

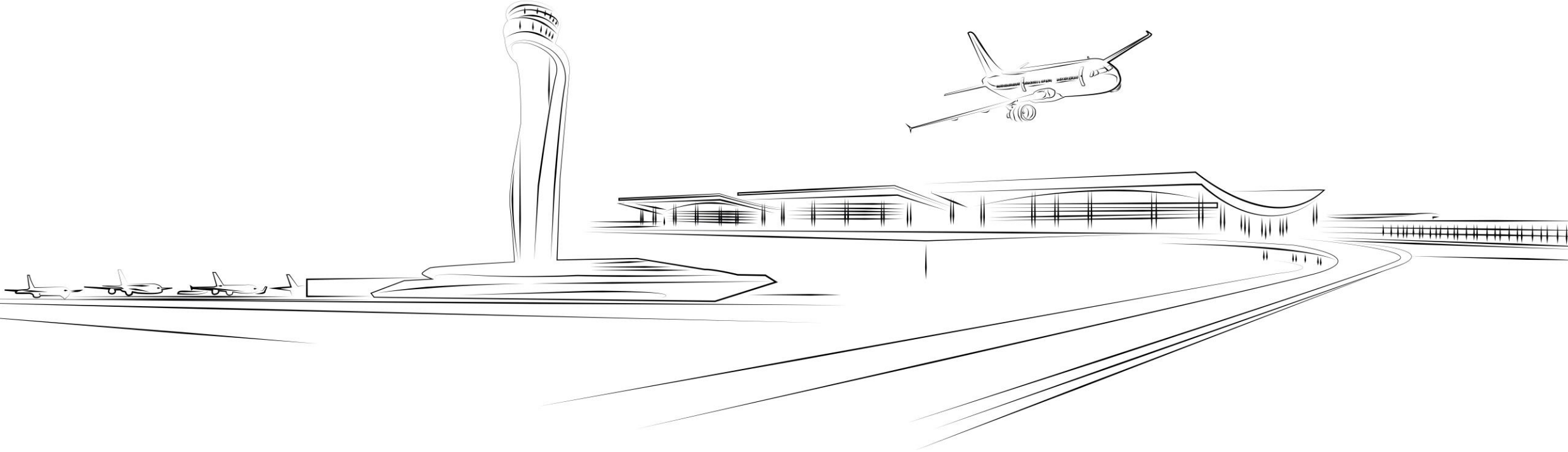


DHMI (TÜRKİYE)

General Directorate of State Airports Authority

Roadmap Towards

Net Zero Carbon 2050





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2050 Net Zero Commitment



- Aviation industry is one of the crucial sectors that needs to prepare for the challenges posed by climate change. Particularly airport infrastructure is very significant in the fight against this threat. In accordance with the Paris Agreement, to which Türkiye is a party, DHMI, as a state owned organisation is one of the airport operators committed to achieving Net Zero CO₂ emissions by 2050 by reducing energy and fuel consumption, investing in low energy vehicles and switching to zero-carbon energy and fuel sources.
- With 43 Airports certified at different levels DHMI is recognized as the airport operator with the most ACA accredited European airports. Moreover, the "Toulouse Declaration" approved by the European Union Council on February 4, 2022, which is the first public-private enterprise supporting the "target of achieving net zero CO₂ emissions by 2050 of European Aviation" was approved also by DHMI.
- In order to align with the IPCC's 1.5 °C goals, in 2020 DHMI initiated a project called as «Carbon-Free Airport Project». To control the environmental impacts of the activities carried out at our airports and to ensure sustainable airport operation in addition to national legislation requirements regarding the management of carbon (greenhouse gas), natural resource use, air pollution, noise, waste and wastewater and chemicals projects' applications have been disseminated in all our 50 airports. Moreover, ISO 14001 system has been implemented in airports and collaboration with other stakeholders at airports is very crucial in all of these activities for a sustainable airport operation.





