

NEW ENERGY FORUM



19 juni 2025 | Groningen

Breaking Barriers



Floating Future: Housing and energy on the water

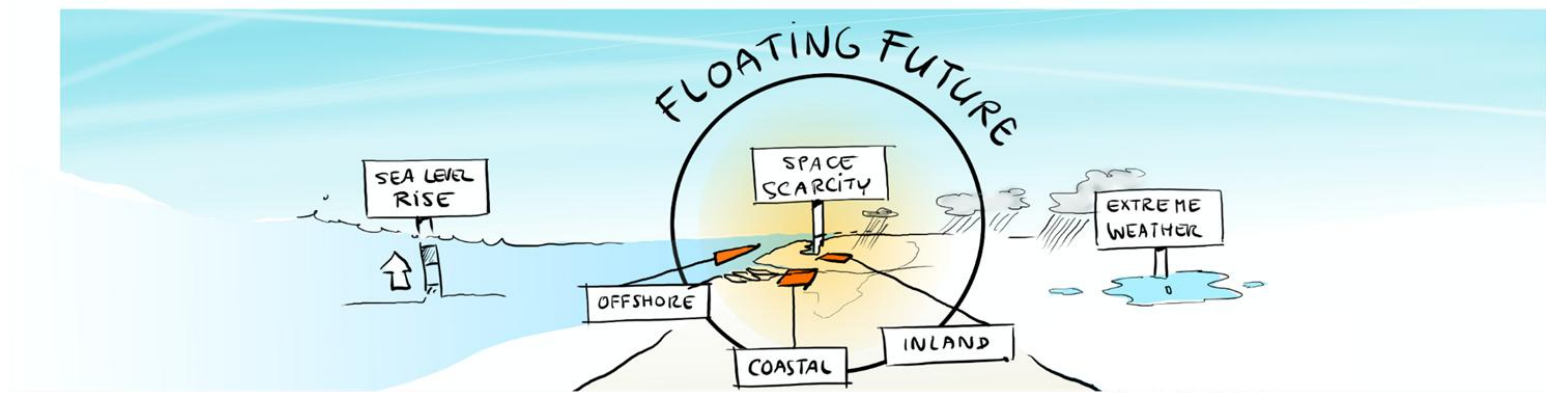
19 June 2025

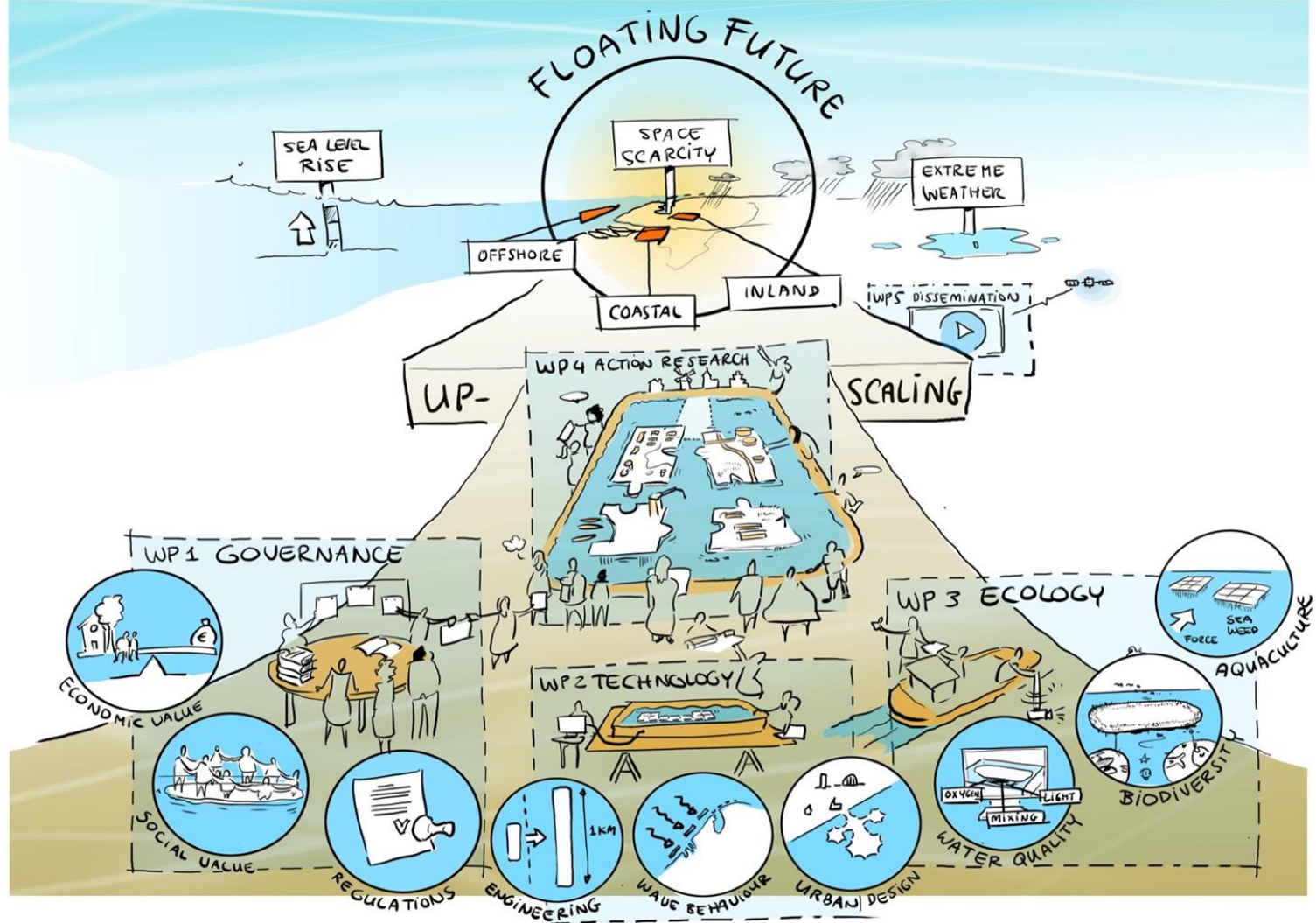
Scaling up floating structures as
climate-proof space-creating solution





