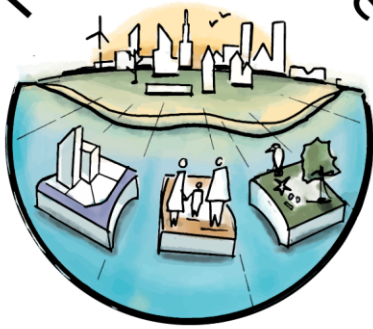


Floating Future



Newsletter

An interdisciplinary project to enable implementation of floating islands for societal, industrial and ecological win-wins

June 2024

The Floating Future project has started! This first newsletter reflects on the first project activities, including the project kick-off in Rotterdam. In addition, the first five PhD candidates that will work on the project are introduced, the advisory committee has been installed, and high school pupils tested their floating islands in MARIN's wave basin.

and ecological win-wins – fully in line with the project's ambitions.

Floating Future members were enthusiastic:

Tjeerd Bouma, NIOZ: "The floating future project has a lot of potential for humanity, by creating space for living, food production or energy generation"

Eefke Huisman, Open University: "I'm really looking forward to create impact together!"

Project kick-off

The full Floating Future consortium gathered in Rotterdam on 17th April 2024 to kick off the project together.



The societal relevance of the project was shown by presentations from the City of Rotterdam, which highlighted the necessity for innovative (floating) solutions that combine living, leisure, and water storage needs. Water taxi brought the team to the unique Floating Pavilion at RDM Campus – no venue more suited for starting this project.

During an inspiring and highly interactive co-creation event, the participants built miniature versions of future floating



constructions for varying applications. The complementary backgrounds of stake-holders contributed to designs with social, economic,



Video and summary

For a visual impression of the kick-off, as well as a summary by cultural anthropologist Lasse Bech Knudsen, visit the website (<https://floating-future.nl/floating-future-project-kicks-off/>).





Meet the PhD's (part I)

The core of the Floating Future project is formed by a team of 10 PhD candidates, who will develop key insights in their specific domains (governance, technology, ecology). We are proud that all PhD candidates have been appointed and most have started. This newsletter introduces the first 5 PhD candidates (meet the rest of the team in the next newsletter!).

Buddhi Weerasinghe (Erasmus University)

I am Buddhi A. Weerasinghe, a PhD researcher at Erasmus University Rotterdam, passionately exploring the frontier of Floating Ports & Governance under the Floating Future Research Project.



Imagine a world where ports are no longer anchored to the shore but float majestically on the sea. This vision is becoming a reality, thanks to pioneering efforts by Dutch organizations like MARIN and the Blue Revolution Foundation.

My research dives into this revolutionary concept, merging the principles of port governance and business modeling to chart new waters in maritime transport. With an MSc (Research) in container terminal optimization and a BSc (Hons) in Transport and Logistics Management from the University of Moratuwa, Sri Lanka, I am uniquely positioned to innovate in this cutting-edge field.

This journey is a collaborative voyage between Erasmus University Rotterdam and Rotterdam University of Applied Sciences. Guided by the wisdom and expertise of Prof. Dr. Jurian Edelenbos, Prof. Dr. Ron van Duin, and Dr. Wouter Spekkink, I am excited to navigate the complexities within this emerging domain. My goal is to contribute to the creation of floating ports that redefine the boundaries of port infrastructure, business, and governance, paving the way for a sustainable and innovative future.

Vera Hartman (NIOZ)

My name is Vera Hartman, a PhD candidate at NIOZ. I hold two master's degrees from Wageningen University where I have gained combined knowledge of (international) water management and marine ecology. In the past I have focused on the interdisciplinary field between marine science and socio-economic dynamics.

I am very excited to be part of the interdisciplinary team of the Floating Future! In the coming four years I will investigate economic and ecological win-win opportunities of seaweed cultivation alongside floating developments in the Dutch North Sea (WP3).

Expanding seaweed cultivation to the offshore environment remains difficult, due to the rough environment and often large



investment risks and large costs. My aim to contribute to this transition starts with understanding the impact of offshore hydrodynamics and shading by large-scale floating developments on, among others, the growth and biochemical composition of seaweed. This will be followed by investigating different roles that seaweed can play in mitigating environmental impacts of the floating developments and in promoting biodiversity.





Sonja Rombach (University of Groningen)



I am Sonja Rombach, exploring the Social Value of Floating Communities (WP1). My strong interest in marine science – besides my passion for water sports – emerged during the broad structure of my Geography studies; As it happens, I have already written my bachelor thesis on the potential of floating homes as a special

adaptation method to sea level rise in Kiel, using the example of IJburg, Amsterdam and quoting Rutger de Graaf. My master in Environmental Geography and Management at Kiel University/Germany then paved the way at last resulting in a thesis on Transdisciplinary Research in Marine Science: What's the Added Value of Involving Stakeholders?

