



The Cuvier's beaked whale was found outside Sotra in Norway – with more than 30 plastic bags in its stomach

PGS Plastic Clean-up Concept

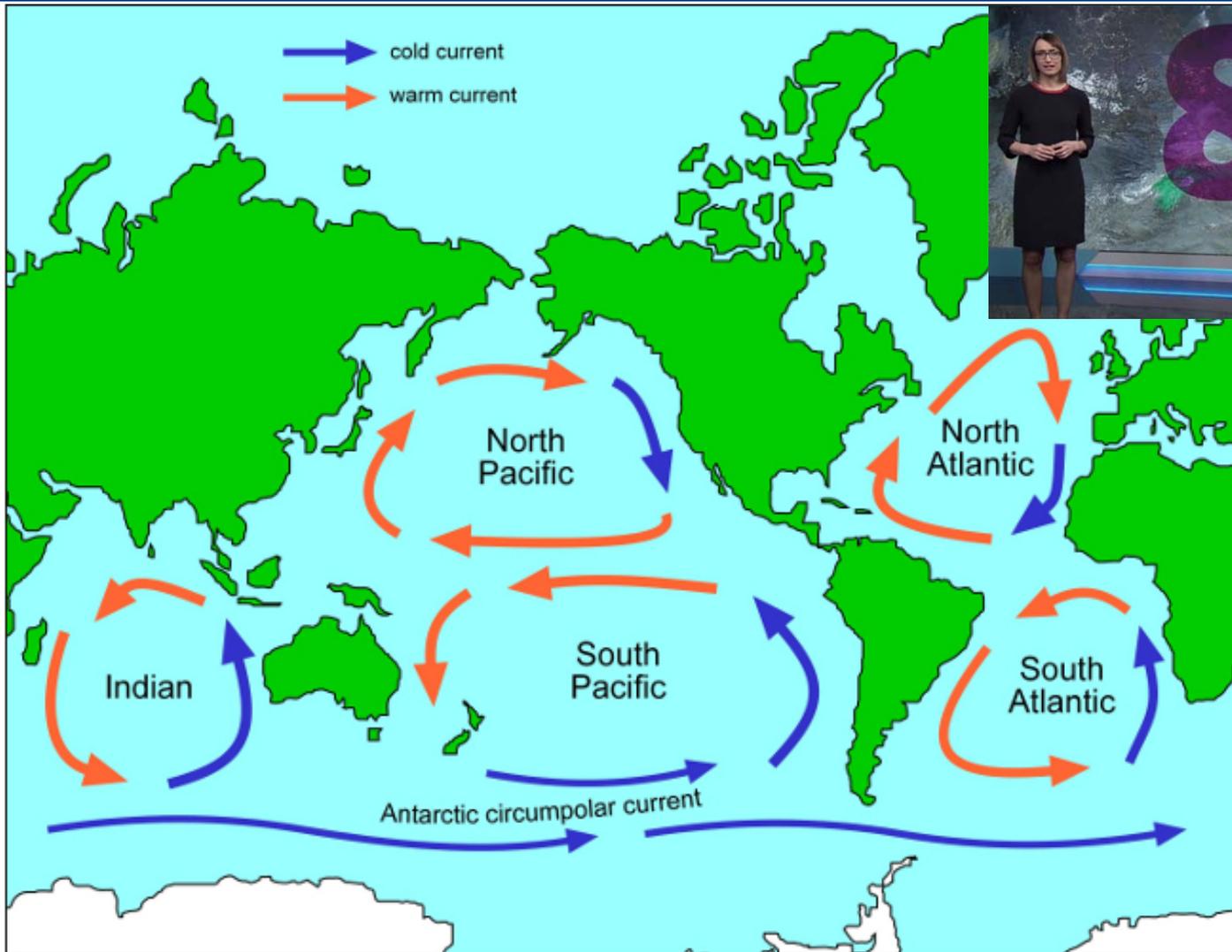
Jon Erik Reinhardtsen, President & CEO

New York, June 7, 2017

