

# KLM Sustainability: 2018 at a glance



17,3%

lower CO2 emissions per passenger compared to 2011. Target for 2020: 20% reduction



40%

less noise energy through fleet renewal



1.318

tonnes of sustainable biokerosene consumed



10

new, quieter, more efficient aircraft added to the fleet



9%

less waste compared to 2011



61,5

Employee Promotor Score



-50%

CO2 per passenger compared to 2005

2018



14 times

at the top of the Dow Jones Sustainability index as Air France-KLM Group



85

projects in 16 countries supported by Wings of Support



88.000

passengers travelled CO2-neutral thanks to KLM's compensation service CO2ZERO



9,4

million sustainably produced sandwiches served on board European flights



18%

less CO2 emissions produced by ground processes. Target for 2020: 20% reduction



312

hectares of tropical forest planted in Panama by KLM CO2ZERO service



-50%

residual waste compared to 2011



## On our way to 2030

In 2018, KLM set new sustainability targets for the year 2030. Why that year? KLM is guided by the United Nations Sustainable Development Goals (SDGs) when developing its own sustainability strategy. The "2030 Agenda" contains 17 goals, which are a call to action to end poverty, inequalities, climate change and ensure that all people on earth enjoy security and prosperity. KLM is committed to the SDGs and wants to contribute to realising at least Goal 7 (Affordable and Clean Energy), Goal 8 (Decent Work and Economic Growth), Goal 9 (Industry, Innovation and Infrastructure), Goal 12 (Responsible Consumption and Production), and Goal 13 (Climate Action).

One of KLM's most important sustainability strategies within its operation is the reduction of its environmental footprint. KLM aims to have reduced its CO<sub>2</sub> emissions by more than 10% by 2030, compared to 2018. This is a 50% reduction of CO<sub>2</sub> per passenger kilometre compared to 2005. KLM has also set itself the ambition to achieve a CO<sub>2</sub>-neutral ground operation and to cut waste by 50% (compared to 2011).

### 1. 17,3% lower CO<sub>2</sub> emissions per passenger compared to 2011. Target for 2020: 20% reduction

To reduce our carbon footprint, KLM is working with a Carbon Reduction Roadmap. KLM has had a policy plan in place since 2007 aimed at reducing the impact of its operations on climate. The current target is a 20% reduction in CO<sub>2</sub> emissions per passenger by 2020 (compared to 2011). We're well on course; at the end of 2018 we had achieved a 17,3% reduction. KLM has identified three pillars for reducing the CO<sub>2</sub>

footprint of flying: cut fuel consumption; replace fossil fuels; compensate for CO<sub>2</sub> emissions. Fleet renewal contributes most to reducing CO<sub>2</sub> emissions; new aircraft are more fuel-efficient and emit less CO<sub>2</sub>. Combined with the measures that KLM is taking to improve the efficiency of its flight operations, the new aircraft are emitting between 35% and 40% less CO<sub>2</sub>. KLM has taken a range of operational measures to: reduce aircraft weight; make optimal use of airspace; train pilots to fly as efficiently as possible, so that less fuel is required. It goes without saying that safety is paramount. Sustainable biokerosene can potentially make a significant contribution in the medium term. The fuel can reduce CO<sub>2</sub> emissions in the entire life cycle by 80% compared with using fossil fuels. KLM also takes part in the EU's emissions trading system (ETS). This programme sets a maximum limit for CO<sub>2</sub> emissions for all flights in Europe. Passengers can compensate for the CO<sub>2</sub> emissions generated by their flight by using KLM's CO<sub>2</sub>ZERO compensation service.

### 2. 40% less noise energy through fleet renewal

The advantages of fleet renewal include fuel efficiency, less noise energy, and lower CO<sub>2</sub> emissions. The Boeing 787-9 Dreamliner is 40% quieter than comparable aircraft, thanks to a range of innovations, such as the new engine design. This keeps sound levels in the air to 85 dB, which is about the same noise level as traffic on a busy road.

