

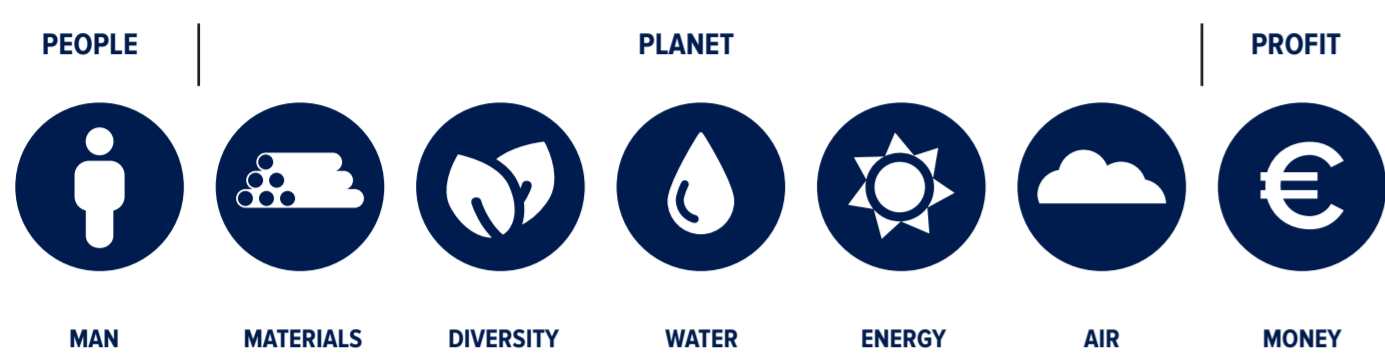
CITY HALL VENLO

more than merely sustainable

