



Winy Maas, Architect, MVRDV, the Netherlands

Sustainability immediately brings to mind the enormous potential of research, experimentation, and tests. The term “sustainability” links large and small scales – from the city to the individual.

New solutions for

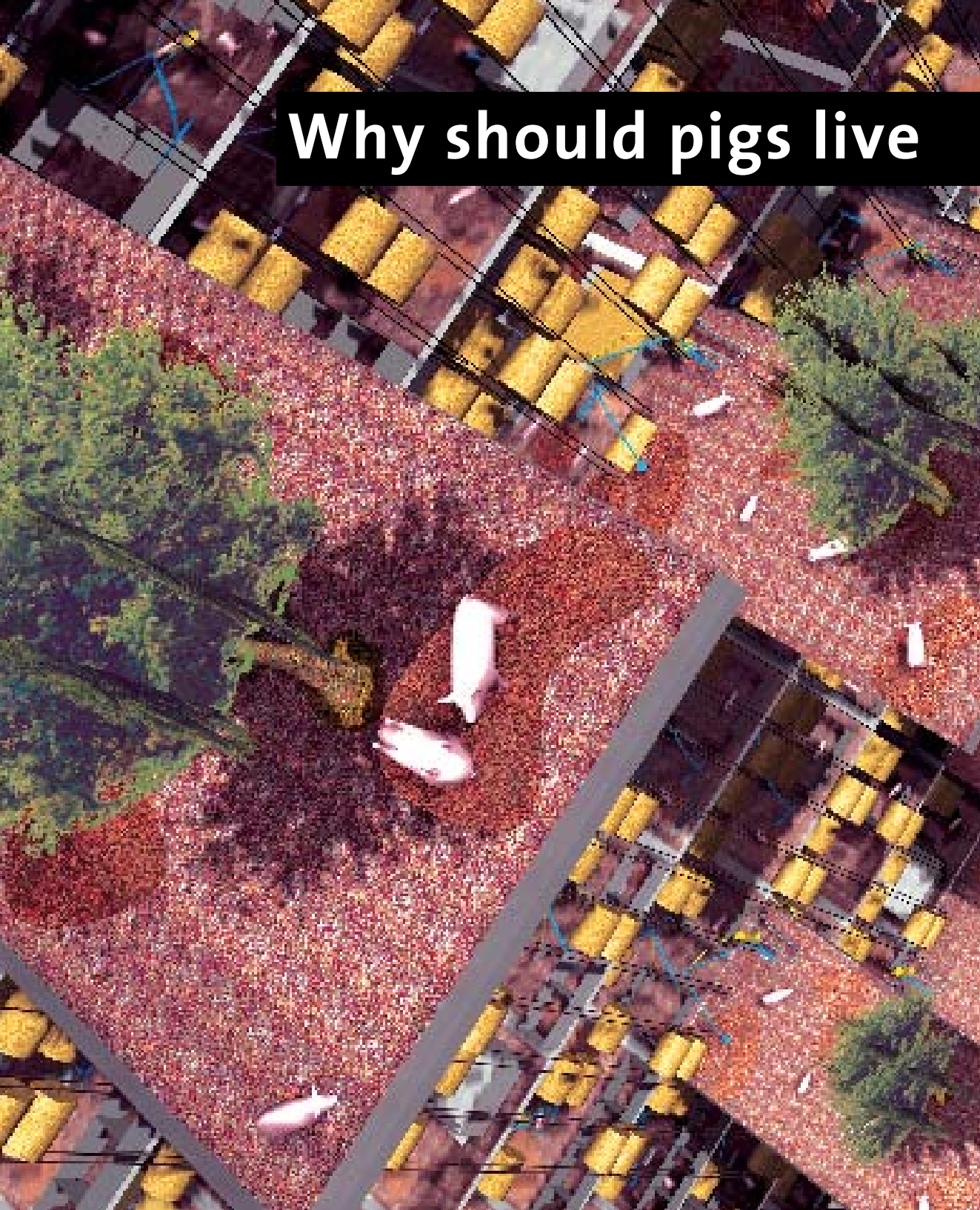


new challenges



In his talk at the first Holcim Forum, Dutch architect Winy Maas warned not to equate sustainability with eternity. Because societies and their values are constantly changing, we must be careful not to block tomorrow by what we build today. As an example of answers to new challenges he presented a proposal for meat production in the Netherlands, an industry that “today is completely different than in the time of our grandfathers.” (next page)

