



# AQUA DOCK

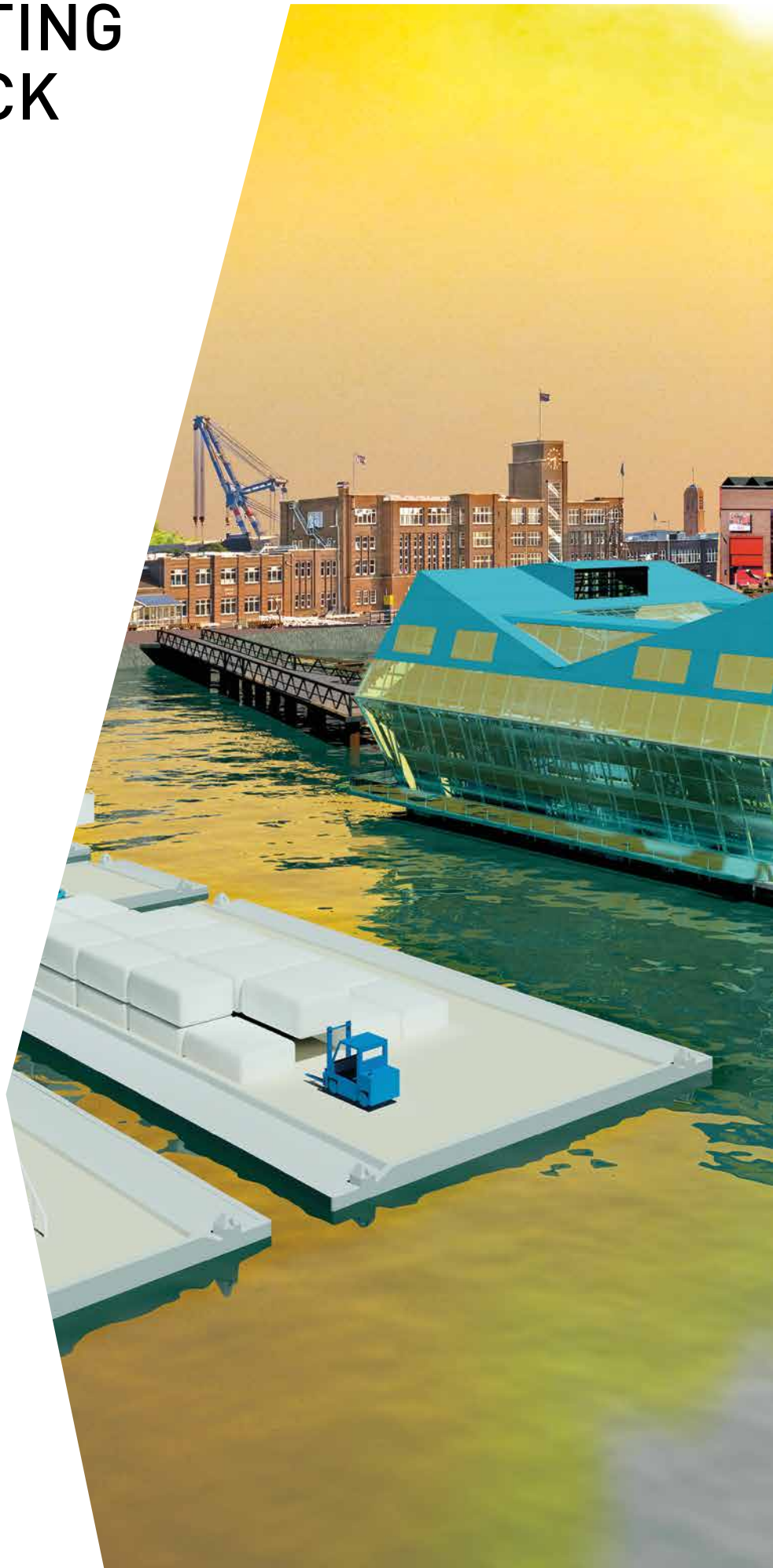


# EXPERIMENTING AT AQUA DOCK

Aqua Dock, located in the Dokhaven of RDM Rotterdam, is an innovative and experimental test, demonstration and production environment for construction on water. Displaying and working on the development of new technologies, products and prototypes has pride of place here. The experimentation site consists of a floating construction pier with sections of water on which various experiments can take place. These might include a test location for floating systems, floating dams and a floating greenhouse, but also floating houses, offices and a hotel. In addition, Aqua Dock provides excellent opportunities for crossovers with the maritime sector present at RDM. Experiments with maritime applications in floating constructions and with the development of underwater drones for measuring water quality are already taking place.