But for many people,
living on the water remains out of reach.







university of
groningen

dr. Margo van den Brink - Associate Professor
Water and Planning

prof. dr. L.G. (Ina) Horlings - Full Prof. Dr.
Socio-Spatial Planning

dr. Britta Restemeyer – Assistant Professor
Spatial and Institutional Design

dr. Elizabeth MacAfee – Postdoc researcher

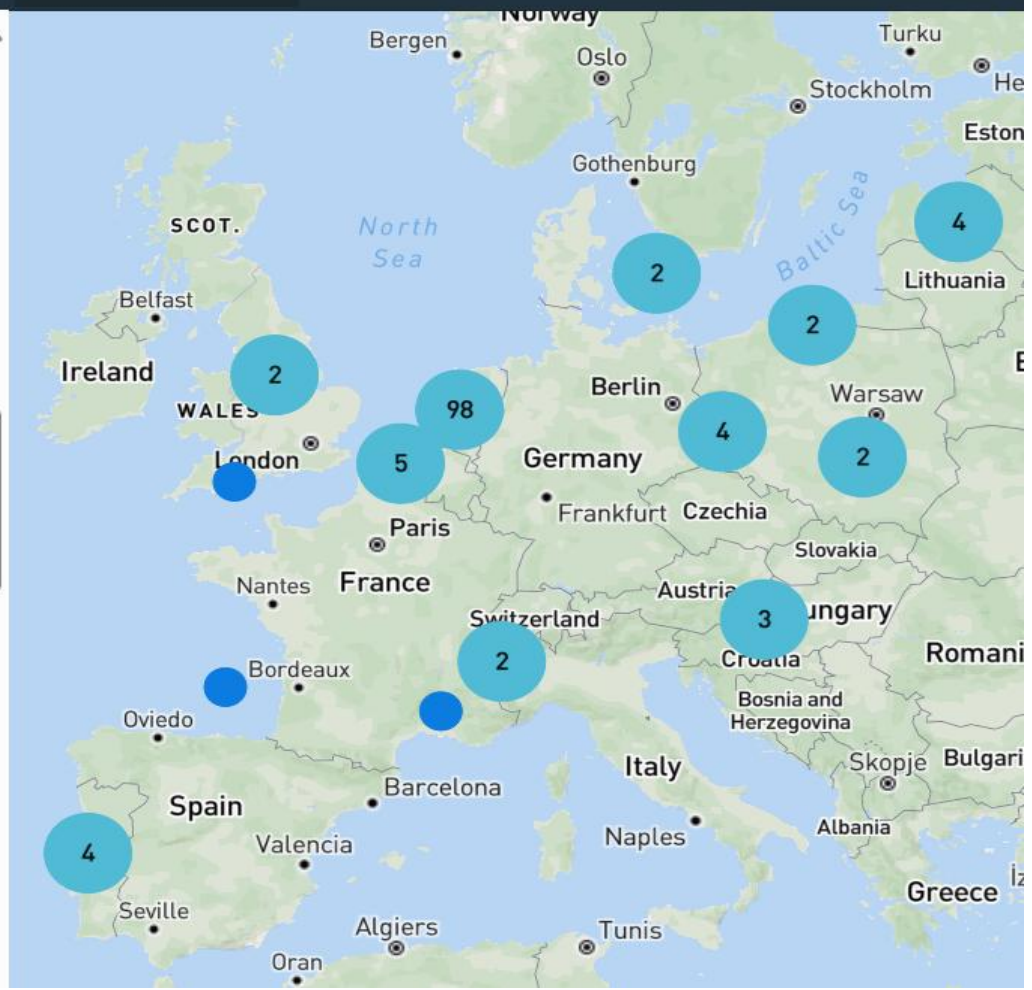
Sonja Rombach – PhD researcher

Erika Varik – Jr. researcher

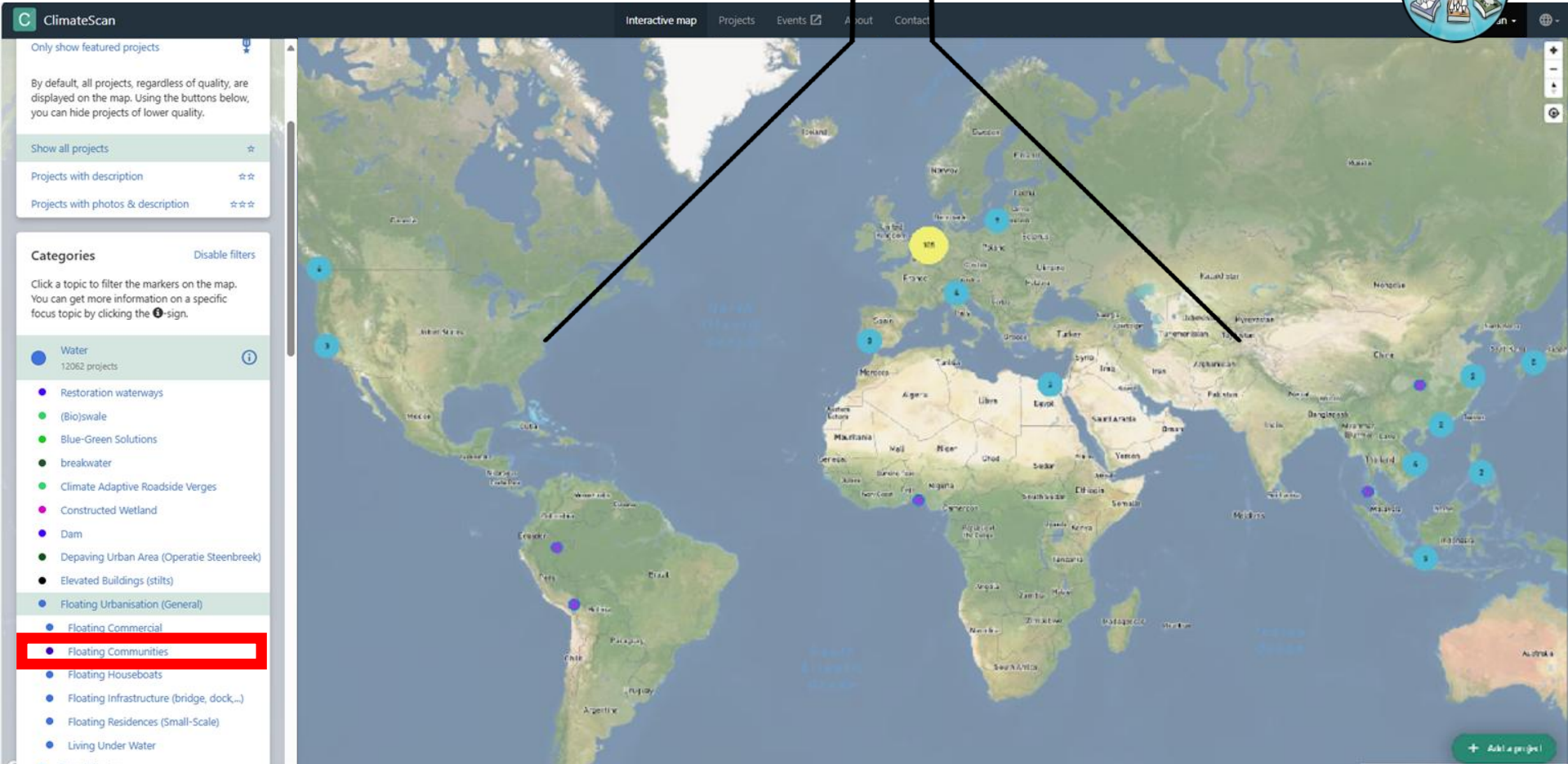




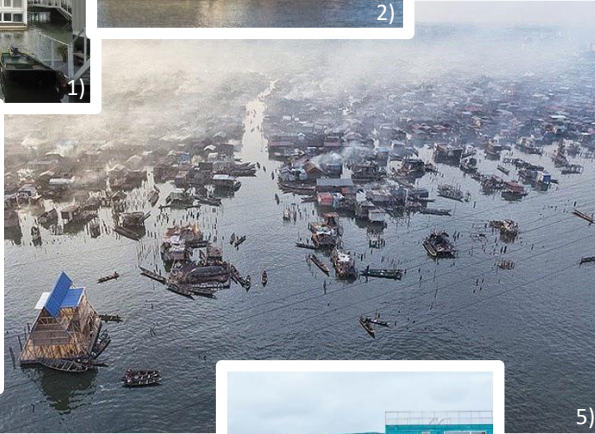
- Floating Urbanisation (General)
 - Floating Commercial
 - Floating Communities
 - Floating Houseboats
 - Floating Infrastructure (bridge, dock,...)
 - Floating Residences (Small-Scale)
 - Living Under Water
- Flood Barrier
