

Natural



building with nature

Natural



Human activities



Beneficial Use of Sediments (BUS)

“The use of dredged or natural sediment in applications that are beneficial and in harmony to (human and natural) development”

(...as opposed to waste it at sea or store it in a remote deposit forever)



Flood risk
management



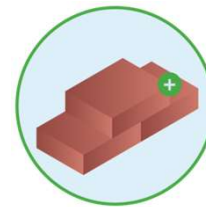
Navigability



Nature
development



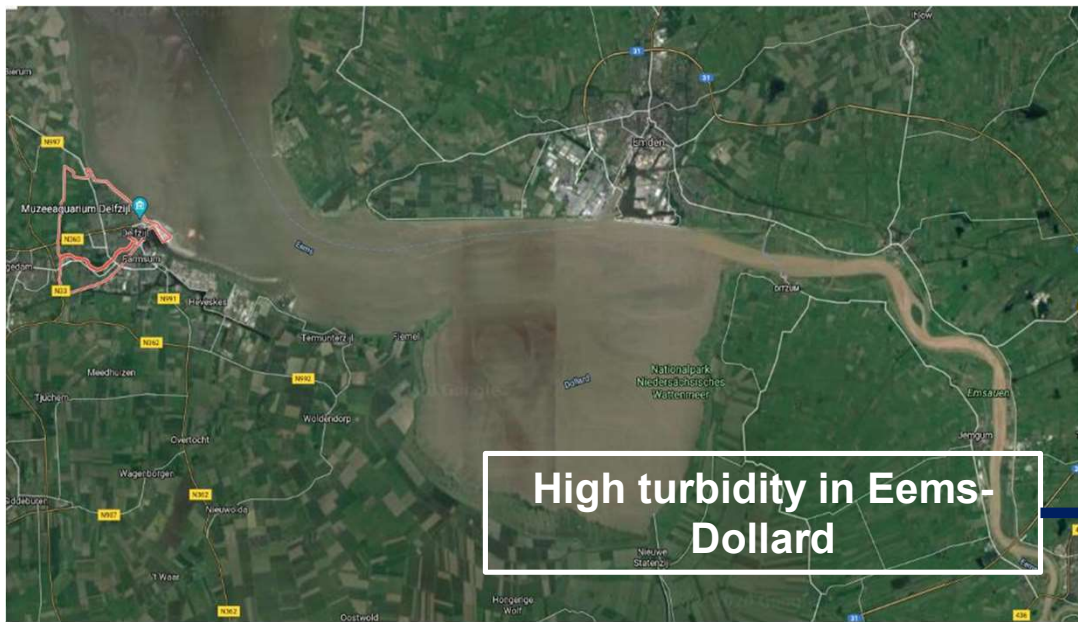
Water quality



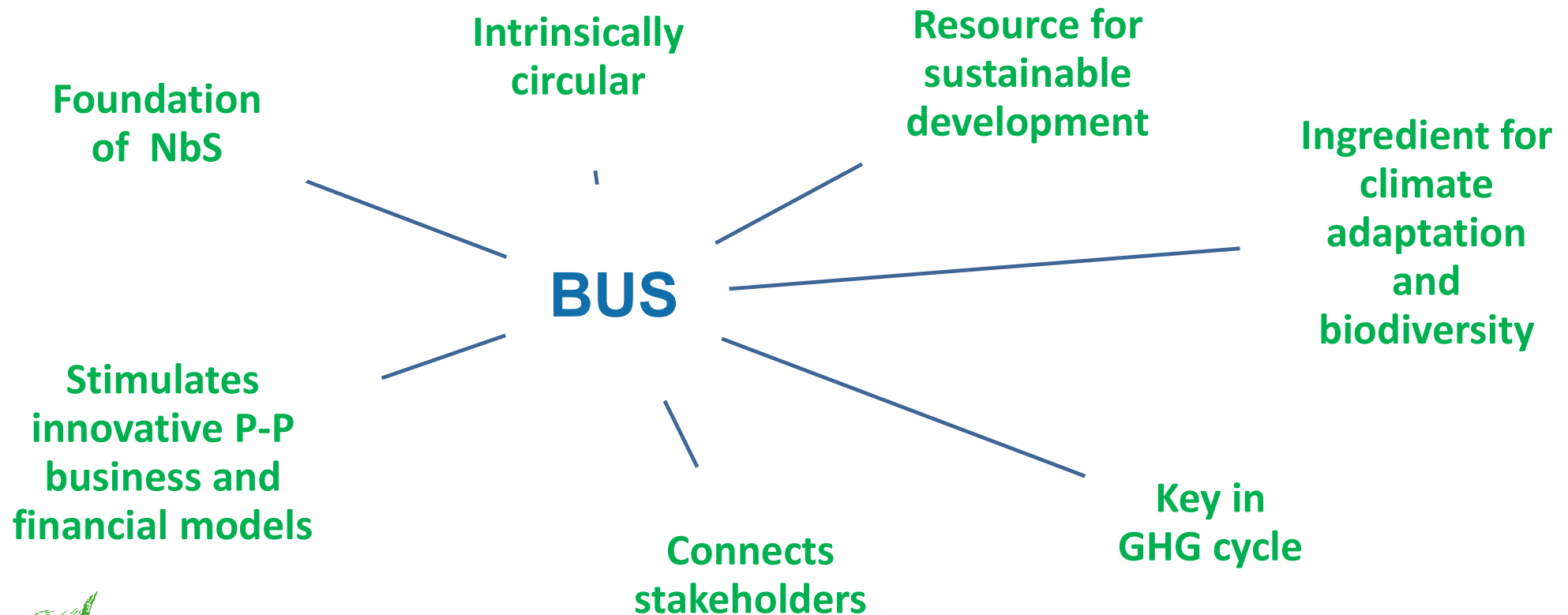
Building
material



Local
economy



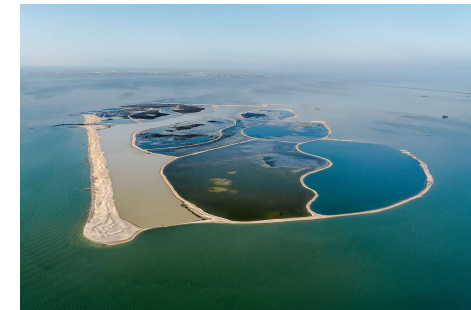
BUS – links to international ambitions



Focus of BUS table

BUS: sand and mud, with links to ecobiology and water

- Dike strengthening and realignment
- Counteracting subsidence
- Salt marshes and wetland development and restoration
- Navigation infrastructure maintenance
- GHG (NOx) emissions and sequestration opportunities



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<https://www.ecoshape.org/nl/pilots/living-lab-mud/>

Tracks (concept) – building on solid legacy

1. Kleirijperij: P – 2017-22 (ripening salty dredge sediments in clay soil for dikes)
2. NWO Hedwige Polder (TUD): P – 2021-24 (dike realignment and erosion)
3. KIEM (HAN): P 2021 (desalination of dredge sediments)
4. Meegroeidijk Fase 1: P – 2021 (thin lift placement of dredge sediment on dike – feasibility)
