



THE INTERCEPTOR™ - FAQ

On October 26th, The Ocean Cleanup unveiled their solution to river plastic pollution. After four years of secret development, this technology is ready for roll out to help tackle the 1000 most polluting rivers in the world. This is the world's first solution that is scalable, autonomous, and available for global implementation.

Q. WHAT IS THE INTERCEPTOR™?

To rid the world's oceans of plastic, we must remove legacy waste and prevent plastic from entering the ocean. Because rivers are the primary source for ocean plastic, this is where we needed to apply a solution.

The Interceptor™ is the world's first scalable solution for preventing river debris from entering the ocean – meaning it can be placed in the majority of the world's most polluted rivers. The Interceptor™, much like our ocean cleanup technology, relies on natural forces (river currents and solar power) to extract debris flowing through rivers and ensure that it does not make its way to the ocean.

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Q. HOW DOES IT WORK?

The Interceptor™ is a barrier and conveyor belt system that concentrates and extracts plastic from rivers. The flow path is uninterrupted due to the catamaran design, which allows plastic to flow freely into the device and water to continue with the current. The barrier concentrates the debris as it floats with the current and directs it to a permeable conveyor belt. At this point, the waste is transferred up the belt to an automated shuttle that distributes the waste between one of six containers located on a separate barge. Once full, the barge is exchanged, and the waste is transferred to a local waste management facility. Apart from unloading, discharging, and reinstalling the waste collection barge, the Interceptor™, due to its solar power, does not require polluting and expensive fuels, allowing for efficient operating costs and minimal labor requirements for its activities.

Q. WHAT IS THE SIZE / TECHNICAL SPECS OF THE INTERCEPTOR™?

The system size is 8m x 24m x 5m with a waste collection (barge) capacity of 50 m³; it is fully autonomous with an off-grid power generation, remote monitoring dashboard, automated extraction control, 4G data uplink to the cloud, and more (see supplemental spec sheet for detailed technical information of the Interceptor™).

Q. WHAT IS THE DIFFERENCE BETWEEN THIS MACHINE AND OTHER MACHINES?

Firstly, we would like to say that we applaud all efforts to clean the world's rivers. The main differentiator for the Interceptor™ from other cleanup efforts is scalability – the Interceptor™ can be deployed into the majority of the world's most polluting rivers. It's autonomous, so it requires little human involvement and it does not require laborers to handle dirty or harmful river debris. It has also been designed for mass production, so it can be manufactured, assembled, and installed more cost- and time efficiently.

Q. WHERE WILL THE INTERCEPTORS™ BE DEPLOYED?

Our aim is to deploy Interceptors™ into the highest polluting rivers in five years' time from launching. You can see an overview of these rivers at theoceancleanup.com/sources. That said, Interceptors™ may also be operated in rivers all over the world where cleanup is beneficial.

Q. WHAT IS THE ROLE OF THE OCEAN CLEANUP IN INTERCEPTOR™ OPERATIONS?

For each deployment location, we will collaborate with a local operator and governments to ensure it is safely and legally implemented and that its operations are well-maintained.

Q. HOW MUCH WASTE CAN THE INTERCEPTOR™ EXTRACT?

Extraction is contingent upon local weather, currents, and tides, as well as the debris density of each river. Fully operational Interceptors can extract up to 50,000 kg a day; at optimal efficiency, this capacity can theoretically be as high as 100,000 kg a day.

Q. WHAT WILL BE DONE WITH THE EXTRACTED WASTE?

Anywhere the Interceptor™ will be installed, we will look for the best available local waste management solutions; when options are insufficient, our aim is to attract new partners. Working together with local and global partners, we will look for solutions that preserve the environment, are affordable, and compliant with local regulations and international standards.

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Q. IS THE INTERCEPTOR™ A REPLACEMENT FOR YOUR OCEAN CLEANUP TECHNOLOGY?

We project that we can remove 90% of floating ocean plastic by 2040, and to truly rid the world's oceans of plastic we must do two things: cleanup legacy plastic and stop it from entering the ocean. Both are necessary to achieve this mission, so we will continue our efforts in the ocean to ensure its safety and health for the future.

Because plastic in the oceans is persistent, the only way to *reduce* the amount of plastic in the oceans is to also clean up the legacy. No ocean cleanup, no clean ocean.

Q. HOW IS IT POSSIBLE TO CLEAN 1000 RIVERS?

Our ambition is to tackle the pollution problem in the 1000 most polluting rivers in five years' time from launching. We have a solution, the Interceptor™, that can work in the majority of these rivers, but we will get to our goal much faster if everyone helps – this means better waste infrastructure, awareness, education, collaboration between initiatives, and more.

Q. WHAT HAPPENS ONCE THE INTERCEPTOR™ IS DONE CLEANING ITS SPECIFIED RIVER?

We will first look to place the Interceptor™ into another river that can benefit from cleanup efforts. Should this not be feasible, or if the Interceptor™ has reached its end of life, we will decommission the system and recycle or reuse materials for other efforts.

Q. HOW MUCH DOES IT COST?

Interceptors™ in our pilot program were approximately 700 thousand euros for construction and assembly. However, costs from the pilot program are higher than what we expect to be once we are in series production. Therefore, Interceptors™ produced in volume will be more cost efficient.

Q. WHAT ABOUT RIVERINE LIFE? WILL THIS HARM THE ENVIRONMENT?

We commissioned third-party environmental impact assessments (EIA) with Royal Haskoning, Arcadis, and Witteveen en Bos for the deployment areas in question. The EIA results concluded that in all locations where an Interceptor is deployed, the negative impacts on the environment are negligible. For each deployment, we will conduct additional EIAs, which will be available upon request.

Q. WHAT ABOUT PASSING BOAT TRAFFIC?

Interceptors™ are placed in the river only after consultation with relevant public bodies and stakeholders, while considering all applicable rules and regulations. That said, the barrier of the Interceptor™ does not have to span the entire width of the river – because we can identify the natural plastic accumulation paths in a river, or “hotlines”, we can place the Interceptor™ in a location that prevents the majority of plastic flowing through the river while still allowing vessels to pass by. If this hotline is not present, we can create an artificial one using a second barrier upstream.

FOR FURTHER QUESTIONS REGARDING THE INTERCEPTOR, PLEASE VISIT OUR WEBSITE AT:

[HTTPS://THEOCEANCLEANUP.COM/FAQ/](https://theoceancleanup.com/faq/)