Environmental sustainability strategy 2023

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norwegian

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1. Creating a sustainable future the low-cost way

Flying brings people together and is of great value to society. But flying also comes at an environmental cost that must be reduced. We commit to reducing our emissions by 45 percent by 2030, in line with the 1.5°C target set forth in the *Paris Agreement*. In order to reach the target, we will need up to 500 million liters sustainable aviation fuel by 2030, depending on the level of fleet renewal.

Norwegian is a low-cost commercial business in a competitive market. We deliver affordable and quality flights to our customers. Over the next 3.5 years the overall strategic goal is to use less natural resources and make more money. The overall goal rests on the principle that environmental actions must deliver a profit to be economically sustainable and operationally scalable.

Where we are
We have a good starting point. At Norwegian we fly smart, with one of the newest fleets in the industry. Our flights are full and our operations are efficient. Our low-cost model reduces fuel and resource consumption – cutting costs, ticket prices and carbon emissions at the same time. The low-cost model is the sustainability model in aviation, as it enables highly efficient energy and resource management.

Between 2010 and 2019 we reduced carbon emissions per passenger kilometer by 28 percent. Still, we cannot rest on our laurels.

We need to do more, as expected emissions growth from our industry is greater than the projected fuel-efficiency improvement.

Where we want to go
To align our business model to scientific environmental and climate targets we must improve our resource productivity over the next decade.

To limit global warming to 1.5°C, carbon emissions must be reduced 45 percent by 2030 compared to 2010 levels, according to the International Panel on Climate Change (IPCC, 2018). We commit to improve the carbon efficiency of our operations and will reduce our carbon emissions by 45 percent per passenger kilometer by 2030 - compared to 2010 levels.

We will remove all unnecessary waste from our office locations and onboard our flights, and make sure that our waste resources can be used again. We commit to stop all consumption of non-recyclable plastics by 2023. In the same period, we will also reduce consumption of single-use plastics by 30 percent and make sure that all single-use plastics in Scandinavia are recycled.

Our targets are action oriented and measurable. We will be open and share our progress actively. We commit to integrate climate risk and environmental factors into corporate governance, risk management and annual reporting.

How we plan to get there
Sustainability work starts internally and on the frontline. We all have different competencies and experiences. To succeed, we must walk in the same direction. This is not a job for one department or one unit. We are all responsible for integrating sustainability into our function, management, leadership and corporate culture.

We must also cooperate closely with our customers, investors, suppliers, regulators, and other stakeholders to succeed. To make it easier for external partners to contribute, we share our strategic objectives and the rationale behind our ambitious targets in this document. We will actively engage with producers of sustainable aviation fuels and use our purchasing power to ramp up production of affordable fuels with high sustainability performance.

We have a major opportunity to use our pole-position and make sustainability a competitive business advantage. We hope you will join us on the journey to create a sustainable future for aviation the low-cost way.

2. Strategic objectives

1	Make sustainability an **integrated** part of our business
2	Achieve **best-in-class** position
3	Clean our **supply chain**
4	Take control of our **Environmental Social Governance** data
5	Secure **predictable** regulations

We will focus on five strategic objectives over the next 3.5 years.

1. We will make sustainability an integrated part of our business. That involves integrating sustainability into our business plans, corporate governance and management, as well as our culture and leadership functions.

2. We will achieve a best-in-class position among European carriers. That involves improved fleet and operational efficiency, product development, as well as communications, marketing and sales.

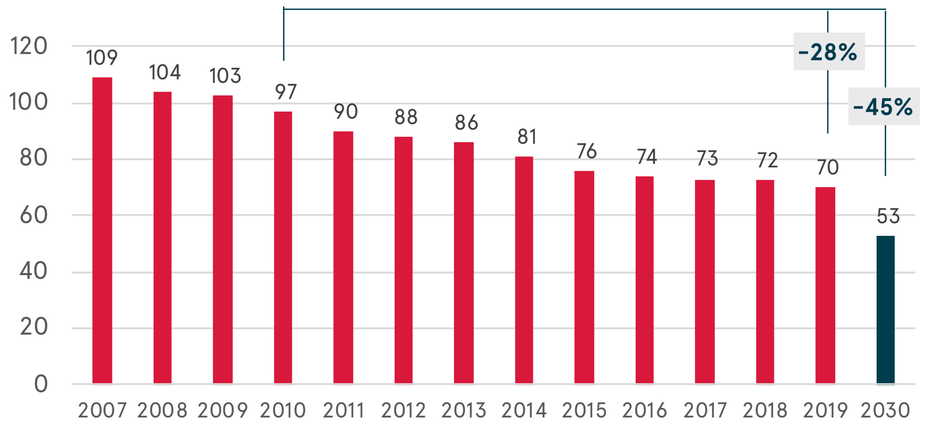
3. We will clean our supply chain. That involves procurement of sustainable aviation fuels and going through our purchasing agreements to see how our suppliers can help us reach our targets.

4. We will take control of our environmental, social and governance data. That involves improved measurement and verification, as well as accounting and reporting, in order to perform better on relevant ratings and benchmark.

5. We must secure a regulatory framework that reduces investment uncertainty and rewards carbon efficiency. That involves sustainability standards, environmental taxes and charges, as well as policy instruments for sustainable aviation fuels.