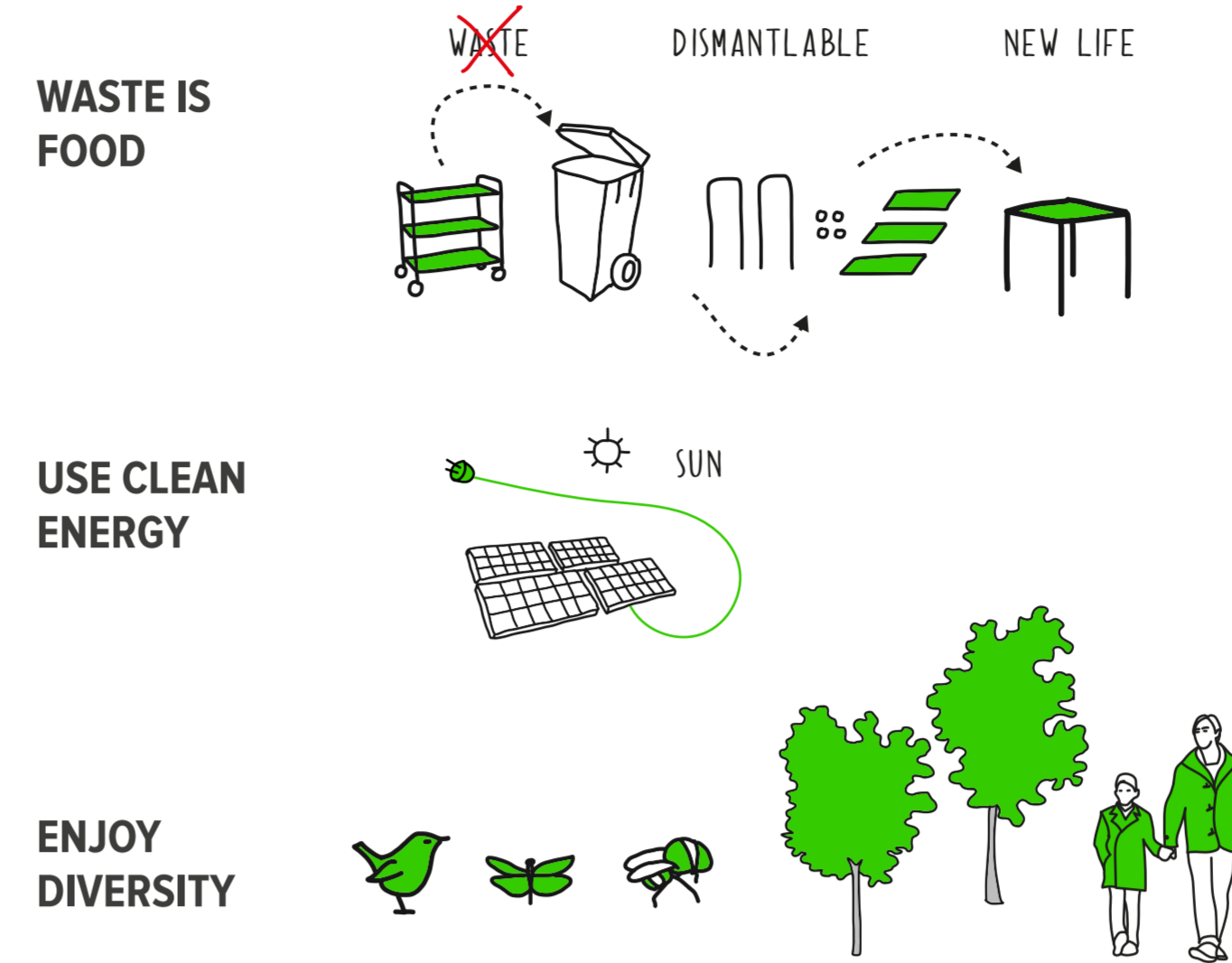
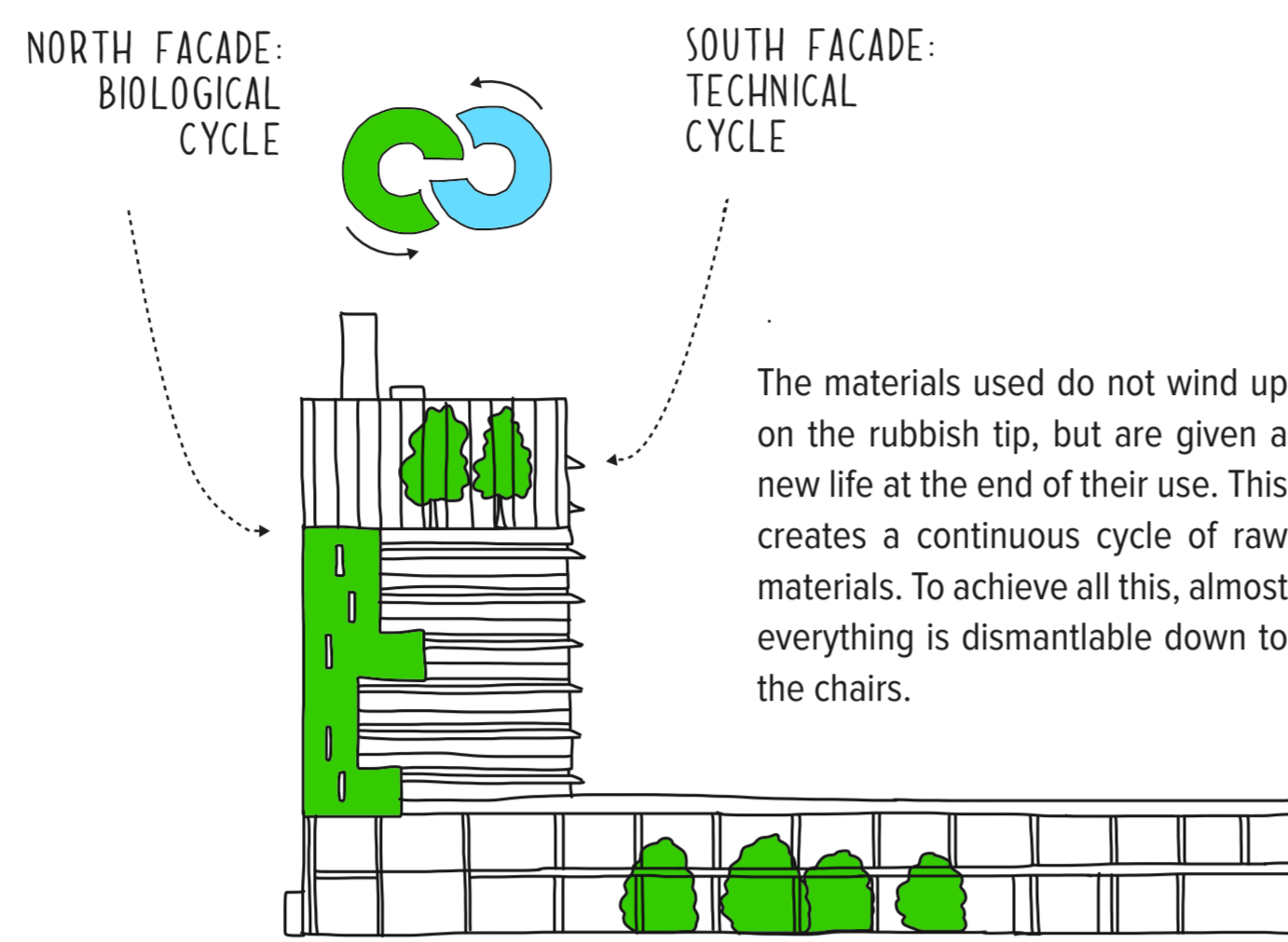


