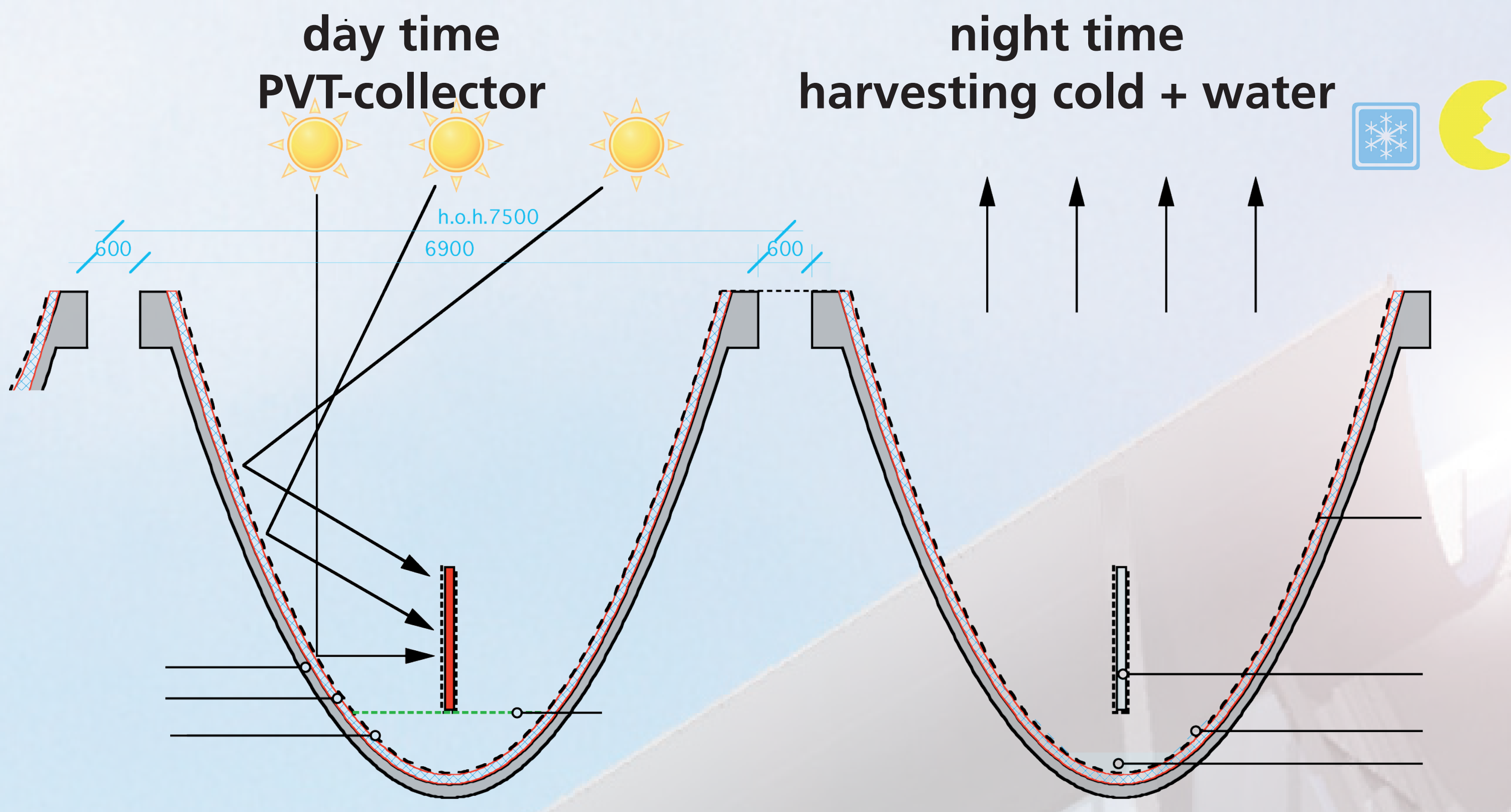


THE GREENEST BUILDING IN THE NETHERLANDS