5. (TKI Living Lab for Mud: P 2020 – 21 (Measurement of CO2 from sediments + dredge sediments ripening))
6. EU Green Deal 7.1: Pr – 2022-25 (ecosystem restoration and GHG from BUS)
7. NWO Sediment to Soil (TUD): Pr – 2021-24; (ripening and geochemichemistry in BUS)
8. Brede Groene Dijk: L – 2022-24 (use of ripened clay in dike)
9. Marconi follow-up: L 2022-25 (salt marsh development)
10. Meegroeidijk Fase 2: L 2022 – 23 (thin lift placement of dredge sediment on dike – field experiment)

Plus (many) other within our partners

Ambition and key factors

To favour mainstreaming and to maximize the beneficial (re)use of sediments towards 100% reuse, through BwN

- Implementation cases of BUS (beyond technique)
- Link BUS implementation with bigger picture ambitions (e.g. GHG / climate neutrality; biodiversity; circularity)
- Creation / contribution to specific large programs
- Link NL – International
- Influence legislation and tenders to incorporate BUS

Enablers



System knowledge



Adaptive M&M



Stakeholders Engagement



Business Case



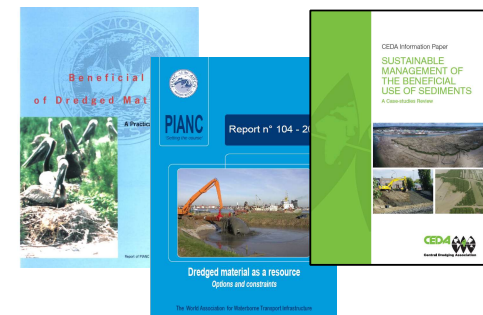
Capacity Building



Institutional Embedding



Technology



Implementation



Contact us

Luca Sittoni
Luca.Sittoni@ecoshape.nl



Nathalie Strookman
Nathalie.Strookman@vanoord.com



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