

Interactive Planter

The attractiveness of urban farming is a combination of food production and the needs of city dwellers like a green environment, peace, space and social cohesion; this is made possible by maintaining the habitat. The Interactive Planter can be seen as a nice starting point for this development.

The design takes the principles of Cradle to Cradle (C2C) and Blue Economy into account. The Planter can be easily assembled and disassembled. The tray can be adjusted in height by putting modules on each other and taking modules off. Watering is done automatically and the water tank has to be filled only once a year.



The Interactieve Planter is an idea of 'Het Beleg van Venlo' and GreenTechLab. This has been developed by students of Fontys University of Applied Sciences.

For more information, visit: www.greentechlab.nl/interactiveplanter







Interaction with the enviroment

To give urban farming a new impetus, interaction is implemented into the planter. This interaction allows and attracts the city and its residents to participate in urban farming.

The interaction is supported by various sensors that are placed in the water tank and soil. The web-based application can be accessed with smartphones. These sensors can be read real-time.









Sensors

The planter is supplied automatically with water. Sensors like pH (acidity), EC (nutrients) and UV (ultraviolet light) makes it possible to gain insight into the conditions of the soil and environment. The sensors are activated by the wireless network protocol. The web application shows the generated information and makes them understandable.