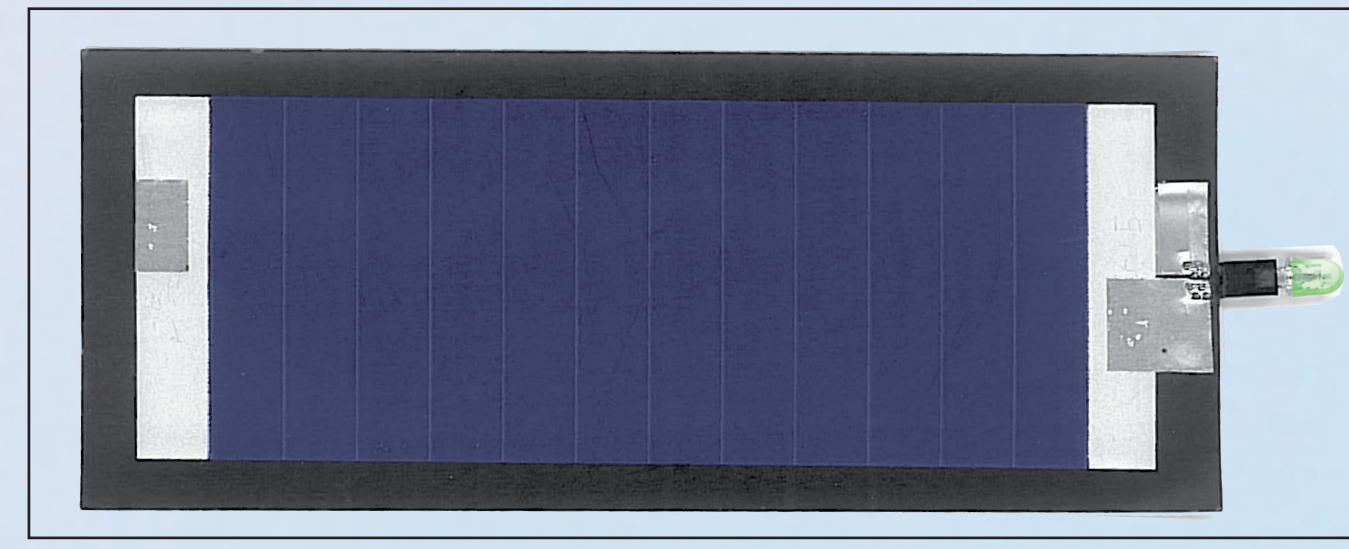
integrated design Floriade 2012, international horticulture exposition at Venlo