Rotterdam is investing in the further development of knowledge in relation to climate adaptation and construction on water through programmes such as Rotterdam Climate Proof, Clean Tech Delta and the development of the Rotterdam Centre for Resilient Delta Cities. The Port of Rotterdam wishes to be the most innovative and cleanest port in the world. A site on the water, which could be used for experiments, demonstrations and displays, including maritime, water and delta technology, is consistent with the city and the port's objective to be pioneers in the area of urban climate adaptation and intelligent green ports.

Aqua Dock is a cooperative venture involving the City of Rotterdam, the Port of Rotterdam Authority and RDM Centre of Expertise (RDM CoE) of the Rotterdam University of Applied Sciences. As part of this, the municipality and the port authority are responsible for the construction and operation of the site and RDM CoE for the link to science, education and research.





## EXPERIMENTATION AT AQUA DOCK

Experimentation at Aqua Dock relates, for instance, to the following areas of research and issues:

- > new forms of floating technology
- > new forms of decentralised energy provision, making use of water and wind energy, and high and low tides
- > autarky/self-sufficiency of the structures built on the water
- > logistical opportunities and threats associated with building on water; accessibility of a floating city by road and water, parking problems, opportunities for modal shifts, floating construction and storage locations
- > the added value of living, working and leisure on water
- > the opportunities and costs of construction on water
- > construction on water as an adaptation strategy for international delta cities
- > the opportunities which building on water offers cities with regard to increasing their population density and the revitalisation of old port areas
- > floating green areas on water
- > flood control, floating dams
- > smart-grid solutions
- > measuring water quality under floating structures
- > policy issues in relation to licences and zoning plans
- > legal and planning issues, such as 'what is public space in the floating city?' and 'how does the floating city link to the city on land?'

## A SECTION OF WATER AT AQUA DOCK

# YOUR WORKPLACE ON THE WATER

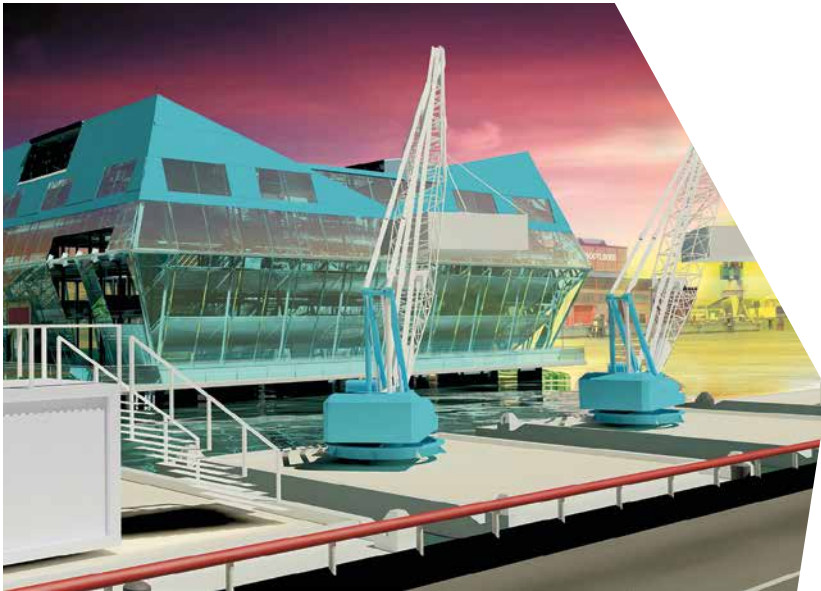
- > Lease periods from as few as six months
- > Sections of water of 25 m<sup>2</sup> to 1,200 m<sup>2</sup>
- > Cost of the lease: negotiable and depending on requirements and specifications
- > Situated on a public quay
- > Close to the restaurant, Dudok's RDM Kantine
- > Optional: drinking water/sewage/Wi-Fi

### With access to

- > RDM Centre of Expertise's Community of Practice 'Drijvend Bouwen' (Floating Construction; [www.copdrijvendbouwen.nl](http://www.copdrijvendbouwen.nl))
- > Students and researchers of Rotterdam University of Applied Sciences, Rotterdam Mainport University and Technical College Rotterdam (Albeda College/Zadkine)
- > A network of excellent partners: TU Delft, TNO, Clean Tech Delta and Delta Technology & Water Valorisation Programme
- > Support in relation to applications for licences and subsidies

### The following are available as options

- > Access to the Innovation Dock machinery for prototyping through RDM Makerspace
- > Office space, congress centre and meeting facilities