The new city hall, or "stadskantoor" embodies Venlo's ambition to have the town and region function based on Cradle to Cradle (C2C) principles. The building is not merely sustainable ("less bad"), but delivers a positive contribution to man, the environment and economy.

The focus of the design for the building is on the following themes (people, planet, profit).

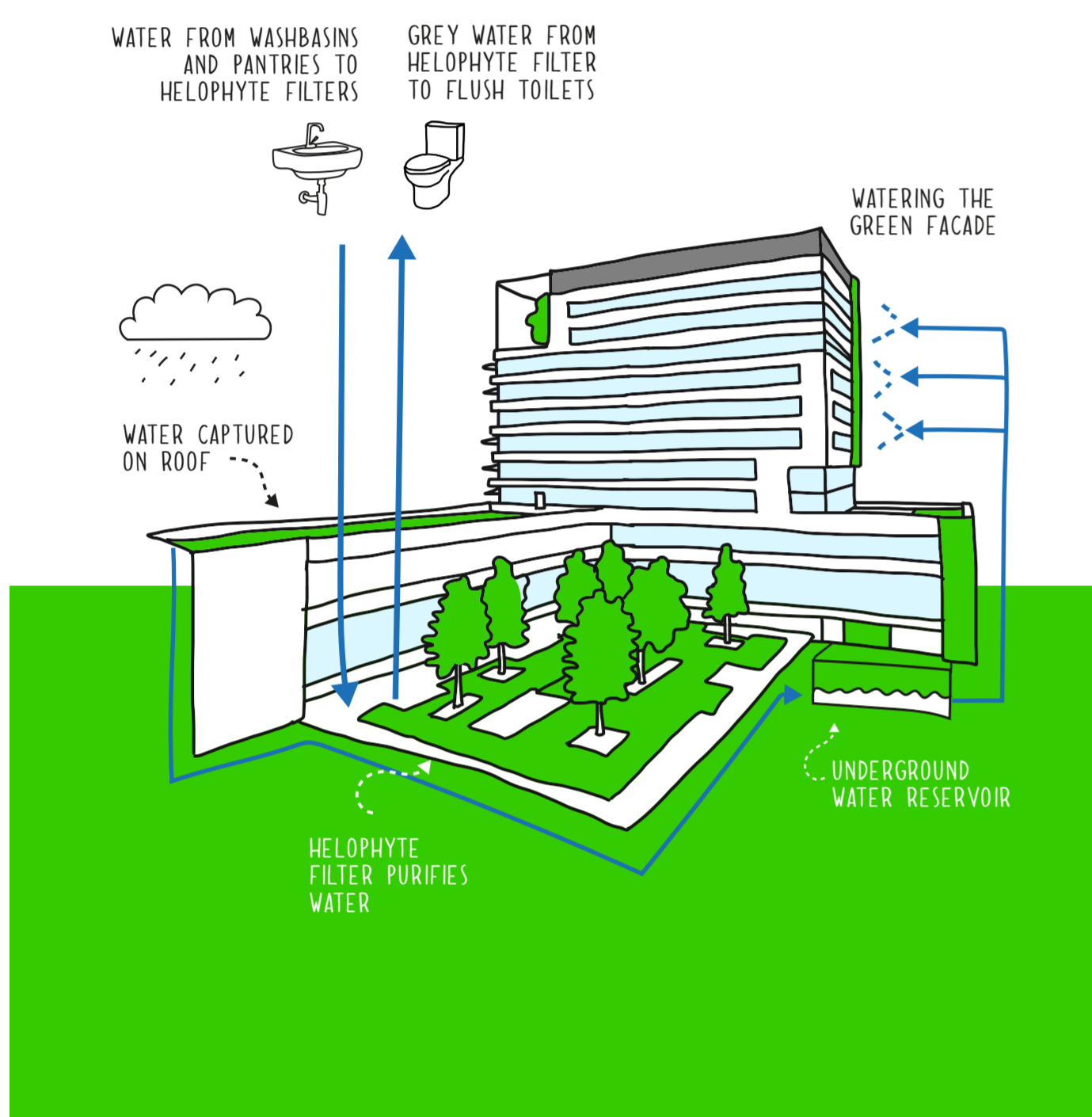


BUILDING ACCORDING TO CRADLE TO CRADLE PRINCIPLES



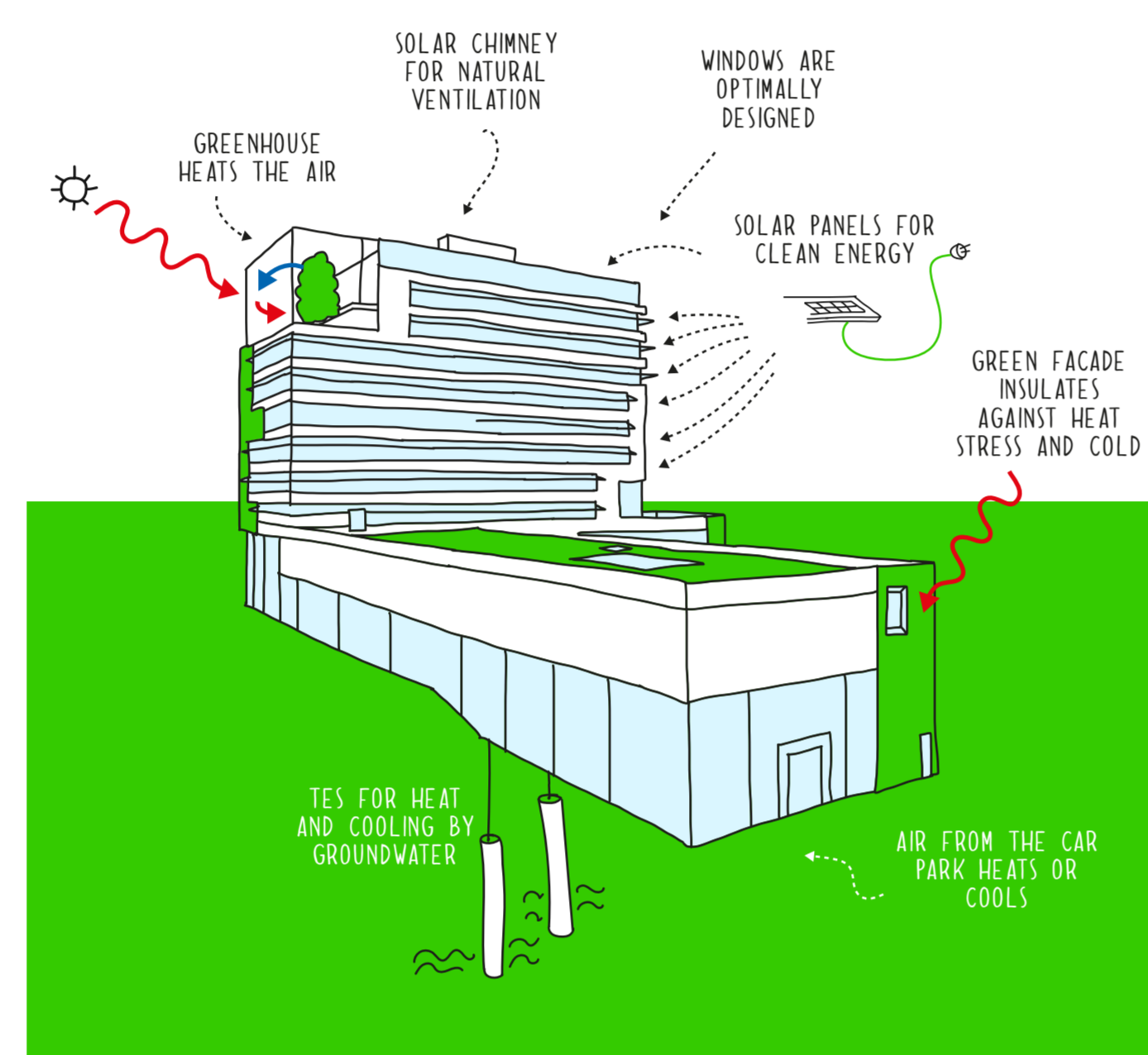
