IFC > INFRASTRUCTURE

www.ifc.org/transportation

ICAO - Green Airports

FY 2024

IFC International Finance Corporation WORLD BANK GROUP

IFC: A MEMBER OF THE WORLD BANK GROUP

IBRD	IDA	IFC	MIGA	ICSID
International Bank for Reconstruction and Development	International Development Association	**International Finance Corporation**	Multilateral Investment Guarantee Agency	International Centre for Settlement of Investment Disputes
Loans to middle-income and credit-worthy low-income country governments	Interest-free loans and grants to governments of poorest countries	**Solutions in private sector development**	Guarantees of foreign direct investment's non-commercial risks	Conciliation and arbitration of investment disputes

IFC: WHAT WE CAN DO AND OFFER

INVESTMENT

Financial products tailored to client needs

- Loans
- Equity
- Trade and Commodity Finance
- Derivatives and Structured Finance
- Blended Finance

$31.7 billion committed in FY23
$69.5 billion committed portfolio

UPSTREAM

Create proprietary projects and investment opportunities by developing a sustainable pipeline of bankable transactions

- Early-stage, project level intervention in return for proprietary rights for equity and debt arranger role.
- Promoting and anchoring the design and implementation of platforms and programmatic approaches.
- Working closely across the World Bank Group to help develop policies, regulations and frameworks for private sector investments.

ADVICE

Innovative solutions combining IFC's expertise and tools

- Help Create New Markets
- Unlock Investment Opportunities
- Strengthen Clients' Performance and Impact
- Improve Environmental, Social, and Corporate Governance Standards
- Support shaping corporate sustainability strategies

MOBILIZATION

Mobilizing and managing capital for investment

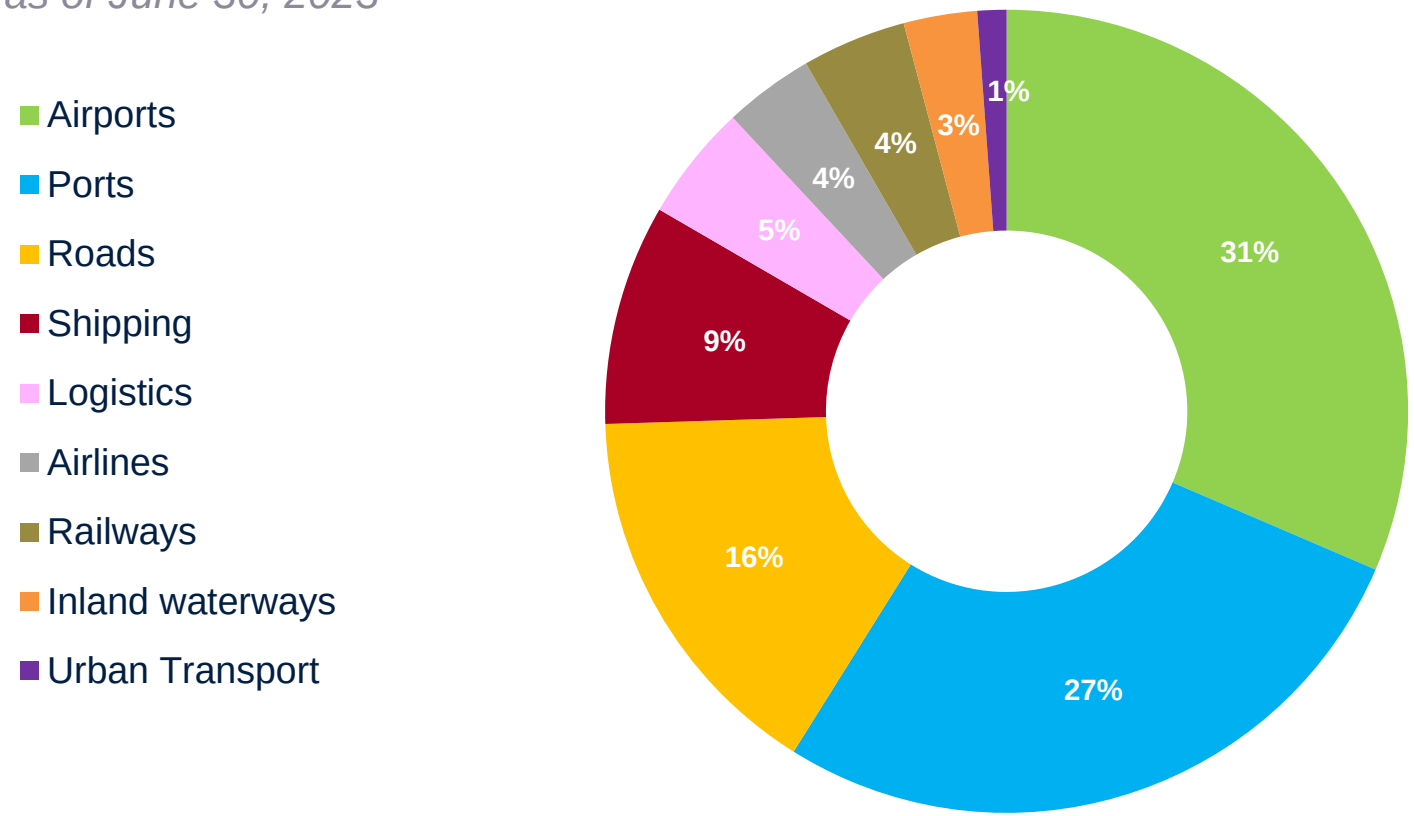
- Syndications
- IFC Asset Management Company

