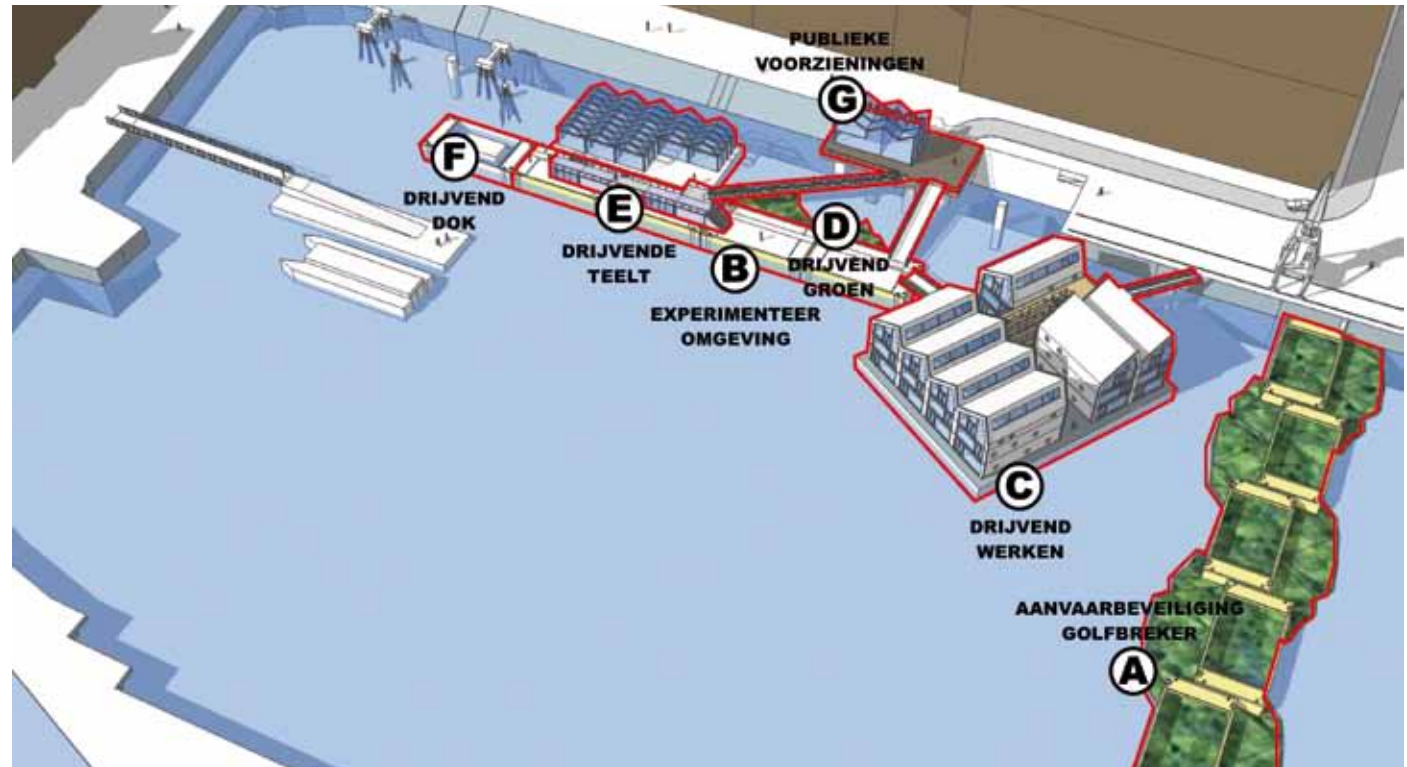


NEW OPPORTUNITIES FOR BUILDING ON WATER

Sustainable building is one of the priorities in the redevelopment of the city ports of Rotterdam. Experience in this field presents global market opportunities: 75% of all megacities in the world are located in delta regions, all suffering from limited space and confronted by having to address climate change and scarce energy. Floating buildings fit in with the adaptation strategy.

Rotterdam is investing in further development of knowledge about floating buildings through such programmes as Rotterdam Climate Proof and Clean Tech Delta, and the Netherlands Water Centre. The ultimate goal is to build a floating city but in order to make the leap from idea to reality, an extra link in the chain is necessary. This particular link is the Aqua Dock, an experimental demonstration site on RDM Campus. The partners involved in developing the Aqua Dock project are City of Rotterdam, Port of Rotterdam Authority and Rotterdam University. Stadshavens Rotterdam is sponsoring the project.

Aqua Dock is an experimental platform for testing, demonstrating and designing innovative floating buildings. The focus is on showing off and developing new techniques, products and prototypes. It involves small-scale construction of floating models and novel forms of energy generation on and near water. This 'delivery room' for innovation enables us to experiment with floating buildings and test them on the technical level as well as in terms of logistics, planning, policy, and legal and social aspects. With the delivery room, we can physically realize projects without the project in question being hindered by spacial issues. The delivery room also has great publicity and public communication value.