no external fuel, electricity, water or sewage



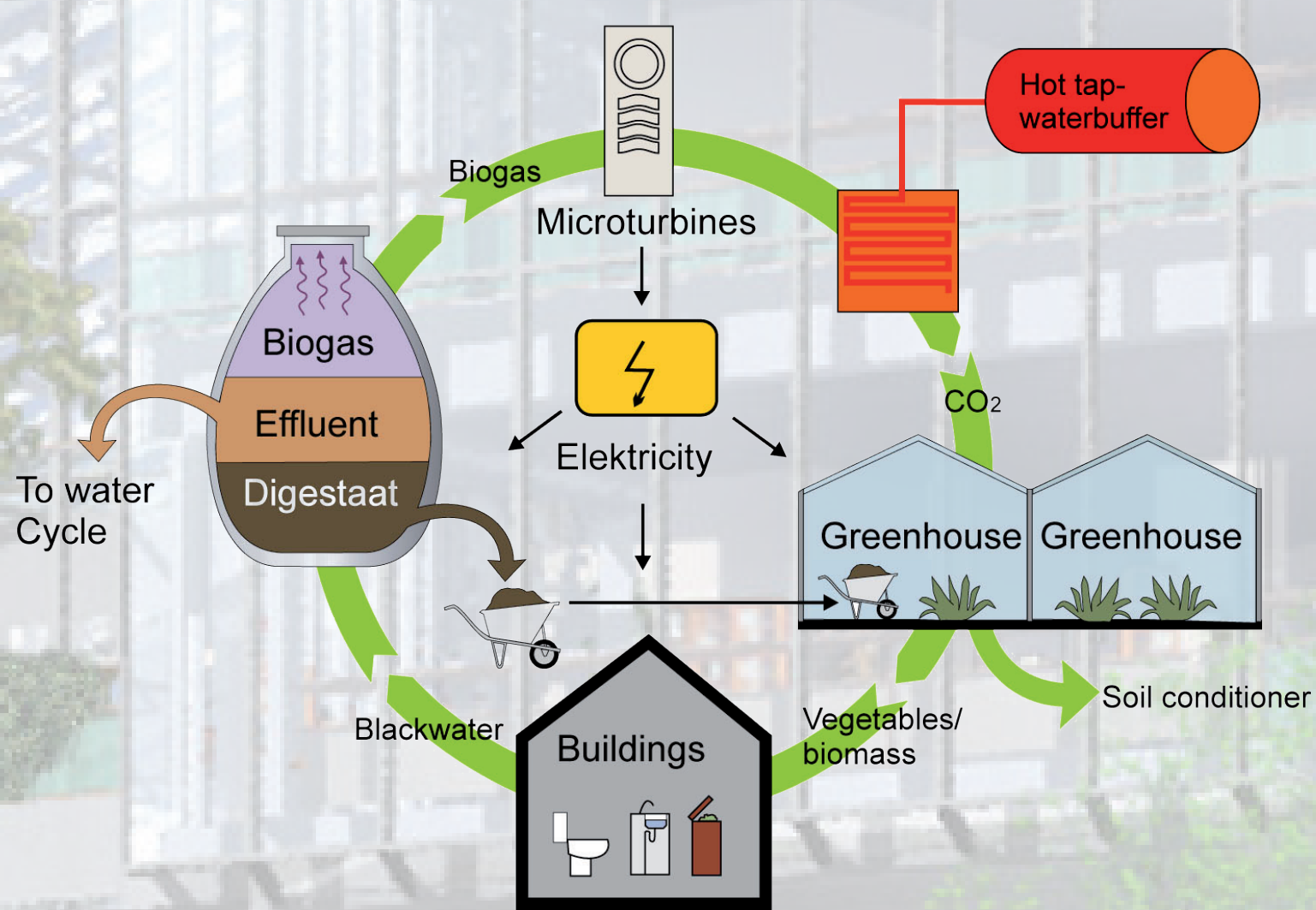
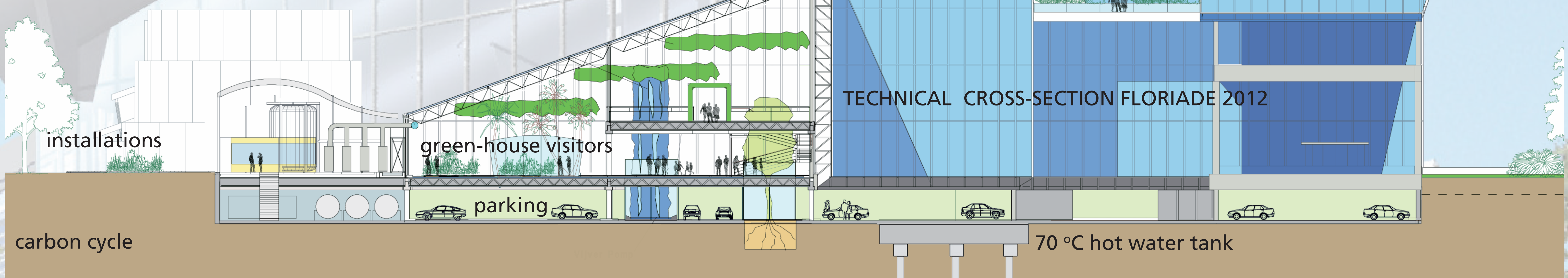
multipurpose parabolic solar collector
polished steel sheet roof of parabolic solarmirrors

