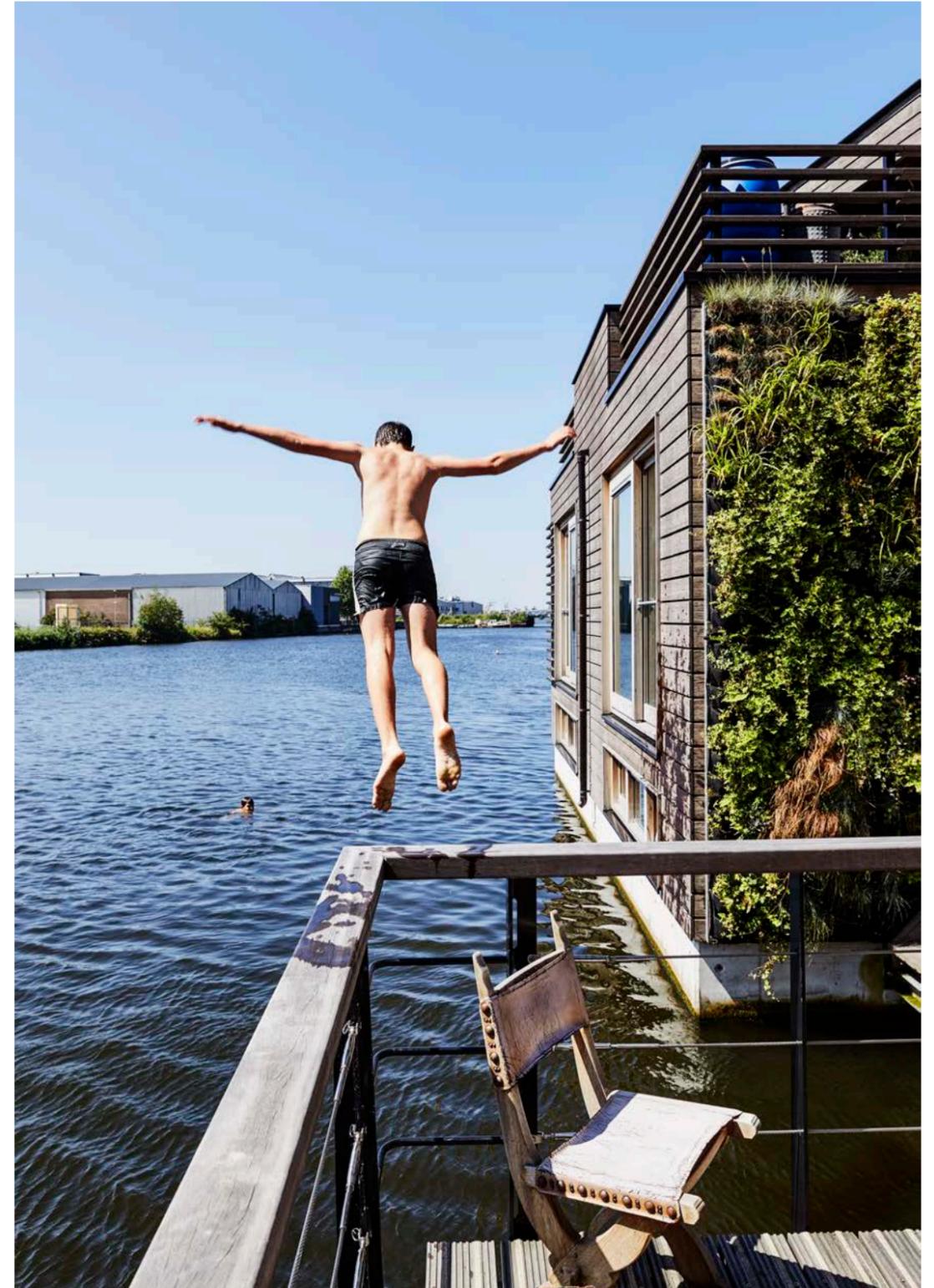


Tight Schip

A group of like-minded residents turn an uninviting stretch of canal in Amsterdam into an energy-independent floating community.

TEXT BY Tracy Metz PHOTOS BY | @ALANJENSEN Alan Jensen



Residents of Schoonschip, a floating neighborhood in Amsterdam, designed their own houses, working with various architects and contractors. They decided to build with a limited set of sustainable materials;

for the facades (opposite), that meant wood, bamboo, or cork. The water in the formerly industrial canal (above) is now clean enough to swim in, but the opposite shore is still a landscape of warehouses.



Even on a sunny day like today, this part of Amsterdam is stark. North of the city's historic center, the canal is straight as an arrow and unforgiving, the sheds and warehouses on its concrete banks proof that the area's industrial origin is not far behind us. But take a turn onto a set of interconnected wooden walkways and into a new floating neighborhood, called Schoonschip, and things start to feel homey.

After 10 years of planning, designing, and building, the community's 30 floating houses have moored along five interconnected piers. Commissioned in tandem by like-minded neighbors-to-be, the two- and three-story buildings are now home to 46 households. They are fairly close together, and as you walk by, you notice people sitting on their terraces or roofs. You can hear neighbors chatting, and through an open door you look up at an owner reading the newspaper. There are children splashing around in the canal as one of their mothers lies on a towel on the walkway, enjoying the sun.

