments and the fauna that inhabits them. This polyvalence plays a role of utmost importance in the fight to eliminate the sheets of plastic pollution.
- Recent studies have emphasized the harm inflicted upon marine environments and their fauna because of plankton intermixing with micro-plastics.
- Its exceptional ability to treat large volumes of water and its rapidity in doing so.
- Its mode of operation is entirely in line with international maritime laws; ships can operate in any oceanic zone without ever presenting any inconvenience or danger during navigation.
- The on-board scientific team of each ship will provide a rigorous and strictly-controlled operational process, which will allow us to adjust the filtration settings based on the local conditions of a specific geographical zone. These settings also inhibit the retrieval of non-contaminated biomass.
- The concept enables the retrieval of all large-sized floating waste, which is a serious threat to navigation and inflicts grave harm to merchant, fishing, and leisure ships around the world.

- It will help reduce the costs of cleaning up thousands of beaches and coastal towns overrun by marine pollution and will allow for the preservation of millions of sea birds and mammals.
- The viability of this concept was the subject of a meticulous study conducted by a naval design office, which removed any doubt regarding the concept's viability.
- The wealth of technical expertise possessed by the design offices and shipyards we will employ guarantees that the construction of the various ships can proceed in a measured and timely manner. This major advantage will enable us to optimize the Ocean Phoenix's construction.
- The colossal size of the Ocean Phoenix provides great stability, to the point of greatly facilitating its mission of retrieving waste, plastic or otherwise.
- The Flettner rotors (turbo-sails) allow the Ocean Phoenix to make considerable savings on fuel.
- Generally, no diving will be necessary, as the maintenance of the waste recovery devices will be undertaken from the bridge of the onboard factory. This bolsters the maintainability of the devices as well as the safety of the onboard personnel.
- The recovery devices can be raised up to the factory bridge in the event of severe storms. This guarantees that the operational lifespan of the devices will remain intact on the long run.
- Thanks to the Ocean Phoenix's financial potential, the initial construction costs, though significant, do not represent any real obstacle to the project's implementation and development, as these expenses will be offset by advertisements placed on the hulls of the ships.
- One of our goals is to educate future generations about ocean wildlife and pollution. This is a vital challenge as millions of tons of plastic waste are still being dumped into the oceans while many young people remain unaware of the problem.
- The Ocean Phoenix can be a very valuable means of conveying this message through television programs. This will also benefit the project by increasing awareness about the Ocean Phoenix and its mission worldwide.
- The number of ships required to fulfill the mission of eradicating the layers of plastic pollution does not reduce their ability to be profitable given the enormous potential of the advertising market of the countries to which each ship may be attached.

- The construction and maintenance of a fleet of forty ships (or more) will lead to the creation or preservation of thousands of jobs in naval construction. The project itself will employ several thousand people (ship crew and onboard factory personnel).
- The project's launch can be effectuated immediately owing to the fact that it is not dependent upon a convoluted diplomatic process. Rather, each individual can contribute as they see fit.

6 – Weaknesses of the Concept

- The high cost of each ship and their concomitant operational cost (though it is foreseeable that the project will be able to compensate for such expenses via various revenue streams). The cost is also relative when compared to the economic value of the oceans, estimated at \$ 24 000 billion according to the WWF.
- An unavoidable preparatory stage (though one we consider reasonable, considering the scale of the project).
- The possibility remains, however slight, that some fish may be inadvertently captured or harmed. We consider this a small price to pay in order to save millions of other fish and to prevent a general contamination of the world's oceans, which would inflict incalculable damage for centuries to come.
- The Ocean Phoenix is too large a ship to pass through the Panama Canal; it is, however, not a transport ship and as such will remain in its zone of operations for at least ten years while auxiliary ships supply it and collect the plastic waste it retrieves from the oceans.

7 – Intellectual Property

The Ocean Phoenix concept is patented, its initial patent application being recently approved. This application was submitted in France on February 21st, 2013, designation FR1300393.

The patent extends internationally under PCT EP2014/000111, since this venture, though primarily humanitarian in nature, still contains industrial and commercial elements which are intended to help finance the project itself.

Two new patent applications were filed on August 7, 2017. They protect several technical benefits critical to the mission and greatly improve the base concept. These applications were the subject of an international PCT filing in August 2018. The international search report issued for one of the two applications confirms the validity of the latter. This very important patent can therefore be extended worldwide in due course.

Disclaimer: *The diagrams are intended to convey the designs of the patent in a simplified manner, not to present the exact appearance of the waste recovery devices.*

8 – Industrial Launch Phases

The industrial launch has three phases. The details of the actions to be taken and the costs to be expected for the completion of the three phases are set out in a separate annex.