Climate Change & Energy Management Efforts



- This roadmap meticulously details our eco-friendly practices such as; use of renewable energy resources, smart building systems, LED conversions, and adoption of electric vehicles, etc. Each step is a deliberate move towards net zero carbon by 2050.
- The construction of solar power plants with a total installed power of 3.5 MW at 6 airports has been completed and we are working to expand the construction of solar energy systems to all airports.
- We are working on the conversion of heating and cooling systems to natural gas-powered systems (LNG, LPG, CNG) that provide less emissions. At the same time, it enables airports to switch to automated lighting, heating, cooling and ventilation systems to consume less energy. Moreover, existing lighting systems inside and outside the terminal at airports are converted to LED.



Climate Change & Energy Management Efforts

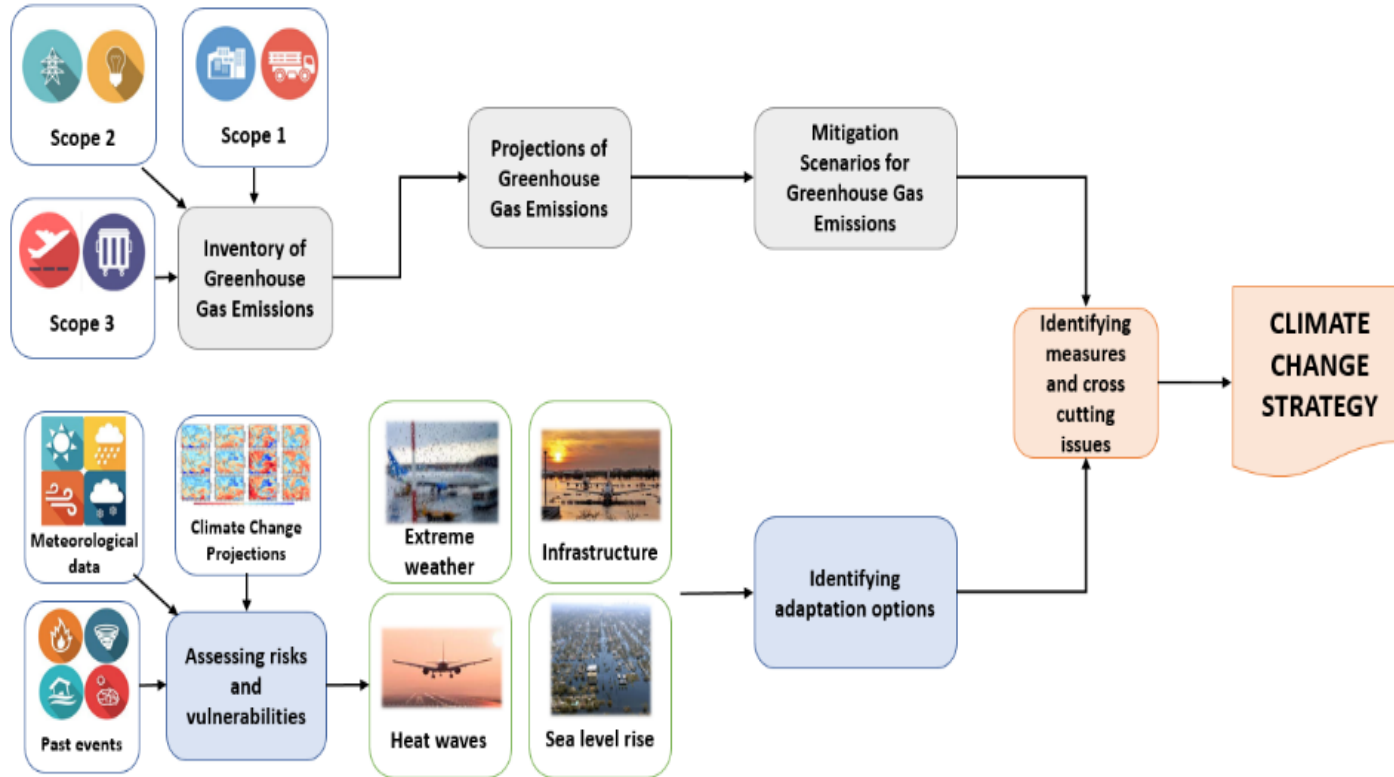


- We have supplied 15 TOGG's which are home production electric-vehicles in order to transform the vehicles operating at airports into electric vehicles and we plan to supply more in the future. The ground services and other vehicles at the airports are converted to electric vehicles.
- Moreover, in order to efficiently use the water resources of our country, which is among the countries in the high risk group in terms of climate change impacts, a water saving project has been developed and implemented at our airports to ensure that the water is collected in the RFF supply pool in order to recycle and reuse the water used during the daily checks of the RFF vehicles used at our airports.
