

Workshop program

SedNet workgroup Sediments in Circular Economy (CE)

Circular Economy WG chairs: Arjan Wijdeveld (Deltares, The Netherlands)

Julia Gebert (Delft University of Technology, The Netherlands)

Workshop details:

- Date: 6 October 2025
- Location: Instituto de Ciencias de la Construcción Eduardo Torroja (IETcc), Madrid
- Time: 09:00 - 17:00

Agenda:

09:00 – 09:15 Walk in

09:15 – 09:45 Name change of the workgroup (*) – Julia Gebert and Arjan Wijdeveld

Beneficial use of sediments

09:45 – 10:45 Beneficial use options for dredged sediments: Building with nature for climate resilience

- Projects related to climate change and resilience for Building with Nature projects – Luca Sittoni
- CEDA work on GHG emissions – Julia Gebert

10:45 – 11:00 *Break*

11:00 – 12:00 Beneficial use options for dredged sediments: continuation

- Field ripening of sediments into soils for dike construction – Julia Gebert
- Field validation methods for recoverability of mine wastes – Bruno Lemiere
- Need for adaptation of standard leaching tests? – Arjan Wijdeveld

Lunch

12:00 – 13:00 Lunch

Open call for topics

13:00 – 14:00 Open to the floor (interesting projects, upcoming opportunities, recent published papers, EU policy developments, 'new' concerns like PFAS, etc.

All

Sediments in the Water Framework Directive

14:00 – 15:00 Sediments in the Water Framework Directive

- Recap of current state of discussion - Arjan Wijdeveld
- Non-papers 'reporting progress' and 'deterioration' - Pieter de Boer

15:00 – 15:30 *Break*

Micro plastics in relation to sediments (with Teams link to USA)

15:30 – 16:30 New and ongoing research related to the role of microplastics on sediment

- Completing the Puzzle – How Do Microplastics Alter Aquatic Sediment Transport? - Noortje Oosterhoff and Kryss Waldschlager (WUR)
- Trans Atlantic cooperation - Microplastic Heteroaggregation and Adsorption Characteristics to Environmentally Relevant Particles and Floccs - Andrew David McQueen (USACE) and Eugene LeBoeuf (Vanderbilt)

Wrap-up & Closure

16:30 - 17:00 Closure

Registration:

To register please [click here](#).

(*) Name change of the workgroup

The SedNet workgroup was founded in 2018 in Hamburg. The key mission is:

Dredged sediments are one of the biggest potential waste flows, according to regulations.
 Dredged sediments are mostly disposed of, at sea or on land.
 Sediments are part of our potential mineral resources (but also of our environment).

⇒ *Sediments are eligible to circular economy thinking*

What has changed anno 2025? Not the key mission, but the term “CE” has been more clearly defined, see Figure 1.

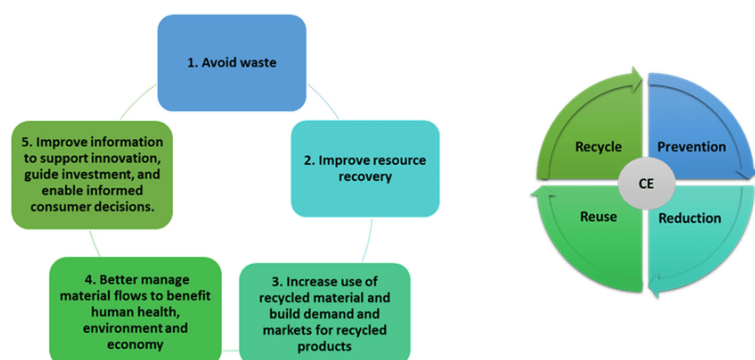


Figure 1 Conceptualizing the Circular Economy (Revisited): An Analysis of 221 Definitions, <https://www.sciencedirect.com/science/article/pii/S0921344923001374>

Most of what we do as a workgroup is not strictly “CE”, but beneficial use. Dredging is often done due to other drivers (nautical depth for shipping, safety against flooding, land access) and prevention (not dredging) is often not a consideration. On the other side sediments are essential for applications like habitat restoration or protection against flooding. Concepts like building with nature and ecosystem services are the driver for many beneficial use aspects. These projects are not strictly focused on CE, but focus also on Green House Gas emission reduction, costs (direct, indirect and induced) and ecosystem services including the social perceived value (or lack thereof) of the application of what is by legal definition a waste material (Wijdeveld, 2024; <https://doi.org/10.1007/s11368-024-03811-z>).

To reflect that the driver of our workgroup is broader than CE we propose to rename the workgroup in **“SedNet workgroup – Beneficial Use of Sediments”**.