

Cleaning the Ocean is Our Business



A Berlin based project using Crowd based innovation; a Siemens Quickstarter Project which ran from April to September 2017. Using 3 work packages to achieve the goal: "Using Siemens product portfolio to tackle an environmental problem" and supports UN SGD 14 – Life below water.

Marine plastic pollution has become one of the most serious and prevailing environmental problems of the 21st century. Through its endurance and solidity, marine plastic litter degrades very slowly and persists over centuries in the marine environment. The project "Cleaning the Ocean is Our Business" was initiated by employees from Siemens Corporate Technology (CT REE ENS SEP-DE) Department in April 2017. It aims to distribute the topic of marine plastic pollution within the company in order to create awareness about the issue, on the one hand, and to identify potential engagement and technology solutions for marine plastic waste collection, treatment and recycling, on the other hand. The initial project was focused on the usage of recycled ocean plastic as raw material for Siemens applications. In the meanwhile, other engagement options were explored.

Key Activity

The initial project was divided into three work packages:

- **1st work package: Scoping**
Involving crowd ideation process for the selection of 2-3 potential application ideas for using recycled ocean plastic.
- **2nd work package: Feasibility**
Identification of collectors and potential business partners. Collection of information about plastic types and prices.
- **3rd work package: Environmental Assessment**
Assessment of environmental aspects in an ocean plastic supply chain (screening level)

Outcomes

1. Few potential applications identified for using recycled ocean plastic within Siemens (legal and financing barriers)
2. Network of Ocean Plastic suppliers established incl. NGOs, PPPs and recycling companies (The Plastic Bank, Waste Free Oceans etc.)
3. Ocean Plastic Material Information: Types (HDPE, PP, PA6, PET), technical data, prices
4. Screening level LCA revealed CO₂eq. savings by using recycled ocean plastic instead of virgin material and methodological/impact category limitations
5. Topic, distributed in the company, led to more initiatives (Siemens Gamesa, Siemens Real Estate, Siemens Supply Chain Management)
6. More engagement options (e.g. offsetting)

Unrestricted

