Institute of Coastal Research

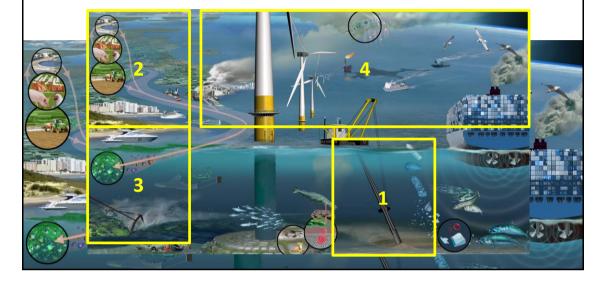
Research Unit Biogeochemistry in Coastal Seas

::: Helmholtz-Zentrum Geesthacht

Centre for Materials and Coastal Research

Summary and Outlook Prof. Dr. Ralf Ebinghaus





Summary

:: Helmholtz-Zentrum Geesthacht

Centre for Materials and Coastal Research

Our research data:

- are generated with comprehensive, state-of-the art analytical instrumentation
- are subject to strict QA/QC protocols
- are Open Access and publicly available through **coastMap**
- bridge multiple Earth compartments (sediment, water, air)
- identify pollution sources by stable isotope signatures and chemical fingerprinting
- are significantly expanded by partners: **coastMap** as trusted long-term repository
- are used by national authorities (BSH), Central Command for Maritime Emergencies) Emergencies)
- are used by international agencies (IMO; HELCOM; PoA)
- are used as scientific out for regulatory issues and public outreach (e.g. Corap; REACh; ETH Zürich; (i)eenpeace; NABU)

New lab facilities - almost ready...



Centre for Materials and Coastal Research

Infrastructural and analytical portfolio for coastal research for the decade to come





Coastal Chemistry Platform augmenting existing and integrating new analytical infrastructure

Outlook

:: Helmholtz-Zentrum Geesthacht Centre for Materials and Coastal Research

- to focus on matter cycling, including pollution, in regional land-seaatmosphere systems along gradients of human influence (Europe; China; Arctic)
- to quantify matter fluxes in the coastal transition zones from catchment to
- to identify biogeochemical key processes with new non-traditional stable isotope techniques
- to provide science base for bridging the gap between current European environmental policies (e.g. WFD and MSFD) & provide evidence base for future environmental policy making
- to contribute to UN 2030 Agenda SDG's 6 & 14



to integrate **DANUBIUS-RI**, MOSES, COSYNA and G-COAST