In 2009, the city decided to dedicate this once exclusively industrial part of the north of Amsterdam, called Buiksloterham, to mixed-use projects and to allow experiments in sustainability and low-to-zero-waste residential developments. All of Schoonschip's floating homes are made of sustainable materials and produce their own energy, making the neighborhood—

by its own claim—Europe's most sustainable floating community and an experiment in a new, resilient way of living in cities in times of climate change.

In Dutch *schoon* means both clean and beautiful, and the expression *schoon schip maken* means making a fresh start. The residents have done just that. It started with TV director Marjan de Blok, who had a dream of living in a self-supporting houseboat. "I went to the city government, and it turned out that after the financial crisis of 2008, this part of northern Amsterdam had been designated an experimental area for sustainable living and working." She laughs at how easy that makes it sound. "Back then it actually looked pretty grim here—just rows of big gray warehouses along the canal and not a single streetlight."

About half the houses are single-family homes. The others are shared by two households and one by three households. Residents designed their own houses, with some sharing an architect or a contractor. But all the floating homes have certain design principles in common, says architect and resident Sascha Glasl, whose studio, Space&Matter, planned the neighborhood. "We wanted to use materials that were as sustainable as possible in sourcing, production, and maintenance," he says. "That excluded steel and polyurethane foam, for example, and limited the materials for the facades to wood, bamboo, and cork." The city also had its demands. >

The Buiksloterham area in northern Amsterdam is designated for sustainable building, which made it an appealing location for Schoonschip's founders. Resident Manon van der Zwaal's home

(opposite, left and right) exemplifies the open design and natural materials common to all 30 structures. The houses are oriented toward the water and each other (below), creating a neighborly feel.



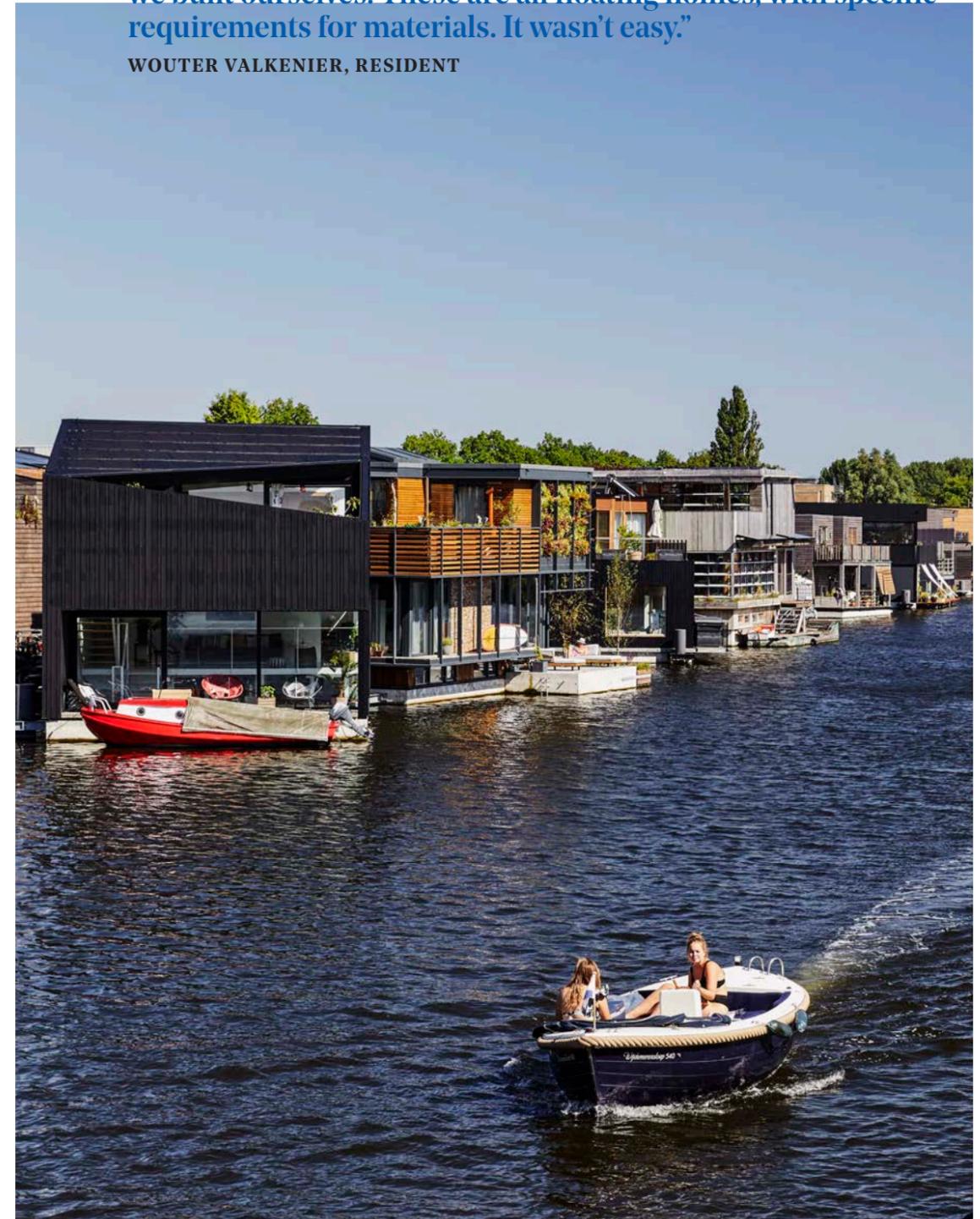
"For me, sustainability is a social aspect of the neighborhood. It was a huge investment of time, but together we helped each other through all the technical innovations. None of us could have done this on our own."

