



Our ambition is to be the most sustainable airport in the world. Local air quality is important for employees and local residents. Although relatively little is known about the effects of ultrafine particles on health, Schiphol has drawn up a plan to reduce emissions of ultrafine particles in 2019.

Update on the ultrafine particles action plan

October 2021

The action plan consists of 2 parts:

1. Gaining knowledge is an important part of the plan. Research we carry out at the airport will increase knowledge about aviation emissions of ultrafine particles.

2. Measures to improve air quality and further bring down emissions of ultrafine particles at and around the airport. Many measures also reduce CO₂ and nitrogen emissions and contribute to our wider sustainability ambitions.

In this document we give you an update on the ultrafine particles action plan. We show what has already been achieved and which measures are being taken.



1. Knowledge

Ultrafine particles are released into the air during combustion (of fossil fuels, for example). Worldwide, little is known about the effects on health. Royal Schiphol Group wants to make a contribution to the knowledge about ultrafine particle emissions in aviation.

- At the request of Schiphol Group, TNO carried out research into ultrafine particle concentrations at Schiphol. This research was published in October 2021.
- ACI Europe, the European airport trade association, has a local air quality task force that published a report on ultrafine particles in 2018. Schiphol contributed to this report.
- Schiphol is working with other airports to share knowledge and experience.
- Schiphol is on the advisory board of the RAPTOR project. A European project in which various organisations work together to gain knowledge about ultrafine particles in the aviation sector. The other participants from the Netherlands are TNO and RIVM.

2. Measures

Making traffic to and from Schiphol more sustainable

The roadmap to become the most sustainable airport includes cleaner and less road traffic to and from Schiphol.

- We encourage the use of public transportation, and we support the extension of Amsterdam's North-South metro line. In 2019, more than 40% of travellers came to Schiphol by public transport.
- As of 2021, there are 258 electric buses at Schiphol. Almost all public transport buses are electric.
- 573 electric taxis drive to and from Schiphol.
- Schiphol encourages employees to travel to Schiphol by public transport or by bicycle.

Emission-free airport

Schiphol is to become an emission-free airport by 2030.

- More and more equipment that we use in the airport process uses electricity. Our electric fleet gets bigger each year.
- Since 2015, Schiphol has been using electric buses to transport travellers between the plane and the gate. There are 53 electric buses as of this year.
- To lower emissions, Schiphol has equipped 72 aircraft stands with shore power. This means that (diesel) generators are no longer necessary and that more than half of the aircraft no longer require diesel..
- Ground Power Units (GPUs) provide electricity to planes not directly connected to the terminal. We are using 5 electric GPUs and we're investigating if we can develop and test a hydrogen version.
- We are working towards making sustainable taxiing standard procedure at Schiphol by 2030. At the start of 2022, two more Taxibots will come to Schiphol to take part in a second trial.

Stimulating sustainable aviation

Schiphol is encouraging a more sustainable aviation sector in various ways. Our ambition: emission-free aviation in 2050.

- Cleaner aircraft pay less at Schiphol. The cleanest and most silent planes pay 45% of the basic rate.
- Schiphol Group and other parties from the aviation sector have agreed to increase the share of sustainable fuel. The goal is 14% sustainable fuel in 2030. We are investing in the development of sustainable aviation fuels and in increased production.
- We are also committed to a more efficient use of European airspace and advocate more short-distance train travel (up to 700 km).