EXPLOIT WATER

The rainwater is captured and used to water the green facade. Over time, the water streams will be separated even more.



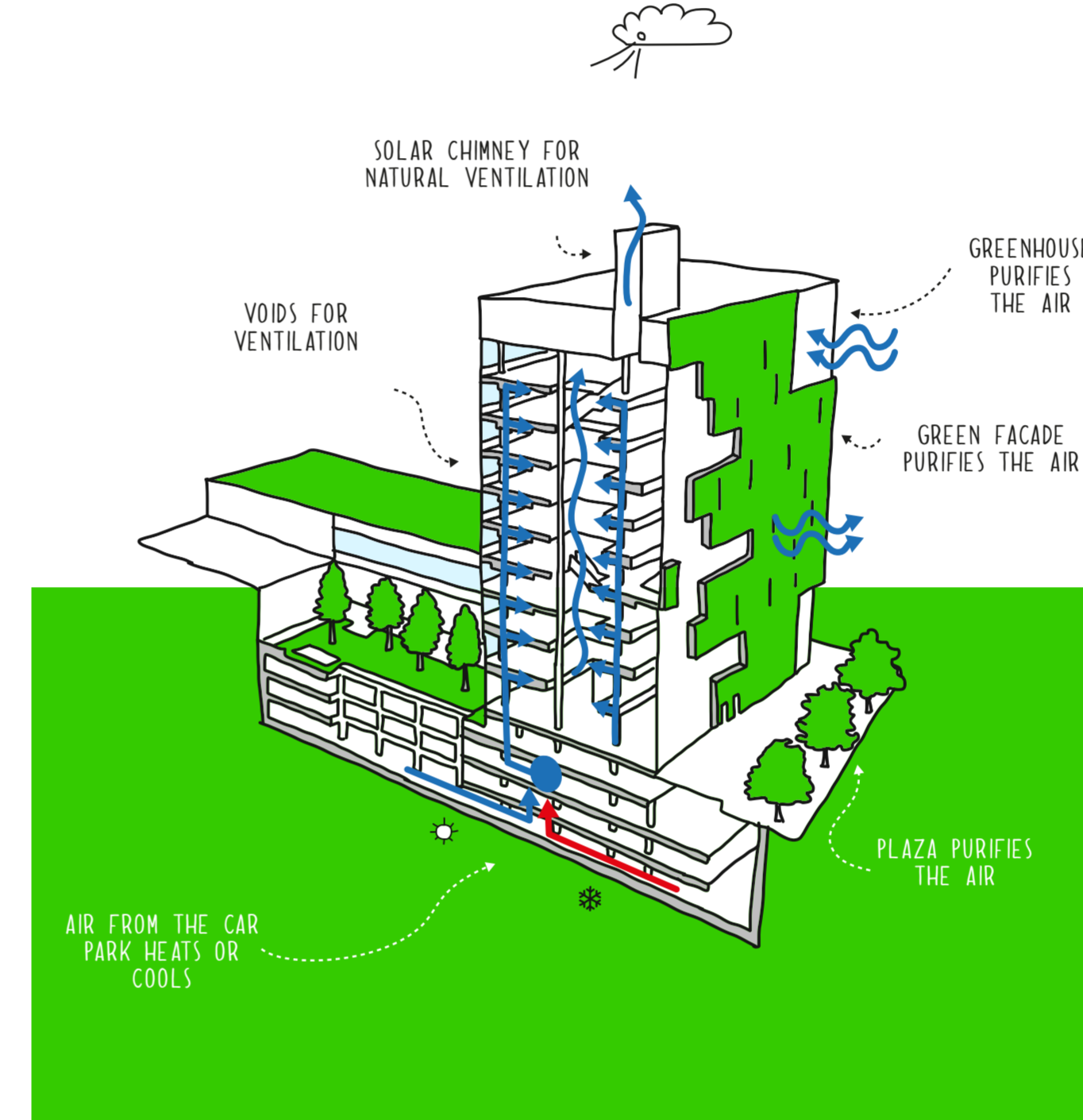
MAKE ENERGY

The sun is an important source of energy. Sunlight is converted into energy and the light and heat is used as much as possible and wherever possible. Groundwater also contributes to clean energy. Energy losses are counteracted as far as possible. In this way the energy costs will be low.