- In addition to all of these, as DHMI we organize afforestation festival with our airports' personnel and to form sinks for carbon footprint in the medium and long term we will go on all these afforestation efforts.
- All our GHG-related commitments and progress updates are readily available on accessible platforms, showing our dedication to accountability and openness.





Gaziantep, Erzurum, Ordu Giresun and Muğla Milas Bodrum Airports Climate Change Strategies Preparation Project



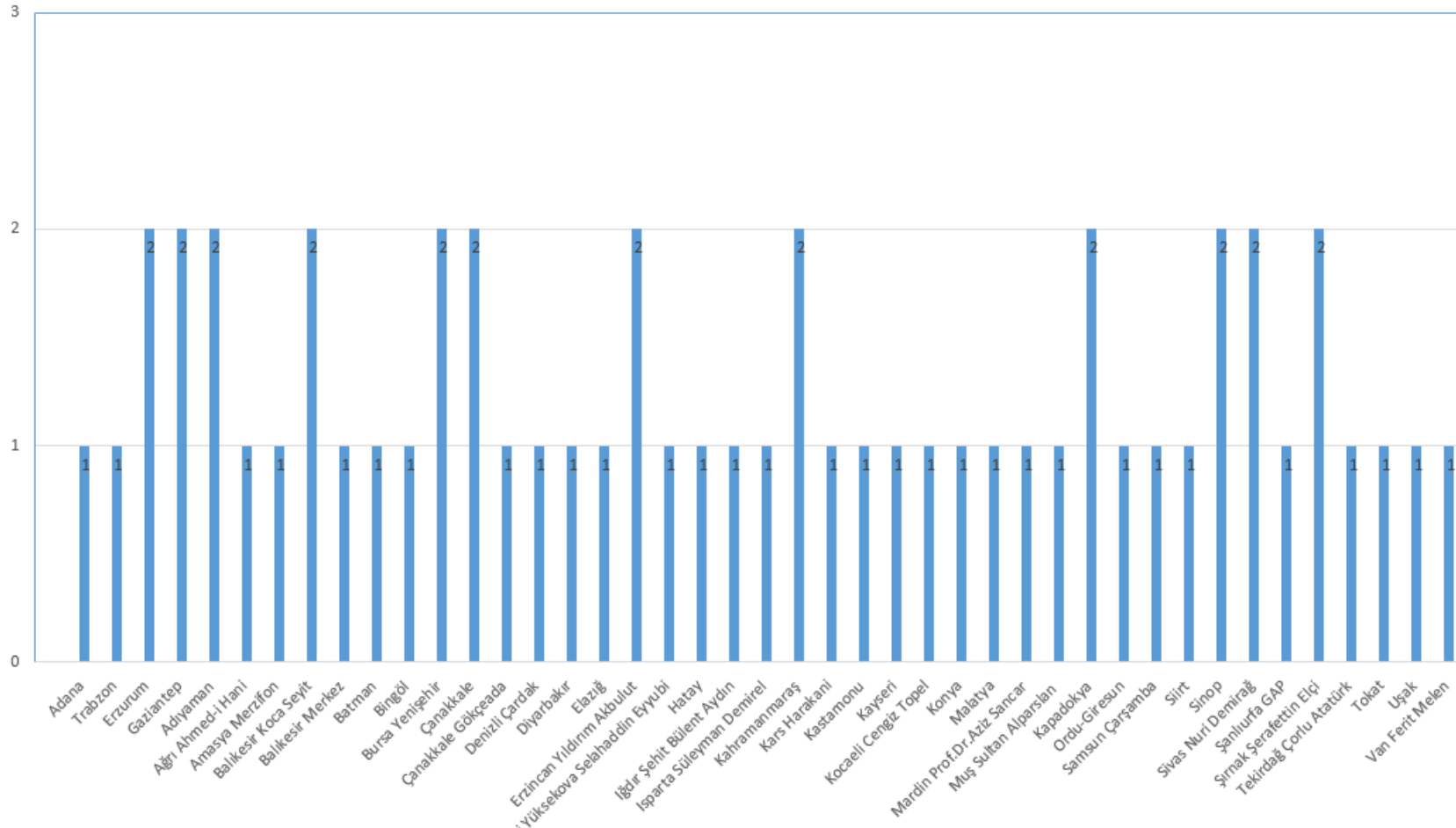
- We have carried out «Gaziantep, Erzurum, Ordu Giresun and Muğla Milas Bodrum Airports Climate Change Strategies Preparation Project» with TÜBİTAK-MAM (The Scientific And Technological Research Council of Türkiye). Project includes; preparation of inventories for greenhouse gas emissions, determination of emission-intensive areas within the scope of the activities carried out in airports, revealing the expected impacts of climate change in the region and determining the areas that will be most affected by climate change interms of airport activities. After identification of vulnerable areas, mitigation and adaptation measures has been chosen based on cost and benefits approach. In the light of the evaluations carried out, «Climate Change Strategy Documents» have been created specific to the four airports mentioned and projections have been obtained for carbon reduction in the future. To move towards net zero carbon we have intention to realize this project in the other airports too.