$15.0 billion mobilized from other investors

IFC'S TRANSPORT PRACTICE

IFC Committed Portfolio by Subsector

as of June 30, 2023



OVERVIEW

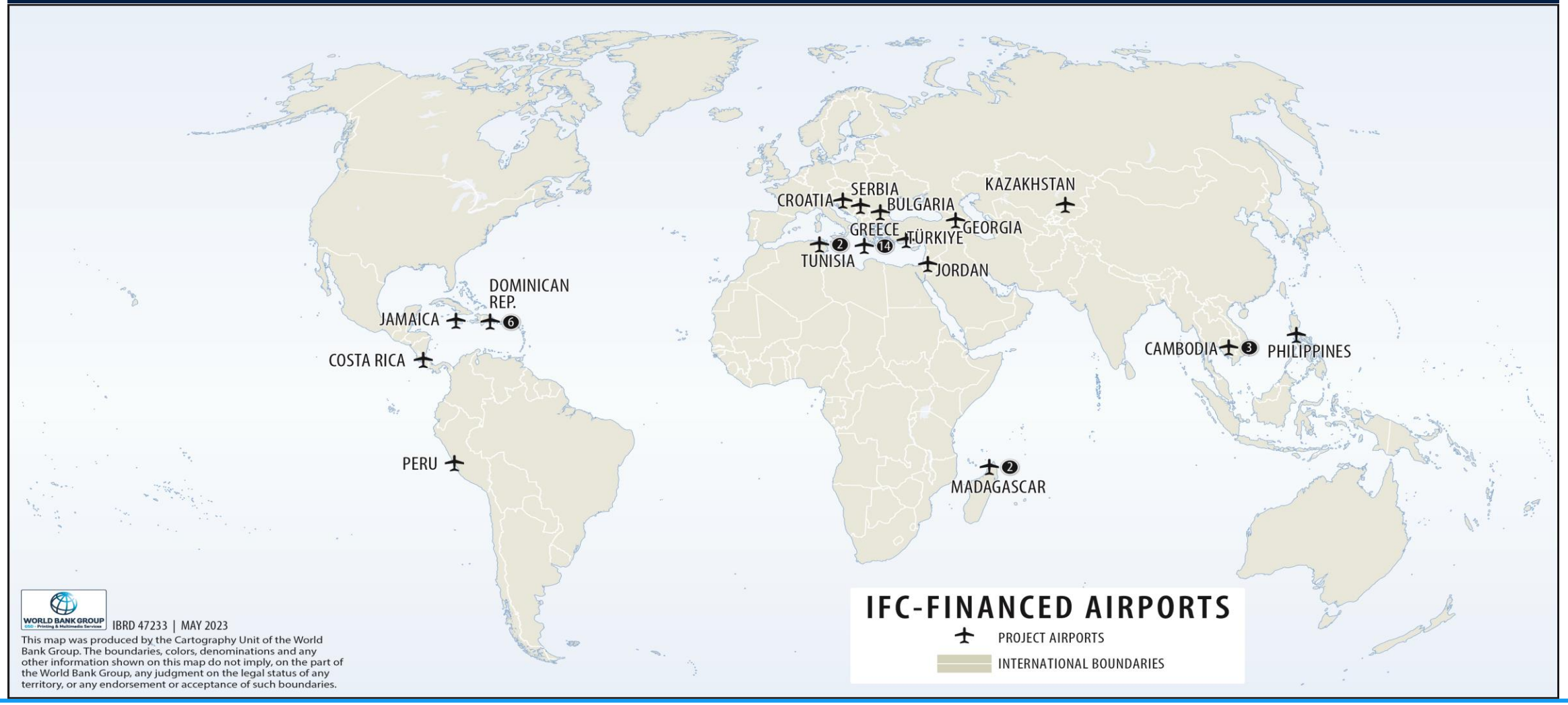
- IFC transport's commitment volumes average around **US$0.8-1 billion** per year.
- At the end of **FY23**, IFC transport's committed portfolio is **~US$2.3 billion**.
- We are active in all transport subsectors. Airports and ports account for **31%** and **27%**, respectively, of the committed portfolio.

