

COASTAL PROTECTION & MINERAL RESOURCES

Improving the resilience, sustainability and economy of coastal protection



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INFRASTRUCTURE		NATURE-BASED SOLUTIONS			RAW MATERIALS	
Necessary hard infrastructure	Naturalness	Data-driven solutions	User functions	Natural processes	Innovative materials	Sustainable exploitation & management
Making hard infrastructures more sustainable	Integration of functions and services that create added value for more naturalness within hard infrastructure	Analysis of natural processes with a view to cost-efficient restoration and protection of coastal areas	Integration of functions and services that create added value for people and nature	Development and support of coastal protection systems inspired by nature	Search for alternative materials for coastal protection and reuse of dredgings within a circulaire economy	Development of sustainable methods and technologies for optimum extraction of mineral resources and securing of sand supplies
Topics	Topics	Topics	Topics	Topics	Topics	Topics
 What role can existing infrastructures play and how can they be made more sustainable (together with innovative materials) Innovations in hard protection measures Role of existing infrastructures 3D printing of parts of coastal protection infrastructure 	 Design & manipulation of hard substrates for biological upgrade Toolbox for ecosystem services Design of multi-use infrastructure Techno-economic integration of several functions Hybrid solutions 	 Follow-up & monitoring of NBS Data transfer, data streams and proxies Monitoring systems, drone technology Probabilistic models for morphological coastal protection Toolbox for impact of anthropogenic constructions on the coastline 	 Innovative funding options (multi-use, risk management & insurances) Support for creation, stakeholder management Integrated management and maintenance Ecosystem services & nature-based solutions (e.g. water treatment, recreation, blue carbon) Accumulation of knowledge about impact of user functions at sea 	 Accumulation of knowledge about natural processes for correct application Innovative and cost- efficient techniques for foreshore / beach nourishment Biogenic reef design & monitoring techniques for nature-based coastal defence Upscaling of nature-based coastal defence 	 Reuse of dredgings and dewatered sludge within a circular economy Innovative & bio-based materials for coastal defence New market outlets, business cases Eco-concrete Development of sustainable substrates, materials and anchoring 	 In-line separation of sediment fraction during sand extraction Upgrading of fine fraction during sand extraction Mitigation of the impact of sand extraction
	SUCOMAR	DATABEACH	Coas	stbusters Bank	kbusters	
			SUMES			
			MFiLand – D4PV@SEA			
			SARCC			