EindhovenAirport

Eindhoven Airport

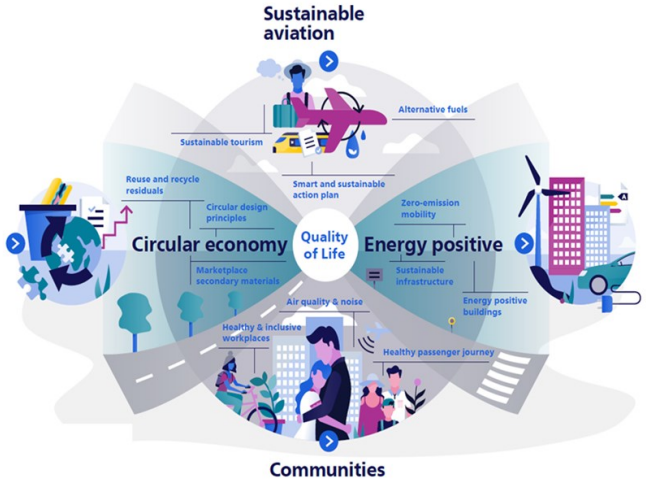
We make our region even better

We make our region even better

- We create connections
  - Europe at your fingertips with ease and comfort
- We are a good neighbour
  - Providing as many benefits with as little disruption as possible
- We are a worthy gateway
  - A showpiece for a thriving region
- We are an inspiring testing ground for new ideas
  - Leading the region in sustainability and innovation

Sustainability is in our DNA
Any development of the airport must be responsible and sustainable: less nuisance and impact on the environment and surrounding area.

Making Aviation More Sustainable



Combating climate change is the greatest challenge we face on our planet as human beings. Fundamental changes are needed to live within the planet's constraints. Policies and solutions must prevent and reduce further emissions (mitigation) and cope with the unsettled effects of climate change (adaptation). As the climate continues to change, more extreme weather and climate-related events are expected. In line with the Royal Schiphol Group policy 'Sustaining Your World', Eindhoven Airport wants to contribute towards sustainable aviation and set a good example by focusing our efforts on four interrelated themes: Energy; Circular Economy; Sustainable Aviation and the Community.

Because the first two themes are largely tied to our airport operation and real estate activities on our airport grounds, Energy and Circular Economy are within our direct sphere of control. These themes – and the resultant targets – relate to our scope 1 and 2 CO_2 emissions, as well as a small proportion of our scope 3 emissions. We are already making significant progress on both themes, promoting positive change for our partners and stakeholders. Sustainable Aviation and the Environment are themes outside our direct control and relate exclusively to our scope 3 emissions, which account for around 90% of the total CO_2 emissions of Eindhoven Airport*. Even though our direct influence over these topics is more limited, Eindhoven Airport is strongly committed, because of the considerable impact of these themes, to a sustainable aviation future in the Netherlands, Europe and beyond. The topics are interrelated: Energy and the Circular Economy can contribute towards solutions for the Community and Sustainable Aviation. Because we 'walk the talk' in Energy and Circular Economy, we believe we are a credible partner in dialogues about Sustainable Aviation and our Community.

* Based on 2019 data

Our targets

International and national agreements and legislation, as described in ‘Sustaining Your World’, create the framework for the actions we take to combat climate change.

In line with the Royal Schiphol Group policy ‘Sustaining Your World’, our target is to reduce CO_2 emissions from our own operations to almost zero by 2030. For our scope 3 emissions, our target is to reduce CO_2 emissions to zero by 2050. Aviation is characterised as a hard-to-abate sector because reducing CO_2 emissions does not follow the same path as other sectors. By 2030, the national target is to reduce scope 3 emissions to the 2005 level – a 10% reduction compared to 2019. Eindhoven Airport has committed itself to this national target. But our ambition goes further: along with the regional stakeholders from the Luchthaven Eindhoven Overleg (LEO), we have detailed a proposal to use revenues from the announced passenger aviation tax for sustainable fuels on flights departing from Eindhoven Airport. Through this method of financing, it would be possible to achieve such a high percentage of kerosene blending that CO_2 emissions from flights departing from Eindhoven Airport could be reduced by more than half by 2030. Given the relatively small scale of Eindhoven Airport and its mainly European traffic, EA could be an excellent test case in the Royal Schiphol Group with the central government’s cooperation.

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2030 Sustainability Roadmap

Eindhoven Airport's Targets (by 2030)

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Environment

- Encouraging fleet renewal (at least 60% by 2030) to reduce noise, CO_2 emissions and air pollution
- Encouraging sustainable transport to and from the Airport
- Encouraging sustainable employment and CSR projects

Sustainable Aviation

- National target: 2030=2005 (i.e. 10% reduction compared to 2019)
- Nationwide: 14% sustainable fuel blending
- Pieter van Geel's recommendation: 20% blending
- EA's ambition: 50% blending subject to using full revenue from announced passenger aviation tax for departing passengers from EA, availability and financial feasibility.

Energy

- 0% CO_2 emissions
  Control activities
- 0% CO_2 emissions
  Ground service equipment