Why should pigs live



An aerial photograph of a pig farm. The farm is situated in a landscape of green fields with prominent blue diagonal stripes. The farm buildings are arranged in a grid-like pattern, with several large, rectangular structures. The roofs of these buildings are covered in reddish-brown mulch and are dotted with small green trees. In the lower-left portion of the farm, there are several large, dark-colored structures, likely pig pens or barns, which are densely packed with yellow piglets. The overall scene is a mix of natural and man-made elements, illustrating the scale of pig farming in the Netherlands.

on the ground?

Fifteen million pigs live in the Netherlands – as many pigs as people. After a crisis in 2001 the domestic meat industry decided to adopt a more sustainable alignment. Comprehensive production would require about eighty percent of the country's land area. Maas proposes raising pigs not next to one another but above one another – in giant towers: "Because our requirements have changed, our buildings must now change – even barns." (next page)

A tower that benefits everyone



and reflects the zeitgeist



The pig tower Maas proposes would benefit everyone: It saves a great amount of land area and can be ideally adapted to the requirements of modern meat production. The animals have ample space, even balconies. The biogas can be collected as fuel. “It makes meat production sexy again,” says Maas, “and it even satisfies the architects’ affinity for towers. Such an innovation would make us all proud because it is ideally suited to the spirit of our time.”

Long-term is

With uncommon imagination and creativity, Dutch architect Winy Maas shares his radical visions for sustainable construction.

By Lara Braun, Journalist



not the same as sustainable

Dutchman Winy Maas is an architect who loves to explore possibilities and go beyond traditional thinking. “The notion of sustainability makes me think immediately of the enormous potential of research, experiments, and testing,” he said at the Forum. In his entertaining, surprising, and provocative talk he warned us not to equate sustainability with eternity. Everything has an expiration date: “When you buy a computer today, in two years the value of that machine will be almost zero. When you buy a car, the depreciation takes six years. A curtain wall depreciates in 10 to 12 years; the structure of a house, in 25; a freeway, maximum 75.” Considering the limited durability of products, Maas emphasizes that sustainability is relative: “In 25 or 30 years, new ideas, unimagined today, can appear. We don’t know exactly what values future society will espouse.” The architecture of today must respect this fact because “I don’t want to force my children and grandchildren to adopt ideas that I hate so much today.” Winy Maas calls for less investment in long-term projects that can block the development of future generations, and more investment in buildings that can later be adapted to other uses, more investment “in research on replaceable parts, not just in fixed parts.”

Everything changes – so cities must be flexible

Winy Maas substantiated his theoretical arguments with impressive practical examples. Citing the example of the typical French provincial town he pointed out how time is gnawing at architectural and urban planning intentions. “Rural France is not the same anymore,” says Maas. “The rural communities are shrinking tremendously, faster than anywhere else in Europe.” In these communities the average population is getting older, the number of young people is shrinking, and there is no rejuvenation. Real estate prices have plummeted. Construction work is

Dutch architect and city planner **Winy Maas** was one of the founders of the Rotterdam architectural consortium MVRDV in 1990.

Among his built works are the “Dutch Pavilion” for Expo 2000 in Hannover, Germany, the innovative business park “Flight Forum” in Eindhoven, two buildings on Borneo Sporenburg in Amsterdam, and the futuristic installation “Metacity Datatown.”

Winy Maas is currently planning a university department building in Nijmegen, designing large buildings in Amsterdam and The Hague, handling the urban planning for a district of Almere, and preparing several publications about data-scapes and man-made natural environments.