Photo: Christoph Noever



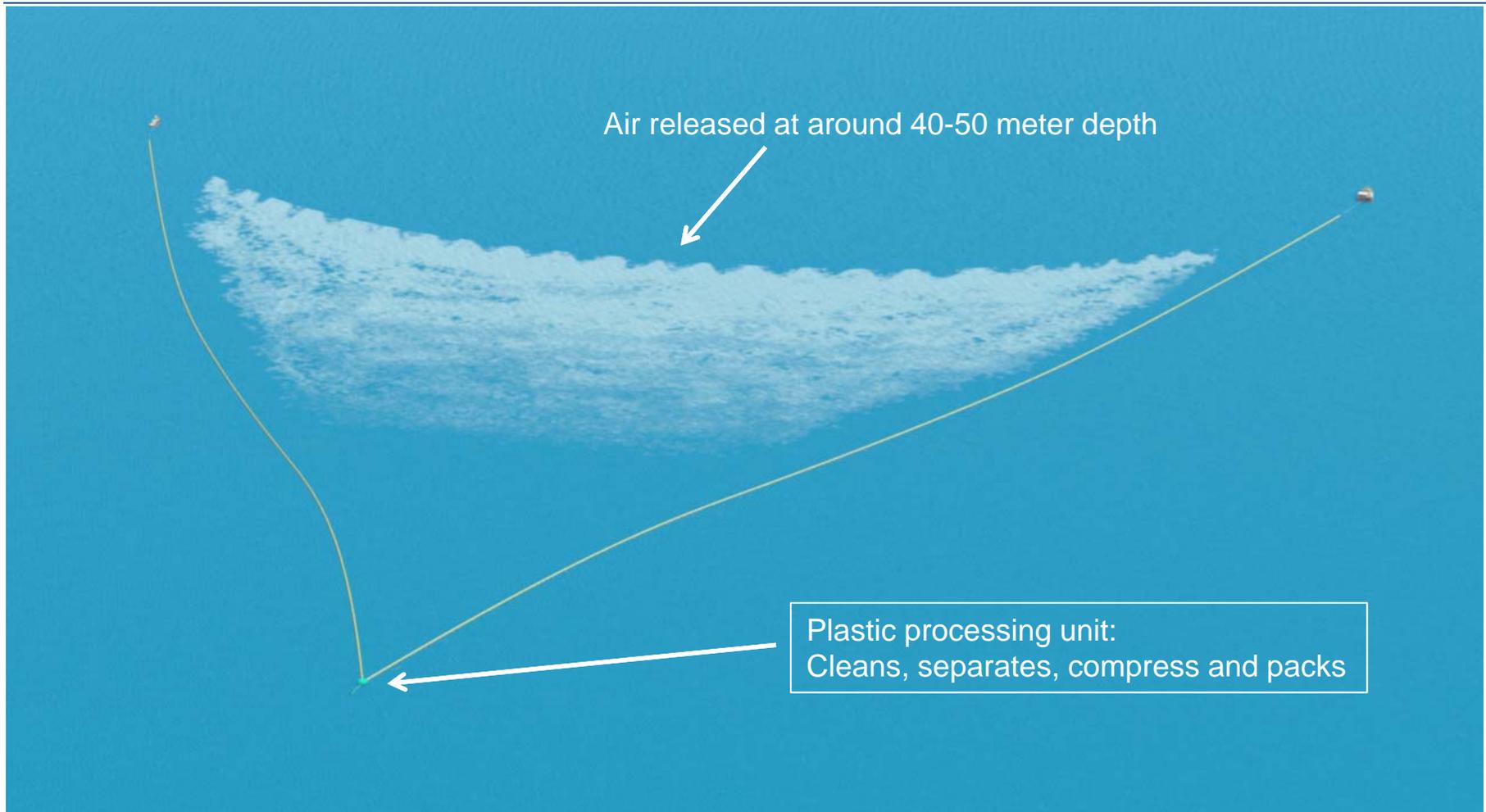
The Large “Garbage-Geysers” of the World



Each year, eight million tons of plastic ends up in the world’s oceans - equivalent to dumping the contents of one garbage truck into the sea every minute*

