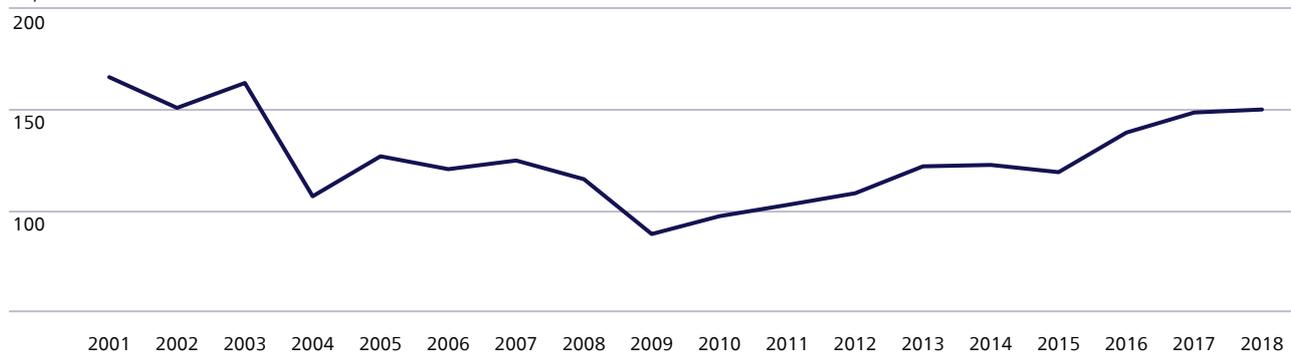


Calculated number of people experiencing severe noise disturbance

(norm is 180,000)

x 1,000



■ Calculated number of people experiencing severe noise disturbance

Number and nature of reports to BAS

	Focus group		Habitual complainants	
	2018	2017	2018	2017
Number of complainants	11,365	8,450	44	36
Number of complaints				
Specific reports	52,795	33,607	131,799	107,781
Period reports	66,685	47,305	16,710	11,607
General reports	1,579	1,180	2,951	7,679
Total number of reports	121,059	82,092	151,460	127,067

For more details, please visit the following websites:

- [Local Community Contact Centre Schiphol \(BAS\)](#)
- [NOMOS](#)
- [Schiphol Local Community Council](#)
- [Schiphol Quality of Life Foundation](#)
- [Samen op de Hoogte](#)

CO₂ emissions

Carbon emissions contribute to global temperature rises, which can have serious consequences for humans and the environment. We are pursuing an active emissions reduction programme at Schiphol and across our regional airports. Schiphol Group is climate-neutral in its own activities and is transitioning towards becoming a zero-emissions organisation. With the search for long-term climate solutions ever-more urgent, we have now set our sights on a more ambitious target: reaching zero emissions in 2030. This goal means that no carbon and particulates will be emitted in using energy and fuel for our own operations as well as ground operations at airside. This science-based target is in line

with the scale of reductions required to limit the eventual global temperature increase to below 2 degrees Celsius above pre-industrial temperatures.

100% Dutch wind energy

In working to meet our goals, we are making increased use of renewable energy sources, including wind energy and green gas. In April 2018, Royal Schiphol Group, Eneco and the municipality of Vianen opened the new Autena wind farm. This important milestone means that 100% of the electricity Schiphol purchases to run its facilities is now sourced from wind power. Additional turbines are also being developed; by January 2019, all of our electricity will be delivered by newly developed Dutch wind farms.

