



VESSEL-BASED TREATMENT OF PLASTIC WASTE FOR THE IMPLEMENTATION OF VALUE CHAINS

## BACKGROUND

Plastic waste is a major threat to the environment and especially to marine ecosystems. In 2017, almost 350 million tonnes of plastic waste were produced worldwide, of which estimated more than 10 million tonnes have entered the oceans due to non-environmentally sound disposal. There are significant inputs into the marine environment, particularly near the coast, especially if functional collection systems are not available.



### **DESIGN OF PLATFORM**

As part of the project, the treatment platform was designed as a semi-submersible with a length of 125m and a width of 80m. The treatment capacity for plastic waste is about 64,000 tons per year.

The platform will be LNG-driven as well as the specific designed barges for storage and transport of plastic waste to the platform.



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The concept of plastic recycling on the floating platform with the take-up on board of plastic waste at many collection points in several countries and subsequent recycling of plastic waste into recyclates can be financed independently through their marketing by the income to be achieved.

### ECOLOGIC RESULTS

The substitution of primary plastic with recycled material will save about 1.5 million tonnes of CO2 over the planned lifetime of the platform of 25 years. The construction, operation and scrapping of the platform have already been considered.



# SOCIO-ECONOMIC RESULTS

During the operation of a platform over 1,200 jobs could be created (on the platform and in the destination countries).

#### IMPACT

- · Sustainable reduction of plastic waste input into the ocean
- Decrease of resource-related CO₂ emissions
- Creation of iobs



saubere Leistung

Project management

## Project partners