Circular Economy

- 0% waste
  (100% reuse/recycling)
- 50% less use of natural resources

Structure of the Roadmap

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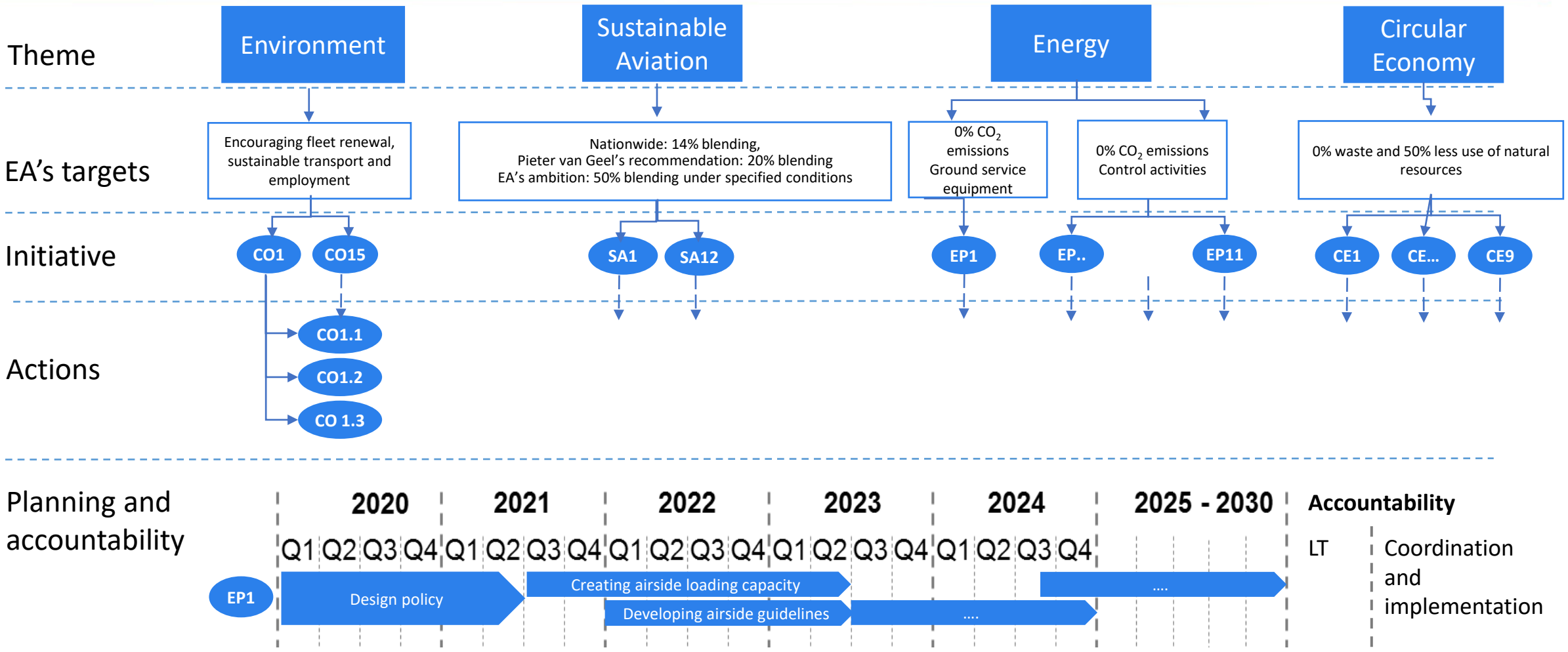


Community

An enduring relationship with the community

Airports are an important driver of regional economic development. Providing added value for the region thus plays a key role in Eindhoven Airport's positioning. It is undeniably important that the airport maintains an enduring relationship with the local community, with regional partners and with the people who work at the airport.

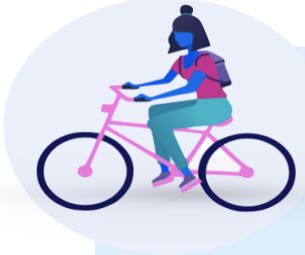
Eindhoven Airport is working on a better balance between the positive and negative environmental effects of its operations to make the airport and its surrounding areas a pleasant environment in which to work and live.

Three main objectives have been formulated in the sustainability strategy for the period until 2030: (1) encouraging fleet renewal to limit noise pollution for the environment and to improve air quality as much as possible, (2) encouraging sustainable transport to and from Eindhoven Airport, and (3) encouraging sustainable employment and employability and delivering corporate social responsibility projects.

Environment

In dialogue with the local community

- To create support for EA's development, it is important to involve the surrounding area
- This should first be done by setting up a permanent consultative structure.
- The community also needs to be kept updated on current developments



Sustainable work environment

- The community is made up not only of local residents, authorities and businesses, but also EA's employees
- A sustainable working environment can be created first by focusing on sustainable, healthy and smart workplaces and, second, by paying attention to sustainable employability

Dealing responsibly with external effects

- It is essential for aviation's right to exist that EA deals responsibly with the adverse external effects of aviation
- To this end, EA needs to focus on air traffic and air quality (noise, (non-)CO_2, nitrogen, ultrafine particles) and on landside traffic (e.g. sustainable modes of transport as a substitute for shorter travel distances)

Added value for the region

- Besides the need to deal responsibly with the external effects of aviation, EA also wants, as an organisation, to create added value for the region from the opportunities that the airport offers
- This can be achieved, for example, by focusing on local nature conservation and biodiversity, contributing to regional education and supporting people distanced from the job market

Community Initiatives

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Dealing responsibly with external effects

- CO 1 Dialogue with region
- CO2 Noise reduction
- CO3 Effort to include sustainability as a criterion in slot allocation
- CO4 Sustainability in airport charges
- CO5 Encouraging the replacement of short-haul flights with sustainable modes of transport
- CO6 Investing in infrastructure for accessibility, focusing on sustainability
- CO7 Encouraging sustainable modes of transport
- CO8 Encouraging air cargo sustainability
- CO9 Ultrafine particle reduction
- CO10 Nitrogen reduction

Added value for the region

- CO11 Commitment to local nature conservation and biodiversity
- CO12 Contributing to regional education
- CO13 Supporting people distanced from the job market
- CO14 Creating sustainable, healthy and smart workplaces
- CO15 Sustainable employability

Community Actions

	Roadmap initiatives	Actions	Status
Dealing responsibly with external effects	CO1: Strengthening dialogue with the region and working towards a constructive governance structure	• Working together with the community on future, long-term improvements and keeping the community updated and involved in current developments: the Luchthaven Eindhoven Overleg (LEO) was set up in 2021 to implement Van Geel's recommendation – 'Opnieuw Verbonden' (Reconnected).	In progress
	CO2: Noise reduction	• Freeze # of flights at 41,500 per year until at least 2022 • Implementing Van Geel's recommendation in 2022 and 2023 (new noise control model: aiming to reduce the calculated noise level also has a positive effect on air quality). Amendment of the Eindhoven Airport regulatory enforcement decision. Reduction standards are laid down in a joint-use permit.	Completed In progress
	CO3: Effort to include sustainability as a criterion in slot allocation	• The possibility of taking account of the aspect of sustainability, or CO_2 reduction, in slot allocation is not yet possible from a regulatory perspective and would require a far-reaching legislative process at EU level. EA and Royal Schiphol Group (RSG) are working together to change this.	In progress
	CO4: Sustainability in airport charges	• Differentiation of airport charges • Encouraging fleet renewal (at least 60% by 2030). A substantial fleet renewal of the airlines currently operating at EA is expected. EA will do its utmost, including through differentiated airport charges, to ensure the newest fleet is used at EA. 60% fleet renewal by 2030 is thus considered realistic and achievable. • Sustainable Landing and Take-Off charge has been prepared (to be introduced from 2023), differentiated in Noise and Nox • Research including non-CO2 differentiation in sustainable landing and take-off charge	Completed In progress Completed Target
	CO5: Encouraging the replacement of short-haul flights with sustainable modes	• A study on electric flying (Power-up) is currently underway. Short-haul flights with small passenger numbers are eventually expected on a trial basis. This will probably happen as from 2025.	In progress
	CO6: Investing in infrastructure for accessibility, focusing on sustainability	• Project to build a fast charging station has started, to be implemented by 2023 • Improving the link (frequency, times, size of buses) between public transport and the flight schedule by cooperating with Hermes and continuing to encourage passengers to use public transport. Ongoing conversations (2022)	In progress Target
	CO7: Encouraging sustainable modes of transport	• 100% sustainable taxi fleet by 2030 through contractual arrangements with taxi companies • 100% sustainable car rental by 2030 through contractual arrangements with car rental companies • Achieving 100% sustainable public transport: Province of Brabant: 100% electric bus transport in Brabant from 2025 Energy and Mobility – Province of North Brabant • Municipality of Eindhoven has signed a roadmap for zero emission taxis: by 1 January 2025 bijlage-routekaart-ze-taxi.pdf (overheid.nl)	Target Target In progress Completed
	CO8: Encouraging air cargo sustainability (suppliers, etc.)	• Encouraging keeping suppliers' transport movements to a minimum. Working with partners to combine the delivery of goods and thus reduce the number of transport movements and setting requirements, or arranging for requirements to be set, for transport with sustainable fuel where electric is not yet possible.	Target