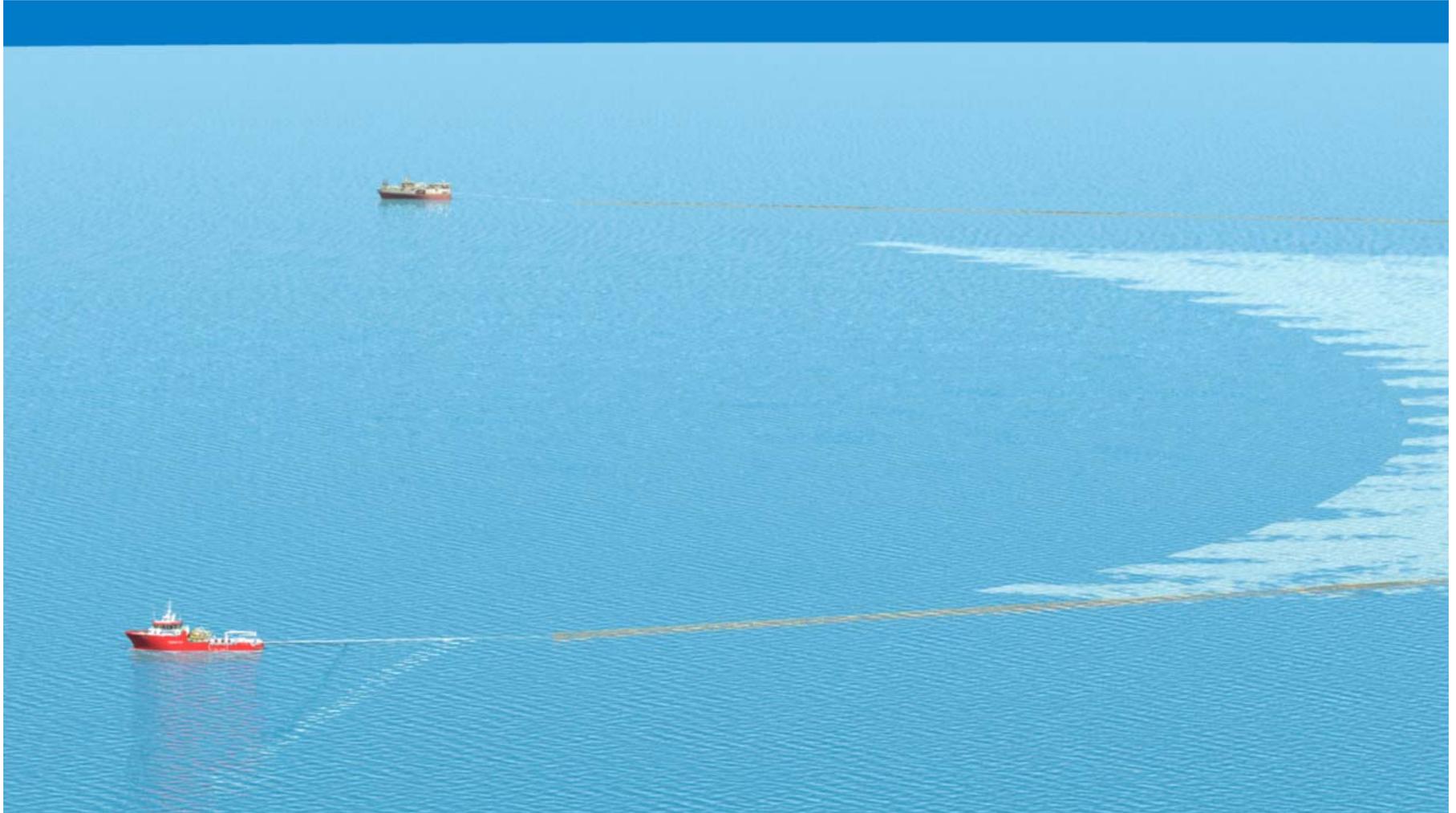
*From the new Plastics Economy Report published by World Economic Forum