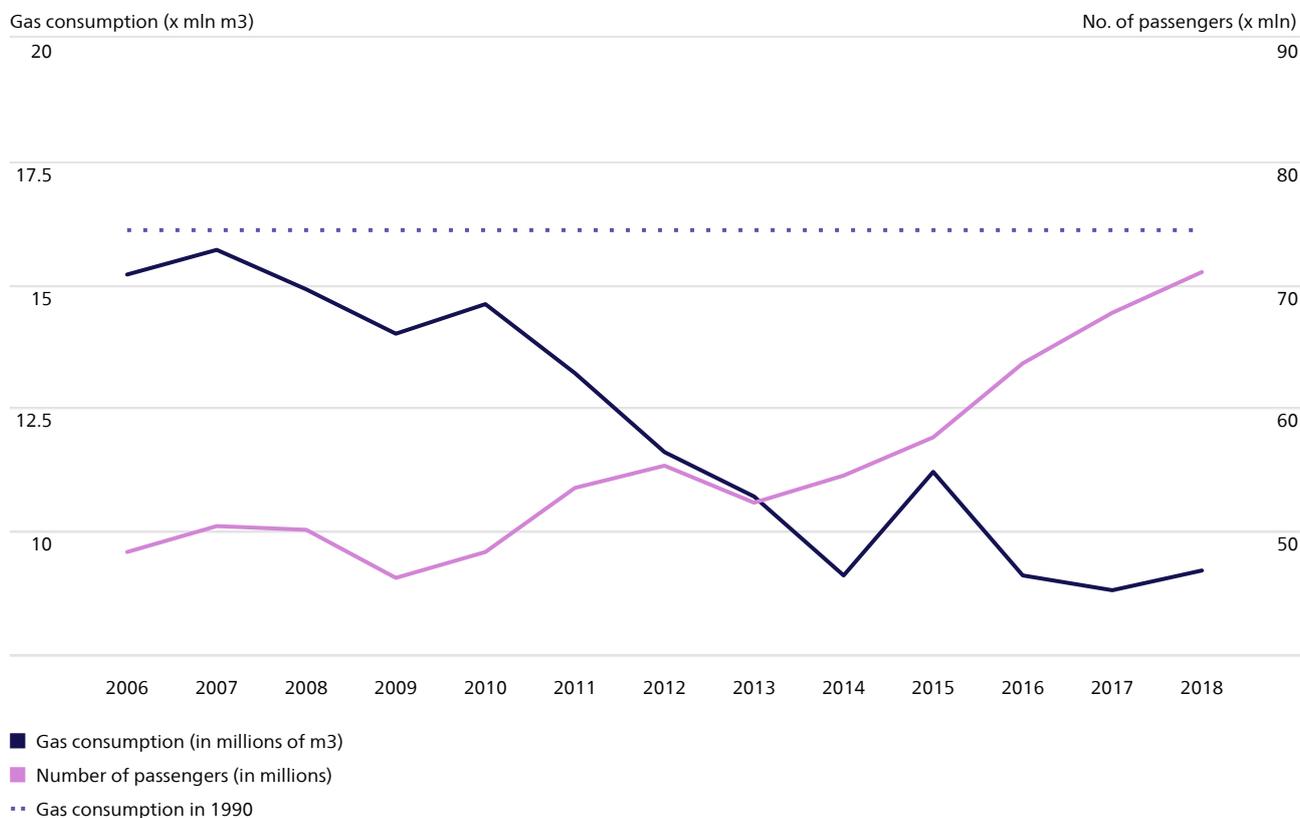
Green gas

In 2018, we also completed the procurement phase for a new biomethane (or green) gas tender. As a result, green gas will comprise 10-15% of Royal Schiphol Group's total gas consumption over the 2019-2021 period, and 100% of the gas used by Eindhoven Airport. We note that, for now, our current use of green gas as part of our wider energy mix remains constrained by its limited availability in the Netherlands. In light of this, we are working hard to limit our use of natural gas while also reducing

our overall power needs in order to stay within the global carbon budget. We do this by making our facilities more energy efficient. A key example of this is the recent upgrade to energy label A of one of our oldest piers, Pier F. As indicated in the graph, despite

Schiphol's growing passenger numbers, natural gas consumption has fallen to well below 1990 levels. By reducing our gas needs and increasing our use of green gas, we aim to become 'natural-gas-free' by 2030.

Development of natural gas consumption and passenger numbers



Fewer CO₂ emissions

In 2009, the Airports Council International introduced a CO₂ benchmark for airports, which Schiphol helped to develop. The benchmark ranks Amsterdam Airport Schiphol among the airports most actively pursuing emission reductions, having retained 3+ status (the highest level that can be attained) for the sixth year in a row in 2018. A key component of this status is that the airport's own activities are CO₂ neutral.

The remaining emissions of Schiphol Group's own activities will be offset through the Guarantee of Origins compensation scheme for electricity, and with the use of green certificates for other fuels. We chose this year for an energy project in India with a Golden Standard certificate.

The positive impact of these initiatives can be seen in improving energy efficiency and CO₂ emission levels at Schiphol Airport. In 2018, we succeeded in meeting our carbon reduction target. This includes emissions from natural gas consumption (Scope 1) and electricity usage (Scope 2), while the overall emissions generated by our activities (according to the terms of our SNBV environmental permit) also fell with respect to 2017. Likewise,

Schiphol's per-passenger emission levels notably improved during 2018, falling to 0.48 kg CO₂. This means we have achieved our 2020 goal of 1.35 kg CO₂ per passenger ahead of time.