Community Actions

	Roadmap initiatives	Actions	Status
Added value for the region Dealing responsibly with external effects	CO9: Ultrafine particle reduction	• In Q2 2022, research on ultrafine particles on the airport apron in cooperation with Defence • Depending on the results, the National Institute for Public Health and the Environment (RIVM) and Schiphol will decide on research into the concentration of ultrafine particles in the environment and the contribution by EA-related activities	In progress Target
	CO10: Nitrogen reduction	• Draft decision on Nature Protection Act has been published. Various views. Awaiting reaction from Ministry of Agriculture, Nature and Food Quality	In progress
	CO11: Commitment to local nature conservation and biodiversity	• Eindhoven Airport District's area vision has been drawn up. Several task forces have been established in which EA participates to develop this further.	In progress
	CO12: Contributing to regional education	• Investigating future possibilities in cooperation with partners, Stichting Samen voor Eindhoven (Together for Eindhoven Foundation) and Impact040	In progress
	CO13: Supporting people distanced from the job market	• EA has partnered with Impact040 and the first Buddy project has been launched. • Examining the possibilities for a Social Return On Investment (SROI) in future contracts	In progress In progress
	CO14: Creating sustainable, healthy and smart workplaces	• Vitality programme running. Leadership programme running. • Hybrid Working Plan was implemented on 1 June 2021. The current office space has been furnished with ergonomic workplaces trying to use as many sustainable materials as possible.	In progress Completed
	CO15: Sustainable employability	• Implementing the Sustainable Employability policy	In progress

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Sustainable Aviation

Sustainable Aviation

- A net-zero aviation sector in 2050 can be achieved through major technological developments, such as alternative fuels and radical fleet innovation (hybrid/electric/H2)
- Because of its relative small scale and the type of traffic (mainly European), Eindhoven Airport can be used as a test case to contribute to and accelerate these developments
- Among other things, the actions in this roadmap are aimed at:
  - Sustainable Aviation policy and innovation
  - Encouraging fleet renewal
  - Promotion of sustainable aviation fuels (SAFs) based on renewable feedstocks
  - Airspace review
- Actions have also been formulated on several themes:
  - Sustainable passenger journey. Informing passengers about sustainability and offering sustainable alternatives.
  - Climate adaptation
  - Human trafficking and flora and fauna trade
- Meanwhile, several ongoing programmes contribute towards CO_2 reduction
  - Destination 2050
  - Fit for 55, including EU ETS (in 2019: 81% of the CO_2 emissions of flights departing from Eindhoven Airport)
  - Sustainable taxiing (on one engine instead of two)

Sustainable Aviation and Passenger Journey initiatives

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Sustainable Aviation		Sustainable Passenger Journey	
SA1	Policy development	SA8	Integrating the sustainability element into the customer experience and offering passengers sustainable choices
SA2	Sustainable aviation fuels	SA9	Actively communicating with passengers about sustainability
SA3	Improving airspace procedures	SA10	Offering passengers the possibility of local or other carbon offsetting
SA4	Climate adaptation	SA11	EA policy on human trafficking or other illegal trade
SA5	Sustainable taxiing		
SA6	Reducing APU use		
SA7	Eurocontrol Collaborative Environmental Management (CEM)		

Sustainable Aviation Actions

	Roadmap initiatives	Actions	Status
Sustainable Aviation	SA1: Policy development	• Continuing to participate in the Sustainable Aviation Table and initiatives to make the aviation sector more sustainable, including the 'Smart and Sustainable' action plan • Keeping up to date and helping to promote international policies • Introducing CDA landings, route optimisation	In progress In progress Completed

	SA2: Renewable fuels	• Implementing Van Geel's recommendations: reducing noise and emissions in EA air traffic by 2030
		  • Nationwide: 14% blending by 2030
		  • Pieter van Geel's recommendation: 20% by 2030
		  • EA's ambition: 50% blending subject to using full revenue from announced passenger aviation tax for departing passengers from EA, availability and financial feasibility.
		• If necessary: building the necessary infrastructure to blend renewable fuels while considering scaling-up options for 2030
			In progress
			
			Target

	SA3: Improving airspace procedures	• Schiphol Group closely monitors national and European developments and participates in international projects such as the Single European Sky (SES) initiative, which calls for a single unified European airspace free of national borders to support the region's long-term aviation capacity requirements. Along with our European partners, we are actively promoting the accelerated introduction of SES because of its potential to modernise the European air traffic control system and to boost efficiency in ground processes, aircraft handling and airport use. European governments are leading the way with Eurocontrol and national air traffic control.	In progress
	SA4: Climate adaptation	Implementing the area vision • Conducting a risk analysis on the impact of a changed and more extreme climate on and around the airport • Evaluating the risk analysis and determining the next steps for the climate adaptation of Eindhoven Airport and its surrounding area • Working with partners and the municipality of Eindhoven on developing the Eindhoven Airport District and accessibility to it • Working with partners and the municipality of Eindhoven on developing the Eindhoven Airport District and its local nature conservation and biodiversity	In progress
	SA5: Sustainable taxiing SA6: Reducing APU use	Conducting a Sustainable Taxiing pilot project in 2022. If the result is positive and there is support from the surrounding area, recording it in the Aeronautical Information Publication (AIP)	In progress
	SA7: Eurocontrol Collaborative Environmental Management (CEM)	Keeping up to date with the implementation at Schiphol. Implementing elements with proven added value and potential added value for EA	In progress