example of a new PV-collector
helianthos@nuon.com

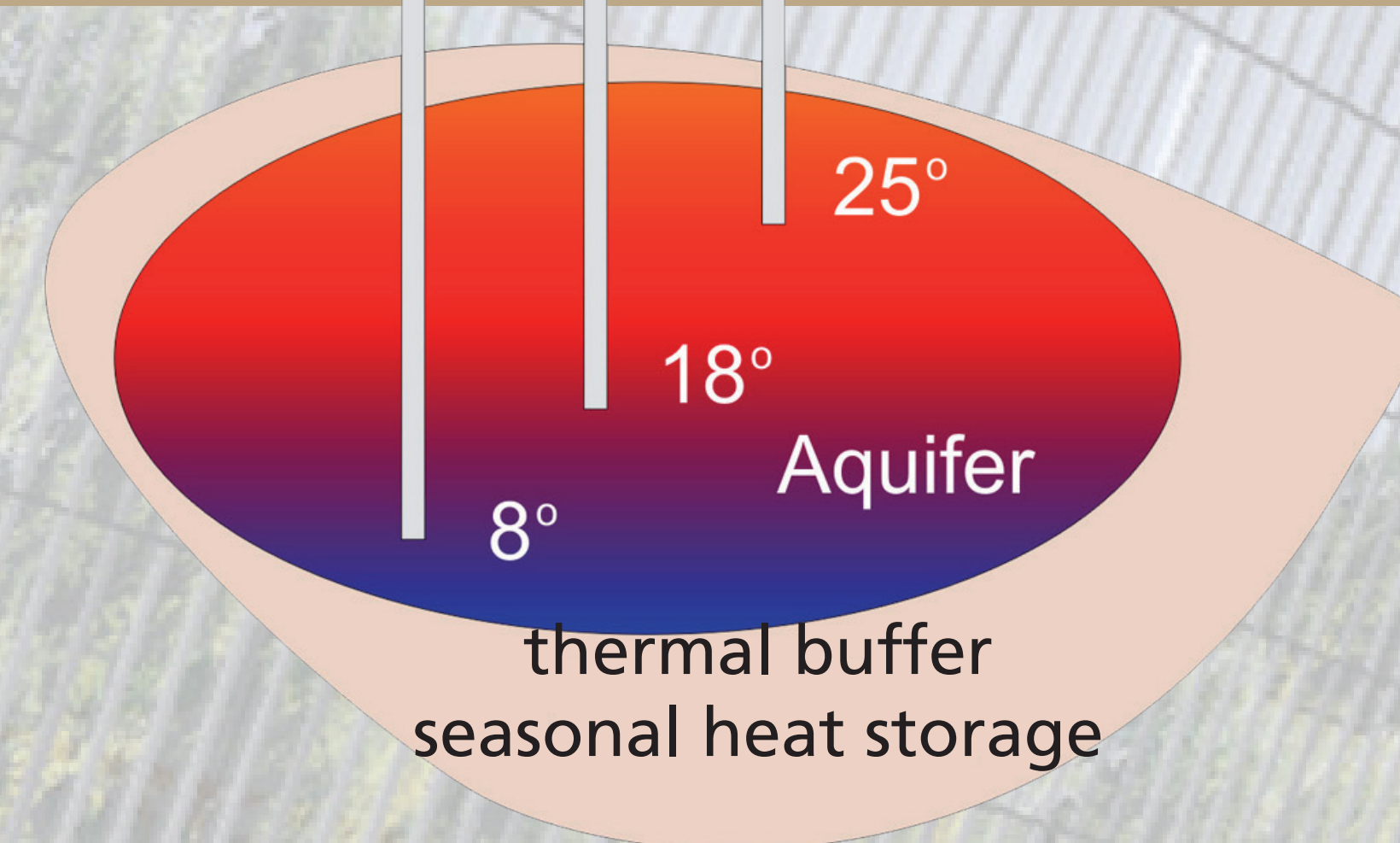


max. 80 °C hotwater collector + paper-thin photovoltaic panels in focus of noded parabola
70 –100 Wp / m² > 70kWh / m²y
size :1220 x 2440 mm
speed of production 3m¹/minute

