

# Natural



*building with nature*

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# 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



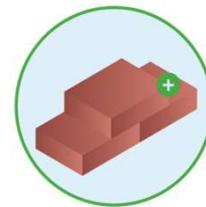
Navigability



Nature development



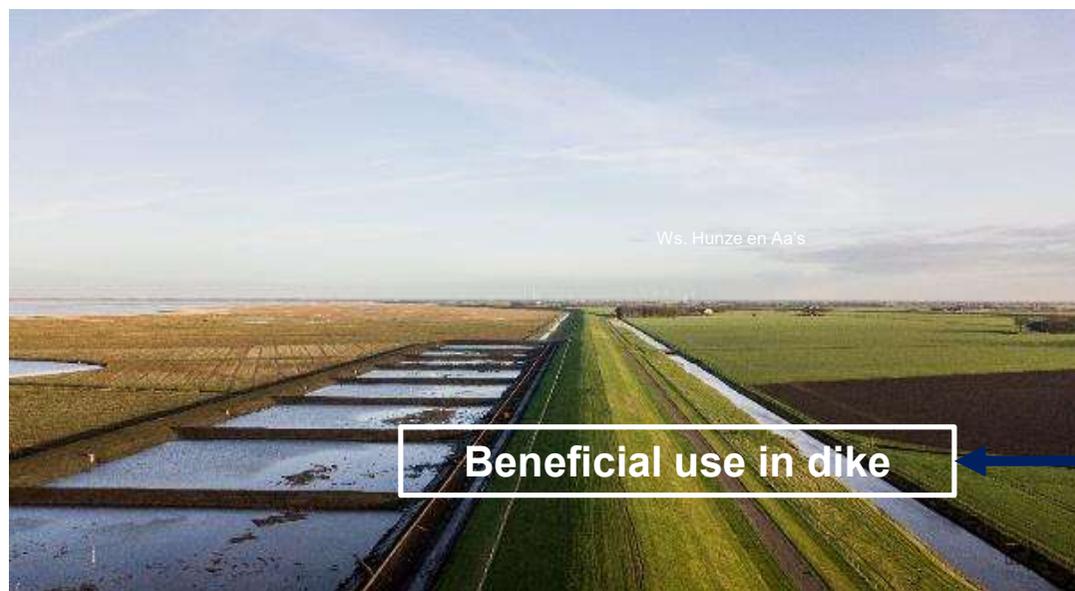
Water quality



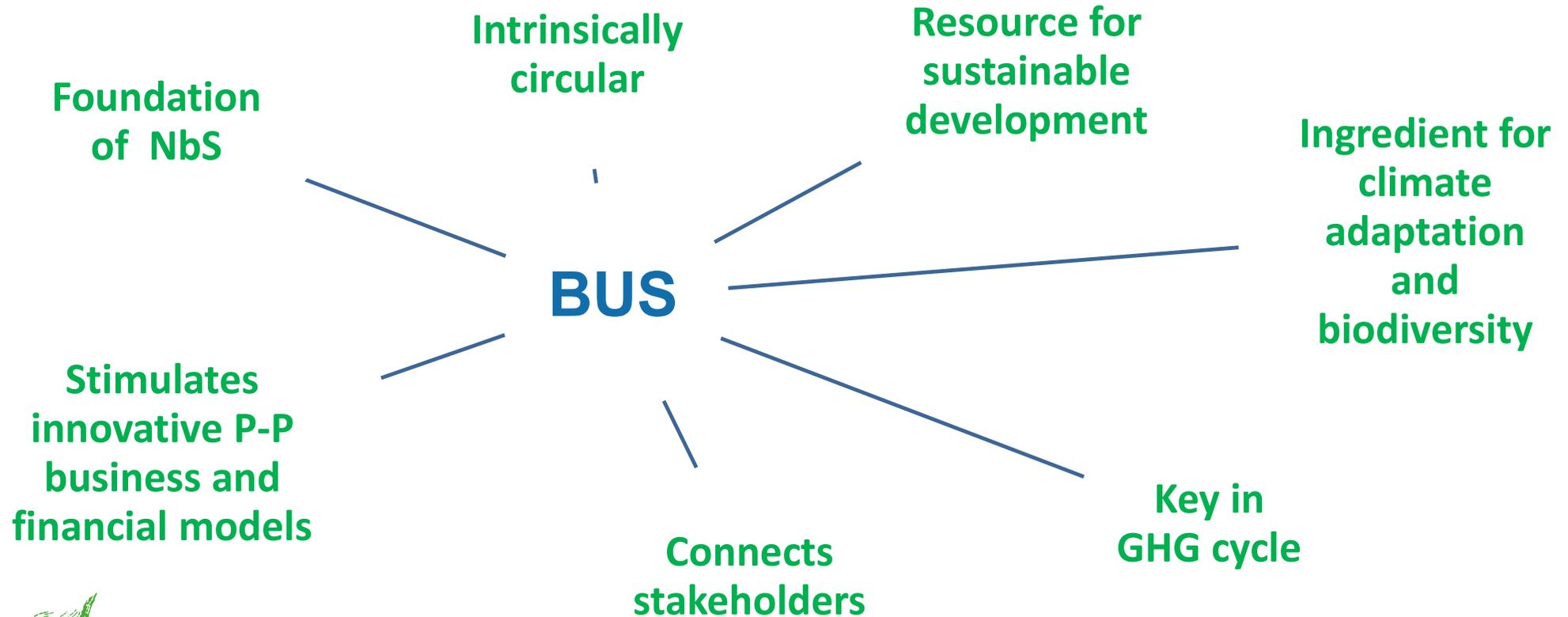
Building material



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*



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System knowledge



Adaptive M&M



Stakeholders Engagement



Business Case



Capacity Building



Institutional Embedding

