

# DoepelStrijkers

**WHO**

DoepelStrijkers

**WHAT**

Architecture and design studio

**WHERE**

Rotterdam, Netherlands

Dutch practice **DoepelStrijkers** is arguably best known for a project it hasn't even built yet: **The Dutch Windwheel**. Announced in 2015 to keen press coverage, the ambitious 175m-high circular structure aims to combine innovations in sustainable energy generation with a boost to tourism in **Rotterdam**. The structure consists of two conjoined rings. Within the outer ring, 36 public cabins rotate to form a **London Eye**-like tourist attraction, while within the inner, apartments, winter gardens, a hotel and restaurants coexist with 'function-free space' designed for flexible use.

A radical new take on the traditional Dutch windmill typology, the project uses its form and orientation alongside cutting-edge technology to harness wind and solar energy, as well as deploy passive cooling and natural ventilation. It is a monument to DoepelStrijkers' — and Holland's — goal of creating a circular economy. 'We still don't know whether we'll pull it off though,' says practice partner **Duzan Doepel**, explaining that the business case for this potentially iconic project is still being finalised.

But there is far more to the practice than this one project. Doepel joined forces with **Eline Strijkers** in 2007 with the ambition to create sustainability-led interior design and architecture at all scales. Strijkers had a portfolio of mostly interior projects, while Doepel had mainly worked on translating architectural research into urban solutions. The partners saw an opportunity to realise meaningful projects in which research and practice could continually inform one other.

Over the past decade DoepelStrijkers has developed projects from installations and interiors to large-scale buildings and urban interventions. 'We have a firm belief that design can act as an agent for social renewal,' says Strijkers, 'which leads to strategies and projects that contribute to a circular and inclusive economy. We are driven to using design to contribute to solving some of the huge challenges we face as society.' The practice describes much of its work as 'climate architecture' — buildings designed with and optimised to the climate they are in. 'Buildings should be climate and culture responsive,' insists Doepel.

Although sustainability is the practice's leading objective, Strijkers believes that user wellbeing is a key part, as well as a byproduct, of this approach. 'We believe that human health should be the primary indicator for measuring sustainability,' she says. 'In the search for creating healthy environments, in which people function better, related aspects such as material use and energy efficiency need to be equally considered. We strive to find a balance between comfort, energy and the environmental impact in our work.'

A key project the practice is currently finishing, which integrates an understanding of this in its design, is **New Village**, a 5,000 sq m housing development and innovation centre in the Dutch city of **Arnhem**. Strijkers describes the project as being designed 'from the inside out', with a user-centred approach. The development is geared towards accommodating recently disabled people as they leave hospital and regain independence. 'With this project we wanted to explore the notion of a healing ecosystem,' says Doepel.

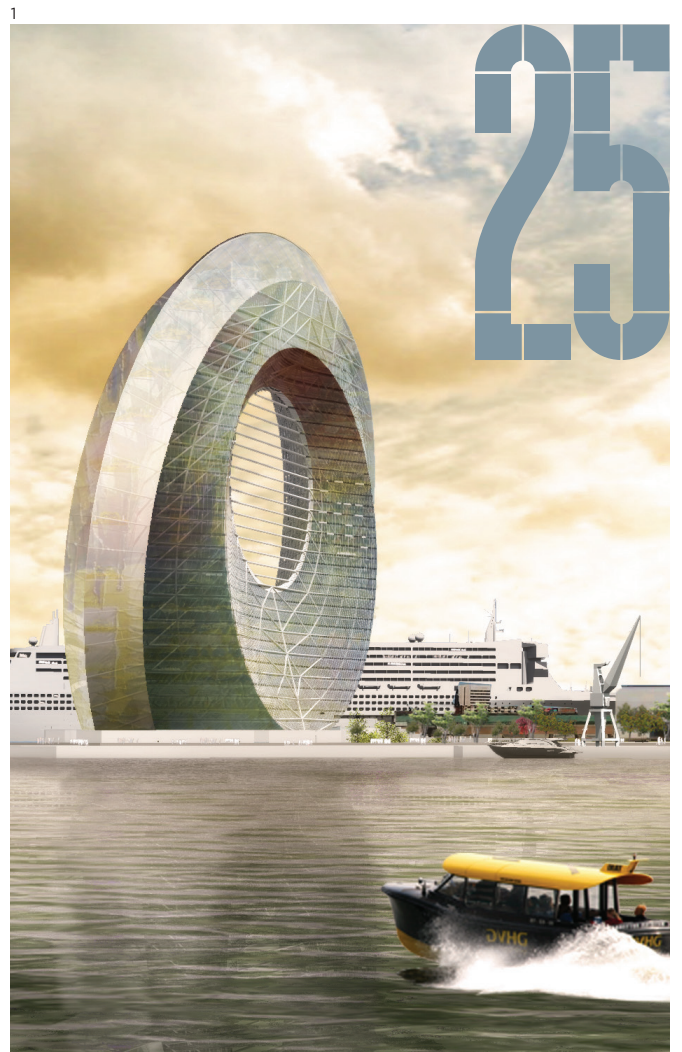
The client, Dutch organisation **Siza**, supports people with

1 The Dutch Windwheel project aims to be a tourist attraction for Rotterdam and usher in a future geared towards the circular economy

2 New Village, a housing development in Arnhem, will focus on the wellbeing and independence of residents



Words by  
**Francesca Perry**



disabilities to lead more independent lives, and New Village is envisioned as a modern renewal of Holland's first residential community built for people with disabilities, **The Village**, which was opened in 1966. The ambition of the project is not only to ensure design responds to advances in care and technology, but to also help create a mixed and sustainable community where people with and without disabilities live and thrive. As well as residences, an innovation centre will be home to **The Village Academy**, where companies, knowledge institutions and healthcare professionals will work with residents to devise and test technology-led solutions and innovations that make the lives of people with disabilities easier and more independent.

'The Academy is the physical heart of the building,' says Strijkers, explaining that it forms a central space around which the houses are placed. 'By orientating the houses around it, the direct relationship between the houses and the Academy contributes to a strong interactivity between both, which accelerates innovations in healthcare.'

In designing New Village, DoepelStrijkers explains that an awareness of the psychological, as well as physical, processes of transition for the residents has been taken into account. The spatial layout, routing and smart interfaces mean users can determine the desired degree of interaction with their environment on every scale. Transitions from public to private domains — through private residences to communal corridors to the large common space of the Academy where people work together — support the rehabilitation process, 'whereby people can increase their interaction step by step in the building,' says Strijkers.

The practice is interested in how local values, a metabolic approach and the creation of healthy buildings can 'result in a movement that brings positive change in our built environment,' as Strijkers puts it. High on the agenda is the further development of the integration of new technology into projects, as well as a focus on user experience. 'We will embed wellbeing strongly in our works by answering the **WELL Building Standard** and biophilic design principles,' adds Strijkers. 'We will formulate answers to these developments through all scales and with a strong link between research and building projects.' The future, as DoepelStrijkers sees it, is one in which built spaces facilitate better personal experiences and support more environmentally sustainable lifestyles — and it's busy making it a reality.