- Green Roof
- Green Walls
- Grey and Black Water Recycling
- Groundwater
- Gutterless Roads
- Multifunctional Climate Adaptation
- Natural Flood Protection



Towards a Typology



Typology of existing floating communities



- 1) Urban living
- 2) Luxurious living
- 3) Sustainable living
- 4) Resource-based living
- 5) „Slum“ living
- 6) Alternative communal living



1) Urban living



"Go with the flow"

- Engineered/ planned urban neighborhoods (next to or extending an already existing residential area)
- Safety, durability and cost
- Housing (reg. land shortage), adaptation (to SLR & flooding) and recreation (living with nature) functions
- Communal & private (green) spaces and facilities

2) Luxurious living

“High and dry”



- Prestigious, romantic, high status associations with waterfront-lifestyle
- Urban calm waters
- High-standard housing and recreational purposes
- Focus on design not ecology

3) Sustainable living



“Reuse, amuse, reside”



- Sustainability & lifestyle aspirations
- Water not predominant factor
- Housing solution for dense urban areas
- Connected (sharing culture) and conscious (environmental consciousness) living community
- bottom-up

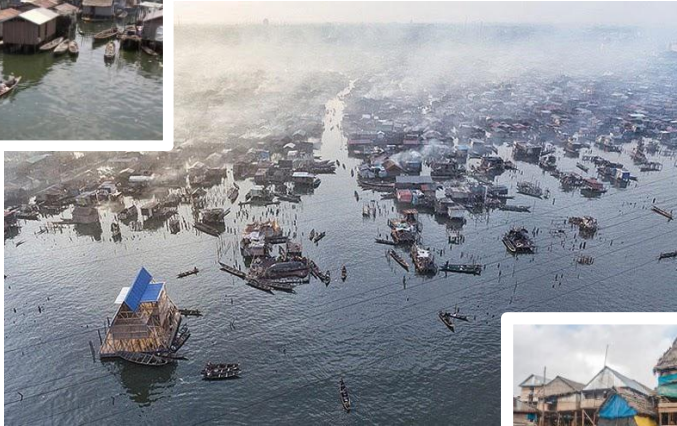
4) Resource-based living



“Living off the land”

- Vernacular/ unplanned communities which emerged organically or out of necessity
- Scattered large accumulations of simple huts (floating or on stilts) with appendant fishing appliances
- Livelihood dependance on water resources
- Strong social capital