Understanding values is an ongoing process of learning-by-doing and doing-by-learning. This can only be done co-creatively! Therefore, I am motivated to dive into the social principles and tools which enable, motivate and mobilize citizens, NGOs and other stakeholders to participate in developing inclusive floating communities, on a larger scale. At the moment, I am working towards conceptualizing floating communities and their social values, asking what are the different types of floating communities existing already?

Barbara Dal Bo Zanon (Delft University of Technology)

I am Barbara Dal Bo Zanon, I am an architect and for over 12 years I have been working in the field of water-based urban development. After my MSc in Architecture for Sustainability from IUAV, I have moved to the Netherlands and joined Blue21

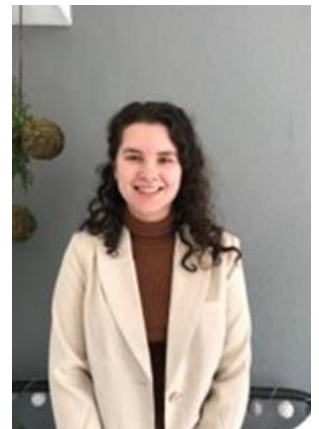


(formerly Deltasync), an engineering consultancy firm specialized on floating development. At Blue21, I have been working on commercial projects, as well as on research projects (e.g. FloodProBE, Space@Sea).

Next to my job at Blue21, I am now a PhD student at TU Delft, within the Faculty of Architecture and the Built Environment. In Floating Future, the aim of my research is to investigate how floating development can be scaled up from the perspective of spatial planning and design. Some questions I am asking in my research are: Can the Netherlands effectively reintegrate an 'amphibious culture' to address climate change? Does floating have the potential to become the 'next tradition' in the Dutch cultural and technological adaptations to floods?

Emma Wolff (NIOZ)

I recently graduated with a master's degree in Natural Resource Management from the University of the Westfjords in Iceland. During my studies, I built a strong foundation in coastal and marine ecology, aquaculture, and oceanography, while also experiencing



life in a remote coastal community. Living in the Westfjords made me acutely aware of the vulnerability of coastal communities to sea level rise. This awareness drew me to the Floating Future project, which offers a solution to space scarcity and adapts to changing water levels, making it resilient against sea level rise. I am very happy to have been selected as a PhD candidate in the Ecology work package, where I can combine my passion for ecology and hydrology. During my PhD, I will focus on developing general applicable design rules on how to create biodiversity-stimulating island edges.





New generation tests floating islands at MARIN

With our ambition to pave the way for large scale floating developments that should arise the next decades, it is essential to also involve young generations – after all, they will be the ones ultimately utilizing such structures.

MARIN therefore asked pupils from local high schools Het Streek and Pallas Athene to design and build their own scale model of a multi-functional floating structure at sea. The pupils, aged 12-15, were specifically encouraged to ensure safety and structural integrity in harsh environmental conditions. This led to highly innovative designs that featured breakwaters, seawalls, or wave-absorbing energy converters.



To study their performance, all models were tested up to (and over!) their design limits in MARIN's Concept Basin. Most designs withstood even the highest waves, so the pupils could be proud on their engineering efforts!

For a video of the basin tests, visit [our LinkedIn page](#).

Project advisory committee installed

We are pleased to announce that the project advisory committee has been installed. Throughout the project, this committee will keep track of, and advise on, the project's

scientific and societal impacts. We are grateful that the committee members offered their experience and expertise to provide guidance to the project. The advisory committee will consist of the following members:

External members

- H. Ovink (World Resources Institute)
- L. Airoidi (Univ. Bologna)
- E. English (Univ. Waterloo)
- Ø. Hellan (SINTEF Ocean)
- S. Richter (Univ. Pennsylvania)

Consortium representatives

- V. Bauman (Gem. Rotterdam)
- R. Leeuwenburgh (Bluewater)
- I. Mouthaan (Ministry of Economic Affairs & Climate)
- K. Olthuis (Waterstudio)
- D. Schuwer (Stichtse Rijnlanden)

Outlook

In the next half year the PhD researchers will bring themselves up to speed and the participatory action research is initiated through a series of events. When you want to know more about the project, attend the public event on Nov 12th! More information will be shared through our website.

Selection of Floating Future events

- Sep 3rd through Oct 1st: weekly webinar on case studies (*consortium members only*)
- Nov 12th: public event on maritime urbanism, Pakhuis de Zwijger, Amsterdam (in collaboration with Taalkwadratuur and Circular Floating Districts)
- 12th Dec: case study meeting Utrecht (*consortium members only*)