### PARTICIPATION IN AQUA DOCK

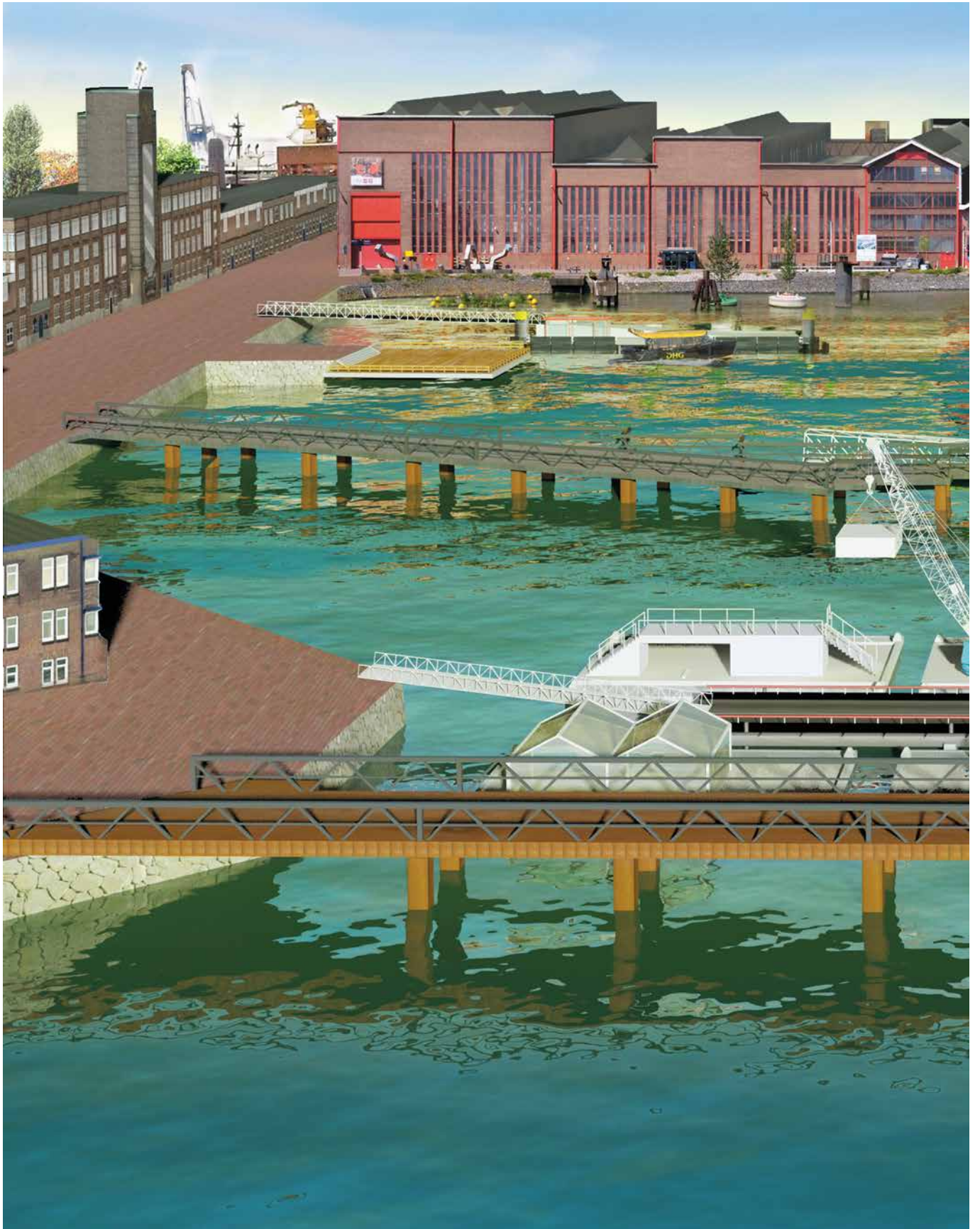
Companies, research institutions and educational institutions, as well as the City of Rotterdam, are working together in Aqua Dock to realise the opportunities that water offers. Any interested company may participate in this project. Participation in Aqua Dock results concretely in the following:

- > a place for carrying out experiments in the form of a section of water (a water 'plot'), which is directly linked to the facilities on the construction pier
- > a workplace on the water
- > opportunities for support in the area of research and knowledge with regard to all the relevant disciplines associated with construction on water, water management and decentralised energy generation
- > facilities to create prototypes
- > access to innovation subsidies through cooperation with public authorities, education institutions and companies
- > attention from national (and international) media and working visits
- > participation in relevant meetings and networks in the area of water and delta technology
- > inclusion in the showcase Rotterdam Deltastad (Rotterdam Delta City) and Rotterdam Innovation District

### FURTHER INFORMATION

Do you wish to build a prototype, test new sustainable technologies or have a workplace on water at Aqua Dock? If you have any questions relating to Aqua Dock, kindly contact Jaap Peters, Project Manager, City of Rotterdam: [j.peters@rotterdam.nl](mailto:j.peters@rotterdam.nl) / 06 - 5155 0117.

For more information on Aqua Dock, see [www.rdmcoe.nl/aquadock](http://www.rdmcoe.nl/aquadock).



ARTIST IMPRESSIONS Hai Dong Liu, commissioned by Stadshavens Rotterdam. GRAPHIC DESIGN Medamo