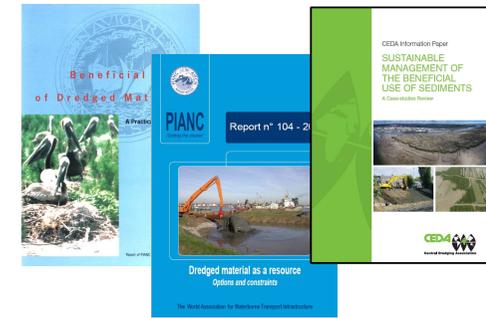
# Ambition and key factors

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

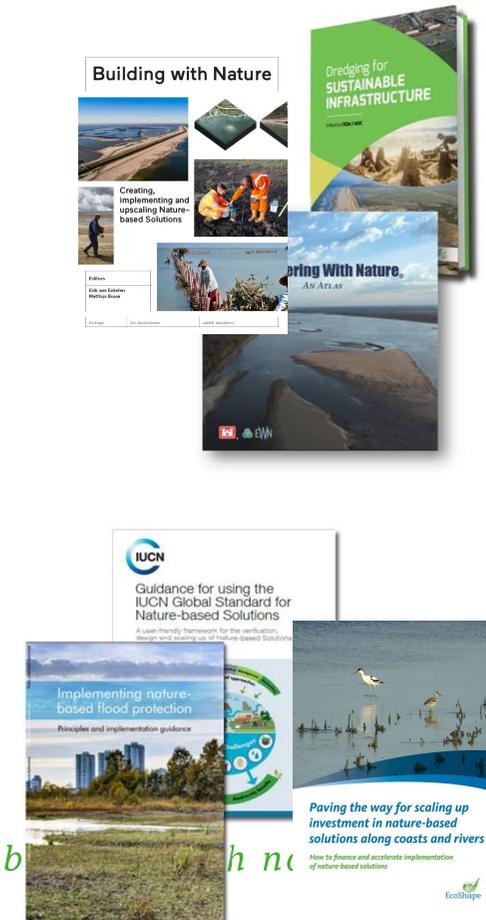
- Implementation cases of BUS (beyond technique)
- Link BUS implementation with bigger picture ambitions (e.g. GHG / climate neutrality; biodiversity; circularity)
- Creation / contribution to specific large programs
- Link NL – International
- Influence legislation and tenders to incorporate BUS



Technology



Implementation



## Contact us

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