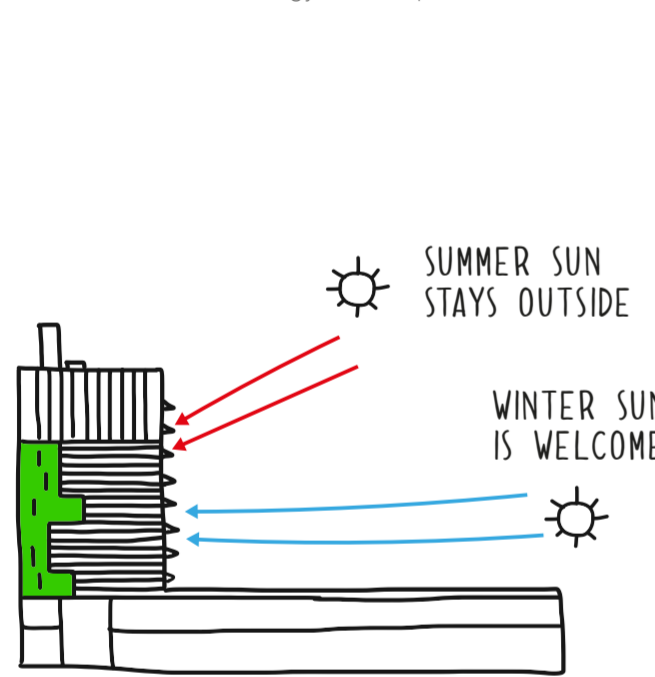
PURIFY AIR

The green facade works like a green lung to produce clean air for the people and the town. The air streams through the building thanks to natural ventilation. The healthy air is good for the productivity of employees.



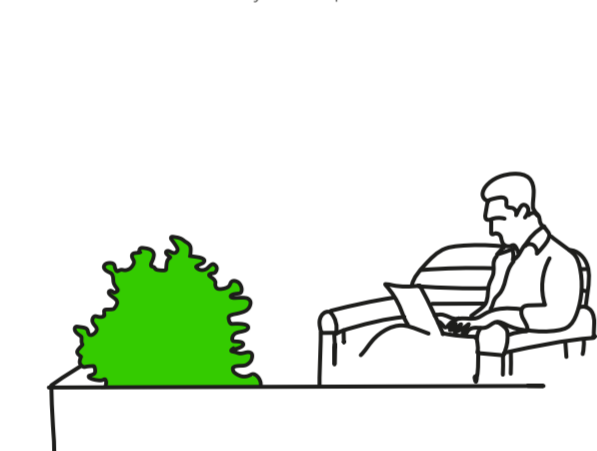
WINDOWS

The daylight is fetched as deep as possible into the building, which reduces the use of artificial light. People appreciate daylight coming in and plenty of natural light. The openable windows contribute to a pleasant working environment and treble-glazed insulation reduces energy consumption.



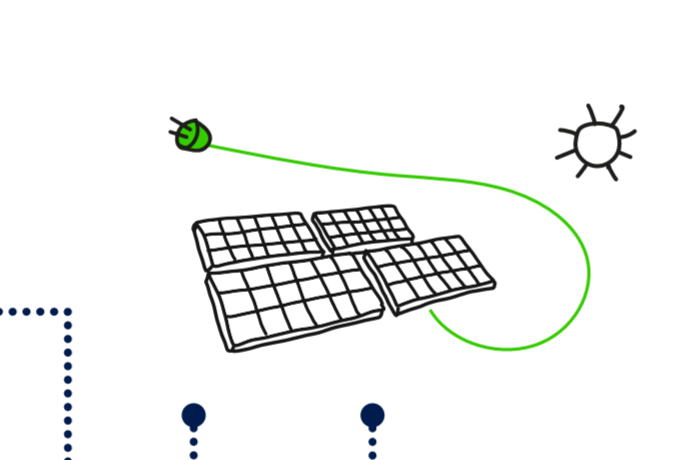
ROOF GARDEN

The roof garden contributes to diversity. Work outside, lovely and quiet view.



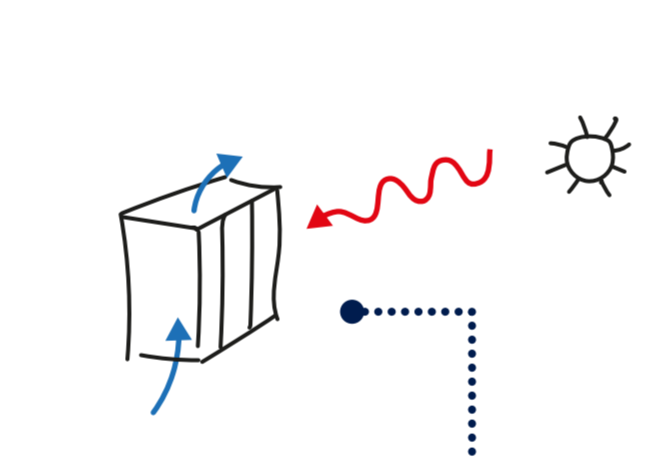
SOLAR PANELS

Solar panels supply electricity and heat for hot water and also serve as sun protection as they are integrated in the facade.



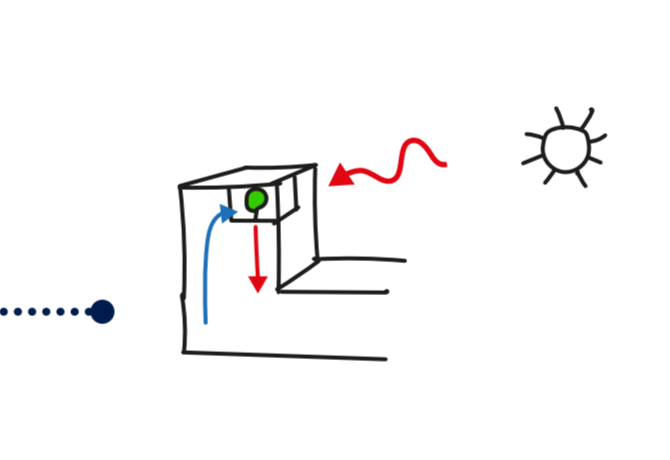
SOLAR CHIMNEY

The solar chimney provides for natural ventilation. The sun heats the chimney, which draws the air out naturally.



