



Success against microplastics: URBANFILTER doubles the amount of solids and plastic particles collected in real-world operations

- **Four-month test phase in Copenhagen shows particularly high effectiveness on microparticles sized 63 to 500 µm**
- **The URBANFILTER system successfully completes fourth field test under various real-world conditions**
- **Valuable addition to urban wastewater systems for filtering tiny particles**

Copenhagen, November 25, 2025 – After 127 days of test operations on Frederiksberg Allé in Copenhagen, the results for URBANFILTER are very positive. A customized version of the filter specifically adapted to Danish dimensions was installed in a street drain on a busy road with an average of 7,700 vehicles per day. Compared to drains without URBANFILTER modules, the filter collected more than twice as many solids and microplastics.

The filter primarily retained particles in the size range of 63 to 500 µm. For example, this corresponds to the size of a grain of flour (<180 µm), a human hair (80–120 µm), a granule of sugar (400 µm), a granule of semolina (300–1000 µm), or a particle of espresso (300–400 µm). This demonstrates that the URBANFILTER can be a meaningful addition to urban wastewater systems, especially where street drainage is not connected to wastewater treatment.

The test in Copenhagen, Denmark, is the fourth practical trial under real-world conditions since the Audi Environmental Foundation began its collaboration with the Technical University (TU) Berlin. The filter developed by TU Berlin was previously tested on the heavily trafficked Clayallee in Berlin, on an ADAC wet-handling track, and on a curvy thoroughfare in Klein Schöppenstedt near Braunschweig in Lower Saxony – with similarly good results.

The effectiveness of the initial URBANFILTER system was proven under controlled and reproducible conditions on TU Berlin's test rig. However, the open-street implementations in Germany and Denmark confirmed the retention rate of the lab tests. Additionally, the open-street implementations proved the long-term durability and maintenance-friendliness of the filter modules.

The URBANFILTER model, specially developed for Copenhagen, is an adaptation of the filter manufacturer GKD's product for Danish drains, created in collaboration with the Danish startup BAIONYX. To use the filter in Copenhagen, its dimensions had to be adjusted to fit the smaller drains there. The two partners are now evaluating the test results to make the URBANFILTER available across Denmark and in the rest of Scandinavia.



Rüdiger Recknagel, Managing Director of the Audi Environmental Foundation, says:

“Microplastics are now found everywhere in the environment. We now know that these particles are also found in the human body. Therefore, it is important to filter out as much microplastic as possible from the environment before it enters nature’s life cycle or the human body. We are very pleased with the successful test results of the URBANFILTER.”

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The Audi Environmental Foundation is an active supporter of research in new technologies and scientific methods for a livable future. Its declared aim is to help protect the environment and to create and promote opportunities for sustainable action. The foundation focuses in particular on the support and development of environmentally compatible technologies, on measures for environmental education, and on the protection of the natural resources for humans, animals, and plants. Established by AUDI AG in 2009 as a fully owned subsidiary, the foundation is a part of the company’s social and environmental policy involvement.