5) Slum living



“People of the rivers”

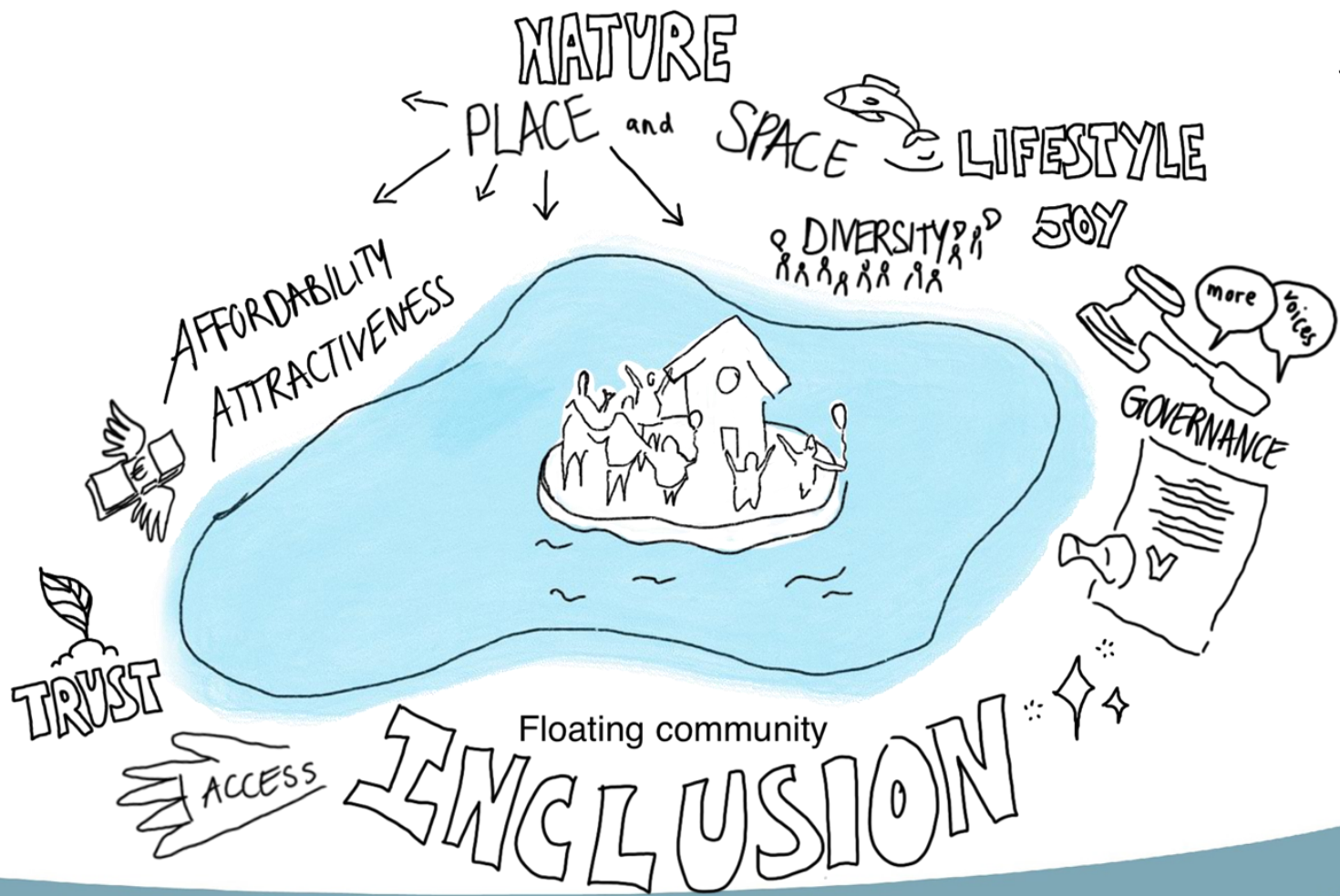
- Overcrowded, unregulated settlement
- Often serious environmental, infrastructural and social (poverty-related) deficiencies/issues
- Poor status of inhabitants
- Housing and working in adaptation to given living circumstances, or refuge for migrants
- Strong social capital

6) Alternative communal living



“Turn the tide”

- Communities connected to marinas
- Alternative lifestyle aspirations
- High water (nature connectivity & recreation) and community aspect
- Floating home associations rule the communal living



Lectoraat Klimaatadaptatie
Floating Future:

Prof. Dr. Floris Boogaard

Dr. Charné Theron

Dr. Bert van der Moolen

Dr. Ron de Vrieze

Entrance Learning
Community Urban Energy
– Floating Future



Learning
Community
Floating Future



Floating Future



& Sparkles

“The floating future is now...”