Phase 1 mainly consists of:

- The realization of numerical simulations in testing-basins, in order to refine the shape of the hulls and to determine the high and low limits of the ship's operating functionalities from the various configurations envisaged. These simulations will be piloted by the Inventor and our Naval Study Office, The Offshore Partners.
- The realization of a technical and commercial brochure with our Naval Study Office based on the data collected with the Design and Numerical Simulation Office associated with the project.

Phase 2 mainly consists of:

- The creation and implementation of legal and technical structures at the designated location, including the Executive Committee.
- Recruitment of the management team.
- Carrying out the study comprising the “Basic Engineering” of construction.

- Conducting a preparatory engineering study to make an initial cost estimate for the ship's construction.
- The establishment of a multinational scientific support committee.
- The processing of contacts established with the Candidates for the operation of one or more ships and the establishment of the first financing.
- The realization of the study constituting the "Basic Engineering" for the construction of the vessels.
- A new digital basin simulation campaign to refine the design during the realization of the "Basic Engineering". The Bureau of Studies and Numerical Simulations will also participate in the definition and follow-up of the Physical Basin Simulations Campaign (Bassin d'Essai des Carènes).
- Scientific modeling with an appropriately sized scale model, to supplement the data previously obtained during numerical simulations basins by physical tests carried out in physical basin (Bassin d'Essai des Carènes), and to compare them to a wide array of conditions occurring in oceanic zones around the world. These trials can be carried out in Normandy, at the internationally-renowned Val de Reuil facility (DGA Hydrodynamics), which tests all manner of vessels (supertankers, container ships, submarines, aircraft carriers, etc.) and offshore installations. The Inventor has already carried out a series of tests there in 2004, when one of his previous concepts, a super-sized anti-oil spill vessel, the "Sea Angel", was validated.
- The realization of a digital configuration software based on all the results obtained during the aforementioned studies, simulations and tests, in order to be able to parameterize the construction of the ships in accordance with the envisaged program and the possible equipment options. This software, designed with the assistance of the project's Numerical Studies Department, will offer a range of OCEAN PHOENIX vessels tailored to meet each request.
- All of the studies and actions to be carried out in preparation for the exploitation of the Ocean Phoenix Fleet in the broad sense
- Public and targeted marketing on social networks and in the media on an international scale.

Phase 3 mainly consists of:

- The construction of the ship.
- The launch, trials at sea, delivery of the vessel.
- The entry into operation of the first vessel(s).
- The entry into operation of the first vessel (s), setting up the organization for the fleet's operation and the related logistics.
- The treatment of the collected waste
- The fleet's development.

Phase 1's launch financing

The financing of phase 1 is the last financial contribution which is to the expenses of the founders of this business.

Phase 2 and 3's financing

In accordance with the established strategy, the Ocean Phoenix Group's Founders' company will not be involved financially in the industrial developments of phase 2 and 3, it will only participate in the research and the implementation of these funds.

All of these phases can be accomplished in about two and a half years.

9 – Foundational Elements of the Project’s Feasibility



TECHNICAL FEATURES & PERFORMANCE

- . Size 360m / 393 Yd in Length (or less, depending on the planned program)
- . 115m / 125 Yd in Width (roughly the width of two supertankers side by side)
- . 72m / 78 Yd in Height
- . Maximum speed 23 knots (when all filtering devices are retracted)
- . Estimated Operational speed 12 knots
- . Draft length 30m / 32 Yd
(this can be reduced to 16m / 17 Yd by de-ballasting).

9.1 – Key Technical Elements



Of trimaran design, it can be subsequently outfitted with 'SWATH' hulls. In a patent protected variant the vessel may be of the single-hulled type.

It is the only ship in the world capable of filtering a layer of water at an adjustable depth of 20 to 30 meters and 100 meters (328 ft.) wide at twelve knot speeds.

The first obstacle we considered was drag (water resistance). To combat this problem, a multi-hulled underside to the ships was selected. Composed of several narrow hulls, sea water enters and passes freely through them and the filtration devices while offering minimal resistance.

The ultra-fine filtering device presents the most resistance. This problem does not exist with systems that filter larger waste.

The Founder solved this issue by making the filtration devices mobile: when for instance the ship travels at a speed of 12 knot, the filtration devices move backward, at speeds ranging from 6 to 8 knots, which makes it possible to treat the total volume of water passing between the hulls.

This allows us to reduce by a factor of 2 to 3 times the pressure applied on the devices during waste recovery. Without this innovation, 2 to 3 times as many ships would be needed to obtain the same result. This would, of course, multiply construction and operating costs by the same amount.