Airport Carbon Accreditation (ACA) Programme



Airport Carbon Accreditation Levels of DHMI Airports



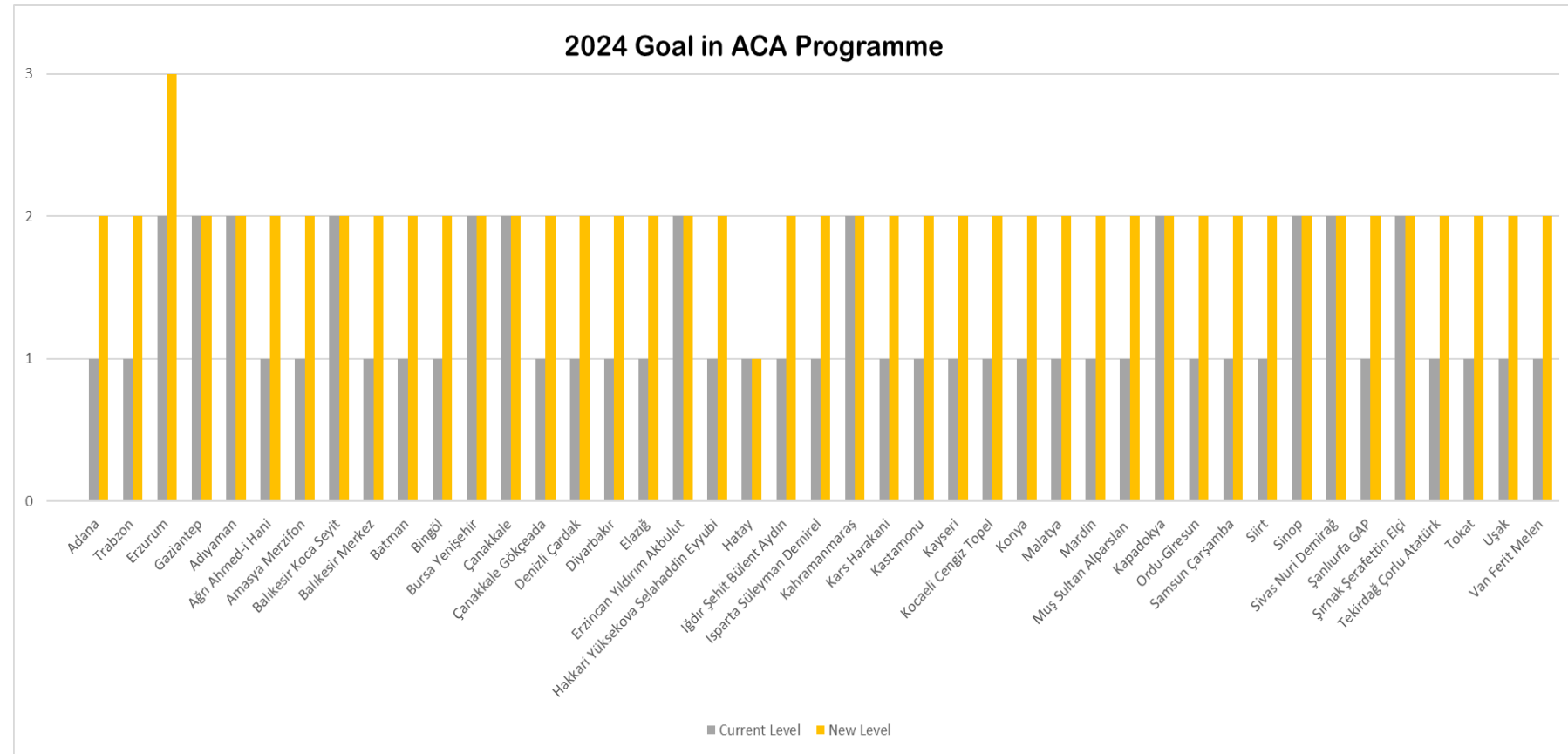
- Since 2021, as part of our Carbon-Free Airport Project we have certified 43 airports within the scope of the ACA Programme. Carbon emissions from our airports have been calculated in accordance with the internationally valid TS EN ISO 14064-1 standard and verification procedures have been completed in accordance with the TS EN ISO 14064-3 standard.
- 31 Airports- Level 1 Mapping
- 12 Airports- Level 2 Reduction