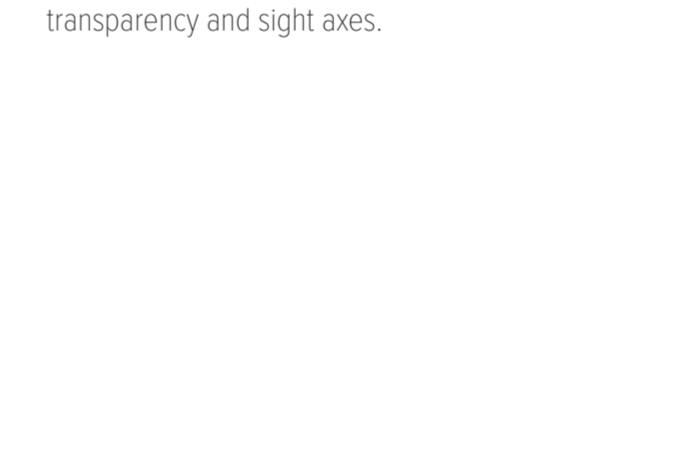
GREENHOUSE

The greenhouse delivers heat for the entire building as the air is heated by the sun. The greenhouse purifies the air.



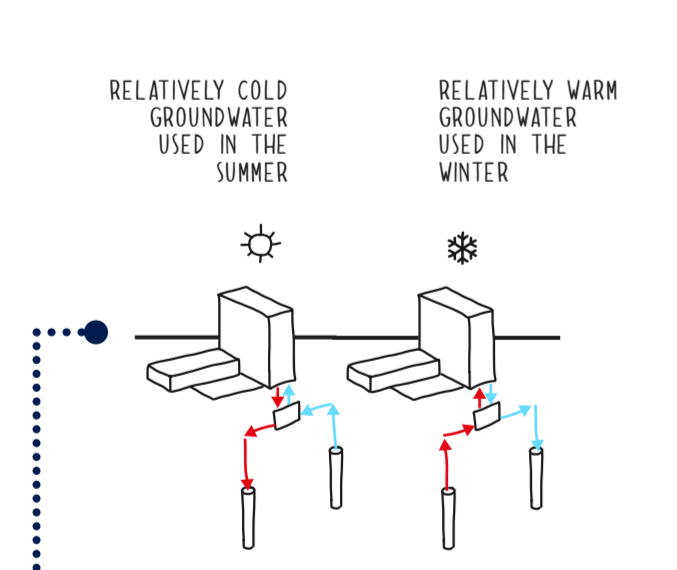
VOIDS

The voids are designed to create an airflow that is as natural as possible (less mechanical ventilation needed). Great spatial diversity with meaningful transparency and sight axes.



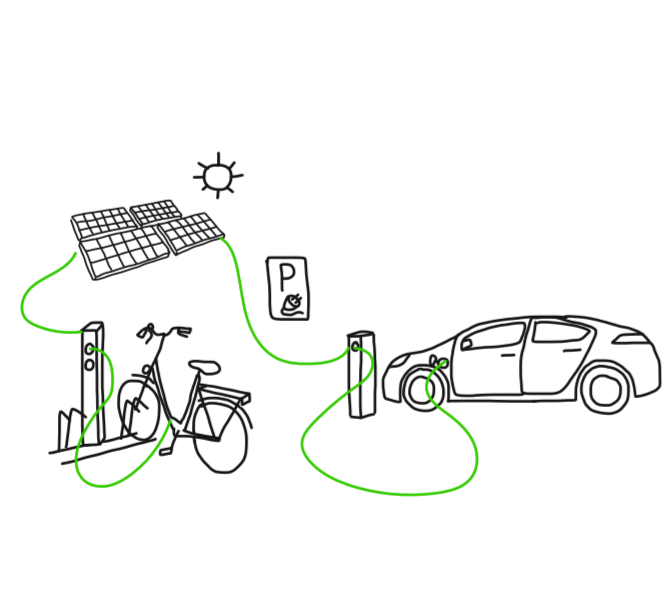
TES

Energy is stored in the form of heat or cold in the groundwater. The TES (Thermal Energy Storage) is prepared for exchange of heat and cold with future functions in that area.



CAR PARK

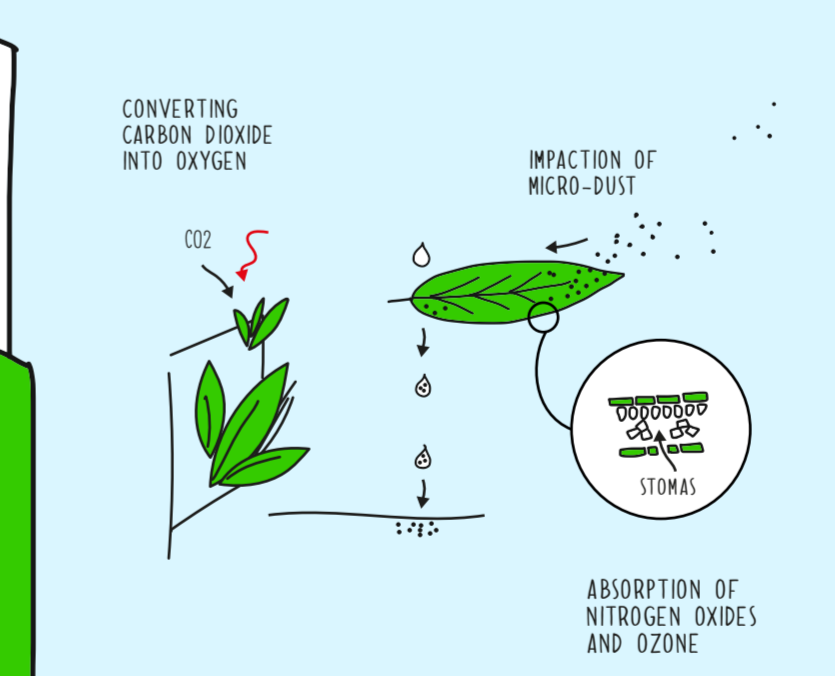
The car park is used to pre-heat the air in the building (in the winter) or to cool it (in the summer). Charging points for electric cars and cycles.



