

Project PREMISE



Objectives & Milestones

Specific objectives:

- *Evaluate the size and volume of the problem.* How much plastics lands in the sea? Quantifying volume, size distributions and shape characteristics of microplastics formed from each material group, used for the blade coatings.
- *Evaluate environmental risk and toxicological effects, for each group of polymers.* How potentially toxic is each group of polymers? What is fate of various microplastics coming from wind turbines?
- *Future solutions.* Promising ways to mitigate erosion and their pollution risks. Guidelines to the reduction marine pollution

Milestones:

- M1.1. Estimation of volume of marine pollution due to wind turbine erosion (DTU, M20)
- M2.1. Evaluation of microplastic degradation under chemical, physical and biological loading in various water depth and sediments (AAU, M25)
- M3.1. Evaluation of impact of virgin and aged plastics on benthic organisms (lugworm) and top layer of sediment (RUC, M24)
- M3.2 Effect of plastics on Brittle stars and benthic invertebrate biomass in Danish coastal waters (RUC, M30)
- M4.1. Mapping and classification of future directions of wind turbine coatings and materials (DTU, M25)

[Read about our work packages and how milestones will be accomplished](https://premise.dtu.dk/premise-objectives)