Using the Inherent Benefits of Seismic Vessels

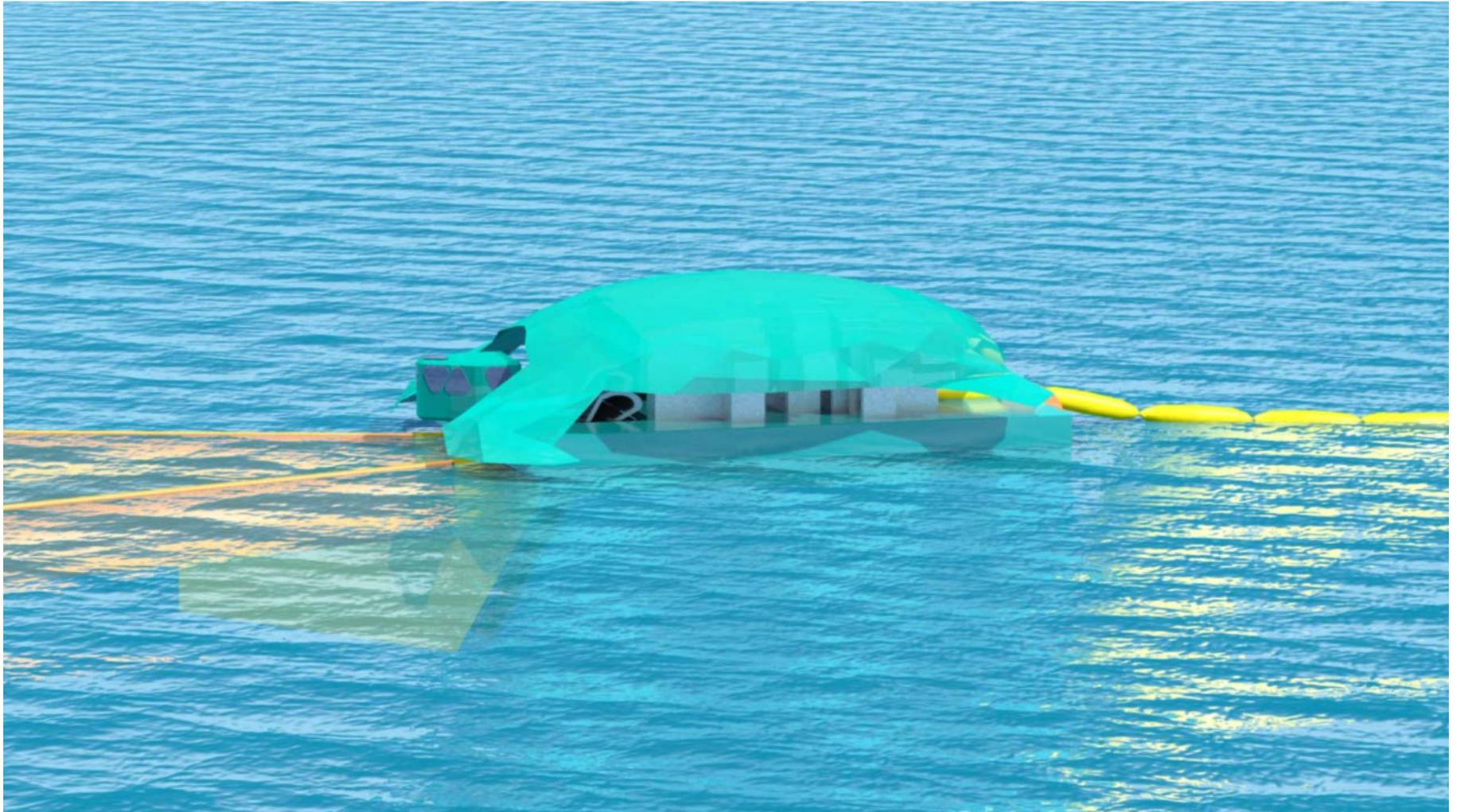


- Large onboard compressors are used to pump air through a ventilated hose between the seismic vessel and the support vessel
 - The air bubbles attach to the submerged plastic which then rises to the sea surface - just like bubbles are attracted to a straw in a glass of sparkling water