Sustainable Passenger Journey Actions

	Roadmap initiatives	Actions	Status
Sustainable passenger journey	SA8: Integrating the sustainability element into the customer experience and offering passengers sustainable choices	• Shared e-bikes at EA for passengers and employees • Adapting additional facilities for shared e-scooters for passengers and employees • MaaS platform for own ticketing (B2C) on own website (further rollout in 2022) • Developed Mobility Roadmap for all transport flows to and from the airport (passengers and employees) • Trains already run on wind power, almost all buses to/from Eindhoven are electric. • Examining whether it is possible to also place an offsetting module on the website	Completed Completed Completed Completed Completed In progress
	SA9: Communicating actively with passengers about sustainability	• BurenApp introduced, local magazines and social media. • New EA sustainability page is live. • Drawing up sustainability criteria for new catering and retail operators and working with current operators to make arrangements for a more sustainable range of products/sustainable choices. Examples: a minimum percentage that is sourced locally and a discount for using your own mug	Completed Completed Target
	SA10: Offering passengers the possibility of local or other offsetting	• Developing an action plan to ensure that customers come across sustainability elements on their journey and that a sustainable alternative is available for all choices that a passenger makes during their journey • Investigating the CO_2 offsetting options for flights departing from EA (possibly combined with producing and/or using SAF), including offering them to passengers (for the flight and/or parking) • Sustainability elements are included in EA's mobility roadmap and the possibility of including an offsetting module in the parking booking system is currently being examined.	Target Target Target
	SA11: EA policy on human trafficking or other illegal trade	Royal Netherlands Marechaussee's (KMar's) recommendations are being developed under KMar's direction with a large group of those involved at the airport	In progress

Energy

Emission-free by 2030

Energy is categorised according to the three power sources used at Eindhoven Airport:

- **Fuel** of the ground-support equipment (GSE) of both Eindhoven Airport and its partners will be reduced to zero. A good sustainable alternative does not yet exist for many ‘heavy’ vehicles. Sustainable diesel (e.g. HVO100) is a transitional solution while we continue to monitor H2-related developments.

- **Gas** is mainly used for heating buildings; a small portion is used for cooking and hot water. Since 2019, all of EA’s gas consumption has been 100% green.

- **Electricity**-related indirect CO_2 emissions have been reduced to zero by purchasing 100% Dutch wind energy. This category also includes PV power generation, energy efficiency and investments in grid capacity. Electricity consumption will increase (less gas and fuel, more electric installations and vehicles). Limited electricity for electric flying is included until 2030. Possible alteration/expansion of EU ETS for the built environment.

Zero-Emission Initiatives

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	Zero-emission mobility	Energy positive buildings	Renewable energy
Own	EP2 Zero emission fleet EA EP3 Sustainable commuting	EP4 Heat Strategy EP5 Sustainable buildings	EP7 Energy management EP8 Solar power EP11 Emergency Power
Partners	EP1 Zero emission airside	EP6 Researching in-house grid management	EP9 Robust energy grid EP10 Third-party obligations

Zero-Emission Mobility Actions

	Roadmap Initiatives	Actions	Status
Zero-emission mobility	EP1: Zero-emissions airside	• Developing an investment and implementation plan for airside-loading capacity (Masterplan-E) • 100% electric GSE, agreements with partners to replace GSE with electric variants. Included in the details of Masterplan-E. 60% already achieved (2022) • Introducing vehicle registration and airside policy	Completed In progress Target
	EP2: Zero-emissions fleet at Eindhoven Airport	• All but one of EA's leased office cars are electric. Last lease car will be replaced by electric in 2022. • All but one of EA's technical cars are electric. Last technical vehicle (T1) will be replaced by electric in 2024. • Snow and ice-clearing vehicles fall under heavy equipment. Introducing sustainable HVO100 fuel by 2026 as a temporary alternative (until at least 2030, and then possibly electric).	In progress In progress Target
	EP3: Sustainable commuting and business travel	• Possibility of buying an e-bike through the Individual Choice Budget. • EA implementing the Hybrid Working Regulation in 2021. More digital meetings, a shift in the number of days working from home and fewer business trips. • Business air travel is fully offset through a local biogas project. • EA is looking at participating in corporate SAF programmes and voluntary passenger programmes. • Infrastructure for bicycles and shared scooters has been upgraded • Commuting third parties, travellers, logistics and construction flows are expected to adapt to the Dutch climate agreement • Additional tightening up of footprint with mode of transport for own employees/partners • Annual monitoring of commuting and business travel • As from 1 January 2022, guiding parking policy towards partners (introducing incentive in the form of a pay-per-use model based on the polluter pays) • Participation in Eindhoven North-West mobility deal (employers' approach to commuting) • Drawing up a sustainable mobility policy (commuting and minimising business travel)	Completed Completed Completed In progress Completed In progress In progress In progress In progress In progress Target

Energy of Buildings Actions

	Roadmap Initiatives	Actions	Status
Energy of buildings	EP4: Heating strategy	• Green gas contract since 2019: 100% of gas consumption is green gas. Verified by Vertogas. • Heating strategy to phase out gas over time, determined in 2021. The focus in the next decade will be on end-of-life replacements: replacing at natural moments. • Built in 2019 from a mix of recycled steel and reused wooden slats, the Main Gateway to the apron can be fully dismantled and is virtually waste-free. A heat recovery system and a heat pump have been used, making a gas connection superfluous. • Determining annual efficiency to improve gas target • Phasing out gas for five existing buildings each year: renovation plan and design of existing building • Including gas-free requirement in tenders for extensions/new buildings	Completed Completed Completed Target Target Target
	EP5: Sustainable buildings	• Cold and Heat Storage (CHS) has been installed to control the climate in the terminal. • Partners and tenants in EA's buildings also use 100% renewable energy • Dutch wind energy contract since 2013: 100% renewable electricity is now purchased. Verified by CertiQ. • All office buildings have a C label or higher. • Continuous implementation of energy-saving measures > reduction in electricity consumption • Minimum zero-energy requirement for new buildings/extensions • Examining renovation plan and design of existing buildings • Implementing Masterplan-E (responsibility for adequate supply for energy transition) Reinforcing the grid (airside phasing) Adapting the grid for solar power • Replacing old IT equipment, old air-conditioning systems for energy-efficient variants, where possible • Replacing current lighting with LED, where necessary • Next-step improvements: smart housekeeping and exploring the potential of direct current at EA • Determining an annual energy efficiency improvement target	Completed Completed Completed Completed In progress Target In progress In progress In progress In progress In progress In progress
	EP6: Researching in-house grid management	• Research into the desirability, feasibility and possibility of managing gas and electricity grids in-house is included in Masterplan-E (see EP1)	Completed