GREAT DIVERSITY

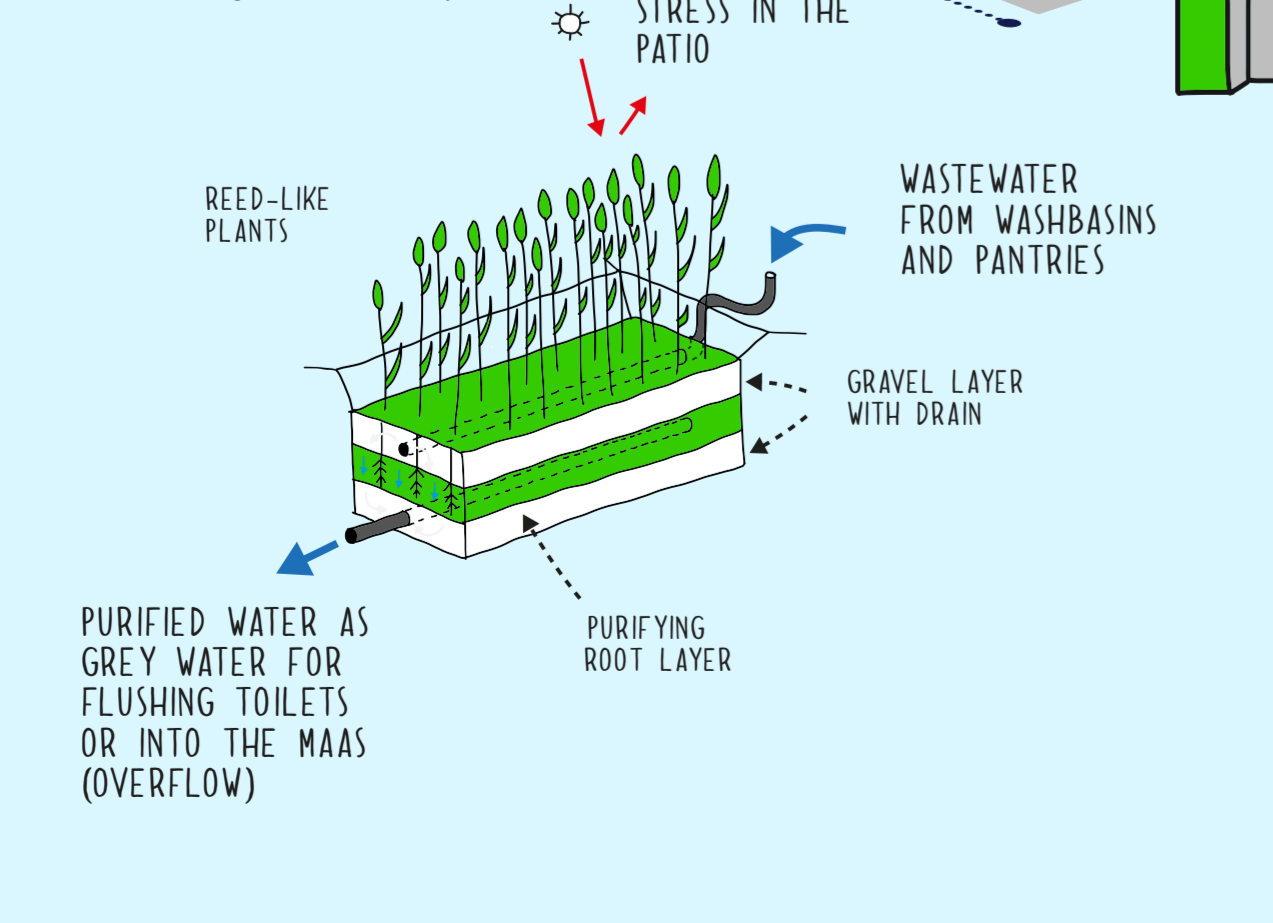
GREEN FACADE

The green facade and the trees purify the air from the road and railway line alongside the building. More than 100 varieties of flora & fauna. View of water/green contributes to employee wellbeing. Combats heat stress and forms part of the insulation layer.



HELOPHYTE FILTER

The helophyte filter (a sort of reed bed) purifies rainwater and wastewater from washbasins and toilets, combats heat stress in the patio and ensures a green environment and greater biodiversity.



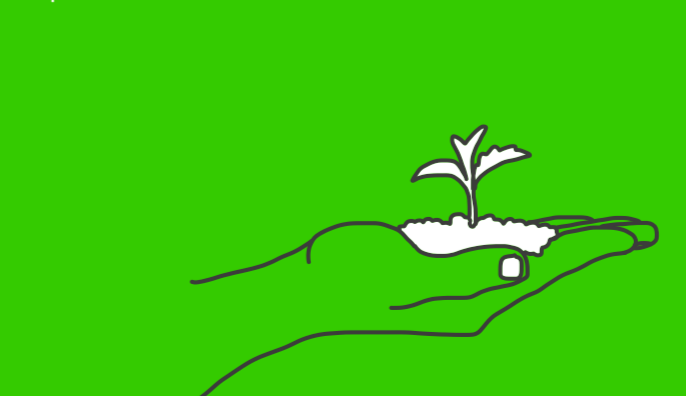
MONITORING

The performance of the building is continuously and visibly monitored. That contributes to the awareness of the employees and lower energy consumption.