### 3. 1.318 tonnes of sustainable biokerosene

Since 2016, all KLM's flights from Los Angeles to Amsterdam have been partially fuelled by biokerosene. In 2018 this amounted to 360 flights. KLM is currently

the only European airline to operate intercontinental flights partly fuelled by sustainably produced biokerosene.

- By the end of 2018, KLM had operated around 1,500 flights partially fuelled by biokerosene. In 2011, KLM was the first airline ever to operate a commercial flight with sustainably produced biokerosene.
- In May 2018, KLM opened its most sustainable route to Växjö; it is 5% fuelled by biokerosene and the rest of the CO<sub>2</sub> emissions are compensated for.
- Biokerosene can cut CO<sub>2</sub> emissions by up to 80% in the supply chain.
- Thanks to its partners in the KLM Corporate BioFuel Programme, KLM is able to bridge the price difference between fossil fuels and sustainably produced biofuels. Arcadis, Air Traffic Control the Netherlands, the Netherlands Aerospace Centre, and the Swedish company Södra joined as partners in 2018.
- KLM only uses sustainably produced biokerosene made from raw materials that do not have a negative impact on biodiversity and/or food production.
- Sustainable biokerosene (used cooking oil) is produced by World Energy, the only refinery that continuously produces sustainable aircraft fuel.

### 4. 10 new, quieter, more efficient aircraft added to the fleet

The greatest advantages of fleet renewal include: fuel efficiency, less noise energy, lower emissions, greater load capacity, and lower operational costs at the end of its economic lifetime. The new aircraft types are more energy efficient because for the aircraft design, but KLM

increases this efficiency by taking operational measures to increase efficiency. We reduce weight by carrying lighter equipment on board; we make more efficient use of the air space; we follow optimal flight procedures so that we can respond to weather conditions and fuel consumption as efficiently as possible. In 2017, we added three Boeing 787-9 Dreamliners and seven Embraer 175+ aircraft to the fleet. Three Boeing 747s have been phased out.

#### 5. 9% less waste compared to 2011

KLM aims to reduce the amount of residual waste it produces by 50% in 2030 (compared to 2011). This will be achieved through cutting the overall amount of waste and increasing the percentage that is recycled. In 2018, the amount of waste was cut by 9% and 28% was recycled. Onboard waste was reduced by 19% per passenger. The Dutch government's proactive waste management policy means that our non-hazardous waste does not end up on a rubbish tip, but is all either recycled or burned to produce energy. At KLM, fourteen different kinds of waste are separated and recycled, including paper, metal, glass, plastic, wood, clothing, electrical equipment. Strict laws surrounding food safety means there is almost nothing that we are allowed to recycle from intercontinental flights, although 73% of waste produced by ground operations is recycled!

#### 6. 61,5 Employee Promotor Score

KLM launched an in-house version of the Net Promoter Score in 2018. This is used to measure customer satisfaction. A selection of employees across the whole organisation are asked if they would recommend KLM as an employer. The average EPS score in 2018 was 61.

#### 7. 14 times at the top of the Dow Jones Sustainability index as Air France-KLM Group

Air France and KLM follow a policy which aims for a sustainable operation. They endorse the United Nations' Global Compact universal sustainability principles and want to contribute to the UN's Sustainable Development Goals (SDGs). We have come top of the Dow Jones Sustainability Index in the category Airlines for fourteen successive years.

#### 8. 85 projects in 16 countries supported by Wings of Support

Wings of Support is an NGO that was founded in 1998 by KLM employees. The foundation is an independent organisation run by around 90 KLM volunteers. The charity's aim is to help children in countries KLM flies to by increasing access to education, shelter and healthcare. The foundation strives to involve local populations in its activities.