Now where are we in ACA Programme?



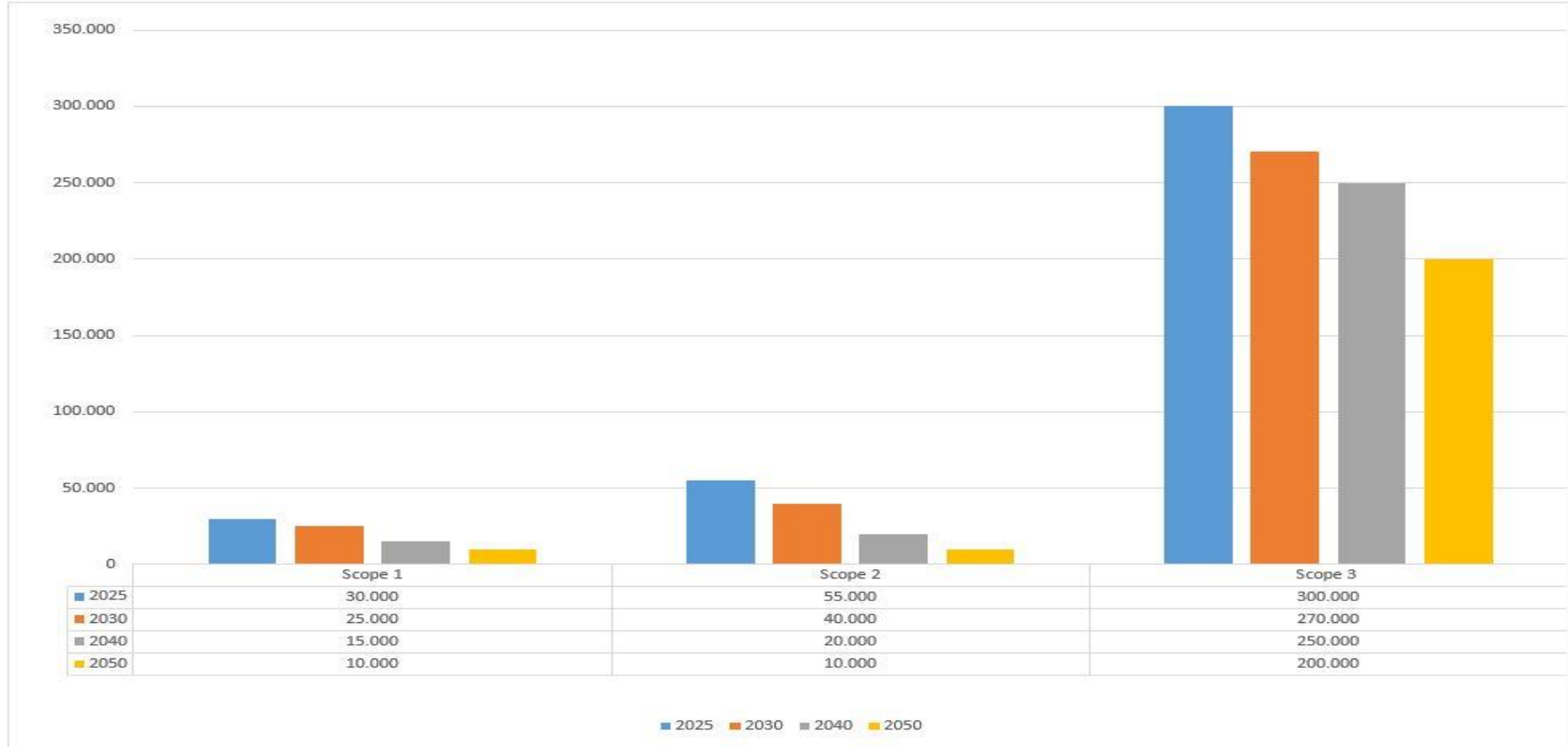
- In 2023, we started to work for upgrading certificate levels of our airports. Due to the number of our airports and volume of the applications is high, certification process is still going on. Verification process is about to complete. When the processes are fully completed:
- 30 Airports certificates will be upgraded from Level 1-Mapping to Level 2-Reduction,
- 1 Airport (Erzurum Airport) will be upgraded from Level 2-Reduction to Level 3-Optimization,
- 11 Airports will be constant at Level 2-Reduction and