Furthermore, the relative movement speed and calibration of the fine filtration elements are completely adjustable, in order to meet any functional or scientific requirement, thus optimizing the efficiency of the waste collection, according to the specific parameters of each treated area.

9.2 – Biological Factors

The waste recovery process is entirely mechanical; no chemical substances or products will be utilized.

The first section of filtration impedes the passage of marine mammals and large fish, whose top speed is higher than that of the ship while in exploitation (up to 30 Kms / hour for the blue whale, 70 Kms / hour for tuna, 110 Kms / hour for the blue marlin or the sailfish). This first section holds the big waste and lets the smaller fish pass through.

The second section allows fish and micro-sized waste to pass through, but not larger waste.

The third section allows fish to pass through but not micro-plastics.

The frontal surface of the filtration devices is exposed to the open sea, unlike a trawl and they dispose of several lateral openings that will allow any fish that are inadvertently caught to extract themselves from the devices.

The ship will be equipped with sonar and other close proximity electronic technology, so as to avoid damaging the auditory organs of marine mammals. Thanks to the relatively modest speed of the ship, these mammals will have more than enough time to avoid it.

Recent studies have emphasized the harm inflicted upon marine environments and their fauna because of plankton intermixing with micro-plastics. The elimination of this plankton therefore strikes us as a matter of utmost importance, lest we only partially resolve the crisis humanity currently faces.

If nothing is done to eradicate these layers of waste, they will only continue to expand, and by 2050, the majority of the oceans will be contaminated, triggering the deaths of tens of millions of seabirds and marine mammals, among which would number many currently endangered species.

In addition, the expansion of this pollution would give rise to pathologies and epidemics which would afflict thousands of species, victims of migratory bacteria attached to waste drifting from ecosystems both near and far. This is to say nothing of the damage wrought upon the commercial fishing industry.

The Ocean Phoenix is able to rid the oceanic plastics slicks of their contaminated plankton to the millimeter or less, however, it seems simpler to recover the plastic waste before they degrade into particles of critical size and mix with plankton.

In light of the environmental and humanitarian stakes at hand, it is evident that we have no time to waste on demagoguery or sentimentalism for plankton and possible collateral losses; the crisis at hand calls for bold and decisive action.

States and governments will have to decide on the course of action that they believe will benefit the oceans and humanity the most, taking advantage of existing solutions. Ocean Phoenix represents a solution of choice, able to deal with the problem of floating and semi-floating plastic waste in its globality.

The adjustable functions of Ocean Phoenix's mission equipment will be adapted accordingly.

9.3 – Chosen Business Structure for Start-up Phase

Setting up a commercial company was chosen to launch this project, on account of the considerable sums in play and the project's industrial and financial scale.

Other considerations, including the thousands of employees required for the operation of the Ocean Phoenix fleet, as well as potential financial losses and recourse to institutional and private investors in the future put the project outside of the scope of most charitable organizations.

9.4 – Financing of Phase 2 & 3

Numerous possibilities for financing exist, but the practicality of implementing these possibilities varies greatly from one to another.

We could, for instance, attempt to convince various countries to lend their support and to finance the Ocean Phoenix project. However, this solution is more likely to be implemented once several vessels are already in operation from private initiatives.

Financing deriving solely from charitable contributions would appear difficult to implement, on account of the total duration of the mission, its industrial requirements, the level of investment necessary and projected operational costs.

Private financing is therefore the most practical and certainly the most effective solution in the short run.

The financing can be in the form of a long-term loan, which will be repaid during the operational phase, as for commercial ships. There are several options to guarantee the loan reimbursement, given the particular profile of this undertaking.

The fleet's operational phase could be financed by advertisements, as large corporations have vast marketing budgets at their disposal, well in excess of billions of dollars for the largest and the number of potential Clients is considerable.

Evidently, advertising is a very suitable source of revenue for the Ocean Phoenix. Nevertheless, there exist other means of procuring financing for the project's operational phase.

However, the United Nations (UN) or some of the World Bank's internal or WB-dependent structures that are interested in ocean pollution issues could take the initiative to contribute all the financing needs of the Ocean Phoenix mission, in the form of a loan, a grant (repayable or not) or any other modalities to be determined.

10 – Legal Structures

10.1 – SAS OCEAN PHOENIX

The SAS OCEAN PHOENIX is a commercial company established in southern France, approximately 5 minutes away from Nice Côte d'Azur Airport. Serge Menard is the President and Founder of SAS OCEAN PHOENIX.

The SAS OCEAN PHOENIX's principal objective is to finance and implement Phase 1 of the Ocean Phoenix project's industrial launch and to coordinate and prepare the development of the project's other planned structures.