MARJAN DE BLOK, RESIDENT



“For most of us, this is the first home we’ve owned and the first house we built ourselves. These are all floating homes, with specific requirements for materials. It wasn’t easy.”

WOUTER VALKENIER, RESIDENT



Homeowners Wouter Valkenier and Mijke de Kok, both architects, cobbled together salvaged material from multiple sources to fit out their home (opposite). Wooden beams in the dining room, normally a double-height open space, can

be covered over as needed to create an extra living area above—without disrupting views of the water. The floating houses were towed to their moorings (above) from multiple building sites over the last two years.

▼ The houses have three sets of water pipes that all run under the “smart piers.” The central clean water supply enters the house and is pumped up to the roof, where it is preheated in solar collectors. Drinking water is pumped down to an underwater heat exchanger in the channel outside. Recovered heat is used back inside the homes. The “black” water from the toilets goes directly out to the sewer, but water used in washing machines and dishwashers (“gray” water) also circulates through the heat exchanger. The shower water is upcycled—filtered, disinfected with ultraviolet light, and reused.



For example, one-third of each roof surface had to be covered with vegetation to absorb rainwater.

Wouter Valkenier and his wife, Mijke de Kok, are both architects, but even for them, building a floating house with new energy and water systems and sustainable materials was a learning curve, they say. “The facade is made of leftover wood bought from a sawmill and upcycled wood from an old bridge. The insulation is made from flax,” Valkenier says during a tour. “The windows come from an office building, and the ‘chandelier’ is made of glass shades from streetlights.”

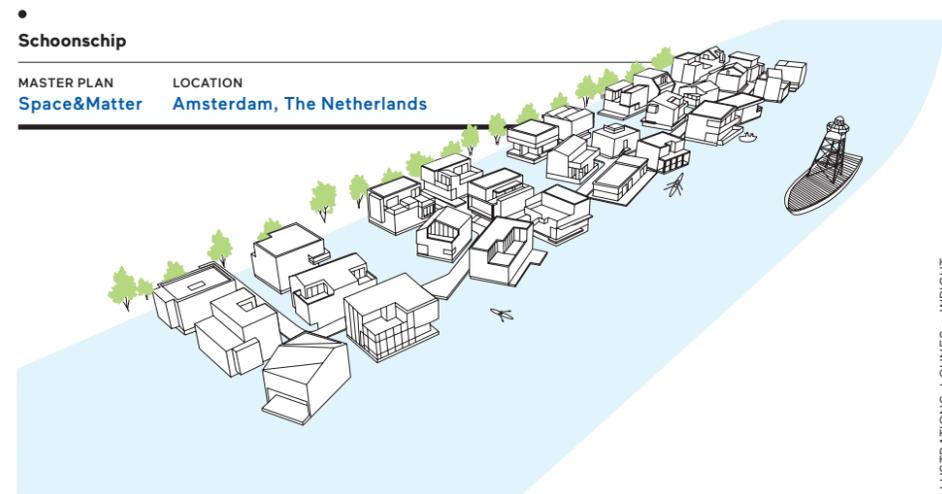
What really makes Schoonschip special,

Valkenier says, is not the technical innovations each in their own right, but the fact that these systems are working together. “Soon all of this will be proven technology—and no longer special. That’s a good thing,” he says.

A case in hand is Schoonschip’s innovative energy system. The houses produce their own electricity from 500 solar panels. All 30 houses together have one connection on land to the municipal electricity grid, so they can give excess energy back when they have it.

Schoonschip was an experiment not just in sustainability, but also in social dynamics. “Of course there were tensions and conflicts, and it all took much longer than anyone expected, but we always managed to work them out,” says Marjan de Blok. Valkenier adds: “The composition of the group changed during that ten-year process. But recently one family returned who had left—and they bought the first Schoonschip house to come on the market.”

For now there are no plans to expand the number of floating homes. Many residents are still finishing construction and settling in, after having been towed from various building sites to their mooring place by tugboats just a year ago. Still, the day will come when it feels less experimental and more established—but Schoonschip will never feel ordinary. ■



ILLUSTRATIONS: LOHNES + WRIGHT

Of the 30 houses, 15 are inhabited by more than one household. One home (opposite) has three floors, the lowest of which is underwater, with daylight entering through the small rectangular windows

above the waterline. In accordance with the urban plan by studio Space&Matter, all five piers of the community are interconnected (this page), and neighbors get together to make plans for the plantings.