Renewable Energy Actions

	Roadmap Initiatives	Actions	Status
Renewable energy	EP7: Energy management	• ISO 50001 since 2020. Expanding energy monitoring in 2021. • Determining annual electricity efficiency improvement target	Completed Target
	EP8: Solar power	• Solar panels installed at various locations • Following Masterplan-E in 2022, research will be conducted into energy generation and storage, looking at which techniques are feasible and realistic for this purpose until 2030 (also see Eindhoven Airport District area vision) • Energy Trading Platform 2022 study	Completed In progress In progress
	EP9: Robust energy grid	• Mapping out the required grid capacity, accounting for growth and the energy transition (own consumption, mobility, regional developments). This is included in Masterplan-E.	Completed
	EP10: Third-party obligations	• Two commercial properties at Luchthavenweg 59 and 61 and properties allocated under ground leases do not fall within the scope of the applicable environmental permit and are thus outside EA's operational boundaries. • Obligating and encouraging concessionaires and tenants to contribute towards energy transition • Replacing small-scale consumption in catering used for hot water and cooking with electric or H2 (hydrogen) alternatives	Target Target Target
	EP11: Emergency power supply	• Emergency power supply units still run on diesel. Continuing to use fuel until 2030; no developments towards hydrogen propulsion yet. Introducing HVO100 fuel by 2024.	Target

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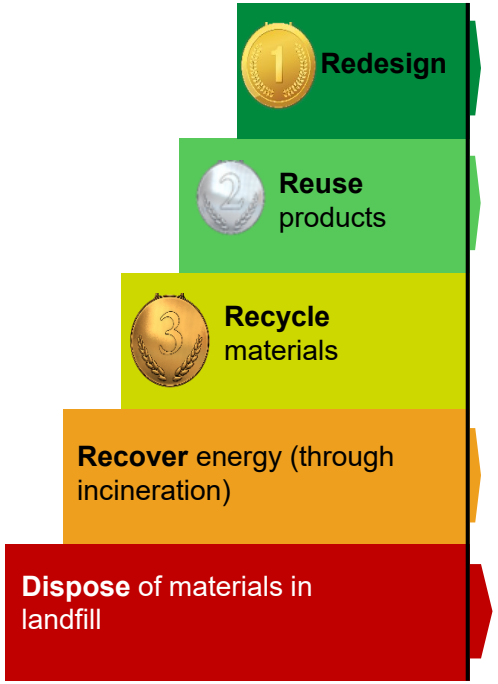
Circular Economy

Zero waste by 2030

Eindhoven Airport has set the target of becoming zero waste by 2030. This means that all unprocessed raw materials, components and products are to be reused or recycled in the most sustainable way possible according to Lansink's Ladder and as close to the airport as is reasonably possible. This avoids landfill and minimises energy recovery through incineration.

To become zero waste by 2030, Eindhoven Airport must:

- Use raw materials as efficiently as possible so that fewer materials are needed.
- Use sustainable materials that are inexhaustible and widely available. In this regard, Eindhoven Airport aims to half its use of primary raw materials by 2030.
- Gain the maximum value from the raw materials used by encouraging circularity as much as possible. For this purpose, high-quality reuse of residue streams must be identified with materials classified as reused, recycled or redesigned according to Lansink's Ladder.
- Explore the options for upcycling materials.
- Reuse materials as close to the airport as is reasonably possible.



Lansink's Ladder

Circular Economy Initiatives

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	Infrastructure/assets	Operational
Front-end	CE1 Circular design and employee training CE2 Materials passport CE3 Action plan for infrastructure flows	CE6 Phasing out of single-use plastic products CE7 Sustainable procurement
Back-end	CE4 Data registration and collection of infrastructure residue streams CE5 Materials hub	CE8 Improving separation and recycling CE9 Research on glycol recycling

Circular Economy Actions

	Eindhoven Airport Sustainability Roadmap actions		
Infrastructure flows	CE1: Circular Design and employee training	• Ensuring: 1. Sustainability touchpoints as additional process steps in the project management process 2. Standard sustainable requirements and material specifications, and structural implementation in developing infrastructure and assets 3. Sustainable procurement requirements for infrastructure and assets (CAPEX projects) 4. Integrating sustainability into a Strategic Asset Management Plan and its development 5. Ensuring that attention is paid to sustainable procurement criteria for Eindhoven Airport in the tendering process	In progress
	CE2: Materials Passport	• Research on a materials passport (for existing and new buildings) in 2022 • If the result is positive, the materials passport for new buildings will be introduced	In progress
	CE3: Action Plan for Infrastructure Flows	• Providing insight into which infrastructure flows at EA have the greatest impact on Eindhoven Airport's ecological footprint. • Drawing up an action plan with the contractors to improve the handling of the largest/most consequential infrastructure flows. • Ensuring that the materials used on the front-end deliver value to the back-end	Completed Target Target
	CE4: Data collection and registration	• Waste contract renewal/new tender of Royal Schiphol Group. Incorporating requirements for 100% reuse/recycling of waste by 2030	In progress
	CE5: Materials Hub	• Researching with the contractors, region and other stakeholders whether a structural regional materials hub close to EA is valuable or whether a materials hub should be set up mainly on a project basis • Continuing to work with contractors to find opportunities to locally reuse materials in projects. Including local reuse as a criterion in the tender, where relevant	Target Target
Operational residue streams	CE6: Phasing out of single-use plastics	• No separate EA policy. NL policy is followed. All partners are on track. Deposits on small bottles have been implemented. • Pilot project in 2022 with return vending machines that issue a voucher.	In progress In progress
	CE7: Sustainable procurement	• See CE.1	In progress
	CE8: Improving separation and recycling	• Providing sufficient separation facilities at EA • Pilot project in 2022 with an airline separating waste on board • Completion of Airside Recycling Centre	In progress Target In progress
	CE9: Glycol recycling	• Monitoring market developments for alternatives to glycol and on improving glycol recycling procedures for lower concentrations	In progress