clear sky 300W / m² IR fluoropolymer coating ±20 micrometer
condensing water in most parts of the world



anaërobie organic waste biogasconverter
vacuüm sewer system
carbon cycle
nitrogen balance
electricity + CO₂



new fine wire heat exchangers, use of very-low temperature

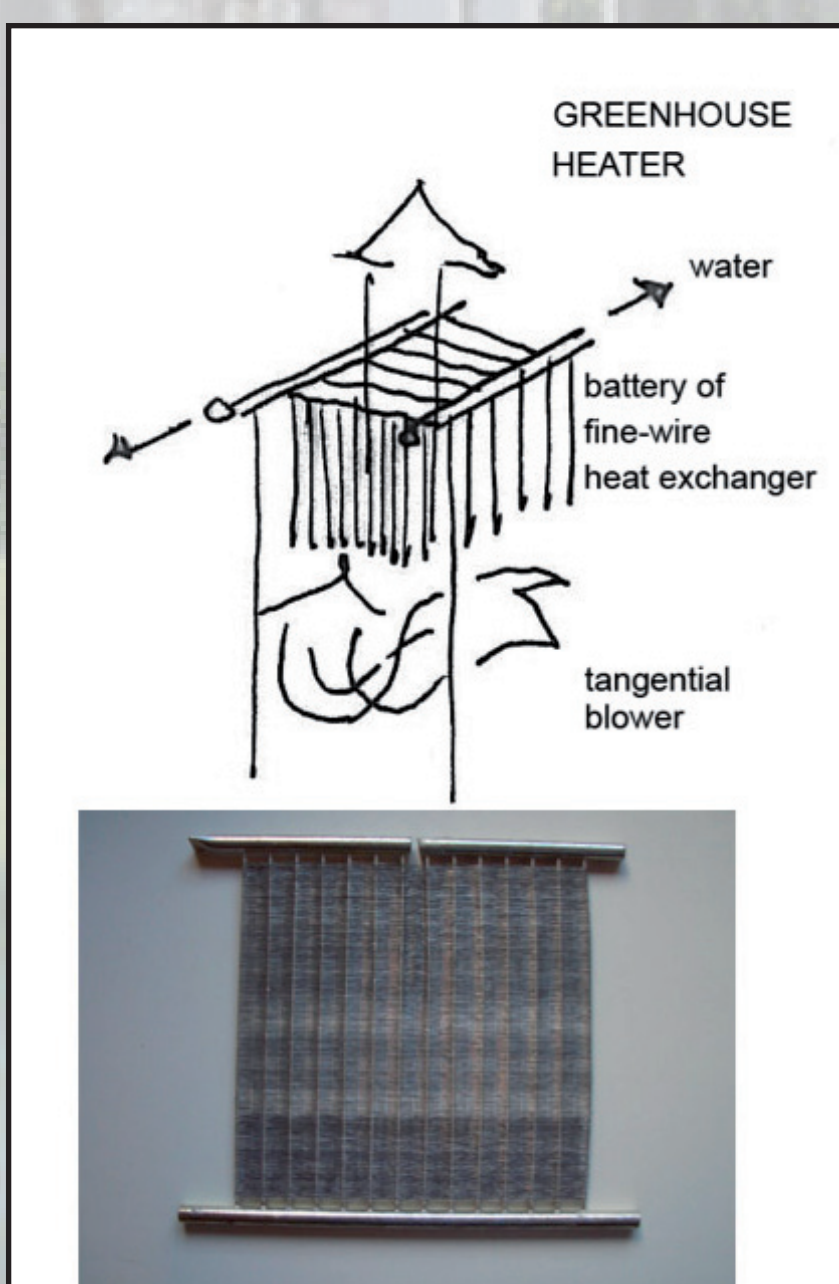
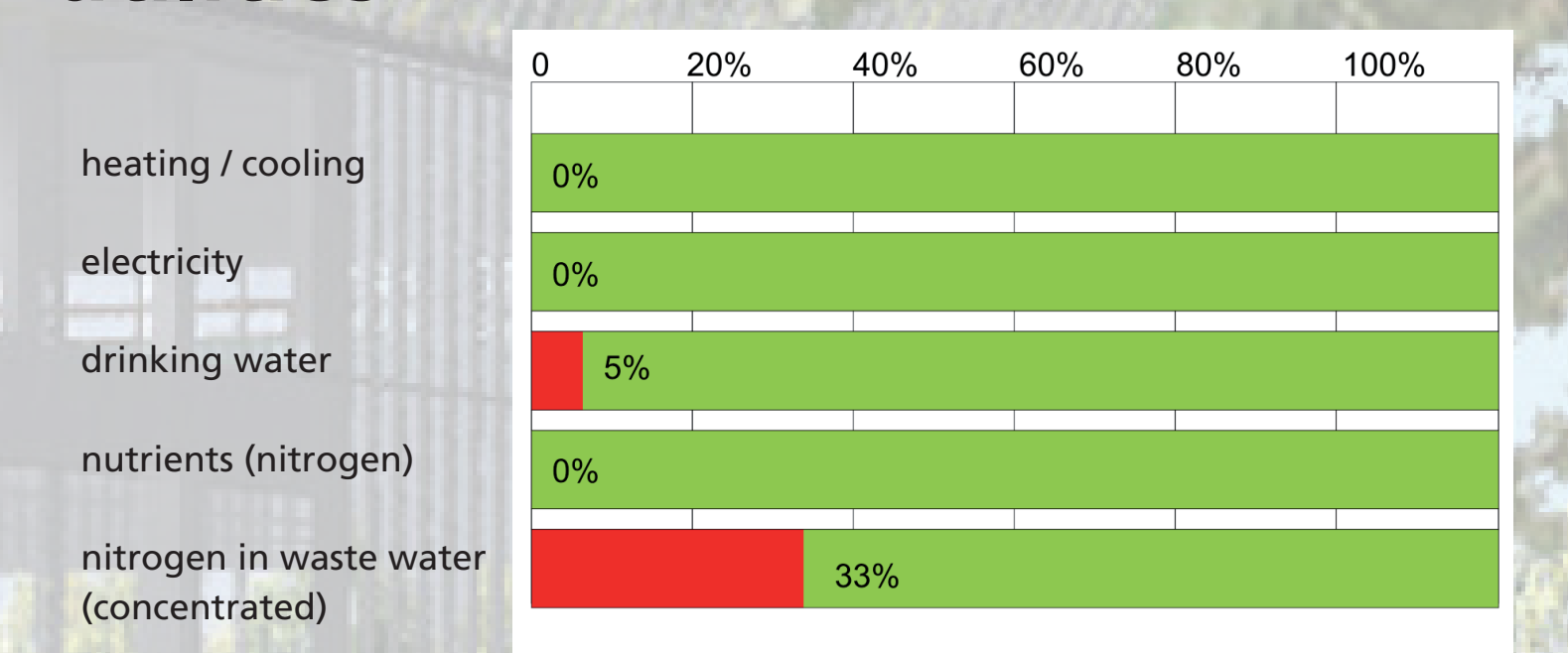
Energy Producing Greenhouses
water / air heat exchangers
very low temperature heating 25°C
very high temperature cooling 15°C
fine-wire exchanger is 7x more effective than traditional ones
info@fiwihex-international.com

BreathingWindow.com
air / air heat exchanger 85% h-r.
decentral, balanced room-ventilation
CO₂-detaching, intelligent display
compact 7.5 km, 1/10mm, 500 g
copperwire air guides, two 4W fans.
ontwerpadvies@brinkclimatesystems.nl