Prof. Dr. Floris Boogaard

**Output 1st year
Learning community**



FLOATING CITIES

EDITED BY
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FAUSTINE MINET
DAVID OUDMAN
HUGO THUARD

Floating Solar Panels: Green & Sparkles

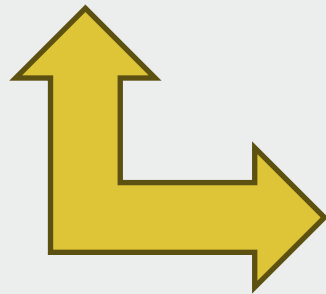
<https://groenleven.nl/projecten/drijvend-zonnepark-bomhofsplas/>

<https://www.youtube.com/watch?v=FaIDniFqx6k>



Climate Adaptation
Research Group

Thom Kruidhof: Floating Street Furniture



https://www.canva.com/design/DAGqicfjnn4/bl076F_wfcvfiWsmWidx_w/edit



Thom Kruidhof

Industrieel product ontwerpen

Kleine kansen grote gevolgen

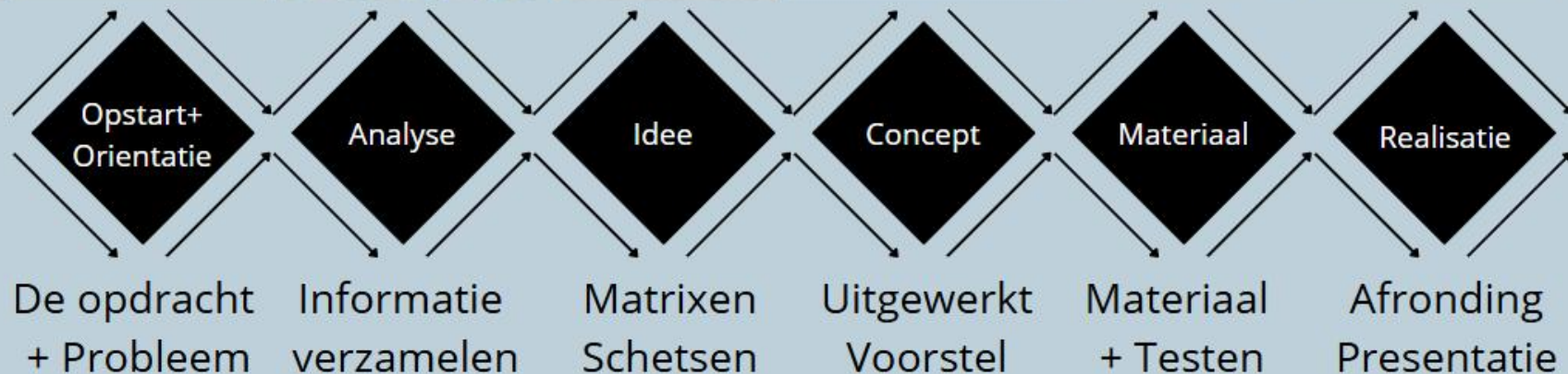
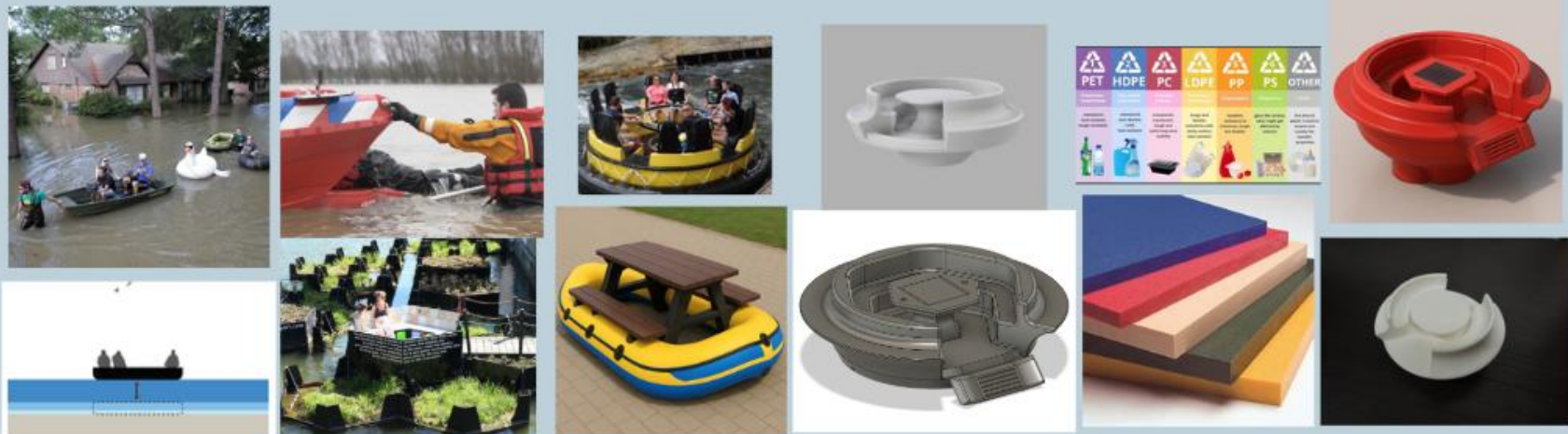
Slachtoffers en maatschappelijke ontwrichting als focus voor waterveiligheidsbeleid



