

# The valorization of marine sediments in a context of circular economy and sustainable management

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## ABSTRACT

Dunkerque-Port is committed to managing its natural areas alongside many partners whose aim is to preserve and manage the diversity of landscapes, habitats and species.

Dunkerque-Port's strategic plan forms part of a policy of sustainable development and action, identifying the vocation of the various areas of the port and particularly those which may affect environmental protection and the preservation of biodiversity.

The port decided to draw up a sustainable development and action plan (PA2D) which will involve four successive stages: first stage is a diagnosis presenting, clearly and objectively, is the situation of sustainable development on its territory, secondly stage is identification of the environmental and sustainable development issues at stake, and definition of the basic guidelines by the Board of Trustees, thirdly stage drafting of the first operational measures and orientation of decisions on the actions of the strategic plan in the context of a prospective approach and finally setting out the basic guidelines of the PA2D in a complete project which will undergo socio-economic analysis in line with national directives.

The study shows that the industrial ecology practices applied by local businesses result in economic, environmental and social benefits for each of them. The circular economy is thus based on different axes combining to achieve a virtuous approach.

One of the examples of a circular port economy apprehended by the Port of Dunkirk is the management of marine sediments with the reuse of sediments with the status of "waste". It is therefore a form of "recycling".

Since 2009, the Port of Dunkirk has been dredging and valorization marine sediments through various civil engineering sectors by integrating design, services, exchange of material and the production of various works involved in the development of the port territory.

**Keywords:** Sustainable development, industrial ecology, circular economy, dredging, marine sediments, valorization.