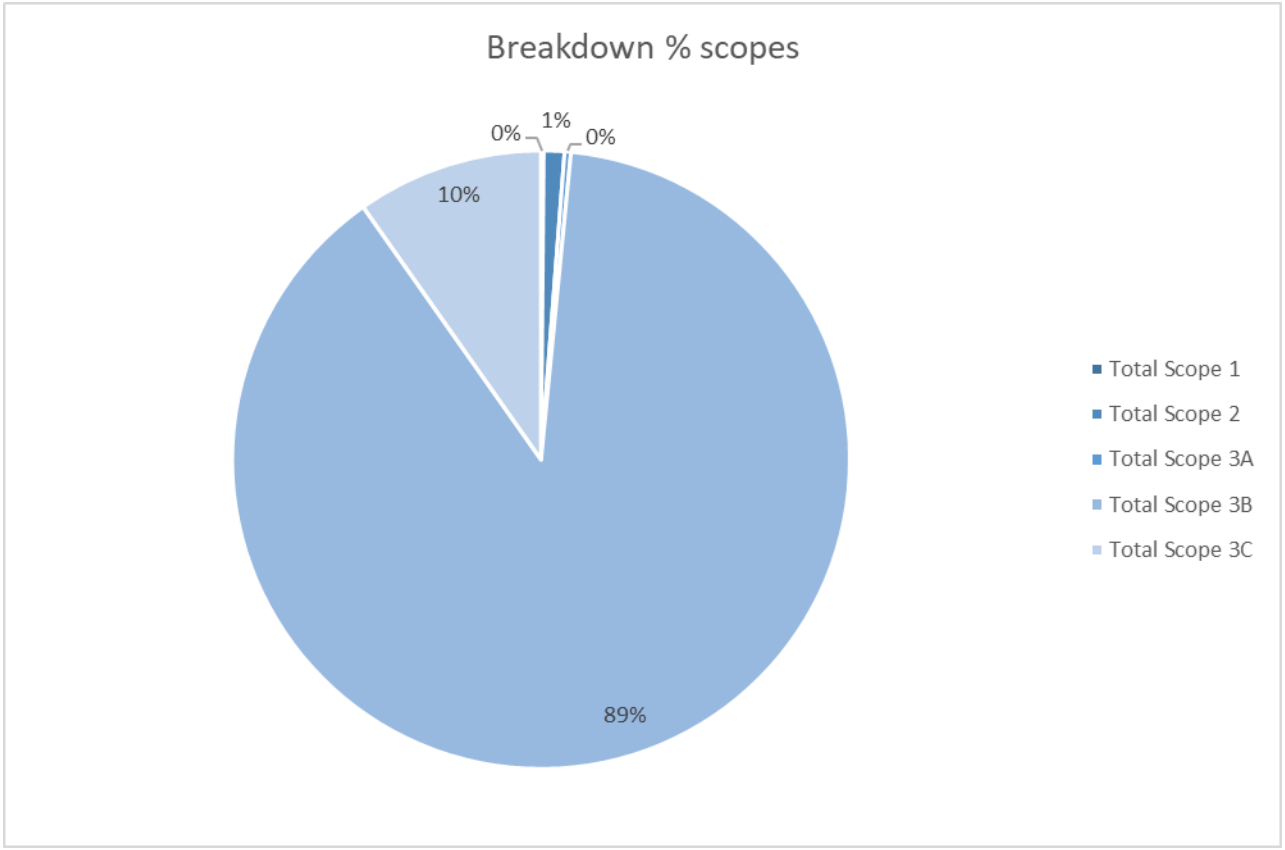
Developments in CO_2 reduction

Overview of scope 1, 2 and 3 and breakdown of themes

	Scope 1	Scope 2	Scope 3		
	Gas- and fuel consumption EA	Elektricity consumption	Energy use (A)	Aviation (B)	Upstream (C)
Energy	Gas consumption EA, incl. tennants EA vehicles incl. lease Emergency Power	Elektricity consumption buildings and terrain EA (incl. tennants)	Ground Service Equipment (GSE)		Business travel employees EA Commuting EA Commuting partners WTT emissions scope 1, 2, 3 (control)
Circular Economy					Snow and ice-clearing Refrigerants Waste Building activities Waste water
Sustainable Aviation				Landing- and Take Off Total flight APU usage Engine test run aircrafts	
Community					Surface Acces

All Defence activities (including air traffic control and fire brigade) are out of scope.

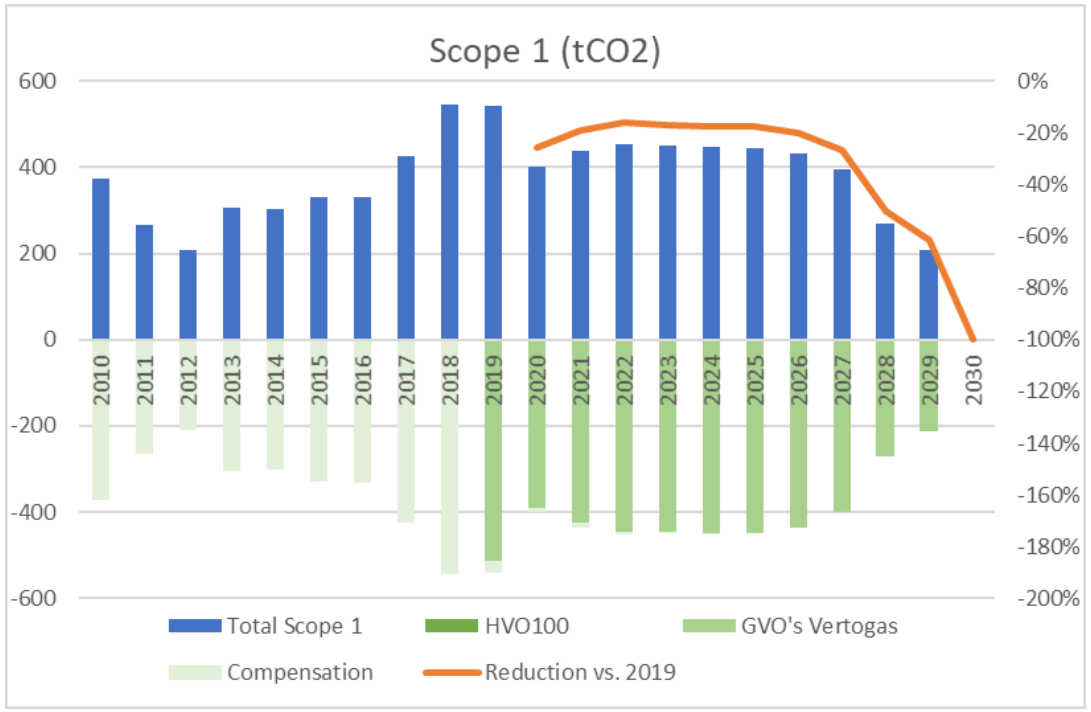
Breakdown of CO_2 emissions into scope 1, 2 and 3

