



Semi-transparent funnel made of a light and strong fabric (e.g. **Honeywell Spectra®**)

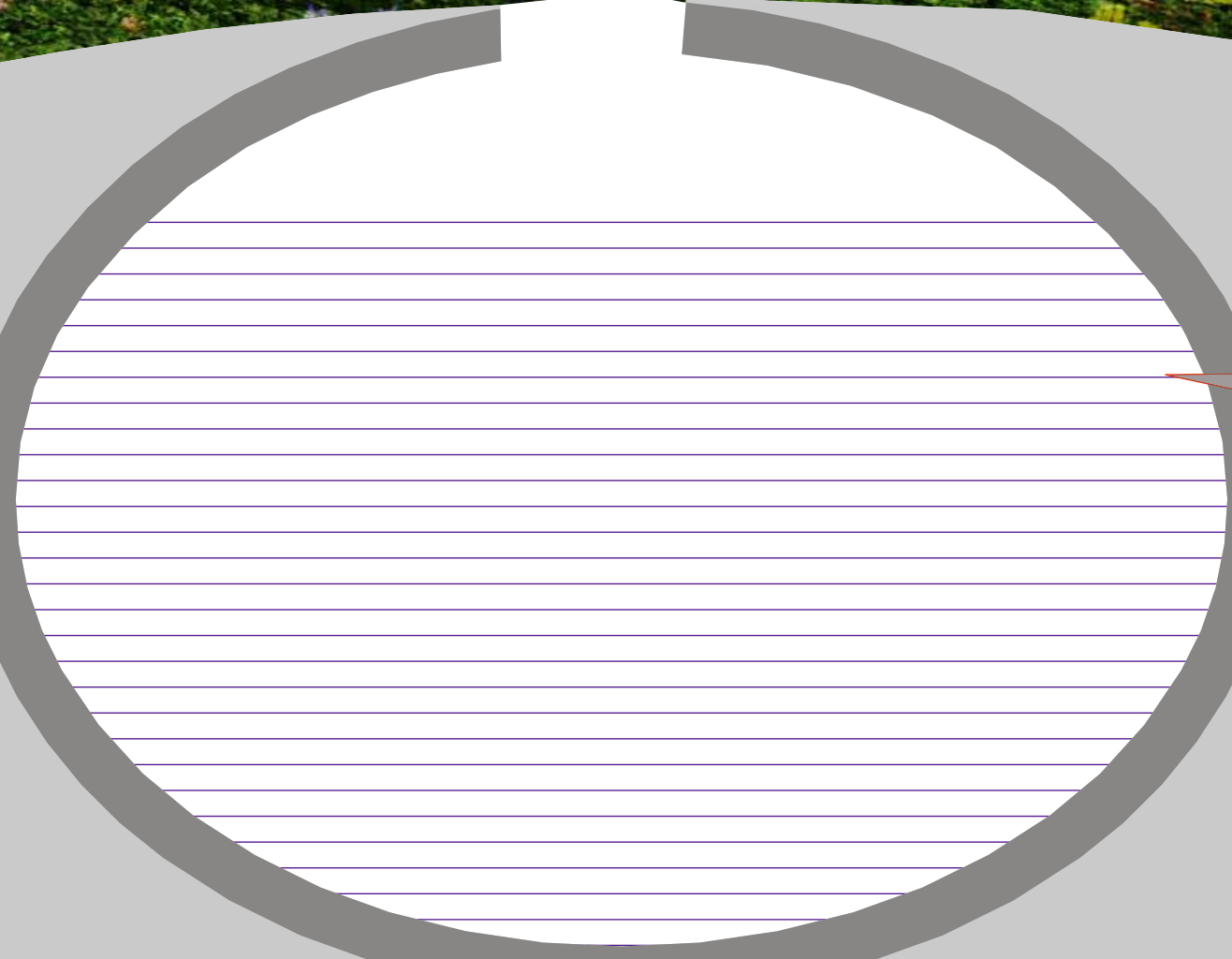
The multicoloured brick buildings might be a residential neighbourhood, artist-residencies, a water research institute or a youth hostel