US$10.1 billion for IFC's own account and mobilized over the past decade.*

*Note: The committed portfolio for IFC's own account for end of FY23 includes outstanding and undisbursed volumes for all product categories. Last decade **(FY12-23)** numbers include IFC own account, core mobilization, and MIGA volumes.*

IFC AIRPORT INVESTMENTS WORLDWIDE

Over US$3.0 billion committed and mobilized for 36 airports since 2005.



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SUSTAINABILITY IN AIRPORTS – REDUCING CARBON FOOTPRINT

- **In 2021, aviation accounted for 2-3% of global energy-related CO2 emissions. If it were a country, it would rank among the top 10 emitters, between Japan and Germany. Non-CO2 effects, such as warming induced by aircraft contrails, add to the total climate impact of aviation.**
- **Aviation is an energy-intensive activity and contributes ~11% of the transport's sector overall global direct GHG emissions. By comparison, road transport contributes ~72% to direct GHG emissions, and shipping accounts for ~11% of direct GHG emissions.**
- **Most of the emissions from the sector are generated by aircraft. These are considered scope 3 for airports, and scope 1 for airlines.**

Addressing the Climate Impact of Aviation Involves Collaboration Among Airlines and Airports

Airports

Airlines

Examples

Scope 1	Scope 2	Scope 3
Directly controlled by the operator	Indirectly controlled by the operator	**Not directly owned/controlled by the operator, but can be influenced by operator**
▪ Airport-owned power plants burning fossil fuel ▪ Conventional vehicles that use gasoline ▪ Conventional ground support equipment (GSE) that uses diesel fuel	▪ Indirect emissions from the consumption of purchased energy (like electricity or heat)	▪ Tenant emissions ▪ Aircraft emissions ▪ Passenger **and freight** vehicles arriving/departing airport ▪ Emissions from waste disposal
▪ Mostly jet fuel – **(e.g.,** United Airlines 99.5% of scope 1 in 2019) ▪ **Sustainable aviation fuel** ▪ Vehicles ▪ **Facilities**	▪ Electricity consumption (either purchased or other energy sources)	▪ Ownership **stakes in other companies** ▪ **Passenger vehicles that arrive/depart the airline's offices** ▪ Regional vehicles used by the company

For airports, **scope 3 emissions tend to be higher than scope 1-2** given aircraft emissions.

For airlines, **scope 1 emissions tend to be the most significant portion.**

Note: Sustainable Aviation Fuels (SAF) do not generate scope 1 emissions.

Airlines and airports have different roles to play in addressing the climate impact of aviation.

Source: Emissions data from Sims R. et al, *2014: Transport. In: Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change,* Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA. For other emissions data, Overton, J. 2022. *The Growth in Greenhouse Gas Emissions from Commercial Aviation.* Environmental and Energy Study Institute. Washington, DC. For airline example, United Airlines website. For GHG intensity of passenger transport modes, International Energy Agency (2022). *GHG Intensity of passenger transport modes, 2019.* The IEA data is global.

CLIMATE-RELATED IMPROVEMENTS AT AIRPORTS

- **On the infrastructure side, there are many efficiency improvements that can be significant contributors to decreasing the footprint of aviation in the short term, given that they are easier to implement at scale faster than aircraft-level technologies**. This includes electrical ground power at gate, digital aviation management systems and other improvements at airports, as below. Note that IFC's EDGE green buildings certification can be applied to airports.

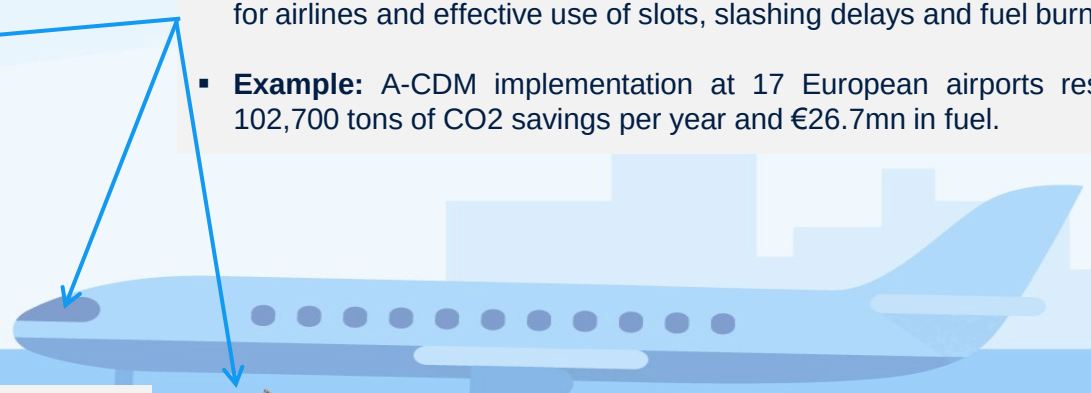
Examples of Climate Efficiencies for Airports Available Today