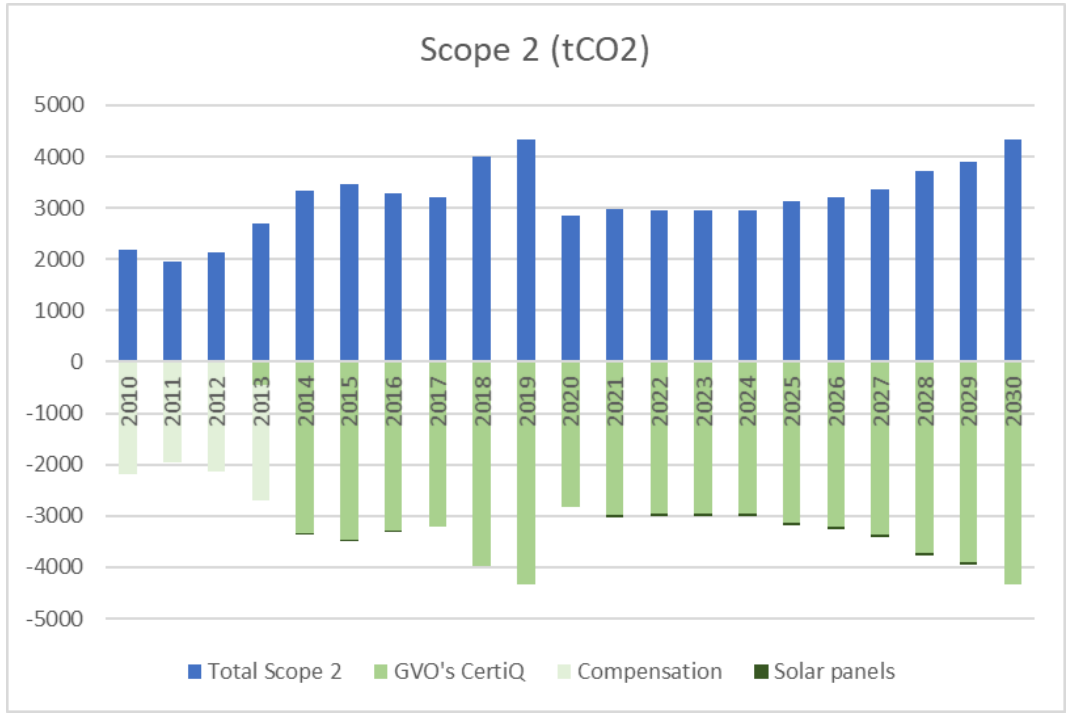


based on 2019 data

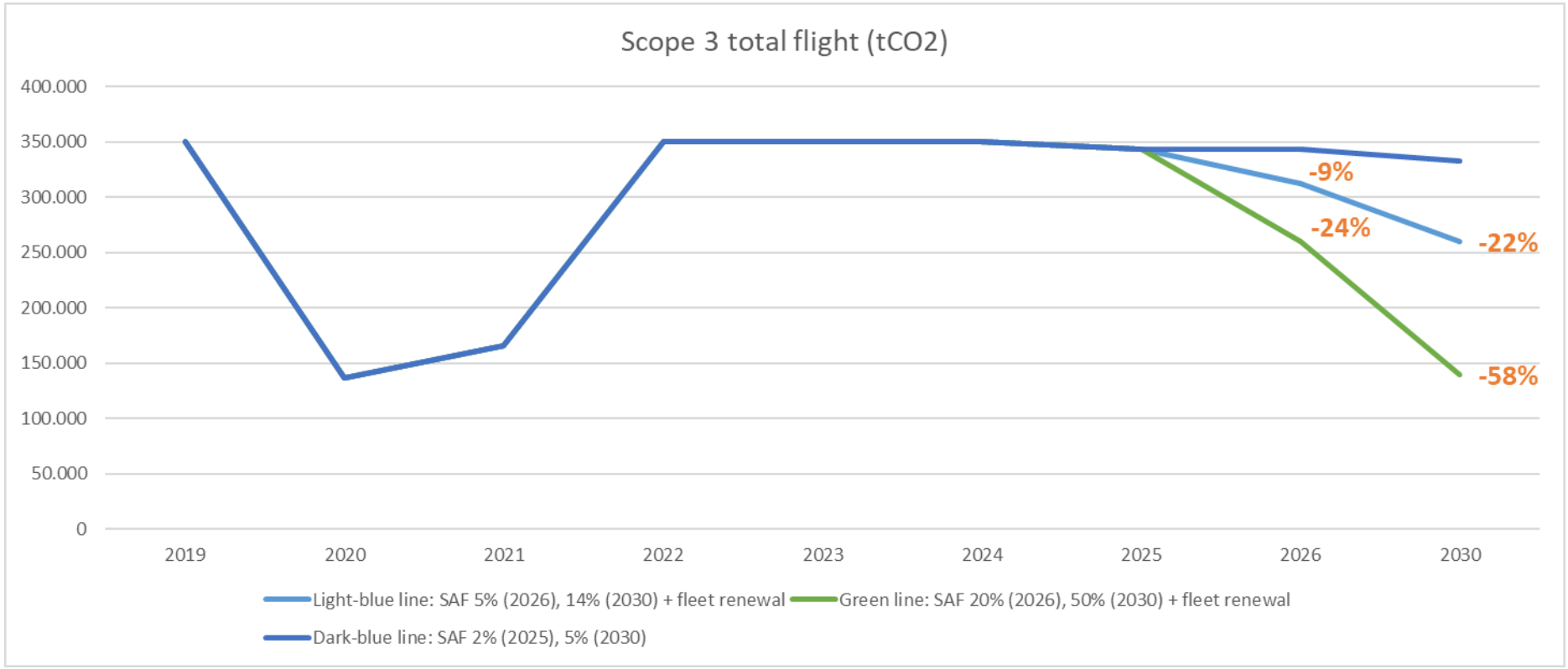
Developments in CO_2 emissions up to and including 2030

EindhovenAirport





Developments in CO_2 emissions up to and including 2030



The ambition of a 58% reduction in CO_2 by 2030 is based almost entirely on achieving 50% SAF blending, subject to the entire EA passenger aviation tax being used for this purpose, financial feasibility and sufficient SAF availability.

Ensuring monitoring and progress

Annual process to ensure roadmap actions

	<YEAR>			
Action	**Q1**	**Q2**	**Q3**	**Q4**
Adopting focus actions roadmap in LT	●			
Status of focus actions by LT members separately	●	●	●	●
Monitoring of roadmap progress by LT	●	●	●	●
Coordination at RSG level	●	●	●	●
Setting targets for the next year				●
Meetings of action holders	●	●	●	●
Coordination at RSG level	●	●	●	●
Annual progress report on RSG roadmap	●			

●: The above actions occur in the relevant quarter

Appendices

Principles of scope 1, 2 and 3A

Gas consumption of buildings

- Gas consumption may increase slightly until the end of 2022 and then remain stable until 2026. This will decrease from 2026 because of the phasing-out of gas in five buildings.

Eindhoven Airport Mobility

- Eindhoven Airport N.V.'s fleet: The last leased office vehicle will be replaced in 2022 and the last operational vehicle will be replaced in 2024.
- Emergency power supply unit: switching to HVO100 from 2024 onwards

Electricity consumption of buildings

- 2023 and 2024 electricity consumption will remain the same (energy-efficient 4% will be offset by electrification of GSE in that year).
- From 2025: additional electrification of GSE minus energy efficiency.
- From 2026: additional electrification of GSE + phasing-out of gas buildings (m^3 converted to kWh).

Ground Service Equipment (scope 3A)

- Diesel consumption based on forecasted flight movements x 6.7 litres /flight movements + electrification every year.
- Introduction of HVO100 from 2026.