Outside the Netherlands, MVRDV is engaged in the construction of 100 residential units in Vienna, a large office building in Munich, pavilions in Japan and Sweden, and “Mobility Park” outside Hamburg. Winy Maas was a finalist for the Mies van der Rohe Award for European Architecture in 2003 and won the Amsterdam Art Prize in 2004 with his project “Hagen Island” in The Hague.

virtually nonexistent. These communities are suffering a great social and economic void. Maas draws a clear conclusion: “There is political change and demographic change – so cities and towns must also be able to change.” He believes sustainability lies in continually replacing old building ideas with new, thereby creating situations that are appropriate for a specific time. His provocative proposal for France: In no other European country are there so many commercially disappointing amusement parks. “Maybe we should reconnect those parks again with nothing. Turn each into a fantastic forest that swallows forgotten zones and ghost towns – a new paradise with the highest forest imaginable after Buçaco in Portugal, or a new Borobodour in France. The call is for change. So please, don’t invest in eternity as such.”

Density, density, and more density

All the ideas that Maas outlined at the Forum spring from the intention to counteract the fragmentation of the natural environment and to achieve greater density of the built environment. Maas seeks correlations and combinations between nature and the city, between the various potential uses of buildings. He believes a train station can become a museum and vice versa. He acknowledges that investors want buildings with clearly defined uses, but nevertheless insists that “we need flexible mixes. They are sustainable because they are adaptable; they can be adjusted to suit new needs.”

A high-rise barn – Why not?

Maas has similarly unconventional ideas that answer to the present circumstances in his home country. Some of these ideas are presented on pages 94 through 99. He proposes a novel way of accommodating the population of 15 million pigs that share the Netherlands with 15 million human inhabitants. To provide the large area the pigs need, Maas has created a new building type – the high-rise barn. The prototype is a glass

tower 80 meters high. Each level is divided into compartments with social areas, eating areas, and sleeping areas for the pigs. The biogas generated by the pigs' waste is collected as a clean energy source. Why not high-rises barns? They would serve the present needs of society.

We need alliances

Maas says the need for flexible thinking is urgent. He cites New York City, symbol of the twentieth century civilization, as an example of the city in stagnation, and he tells what forces could revive innovation. "There is no interesting architecture happening at the moment in New York," he says. "It would be interesting if the city would host the Olympic Games – as an opportunity to find a way of reinventing Manhattan, learning from the mistakes, enhancing the city with new and sustainable qualities." Maas proposes building towers in a corner of a site chosen as the potential place for the future Olympic Games in New York. Seeking a form that would express strength and a sort of timelessness, he proposes twin towers that kiss each other, strengthening each other. "How symbolic as an Olympic statement," he says: "Towers that kiss become living towers." Maas furthermore proposes an urban beach for the Olympic complex. "No one would have to go to Long Island. The new Manhattan Beach would accommodate many groups of people, plus various flora and fauna. It becomes an interpretation of a multicultural and embracing society."

Maas concluded his talk with a word of support for the Holcim Awards: "I think it is a fantastic thing to add this prize to our collective endeavor, to add the institution of research to the subject. It not only connects architecture with its driving forces, it opens up the issue for broader communication and attention. I see the Holcim Forum as an anti-biennial – an effort to get architects back into society. We need more than architects. We need more than developers."

Turn Switzerland into a huge national park

In Switzerland, one of the most densely developed countries in the world, the natural and built environments could undergo dramatic change, said Winy Maas at the Forum: "You might think Switzerland is agricultural, but it is not. The buildings are full of the densest technology thinkable, the cities are full of highly qualified engineers." Switzerland has only one natural park. Perhaps the time will come when even the Swiss should invest in common space.

"Imagine a densification around some of their lakes," suggests the architect. "That would give land back to the countryside and transform the country into a great and exemplary park which is so much needed." According to Maas, the entire Swiss population could live around Lake Zurich with no problem.

He would build skyscrapers around the lake: "Everyone would have a view. Everyone would have direct access to the landscape with a fantastic communal space in the core." Maas would then reforest the rest of the country and turn Switzerland into a huge national park.