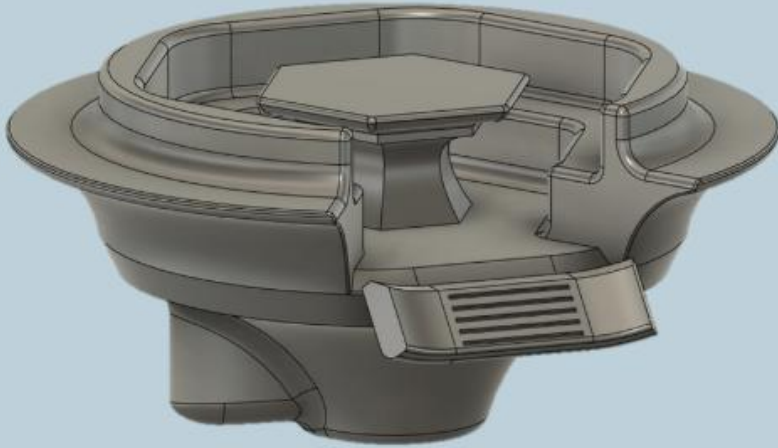
Vraagstelling

“Ontwerp een concept voor amfibische zit-
straatmeubilair dat functioneel en veilig is in
zowel droge als overstroomde openbare ruimte,
en tegelijkertijd bijdraagt aan de zelfredzaamheid
van omstanders tijdens wateroverlast.”

Proces



Resultaat en product



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Interactive session



<https://www.menti.com/alzqc88gvg89>

Questions for the presenters






FLOATING FUTURE

This work is part of the project Floating Future with project number 16953 of the NWA research programme 'Research along Routes by Consortia (ORC)' which is financed by the Dutch Research Council (NWO).

Which of these things does NOT YET exist?

- A) Floating farm
 - B) Floating park
 - C) Floating hospital
 - D) Floating airport
 - E) Floating opera house
- 
- The bottom of the slide features a decorative graphic consisting of two overlapping wavy lines. The upper line is a light blue color, and the lower line is a darker, muted green color. These lines create a sense of a horizon or a stylized landscape.

Which of these things does NOT YET exist?

- A) Floating farm
- B) Floating park
- C) Floating hospital
- D) Floating airport
- E) Floating opera house

Which floating home would you prefer?

A) Boat house

B) Floating villa

C) Eco home

D) Futuristic home

A



B



C



D




How would you prefer to live floating?

- A) Single home
- B) Alternative living
- C) Urban community
- D) Eco village
- E) Offshore living



Would you support the idea of scaling up floating housing?

- A) Yes! Go big or go home
 - B) Probably
 - C) Just stick to small-scale projects
 - D) I wouldn't support
 - E) I don't care
- 
- A decorative graphic at the bottom of the slide consisting of two overlapping wavy lines. The top line is a light blue color, and the bottom line is a darker, muted green color. They create a layered, wave-like effect across the width of the slide.

Which of these statements do you most agree with?

- A) Floating living is an extension of urban living on land
- B) Floating living is very different from living on land
- C) Floating living can also take place offshore

