No chance for thick air – New system from Tallano Technologie sucks particulate matter right off brake pads

- Innovation for passenger car costs less than 300 euros for a new vehicle
- Trial with Audi has been kicked-off
- Also already in use on commercial rail traffic
- Particulate matter emissions produced by brake abrasion six times higher than from the exhaust pipe

Munich, September 9th 2021 – Air pollution by particulate matter is one of the biggest environmental problems and poses a relatively unknown but yet significant health risk, especially in cities. Road and rail transport also contribute to this. Even in modern passenger cars, around six times more particulate matter is produced when hitting the brake than by the combustion engine. While around 5 mg/km of particulate matter are released into the environment through the exhaust, 30 mg/km or more are released through braking processes, as studies by the INSA Lyon University have shown.

The French company Tallano has developed a system in which a vacuum system sucks the brake dust directly off the wheels and collects it in a small container via pipes. This container can be exchanged during regular maintenance intervals and valuable substances in the container can be recycled.

Low costs, high impact

The new technology is currently being tested together with several partners including Audi AG. Tallano and Audi AG have already published a joint technical study on the matter. The additional costs for the installation of Tallano's system on new vehicles are estimated to be around 200 to 300 euros –and likely even significantly less further down the road. The technology is being sold under the product name tamic®.

The system is also deployable in rail traffic, for both long-distance and local transport such as subways or trams. A train operated by the French railway company SNCF is currently in service in the Paris region, testing the tamic® technology in tough everyday conditions with a view to reduce particulate pollution, particularly in underground stations (more information available at: **https://www.sncf.com/en/innovation-development/innovation-research/cleaner-air-in-paris-region-stations**).

Brake emissions not yet included in vehicle emission legislation

Every year in Europe, around 110,000 tons of particulate matter are generated by brake abrasion alone. Unlike exhaust emissions, the release of particulate matter from brakes is still completely unregulated. "The EU's vehicle emission legislation captures only 20 percent of all PM emissions generated by road traffic", says Christophe Rocca Serra, CEO of Tallano. "We have a technology that is safe, cost-effective and readily available. Automakers have also recognized the problem of particulate matter emissions from brake abrasion, which occurs whether cars are powered by a combustion engine or an electric motor." Unfortunately, there is still no legislative requirement regarding brake emissions, which would enable technology companies and OEMs to plan ahead. This should definitely be taken into account by the EU when setting the Euro 7 emission standard, explained Rocca Serra. "We already have the technical means to effectively reduce particulate

matter emissions from traffic. An EU regulation that fails to take advantage of these opportunities misses its target. But most importantly, people in cities have a right to clean air - we're ready to make our contribution now."

Event notice:

On **Friday, September 10th 2021, at 10:00 AM in the Sustainability Lounge of the IAA MOBILITY** in Munich, a panel discussion will be held on the topic of air pollution caused by particulate matter generated by braking. The panel will be moderated by Dr. Werner Schnappauf, former State Minister, and will also be attended by – among others – the Chairman of the Parliamentary Advisory Council on Sustainable Development, Dr. Andreas Lenz (Member of Parliament) and the Head of the Coordination Unit for Drives of the Future and Electric Mobility of the German Association of the Automotive Industry (VDA), Dr. Jakob Seiler. Together with Bert Stegkemper, member of Tallano's Supervisory Board, and other experts from the fields of mobility and health, they will discuss the importance of reducing brake emissions.

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About Tallano:

Tallano Technologie is a pioneer in the field of particulate emission reduction systems for vehicle brakes. The company holds a number of patents that make Tallano Technologie the market leader in the sector of brake particle capture. Research collaborations exist with INSA Lyon University and Arts et Metiers Paris, among others. The company is based in Boulogne Billancourt near Paris and was founded in 2012.