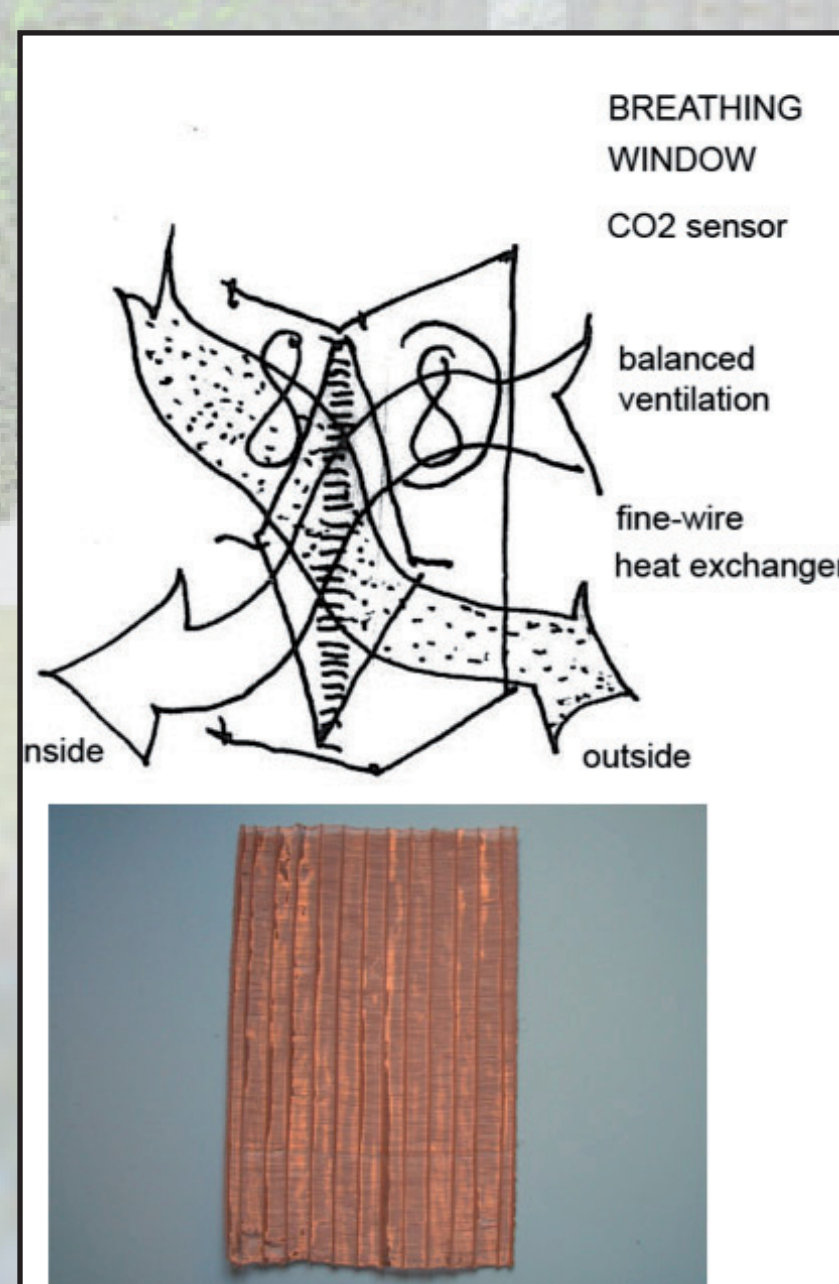
new light-weight concrete large span double floor

Two 100mm thick upper and under concrete slabs connected by special structure of reinforcement. The firesafe cavity in the floor is accessible. The use of the building is flexible forever and also detachable.
keyzerbouwtechniek.nl

self-sufficiency of general utilities



weaving of 2mm copperpipes 1 / 10 mm tinned copperwire



twinning of 1 / 10 mm copperwire



20m¹ span, 0.7m thick concrete double floor

conclusion

On the scale of a 8ha greenhouse area and a living quarter of at least 250 householdings an ecologically self-supporting community seems to be already realistic.