

REQUIREMENTS



0.85 m²/p.e. in the basement (in total 280 m²) 0.42 m²/p.e. outside (in total 140 m²)



Energy use

127 kWh/p.e/year (in total 42,000 kWh/year) Estimation: 10,000 kWh for recirculation, 30,000 kWh for the Aurin production and 2,000 kWh for pumps



CAPEX: 4,545 CHF/p.e. (in total 1.500 000 CHF) Infrastructure: 1,220,000 CHF, material: 280,000 CHF OPEX: 176 CHF/p.e./year (in total 58,000 CHF/year)
Operation: 28,000 CHF/year, energy: 8,000 CHF/year



Operations & Maintenance

150 h/year, carried out by residents ance by technology providers

TARGET OUTPUT



Vermicompost

Used onsite in the cooperative garden after maturation, about 0.006 m³/p.e./year



Urine based fertilizer

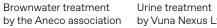
Liquid fertilizer Aurin: 0.039 m³/p.e./year: sold outside the cooperative (in total 13 m³/year)



Treated brown, treated grey and rain water

Is valorized for toilet flushing of all buildings, on the terrasses, on the balcony and on the ground floor for irrigation







Graywater treatment by Vuna Nexus Ltd by Atelier Reeb & Vuna LLC

Graphic: Delia Gregori

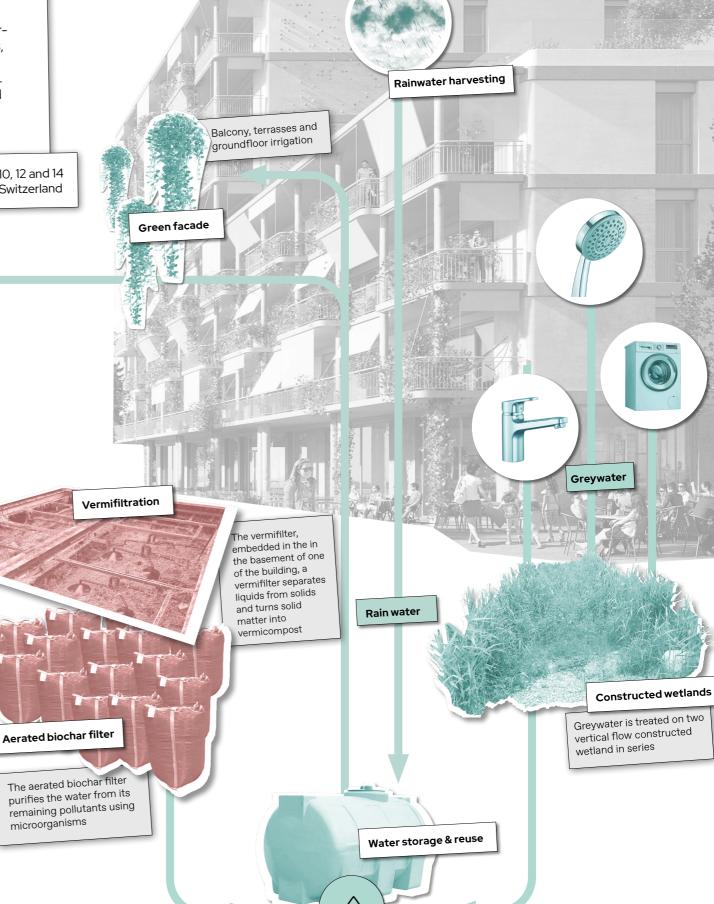
p.e. = Population Equivalent CAPEX = Capital Expenses OPEX = Operating Expenses

La Bistoquette

To be inhabited in 2025 330 p.e. (103 apartments + 2,400 m² of commercial arcade)

La Bistoquette is equipped with a comprehensive wastewater management and water recovery system: source separation of urine to produce an approved local fertilizer, separate treatment of greywater using planted filters, separate treatment of brown water using vermifiltration and reuse of treated water for flushing toilets and irrigation. Excess treated water that is not reused will be analysed and discharged into the neighbourhood's integrated rainwater management system, making this project a complete example of the sponge city concept.

> Chemin du Bois-Ecart 10, 12 and 14 1228 Plan-les-Ouates, Switzerland



Treated water



Urine-based fertilizer

Urine diversion

Urine diversion flush toilet

pathogens and reduces the volume

The aerated biochar filter purifies the water from its remaining pollutants using microorganisms



Brown water

