

PAMARES





lon-exhaust emissions expected to be responsible for road traffic emissions in future

Breathe Life - Clean Air is a Human Right

Discover how the PAMARES offers a smart solution to address and improve the livability and impact of traffic and industrial emissions. We are happy to explain how the urban environment can be made healthier and more attractive with innovative solutions.

The PAMARES is a sustainable, powerful and silent ionizer. An intelligent system that offers, through efficiency and smart connection, structural results to meet air quality objectives while achieving results.

C40 CLEAN AIR CITIES DECLARATIONS

Mayors saw the urgent need to acknowledge and sign the C40 Clean Air Declaration (source: here). With signing the declaration, the mayors recognize that breathing clean air is a human right. These mayors declared they will commit to use all the powers at their disposal as mayors to tackle air pollution, and call on others

ES France - Département Bio-Tests & Industries - 127 rue de Buzenval BP 26 - 92380 Garches Tél. 01 47 95 99 90 - Fax. 01 47 01 16 22 - e-mail: bio@es-france.com - Site Web: www.es-france.com

CONCERNS ABOUT PARTICULATE MATTER

Many substances can pollute the air. Some of these are very harmful and their sale and use is strictly regulated. Others are not immediately harmful, but are released in thousands or millions of tonnes per year nationally as by-products of transport, energy production, chemicals manufacture, domestic combustion and farming. When released into the air these substances have gradual but significant impacts on health and the environment. Once released, air pollution is dispersed by the weather and can travel significant distances within and between countries. Pollutants mix and interact in the atmosphere, forming new compounds, and can be deposited on land and water.

NON-EXHAUST SOURCES

While emission standards for exhaust particles from motor vehicles are becoming more stringent worldwide, non-exhaust PM emissions are largely unregulated. As a result, the proportion of PM emissions from non-exhaust sources has increased in recent years due to the significant reductions in PM from exhaust emissions over this period. Non-exhaust emissions are expected to be responsible for the vast majority of PM emissions from road traffic in future years. (Source: here and here).

What is Particulate Matter?

INVISIBLE FINE DUST

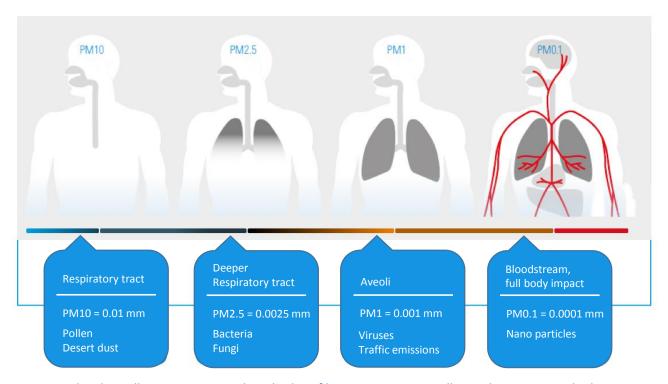
Particulate Matter (also known as aerosols), is a completely invisible form of air pollution.

Zero Emission projects have a strong focus on traffic emissions, obtaining a structural lowering of air pollution: (ultra) fine dust (PM10 and PM2,5), ammonia (NH₃) and Sulphur dioxide (SO₂).

The latter two are substances produced in the air by chemical processes and Are converted into harmful particulate matter. The importance of reducing fine dust is therefore eminent.

(ULTRA)- FINE PARTICLES INCLUDE VIRUSES, BACTERIA, SOOT, MICRO METALS, MICRO PLASTICS, FUNGI.

There are serious concerns about the consequences of air pollution by caused by particulate matter affecting our health and well-being. These tiny particles are classified in different varieties, where a distinction is made between sizes. In the infographic on the right an overview on the impact of the various sizes in particles.



The above illustration gives a clear display of how microscopic small particles impact our body and are able to cause permanent damage.

URBAN PLANNING

PERMANENT IMPROVEMENT AIR QUALITY

The demand for smart solutions against air pollution in the urban area is large. PAMARES offers an efficient plug & play solution and is customizable on request. The unique

The unique attachment to (light) poles, makes it a space friendly solution. PAMARES is the only structural and sustainable solution for implementation over several Kilometers. This system reduces particulate matter right where it occurs, preventing a substancial part of harmful particles to reach nearby residential areas. The PAMARES can reach a reduction percentage of 30 to 50 percent, which makes the PAMARES an excellent choice in the run towards Achieving the Clean Air targets for 2030.



A dynamic installation of the PAMARES is especially suitable for concentrated PM hot spots. A complete PAMARES set-up contributes to a healthier environment in urban areas. The operating system is completely noise-free, nor does it need filter replacement, while using only 18watts. A future city offers optimal clean air, which positions them as a sustainable Green City.

PAMARES

With PAMARES, StaticAir offers the realization of sustainable particulate matter reduction. The PAMARES is equipped with a patented and approved technique by the official Dutch scientific research institute TNO.