More specifically, the company aggregates all the technical elements required for the project's industrialization by carrying out the preliminary studies necessary for the construction and operation of the fleet.

Other structures, useful for the international development of the project will be created as and when required.

11 – Strategic Elements

The strategy we envision necessitates the presence of a strong leadership core, able to negotiate a diplomatic maze extending over every continent.

The homogeneous development of this project depends greatly on this initial financing of phase 2 under the required form, which will provide the tools necessary to pursue autonomous development.

The financing of Phase 2 under the required conditions will enable us to set in place the necessary support for the project's global development, as well as to demonstrate the technical relevance of the Ocean Phoenix. It will also provide the means and media attention the organization requires to expand the project globally.

As for the financing of Phase 1, it will be fully supported by the Ocean Phoenix Group's Founders' company.

The financing of phase 3 for the construction of the ships will be ensured by the creation of an operating company at a national level (or for a group of countries), by a State or by a private investor.

The financing of the vessels will be ensured by the creation of a company of exploitation by country or by group of countries, by the intervention of a State or a Sponsor, a Partner operator or Co-operator having the adequate financial means, advertisers from the country concerned to cover all operating costs.

The fact that the vessels will be very far from the coast will not in any way constitute an obstacle to the effectiveness of their use as an advertising medium thanks to the possibilities offered by the modern means of communication and the Ocean Phoenix's the high-tech equipment.

The advertising could well be sufficient to cover all of the fleet's operating costs, thanks to the considerable number of potential advertisers as already mentioned in "Section 9.4 – Funding".

The firm commitment of an advertiser will strengthen their prestige and serve to bolster their public image.

Significant long-term financial returns can be expected, especially when we keep in mind the considerable media attention that will be generated by so massive an undertaking.

The amount of potential sponsors in the entire world is immense and the number needed to finance a ship is negligible (20 to 30); among the potential candidates are:

. Individual patrons, large multinational companies, States, wealthy cities; any one of these could singlehandedly finance the construction and operation of a ship and select its name to bolster their image worldwide, which makes the availability of such slots quite limited.

12 – Ship Operating Costs

The construction offices will enable us to pinpoint the price of a ship, maintenance costs, ship fuel consumption, logistical costs, etc.

This range can vary depending on fluctuating energy prices, wages of personnel and related expenses, insurance costs, operating costs for the onboard factory, etc.

These costs may seem high, we must keep in mind that advertising revenues may offset them in their totality.

The annual operating costs of the Ocean Phoenix fleet are put into perspective by the mission's contribution to ocean conservation and the safeguarding of the oceans' economic potential in fishing, aquaculture, tourism, leisure activities, the maritime industry as a whole, and for the global population whose very existence, survival, and overall well-being are at stake.

Some may argue that funding for the Ocean Phoenix fleet's operation should rather be used for the prevention of ocean pollution, but this would not reduce the already existing pollution and its fatal consequences!

Moreover, it should be noted that without the advertising media made available on the ships, funding that could be achieved through advertising simply would not exist, so it could not be used elsewhere.

The world's oceans have an economic value of 24 trillion dollars which, according to a study released by the WWF (<http://www.worldwildlife.org/publications/reviving-the-oceans-economy-the-case-for-action-2015>) corresponds to the wealth generated by the most highly developed countries.

What kind of economic value, we may ask ourselves, will the oceans have in 2050 if nothing is done to halt the expansion of plastic pollution?

13 – Conclusion

This document is meant to present a general summary; it is clearly far from being exhaustive.

A specific strategic and operational plan will be established during the industrial launch of the project as soon as we have obtained the required funds, which will help refine the construction and operating costs and steps that must be undertaken.

The management teams of the Ocean Phoenix Organization and of our Naval Study Bureau, bolstered by supplementary consultants and scientists when necessary, will undertake this important work.

In our day and age, ecological issues are a concern for many persons. An endeavor seeking to completely eradicate plastic waste from the Oceans would instantly bring itself into the public eye and draw considerable attention to the project's contributors.

It is nevertheless important to establish a convincing showcase that will ensure this ambitious project becomes reality. The financing of Phase 1 in the form sought will allow for the success of the Ocean Phoenix Mission.

Finally, the educational potential of this project, which will increase awareness about the consequences of irresponsible plastic waste disposal, is perhaps just as important as the ocean waste recovery itself, as it will ensure plastic is not reintroduced into the oceans faster than we can remove it.

Without any doubt, the Ocean Phoenix can play a key role in this regard, today and for all future generations.

Thank you for your attention. To learn more about this vital mission and how you can support it, please visit our website.

Serge Menard

Please find our contact details below

14 – Contacts

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