

Greenhouse horticulture on commercial buildings

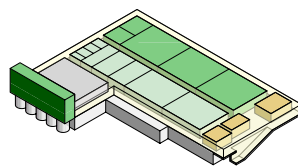
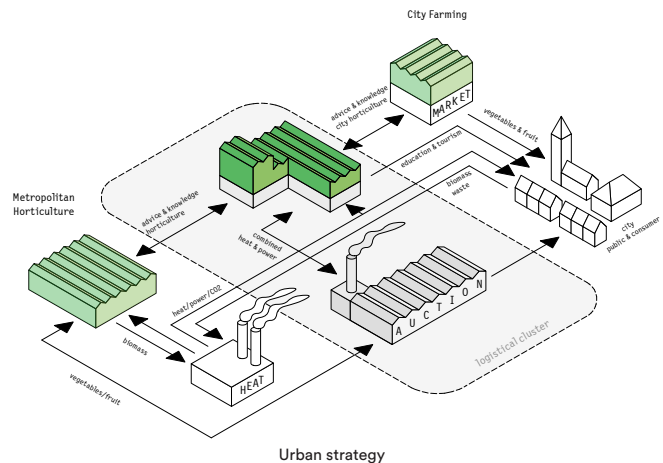
A proven possibility of dual land use.



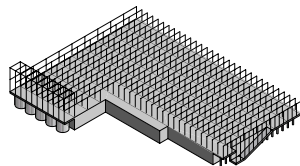
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Climate zoning for plants and people



Steel construction on concrete structure

Multiple use of space on industrial estates arises from the stacking of business functions. Placing greenhouse horticulture on large-scale industrial halls, distribution centers or data centers contributes to the densification of the city and makes energy exchange possible. A good example of this is the Rooftop Greenhouse Agrotopia in Roeselare in Belgium, which was completed in 2021. A 9,000 m² research center for food cultivation has been placed on a distribution warehouse of the auction.

Roof greenhouse Agrotopia Belgium

Dakkas Agrotopia is the largest building in Europe for research into urban food production. With its faceted glass facades, monumental entrance staircase and stacking of functions, Agrotopia gives a striking, architectural face to horticulture on the roofs of the city. The innovative building is an example for future food production, intensive use of space, circular energy and water use and making greenhouse horticulture more sustainable.



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Agrotopia was built on the roof of the vegetable and fruit auction REO on the ring road of Roeselare; the logistics heart of West Flanders for fruit and vegetables. The building has since been awarded the World Architecture Award worldwide.

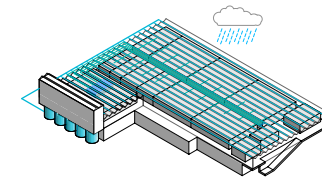


Architecture for Food | Design methods

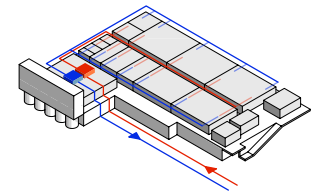
Van Bergen Kolpa Architects uses smart design methods in its projects for vertical farming and rooftop greenhouse farming. This means that energy and cost-efficient buildings are realized. Space is saved with double use of space and sustainable operations are created with circular principles.

In addition, with the stacking of functions, programs are cleverly linked to each other. For example, through food production in the form of a roof greenhouse at a distribution center with agrologistics. Circular principles such as the reuse of, for example, residual heat for heating cultivation areas can also be realized in this way.

Food production on company logistics as part of the transition to sustainable use of space.



Rainwater collection and storage



Residual heat supply and exhaust



Agrotopia is designed for Inagro and Reo Veiling with Meta Architects