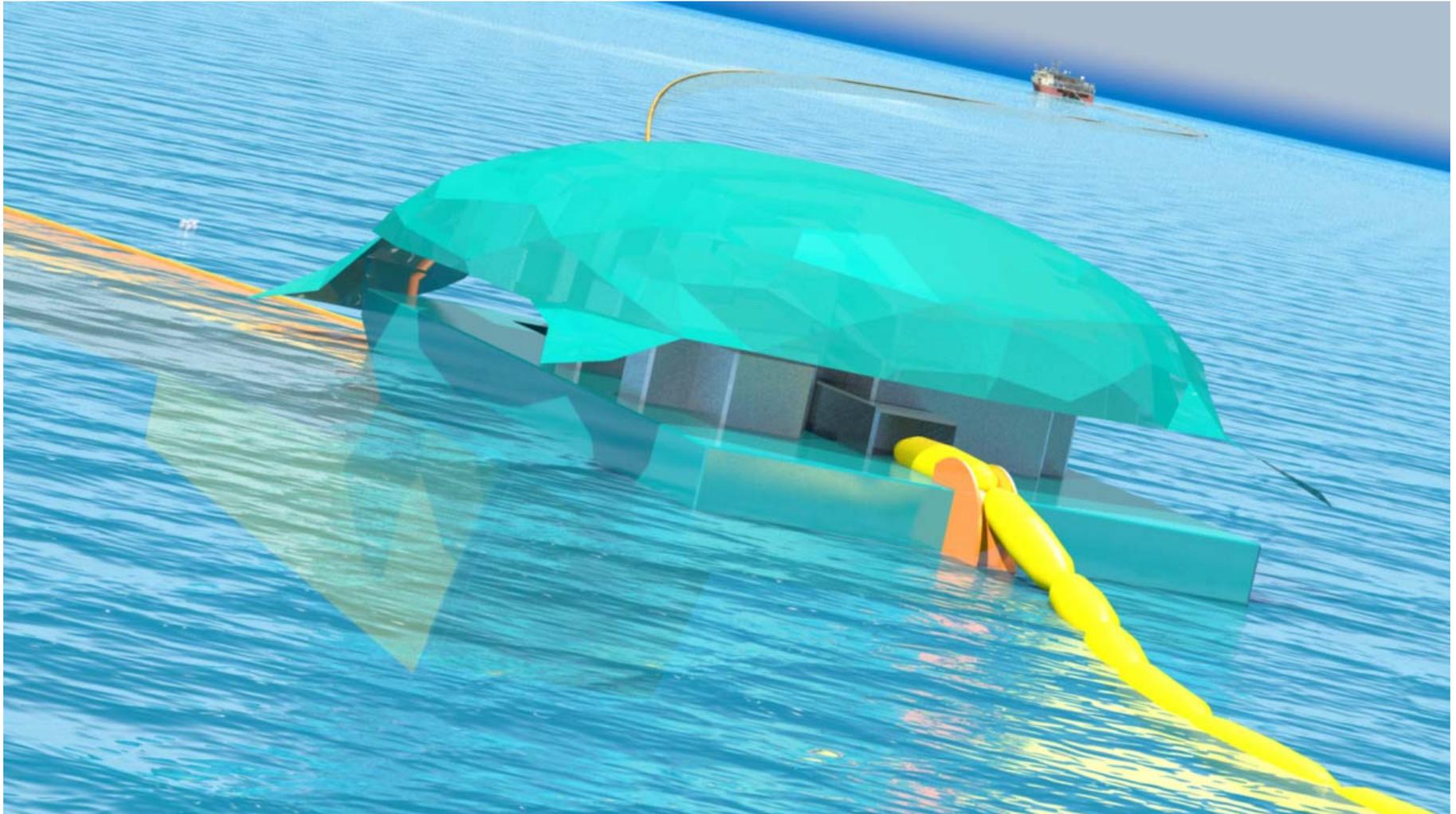
Dual Vessel Sweeping – Side View



Processing Unit at the end of the Collection Spread:
Separates Organic Materials from Plastic – Compressing and Packaging



Compressed Plastic is Put Into “Sausages” Marked by GPS and AIS



Plastic sausages are collected and towed to a processing facility for recycling

Why Use PGS Ramform Seismic Vessels?



- Ramform seismic vessels have:
 - High propulsion power making them capable of towing large spreads
 - Large compressors generate enough air to lift submerged plastic to the surface
 - Multiple winches for handling complex towing configurations
 - Large deck space for easy operations
 - Accommodation facilities for marine and research personnel
- PGS can contribute with project management of complex towing operations world wide
- PGS has four cold-stacked Ramform vessels in Norway, which can be used

Cleaning the oceans of plastic is a global responsibility and PGS is seeking external funding for a pilot test of the system