

# 11. Climate change adaptation and circular economy – the role of the European marine aggregates industry

*Hammwöhner Ingo<sup>\*1</sup>, Fincke Dirk<sup>1</sup>*

*\*Presenting author: i.hammwoehner@oam.eu*

*<sup>1</sup> European Aggregates Association, General Secretariat, Rue d'Arlon 21, 1050 Brussel, Belgium*

Large quantities of building materials such as gravel and sand are needed to adapt to the impacts of climate change. The marine aggregates industry can play a crucial role in implementing necessary coastal protection measures and coastal infrastructure projects, as well as in the construction of renewable energy plants and environmentally friendly, energy-efficient buildings. Especially in coastal regions where local, land-based sand and gravel deposits are increasingly scarce or non-existent, marine deposits play an important role in the supply of raw materials. For certain coastal protection measures and projects, they are without alternative.

To fill supply gaps, large quantities of sand and gravel can be delivered by sea close to where the product is needed. This reduces traffic and transport distances, thus lowers transport related CO<sub>2</sub> emission.

Primary aggregates, such as marine gravel and sand, are essential to cover the entire demand for construction materials, as recycled materials and biomass products are insufficient or unsuitable to cover demand. Nevertheless, the products made from marine aggregates, such as concrete, can be recycled later and fed into a sustainable material cycle.

Marine aggregates should be considered as a key element for climate change adaptation and the supply of raw materials to the building materials industry.

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