- 1 Airport (Hatay Airport) will be constant (Due to the massive earthquake realized on 6th February 2023, data (required for calculations) loss was occurred) at Level 1-Mapping.





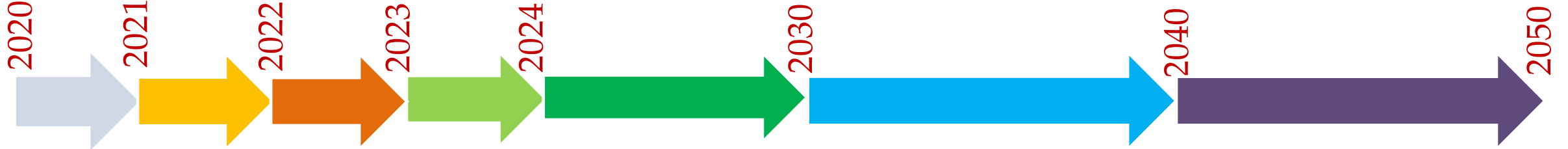
DHMI Goals for Total Emission Values

Carbon Emissions (TCO2E)





DHMI DECARBONIZATION ROADMAP BY 2050



Carbon-Free Airport Project

- 1-Gaziantep (L-1)
- 2-Erzurum (L-1)
- 3-Çanakkale (L-1)
- 4-Balıkesir Kocaseyit (L-1)
- 5-Bursa Yenişehir (L-1)
- 6-Sinop (L-1)
- 7-Sivas Nuri Demirağ (L-1)
- 8-Erzincan Yıldırım Akbulut (L-1)
- 9-Kahramanmaraş (L-1)
- 10-Adıyaman (L-1)
- 11-Şirnak Şerafettin Elçi (L-1)
- 12-Kapadokya (L-1)