vand krone

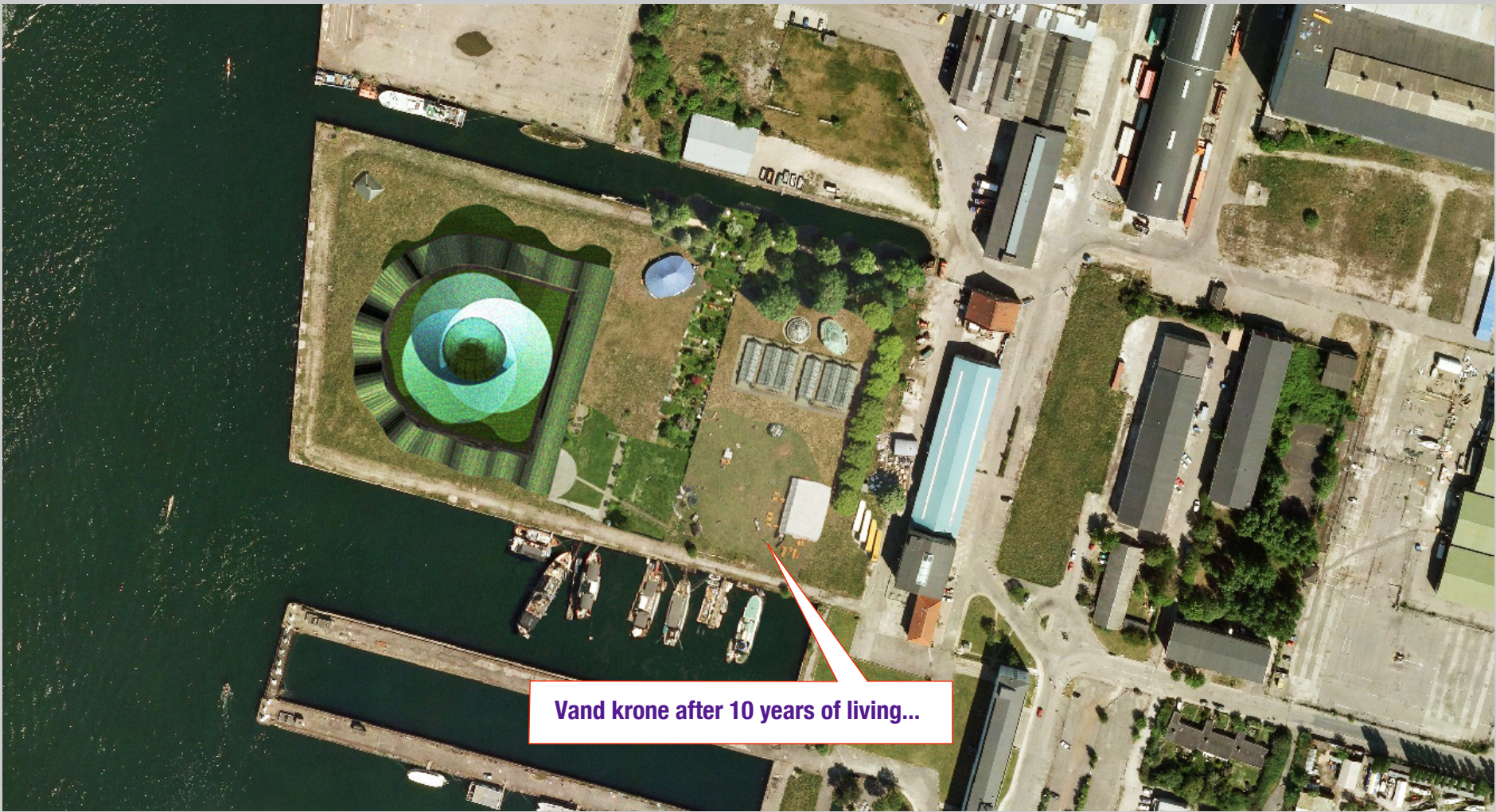
"Vand krone" symbolizes an ecological-technophilic philosophy of life shared by many people around the globe today. For better social identification with this movement it needs to be visible in everyday life and therefor acquires adequate, central spaces in the cities. To strengthen the movement we would like to propose an architectonic landmark for Copenhagen together with an "in-town open land for ecological and social experimentation".

Our proposal is a gravitation water vortex power plant (GWVPP) that makes use of the rain to generate energy and water for domestic use in its immediate vicinity. As the average energy consumption is continually decreasing, decentralized alternative technologies for the production of energy become more and more attractive. A consistent refinement of this idea brought us to extend the scope of the power plant to the whole city: an innovative vortex conversion technology is hypothetically applied in the sewage drains of Copenhagen. Apart from the energy-sculpture "vand krone" we thus propose an invisible network of micro-GWVPPs in each gully of Copenhagen, that unites all places and streets to a common network power plant.

- Facts:
- The GWVPP "Vand krone" transforms the vortex-energy of collected rainwater in a 30m funnel.
 - A permanent magnet generator (PMG) can cope with the low rotation speed and volume based stop-and-go mode of the conversion facility.
 - As GWVPPs already work with a head of 0,7-1,5 m, they are easily applicable to the already existing rainwater infrastructure: all the micro-units at the intersection of street and sewage system could produce up to 50MW/ year (0,1m3/s water = 1kW/s)
 - Energy is locally generated and consumed
 - Energy is generated in times of increased requirement, i. e. in bad weather conditions



5500 m³ rainfall per year pass through this reservoir.
The water is designated for domestic use.



Vand krone after 10 years of living...