"Reduce 30-50% Air Pollution where it counts!"

GREEN CITY MARKETING

GREEN CITY GOALS

Building up towards a sustainable future city asks for new growth strategies. A dedicated roadmap focussed on climate neutral activities is supported by marketing to enhance engagement of inhabitants and tourists.

With PAMARES, city councils have an effective visual tool to roll out Green City Goals through digital communication and integrated AI techniques.

ACCESSIBLE APPLICATION

Connecting air quality sensors and data feed, enables possibilities for personalized communication. Informing people about local air quality and a city's Zero Corbon targets offers unique chances for Green City marketing strategies. Smart City solutions evolve while generating connectivity and dialogue. COVID-19 has contributed greatly towards clean air awareness and the possible health dangers of air pollution. Asians have a daily routine checking the air quality, like checking the weather forecast.

People want to be informed and tend to like smart education and interaction.

DIGITAL COMMUNICATION - IoT

The PAMARES is a fysical representation of the efforts a city takes to work towards a carbon neutral future. A novel street scenery works on people's curiousity. When adding strategic digital communication techniques, combined with PAMARES, effective goal oriented interaction can take place.



"Goal oriented communication and education."

THE DIGITAL CITY

IOT CONNECTED

A Smart City is a Green City. Smart plug-ins provide smart connection for sustainable tracking.

LoRa-TECHNOLOGY

All StaticAir systems can be equipped with LoRa technology. LoRa offers IoT (Internet of Things) settings for the system to connect to the smart city grid and smart city dashboard.

LoRa Technology is a cloud enabled solution for remote monitoring, alerting and decision making. LoRa is easy to connect with the existing infrastructure of Smart City management systems. The LoRa device makes cheaper IoT applications batteries possible. Our systems can be completely adapted to the wishes of the customer.

DIGITAL EFFICIENCY

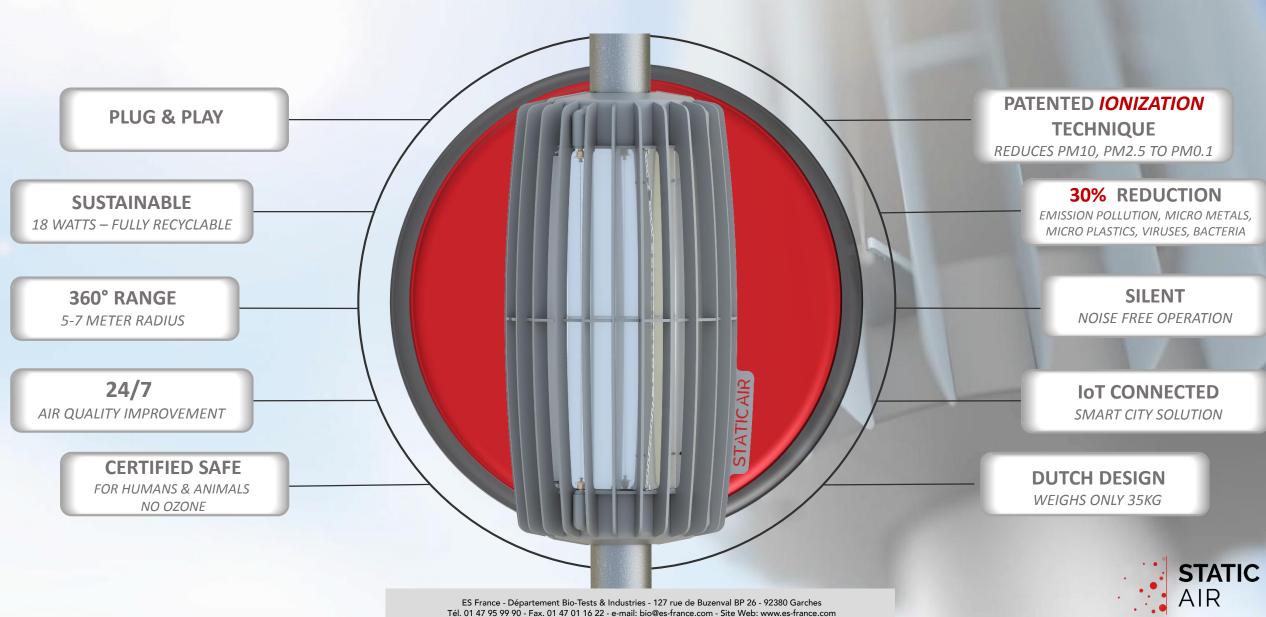
By connecting to mobility programs and further digital developments towards a sustainable city, LoRa brings digital efficiency. Future Cities focus on technology, management and data collection to ensure future progress.



"Smart Green City:
Digital technology for
Clean Air"



SPECIFICATIONS OUTDOOR UNIT - PAMARES



Every city asks for its own unique approach.

<u>Contact</u> our advisors for professional advice.

COMPARE OUR SOLUTIONS

Click <u>here</u> for an overview of our systems



Click the icons to follow our social channels