GROWTH

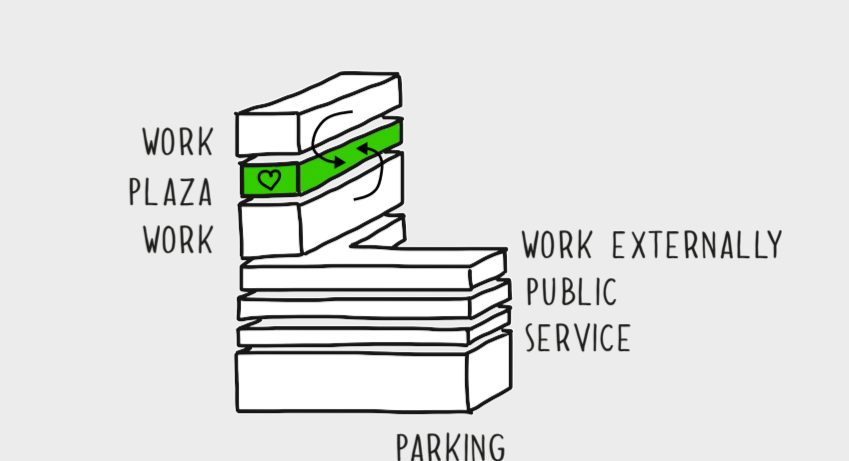
The design took account of application of techniques that will be available in the future. The C2C ambition can grow with it as more becomes possible.



HEALTHY PEOPLE

HEART OF THE BUILDING

The administration level and the restaurant are situated at the heart of the building (the plaza) to get people moving.



COMMUNICATION STAIRS

The stairs get employees moving more and stimulate communication in the building.



GREEN ELEMENTS

The green facade purifies the air. The roof garden and greenhouse provide for a pleasant working environment. The green interior wall in the common-use spaces promotes a healthy indoor climate (humidity, oxygen, acoustics).



MATERIALS C2C

RECYCLING

The technical (south) facade is in aluminum and is fully reusable without loss of quality. The biological (north) facade consists mainly of green planting. The pots the plants sit in were specially designed for the green facade and are C2C certified. The inside facade behind it is in wood and thus environmentally friendly and reusable.

The concrete consists partly of recycled concrete, with C2C-certified additives as an environmentally positive alternative.

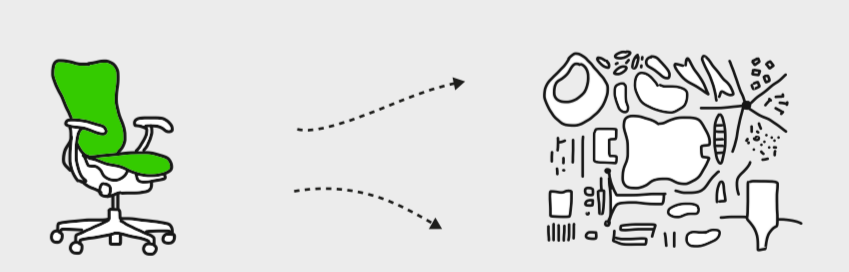
WASTE



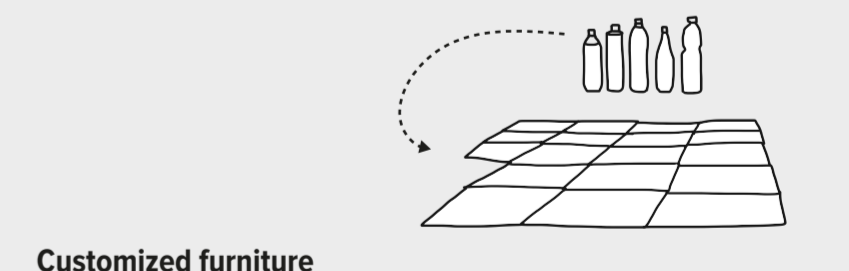
INTERIOR

The C2C principle was also applied in the interior. Below are a few examples.

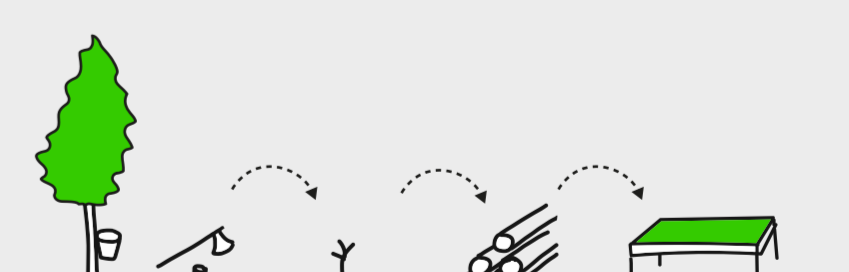
Office chair
Sitting comfortably and healthily, fully recyclable (C2C certified).



Floor covering
The floorcovering is made of plastic bottles: re-used materials, fully recyclable.



Customized furniture
Frequent use of rubberwood (recuperation of the tree after a life as a latex donor. Trees are replanted).



Office worktops
Made of rubberwood (C2C certified).

PROCESS

Ahead of the project, the council paid lots of attention to the composition of the right design team with the right "mindset". Normally, the architect in a tender is chosen based on a design. In this case, the firm of architects was chosen based on their vision on C2C and sustainability.