Aqua Dock focuses on water engineering, water management and sustainable energy in such a way that learning, work, experiments and exhibits all come together. Since business, government and education are collaborating, this leads to a win-win situation for all involved. Participation in Aqua Dock generates substantial international exposure, whereby the value is not just restricted to gains in knowledge. The benefits include new companies, product-market combinations and highly educated employees for this branch becoming available. The collaboration is organized in innovation teams.

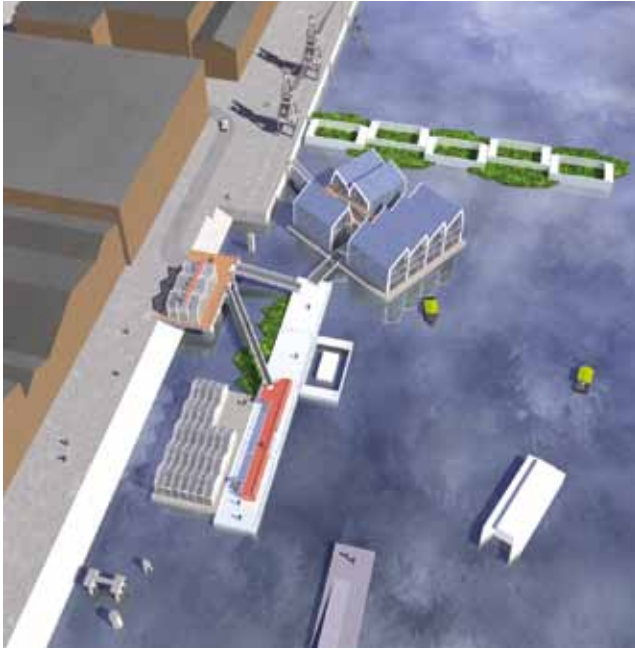
FLOATING EXPERIMENTS

Aqua Dock's experimental site is a floating building platform where various experiments are currently underway. Actual projects connected to the platform include test sites for floating systems and floating wave breakers, and a floating greenhouse.

PARTICIPATING IN AQUA DOCK

In Aqua Dock, businesses, research and educational institutions and the municipality of Rotterdam are working together to capitalize on water opportunities. Interested companies are welcome to take part in this project. Participating companies enjoy the following benefits:

- ♦ an experimental site directly connected to the dock's facilities on the floating building platform;
- ♦ a floating workplace;
- ♦ research support and know-how in floating building technology, water management and decentralized generation of energy;
- ♦ the capacity and facilities to realize prototypes;
- ♦ support and facilities for innovation exhibits;
- ♦ access to innovation subsidies facilitated by the cooperation between government, education and business;
- ♦ (inter-) national media attention and work visits;
- ♦ participation in relevant conferences and networking with others working in floating building technology;
- ♦ inclusion in the Rotterdam Deltastad showcase.



EXPERIMENTS AT AQUA DOCK

Experiments at Aqua Dock address the following research aspects and questions:

- ♦ new forms of floating building technology;
- ♦ new methods of decentralized energy provision, using water and wind energy, ebb and flow;
- ♦ autarchy/self-supporting floating structures;
- ♦ logistical opportunities and threats encountered when building on water, such as access to a floating city by road and water, parking problems, modal shift opportunities, floating construction and storage sites;
- ♦ the added value of living, working and recreating on water;
- ♦ opportunities and expenses of floating buildings;
- ♦ floating buildings as a solution to climate change;
- ♦ chances of building on water to create a compact city and revitalize old harbour areas;
- ♦ floating greenhouse;
- ♦ flood control, floating wave breaker;
- ♦ smart grid solutions;
- ♦ policy questions on permits and area development plans;
- ♦ legal and planological issues such as 'which part of the floating city is open to the public?' and 'how is the floating city connected to the city on dry land?'

RDM CAMPUS

Aqua Dock is under construction at Dokhaven (the Dock) on the RDM Campus, where knowledge institutions and companies are working together in an open environment on sustainable technical innovations in the fields of building, mobility, energy, maintenance, design and architecture. Under the slogan Research, Design & Manufacturing, RDM Campus has everything required to fulfil the needs of companies, such as:

- ♦ research and design facilities (Albeda College and Rotterdam University);
- ♦ first-rate machinery for prototyping;
- ♦ a network of top partners, including TU Delft, TNO, Syntens and the Rabobank;
- ♦ start-up facilities via the Dnamo incubator;
- ♦ site rentals and office space;
- ♦ a conference centre and meeting facilities.

MORE INFORMATION

For more information, visit www.rdmcampus.nl/english or contact RDM Campus:

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RDM CAMPUS IS A COLLABORATION BETWEEN:



RDM CAMPUS

AQUA DOCK

