Düsseldorf Airport Roadmap to Net Zero 2045



On the way to a sustainable future

Carbon neutral by 2035, net zero emissions by 2045





CO₂-Emissions DUS Scope 1, 2 und 3

Yearly Emissions (t CO ₂)	2023
Scope 1	8.252
Scope 2	36
Scope 3	364.737
Sum	373.025





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CO₂-Emissions DUS

Details Scope 1 and 2

Yearly Emissions (t CO ₂)	2010	2023
Scope 1	28,830	8,252
Scope 2	30,350	36
Sum	59,180	8,288





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Our way to net zero

Net zero emissions by 2045





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On the way to net zero emissions

Saying goodbye to fossil age



Environmentally friendly energy supply

Photovoltaic systems and modern combined heat and power plants at the site, District heating and TÜV-certified green electricity

Carbon neutral mobility



Conversion of light commercial vehicles and cars to electric drives, expansion of charging infrastructure, optimised connection to rail and public transport

Future technologies



Realisation of hydrogen filling station, cluster initiative for the production and provision of sustainable aviation fuel



Promoting sustainable aviation

Incentives for the use of low-emission and lownoise aircraft types, support for airlines switching from fossil paraffin to SAF



Sustainable construction

Realisation of new fire station with photovoltaics, solar thermal energy, heat pumps and green roof; optimisation of indoor air systems, smart technology for temperature control



Cluster initiatives / partnerships

Innovation partnership with EUREF, joint project HyPerformer Rhine-Ruhr region, Düsseldorf Climate Pact, exchange with start-ups



Our Road to Zero.

Saying goodbye to fossil age

DUS creates the infrastructure for clean mobility.

 H_2

Hydrogen use / hydrogen filling station and passenger buses



Electrification of vehicle fleet

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Expansion of e-charging infrastructure



Sustainable fuels for ground mobility and aviation



E-tractors and baggage trolleys



Electric propulsion systems for aircraft





Elektromobility DUS

E-Vehicle fleet





50 %





Charging infrastructure



₩ in 2023 150 **bis 2025** 400

Düsseldorf Airport

Environmentally friendly energy supply

Renewable energy production @ DUS



- First photovoltaic installation on an apron in Germany
- Producing 5 million kW/h electricity
- Saving more than 3,650 t CO2 per year

Commissioning in 2025: one of the largest photovoltaic installations on an apron in Germany

- New solar farm coming, 150,000 m² next to northern runway
- Producing 15.5 million kW/h electricity per year
- Saving more than 3,600 t CO₂ per year
- 16 MW/peak building of power storage
- "PPA model" (Power Purchase Agreement): Partner builds and operates the plant, all of the electricity generated is fed into the airport grid



Sustainable construction

Smart technology for temperature control @ DUS



Meteoviva: Predictive, simulation-based indoor climate control

Energy savings

- 2,350 tons of CO₂/year
- 13,408 MWh/year (heating)
- 1,562 MWh/year (cooling)
- 1,606 MWh/year (electricity)

Completion 2025





Promoting sustainable aviation

Sustainable aviation fuel @ DUS



- Long-term increase in SAF fuelling via partnerships
- Binding, increasing SAF quotas from 2025 with 2% and up to 63% in 2050
- DUS Airport charges set SAF incentives
- Influence on SAF value chain limited → focus on establishing partnerships to produce SAF in NRW





Working together to protect the climate

Strategic partnership in the field of sustainable energy and mobility



Cooperation with the EUREF Campus:

- Technological impetus for energy efficiency in building sector
- Technologies for decarbonizing air and landside transport, e.g. hydrogen technology
- Production and supply of sustainable aviation fuel (CO₂-neutral kerosene)
- Strengthening intermodality
- Research and teaching in real lab
- In planning: joint marketing of event spaces







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