Airport Carbon Accreditation (ACA) Programme

- 1-Gaziantep (L-2)
- 2-Erzurum (L-2)
- 3-Çanakkale (L-2)
- 4-Balıkesir Kocaseyit (L-2)
- 5-Bursa Yenişehir (L-2)
- 6-Sinop (L-2)
- 7-Sivas Nuri Demirağ (L-2)
- 8-Erzincan Yıldırım Akbulut(L-2)
- 9-Kahramanmaraş (L-2)
- 10-Adıyaman (L-2)
- 11-Şirnak Şerafettin Elçi (L-2)
- 12-Kapadokya (L-2)
- 13-Adana (L-1)
- 14-Trabzon (L-1)
- 15-Ağrı Ahmed-i Hani (L-1)
- 16-Amasya Merzifon (L-1)
- 17-Balıkesir Merkez (L-1)
- 18-Batman (L-1)
- 19-Bingöl (L-1)
- 20-Çanakkale Gökçeada (L-1)
- 21-Denizli Çardak (L-1)
- 22-Diyarbakır (L-1)

- 23-Elazığ (L-1)
- 24-Hakkari Yüksekova Selahaddin Eyyubi (L-1)
- 25-Hatay (L-1)
- 26-Iğdır Şehit Bülent Aydın (L-1)
- 27-Isparta Süleyman Demirel (L-1)
- 28-Kars Harakani (L-1)
- 29-Kastamonu (L-1)
- 30-Kayseri (L-1)
- 31-Kocaeli Cengiz Topel (L-1)
- 32-Konya (L-1)
- 33-Malatya (L-1)
- 34-Mardin Prof.Dr.Aziz Sancar (L-1)
- 35-Muş Sultan Alparslan (L-1)
- 36-Ordu-Giresun (L-1)
- 37-Samsun Çarşamba (L-1)
- 38-Siirt (L-1)
- 39-Şanlıurfa GAP (L-1)
- 40-Tekirdağ Çorlu Atatürk (L-1)
- 41-Tokat (L-1)
- 42-Uşak (L-1)
- 43-Van Ferit Melen (L-1)

- 1-Gaziantep (L-2)
- 2-Erzurum (L-3)
- 3-Çanakkale (L-2)
- 4-Balıkesir Kocaseyit (L-2)
- 5-Bursa Yenişehir (L-2)
- 6-Sinop (L-2)
- 7-Sivas Nuri Demirağ (L-2)
- 8-Erzincan Yıldırım Akbulut(L-2)
- 9-Kahramanmaraş (L-2)
- 10-Adıyaman (L-2)
- 11-Şirnak Şerafettin Elçi (L-2)
- 12-Kapadokya (L-2)
- 13-Adana (L-2)
- 14-Trabzon (L-2)
- 15-Ağrı Ahmed-i Hani (L-2)
- 16-Amasya Merzifon (L-2)
- 17-Balıkesir Merkez (L-2)
- 18-Batman (L-2)
- 19-Bingöl (L-2)
- 20-Çanakkale Gökçeada (L-2)
- 21-Denizli Çardak (L-2)
- 22-Diyarbakır (L-2)

- 23-Elazığ (L-2)
- 24-Hakkari Yüksekova Selahaddin Eyyubi (L-2)
- 25-Hatay (L-1)
- 26-Iğdır Şehit Bülent Aydın (L-2)
- 27-Isparta Süleyman Demirel (L-2)
- 28-Kars Harakani (L-2)
- 29-Kastamonu (L-2)
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- 41-Tokat (L-2)
- 42-Uşak (L-2)
- 43-Van Ferit Melen (L-2)

■ Btw 2024-2030

- Erzurum Airports' Level will be upgraded from Level 3 till Level 4, Airports at Level 2 and Hatay Airport (L-1) are planned to upgrade to Level 3+

■ Btw 2030-2040

All of 43 airports' levels are planned to upgrade to Level 4 and

■ Btw 2040-2050

All of 43 airports' levels are planned to upgrade to Level 5.



DHMI

NETZERO 2050

Sustainable Environment, Sustainable Airports...