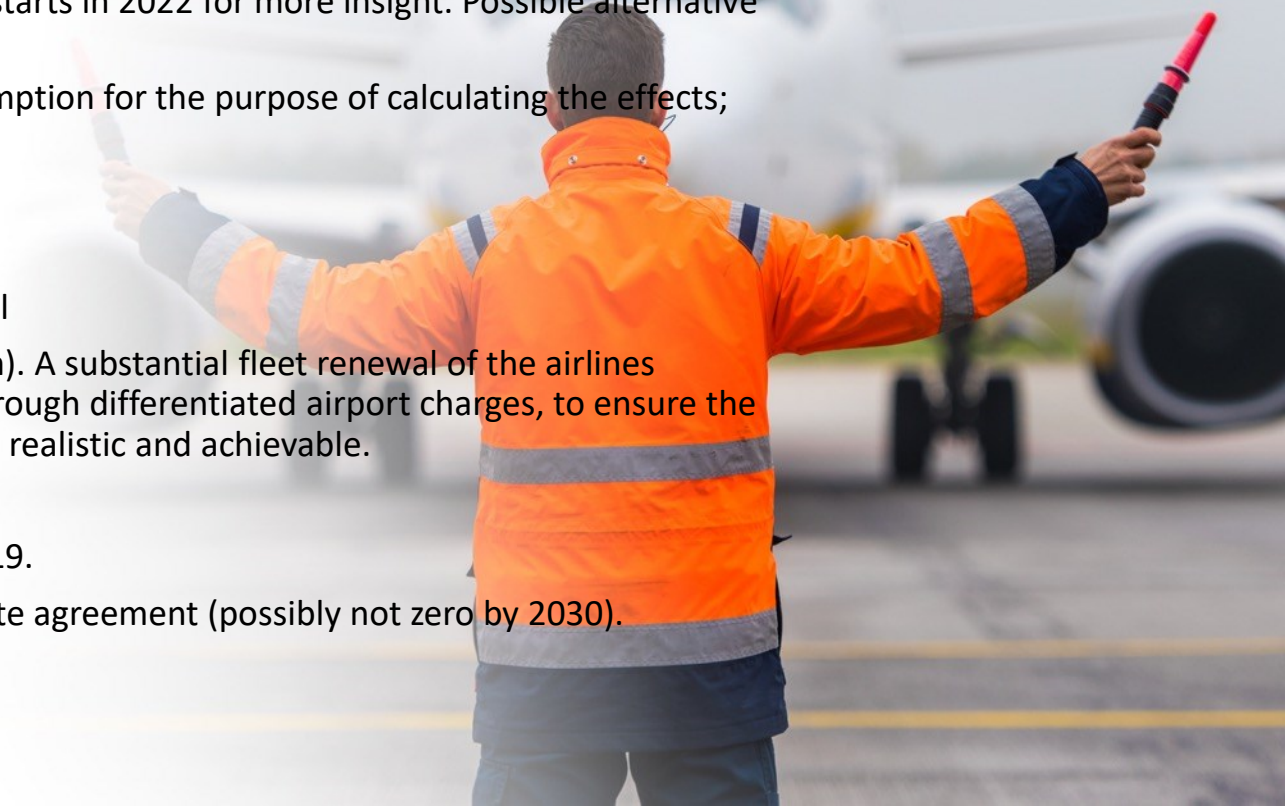
Principles for scope 3 B+C

Flight movements (scope 3B)

- Flight movements for whole flight based on litres of kerosene (tank-to-wheel).
- From 2022 to 2030, 41,500 flight movements: this is a technical/arithmetic assumption and emphatically not a policy-related assumption for the purpose of calculating the effects; for the policy-related aspects of air traffic development up to 2030, reference is made to the principles of the noise control model in accordance with Pieter van Geel's 'Opnieuw Verbonden' (Reconnected) recommendations, as detailed in the Eindhoven Airport regulatory enforcement decision to be amended and the joint-use permits to be granted to EA.
- APU use will be reduced where possible at aircraft stands. Pilot project starts in 2022 for more insight. Possible alternative air-conditioning at aircraft stands
- Trial runs: from 2022 to 2030 = 2019: this is a technical/arithmetic assumption for the purpose of calculating the effects; this is lower than the current space granted for trial runs.
- SAF light-blue line: 2% (2025) and 5% (2030)
- SAF dark-blue line: 5% (2026), 14% (2030) + fleet renewal
- SAF green line: 20% blending (2026), 2030: 50% blending + fleet renewal
- Fleet renewal: 2026: 30% (= 3.9% reduction), 2030: 60% (= 8% reduction). A substantial fleet renewal of the airlines currently operating at EA is expected. EA will do its utmost, including through differentiated airport charges, to ensure the newest fleet is used at EA. 60% fleet renewal by 2030 is thus considered realistic and achievable.

Commuting (scope 3C)

- Business travel for employees of Eindhoven Airport N.V. until 2030 = 2019.
- Commuting employees of Eindhoven Airport N.V.: adapt to the NL climate agreement (possibly not zero by 2030). Additional policies will be formulated.



Carbon offsetting projects

EindhovenAirport

Eindhoven Airport	Quantity (tCO2)	Verifier	Project	Location	Description
2021	200	Climate Neutral Group (VCS)	Biogas	Princepeel (NL)	The biogas project involves several dairy farms and agro pig farms, which, by installing biogas installations, no longer have to dispose of all their manure on local fields. The fermentation of manure and other residual flows produces electricity that is fed into the national power network.
2020	205	Climate Neutral Group (Gold Standard)	Biogas	Uganda	These offset projects provides access to biogas installations in rural areas in Uganda. They are installed on recipients' land by local construction companies. Even if a family owns just two cows, these digesters can generate enough gas for cooking and lighting.
2019	333	Climate Neutral Group (Gold Standard)	Biogas	Uganda	These offset projects provides access to biogas installations in rural areas in Uganda. They are installed on recipients' land by local construction companies. Even if a family owns just two cows, these digesters can generate enough gas for cooking and lighting.
2018	610	Climate Neutral Group (Gold Standard)	Biogas	Tanzania	This project makes biogas installations accessible for families in remote areas. On a piece of land, a biogas installation is installed by local construction companies. The manure from their own livestock is collected in the installation. Fermentation of the manure takes place and biogas is created. This gas is led to the house next door, where it is used for cooking and lighting.

Definitions

EindhovenAirport

Target:	We want to achieve the stated action
In progress:	The stated action is happening and being carried out
Completed:	The stated action has been finalised

APU:	Auxiliary power unit
GSE:	Ground Service Equipment
CSR:	Corporate Social Responsibility

Well-to-wheel (WTW):	The Well-to-wheel approach is used to show that CO_2 emissions are released not only from the combustion process in the vehicle (wheel), but also from the source (well) and over the entire chain at several points in time. Example: the energy needed to manufacture and transport fuels.
Tank-to-wheel (TTW):	The tank-to-wheel approach is used to show the emissions that arise from burning fuel while using the vehicle (fuel tank to wheel).
Well-to-tank (WTT):	The difference between WTW and TTW.