



# LooPi® by alchemia-nova

the plant-based public urinal for all genders

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## ABOUT LooPi®

LooPi® is a sustainable and circular, gender neutral public toilet system which uses plants to treat wastewater in an integrated vertically constructed wetland ecosystem. This treated wastewater is reused for flushing and the nutrients from the wastewater are further transformed into fertilizer feeding the plants. LooPi®'s first prototype is currently being used in Vienna Austria.

LooPi® is movable, off-the-grid and water/energy autonomous. Its beautiful & functional plant wall increases inner-city biodiversity, CO2 capture, cooling & humidification. Besides the currently developed urinal prototype, LooPi® technology can be applied on existing toilets or toilets under construction.

## HOW IT WORKS

LooPi® contributes to the circular economy providing a full nutrient cycle. When a visitor has used the LooPi® toilet, urine mixed with water is run through the soil. The microbial conversion processes at the plant roots in symbiosis with plant uptake, remove contaminants by partly converting them into available nutrients. This way, the plants are fed by the wastewater and the water is simultaneously purified. Due to the special ventilation, LooPi® works odourless. The rest of the nutrients are gathered in biochar. This nutrient-enriched biochar can be used as organic fertilizer for agricultural purposes.



## CONTACT US

**Please contact us to find out  
how LooPi® could be the  
perfect solution for your  
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## ABOUT alchemia-nova

alchemia-nova is an independent research company based in Vienna, Austria and Thessaloniki, Greece, that focuses on sustainable development and innovative solutions in the fields of systemic thinking, bioeconomy, water and Nature based Solutions. We conduct research and develop projects aimed at creating a regenerative, circular economy that minimizes waste and maximizes resource efficiency. We offer consulting services, workshops, and educational programs on the above topics, to help spread knowledge and promote sustainable practices.