3. Targets

	KPI targets	as measured by
A	Carbon efficiency	i. A 45% reduction in carbon emissions per passenger kilometer by 2030 from a 2010 baseline
B	Waste resource optimization	i. A 100% reduction of non-recyclable plastics by 2023 ii. A 30% reduction and 100% recycling of single-use plastics by 2023
C	Accountability	i. Integration of climate risk and environmental factors into corporate governance, risk management and annual reporting



Carbon emissions per passenger kilometer, historic and 2030-target

The success of our strategy will be measured by three KPI targets:

A. **Carbon efficiency:** To limit global warming to 1.5°C, carbon emissions must be reduced 45 percent by 2030 compared to 2010 levels, according to the Inter national Panel on Climate Change (IPCC, 2018). We commit to improve the carbon efficiency of our operations and will reduce our carbon emissions by 45 percent per passenger kilometer by 2030 compared to 2010 levels.

B. **Waste resource optimization:** We will design unnecessary waste out from our product offer and make sure that our waste resources can be used again. We commit to stop all consumption of non-recyclable plastics by 2023. In the same period we will also reduce consumption of single-use plastics by 30 percent and make sure that all single-use plastics in Scandinavia are recycled.

C. **Accountability:** Our targets are action oriented and measureable. We will be open and share our progress actively. We commit to integrate climate risk and environmental factors into corporate governance, risk management and annual reporting.

The IPCC-target of 45 percent reduction is an absolute emissions target, requiring concerted action from governments, citizens and businesses. As a low-cost commercial business, our expertise is to transport our customers as efficiently as possible from A to B in a competitive market. Our role and responsibility is therefore to improve the carbon efficiency of our operations and energy sources.

The established metric that best measures carbon efficiency in aviation is carbon emissions per passenger kilometer. We reduced carbon emissions per passenger kilometer by 28 percent from 2010 to 2019. To reach the 1.5°C-target we must reduce our carbon emissions per passenger kilometer by another 24 percent by 2030.

4. How to reach our targets

1. **Fleet renewal**

   Buying new aircraft is the single most important action an airline can take today to reduce its carbon emissions. Nor wegian has one of the newest fleets in the aviation industry with an average age of 4.6 years. Our Boeing 787 Dreamliner's and our low-cost business model have made us the world's most fuel-efficient airline on transatlantic routes, 33 percent more efficient than industry average, according to the International Council on Clean Transportation (ICCT, 2018).

   By renewing our Boeing 737-800s with either Boeing 737 MAX or Airbus A320neo we can improve our fleet's carbon efficiency per passenger kilometer by approximately 9 percent by 2030.

2. **Sustainable aviation fuels**

   Our aircraft can fly on up to 50 percent certified sustainable aviation fuel today. In order to reach our target, we will need up to 500 million liters sustainable aviation fuels by 2030, depending on the level of fleet renewal. We will actively engage with producers and use our purchasing power to ramp up production of affordable fuels with high sustainability performance.

4. How to reach our targets

By blending in between 16 and 28 percent sustainable aviation fuel we can improve our carbon efficiency by between 11 and 20 per cent, given a 70 percent life-cycle carbon efficiency of sustainable aviation fuels compared to fossil jet fuels.

3. **Data driven fuel saving**
   Our SkyBreathe mobile application teach pilots to fly more fuel efficient. Our pilots also use a new system to make better route choices, receiving real time updates with advanced weather data straight into cockpit.

   We will improve our carbon efficiency by 2 percent by 2030 through full implementation of data driven fuel saving.

4. **Improved waste resource management**
   Our mandatory pre-order of food on flights over 2.5h reduces food waste and weight. Redesigning of our uniforms gives new life to old textiles and work to social entrepreneurs.

   We have aligned our targets to Ellen MacArthur Foundations vision for a New Plastics Economy. We will integrate the circular economy principles of reduction, reuse and recycling onboard and within facility management.

   Improving waste management within aviation is a complex task. Countries and airports have different systems for sorting, collecting and treating the waste.

   We are highly dependent on our catering, cleaning and airport suppliers to succeed. To reduce complexity we will start in Scandinavia and expand when we see positive results.

5. **Operational efficiency**
   In aviation and empty seat is a waste of resources. Competitive prices gives higher load factor and less emissions per passenger. Direct point-to-point flights use less fuel and reduce emissions. New aircraft cleaning techniques reduce fuel consumption and extend engine lifetime.

   We will improve our carbon efficiency by 3 percent by 2030 through more efficienct operations.

Achievability

Future projections and profitability assessments remain uncertain under current market conditions and regulatory framework. Greater visibility and reduced uncertainty of key variables are necessary before deciding upon the most cost-efficient way to achieve our targets.

5. A predictable regulatory framework is key

Sustainability standards	i. Should include objective criteria for measurement, reporting and verification of sustainability performance ii. Should be technology-neutral and internationally harmonized iii. Should be based on minimum requirements for carbon efficiency
Environmental taxes and charges	i. Should reward sustainability performance, such as carbon efficiency ii. Income from government sale of EU ETS allowances should be channeled back to sustainability projects in aviation
Policy instruments for sustainable aviation fuels	i. Should close price gap between sustainable aviation fuels and fossil jet fuel by stimulating increased production, without introducing new market distortions ii. Blending mandates, if introduced, should be put on airlines and be based on reduction targets to reduce market distorting effects

As a commercial business we are dependent on a predictable regulatory framework that enables companies to develop, build, invest in, and use the best available technology. The list of criteria on the left will accelerate market-driven environmental actions in a cost-efficient way.

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