#### 9. 88.000 passengers travelled CO<sub>2</sub>-neutral thanks to KLM's compensation service CO<sub>2</sub>ZERO

KLM's CO<sub>2</sub>ZERO service enables passengers to compensate for the CO<sub>2</sub> emissions produced by their flight, thus neutralising their CO<sub>2</sub> footprint. KLM calculates the actual CO<sub>2</sub> emissions of a flight based on the aircraft type, the distance flown, and the historical load. In 2018, around 88,000 passengers travelled CO<sub>2</sub>-neutrally thanks to KLM's CO<sub>2</sub>ZERO service. This is an increase of almost 50% compared to 2017. The contribution paid by passengers through CO<sub>2</sub>ZERO is invested in Gold Standard certified CO<sub>2</sub> reduction projects. CO<sub>2</sub> compensation is a reduction in CO<sub>2</sub>

made in order to compensate for an emission made elsewhere. All Gold Standard certified projects must contribute to at least two UN Sustainable Development Goals. Not only by having a positive impact on the climate, but also by making a positive contribution to local communities (see point 12 for more information about the chosen project).

#### 10. 9,4 million sustainably produced sandwiches served on aboard European flights

KLM aims to provide responsible catering products by making principled product choices. We choose products that have as little impact on the environment as possible, that promote fair trade and are produced in an animal-friendly manner. The bread from the sandwiches is baked by Carl Siegert bakery. The bakery uses solar energy for the production of organic specialist breads and wind energy to power the grain mills. Almost all the organic grain comes from arable farms located within a 200-km radius of the bakery. The egg and chicken sandwich fillings come from Rondeel where the chickens live as they would in the wild. Both the eggs and the chicken meat from Rondeel have Better Life 3 star certification, the highest certificate available for animal welfare from the Dutch Society for the Prevention of Cruelty to Animals.

- Where possible, we choose products and partners that subscribe to our sustainability mission, so that we can contribute to the global ambition to meet the Sustainable Development Goals (SDGs).
- Our catering policy applies to all flights departing from

Amsterdam Airport Schiphol. Wherever possible, we also include sustainable products from the destinations in the catering.

- The fish we serve is either MSC or ASC certified, or is certified through the WWF's Fish Guide Green List.
- UTZ-certified coffee is served in all classes on board.
- We serve certified, sustainable chocolate in all classes on board.
- We were the first European airline to stop using chicken and eggs from the farm factory in our catering. We only use eggs and egg products with the animal protection seal on all our flights out of Amsterdam.

#### 11. 18% less CO<sub>2</sub> emissions produced by ground processes. Target for 2020: 20% reduction

KLM is aiming at a 20% reduction in the CO<sub>2</sub> emissions generated by its ground processes by 2020 (compared to 2011). This reduction is being achieved by using less electricity, gas and fuel. By the end of 2018, CO<sub>2</sub> emissions from operational processes on the ground had been reduced by 18% compared to 2011. One of the areas we are focusing on is replacing more ground-handling vehicles with electric alternatives. We are also constantly looking for ways to simply use less energy. We have managed to reduce our gas and electricity consumption by 19% since 2011.

#### 12. 312 hectares of tropical forest planted in Panama by KLM CO<sub>2</sub>ZERO service

With the CO<sub>2</sub>ZERO compensation service, KLM offers passengers the opportunity to fly CO<sub>2</sub>-neutrally and thus contribute to CO<sub>2</sub>OL Tropical Mix, a reforestation project in Panama. This project holds a Gold Standard

Global Goals certificate. Former agricultural land is transformed by this project into new mixed forests, which are also maintained. A reforestation project works as follows: the newly planted trees absorb CO<sub>2</sub> emissions from the air and store them in their roots, trunk and canopy. The project not only has a positive impact on the environment, but also creates jobs with a steady income and good working conditions for 150 people. In addition, employees receive a basic education and training in sustainability and ecological alternatives. In this way, local employees are able to improve their living conditions and acquire more skills and knowledge.