Energy efficiency

Total energy consumption at Schiphol Airport decreased further in 2018 to 1,901 TJ (2017: 1,990 TJ), reflecting the continuing impact of our energy conservation programme. Schiphol attained an energy-efficiency rate of 6.06%, which is above our target of 5.92%.

Due to the opening of the new pier and terminal, we expect our energy usage to rise over the next few years, though we aim to offset this increase through our energy savings programme. More generally, we expect to see energy reduction gains levelling off from 2020-2021 onwards, given that most of our equipment will

CO₂ emissions at Amsterdam Airport Schiphol

(in tonnes)

Caused by		2018	2017	2016	2015	2014
Scope 1	Natural gas consumption under the SNBV licence	16,530	15,668	16,279	19,954	16,190
Scope 2	Electricity	17,098 ¹	87,130	85,916	78,681	81,426
Total CO₂ emissions		33,628	102,798	102,195	98,635	97,616
Passengers x 1,000		70,546	67,696	62,705	57,581	54,549
CO ₂ kg/passenger		0.48	1.52	1.63	1.71	1.79
Scope 3	Among others, electricity and gas third parties, all road traffic to and from the airport, and fuels related to aircraft handling and the landing and take-off cycle	n.a. ²	1,336,381	1,318,419	1,248,957	926,382

¹ Scope 2 emissions are based on the market-based method. The location-based Scope 2 emissions for 2018 totalled 97,839 tonnes. This number has increased compared to 2017, due to the changed national emissions factor.

² 2018 data will be reported with a one-year delay.

probably have been replaced with energy-saving technology by this point.

Emissions in our value chain

As Scope 3 includes data provided by third parties, figures relating to 2018 will be made available during the course of 2019.

In 2017, overall emissions (Scope 3) increased by 1.4% compared with 2016. This was due to the growth in passengers and air transport movements at Schiphol, as well as road freight movements and passenger journeys to and from the airport.

Despite our success in driving sustainability across our own operations, the fact remains that the majority of CO₂ emissions at Schiphol (Scope 3) are caused by external organisations outside of our immediate sphere of influence. The majority of these emissions are caused by the landing and take-off cycle, followed by road traffic, as well as fuels related to aircraft handling. The transition to zero-emissions vehicles and sustainable aviation fuels would reduce these carbon emissions. We are working closely with our partners across the value chain to resolve this long-term challenge as part of our wider sustainability transition (see Supply chain responsibility for further details).

Air quality

Schiphol Group is dedicated to ensuring clean air at and around its airports, and we aim to lead the sector when it comes to reducing NO_x and emissions of ultra-fine particles (PM₁₀ and PM_{2.5}). These efforts are important in view of our commitment to safeguarding the health of employees at Schiphol as well as local residents.

Air quality is continually monitored by the government. The province of North-Holland has three air quality meters around the airport. The measurements can be viewed online. The Schiphol site met all governmental requirements for this category in the 2018 operating year. We apply performance indicators that involve input measurements, such as the installation of fixed electrical ground power at aircraft stands and electrification of the vehicle fleet. Performance indicators that involve output are not being measured at present as it is not always possible to distinguish clear causal links between other parties' activities and air quality, and our own.

Schiphol has 225 aircraft stands for passenger aircraft, cargo aircraft and buffer positions. These include 127 fixed aircraft stands and 98 stands without a direct connection to the terminal. In 2018, 73 of Schiphol's fixed aircraft stands were connected to fixed electrical ground power, unchanged from the previous year. With fixed electrical ground power, aircraft do not need to use a generator or the auxiliary engine in their tails during ground handling procedures, thereby reducing NO_x emissions.

In 2018, the number of flights handled using fixed electrical ground power rose in absolute terms compared with 2017, while remaining the same in percentage terms (54%).

Ultra-fine particles

While scientists recognise the potentially serious health effects of ultra-fine particles (UFPs), little is known at present about their specific impact. Furthermore, there is a lack of clarity around how to accurately measure UFP levels, or what constitutes a safe level of exposure for humans.

The Dutch National Institute for Public Health and the Environment (RIVM) is investigating the health risks to residents in the communities around Schiphol more closely. This follows an