Renewables and ground power:

- Fixed electrical ground power and pre-conditioned air powered by local electrical grids or renewables enables airlines to turn on auxiliary power units closer to departure.
- **Example:** At one major airport, gate power use lowered CO2 emissions by over 100k tons/year.

Airport Collaborative Decision-Making (A-CDM):

- A-CDM facilitates the exchanges between the aircraft, ground handler, and air traffic control provider. This ensures more accurate turn-around times for airlines and effective use of slots, slashing delays and fuel burn.
- **Example:** A-CDM implementation at 17 European airports resulted in 102,700 tons of CO2 savings per year and €26.7mn in fuel.



Electric Ground Service Equipment (GSE):

- Electric GSE includes push tractors, which move aircraft away from gates and belt loaders, which load and unload baggage. Others include potable water and lavatory service trucks.
- **Example:** In 2022, Sofia Airport procured 64 electric GSE to support its long-term carbon neutrality program.

Source: Air Transport Action Group (2021). *Waypoint 2050.*. For data on GSE, Forbes, J. (2019). "Types of electric ground handling equipment." *Flux Power.* 25 Nov, 2019.

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Conscious approach to airport investments supports decarbonization efforts and enables trade, tourism and connectivity in developing countries.

- Airports foster **economic development** and provide **critical connectivity** in developing countries. There is **no suitable, commercially available replacement for aviation** for long-haul trips and those that involve less connected nations, like island states and landlocked countries.
- Given that demand for aviation is expected to grow in the future, it is important to provide emerging economies with airport infrastructure that considers **sustainability**.

Destination airport focus, selectively assess others

IFC supports airports in major urban centers, national gateways or tourist destinations, with over 1 million passengers/year. IFC will also selectively assesses connecting hubs with high development impact, and smaller airports in IDA/FCS or island states.

Privatizations, rehabilitations, expansions, ancillary services

IFC supports the privatization, rehabilitation and expansion of airport operations, including airside and landside infrastructure, for passenger and cargo operations. IFC also considers opportunities in ground handling services and air navigation systems.

Global sponsors committed to sustainability

IFC will target established global sponsors and experienced airport operators with a solid track record and credible commitment to sustainability. IFC will selectively supports regional/local operators with solid operational and financial track record.

Target financial products

Potential financing structures include secured debt financing via senior long-term debt, corporate loans as well as bridge loans, and selectively consider attractive, high-impact equity / quasi-equity opportunities.

PA aligned, climate-smart projects

IFC supports airport projects that are aligned with our PA approach and make best efforts to encourage climate mitigation and adaptation measures even if not required.

ALMATY (KAZAKHSTAN)

- In **FY22**, IFC committed a **US$300 million** financing package, which included a **US$150 million** loan for its own account and **US$150 million** mobilization, for Kazakhstan's Almaty Airport, the main aviation hub in Central Asia.
- The financing will support significant upgrades and the construction of a new international terminal at Almaty by TAV Airports, a Turkish operator and longtime IFC client, who will operate the airport.

PROJECT HIGHLIGHTS

- Despite Kazakhstan's lagging connectivity compared to similar-sized economies, Almaty is the region's busiest airport, receiving 6.4 million passengers and nearly 70,000 tons of cargo in 2019. The project will help strengthen the expansive country's connectivity while helping to improve user experience and service levels.

- The project will also make Almaty Airport Central Asia's first certified airport under **IFC's Excellence in Design for Greater Efficiencies (EDGE) program**.

- **Expected savings:** Up to 49% in energy use, 56% in water use and 36% in embodied energy of materials, resulting in GHG emissions reductions of up to 49%. Avoidance of up to 4,920 tons of CO2 per year.

ANTALYA (TÜRKIYE)

- The project is sponsored by two longtime IFC clients, Fraport, a Germany based leading global airport operator, and TAV Airports, a Turkish airport operator and part of Groupe ADP, a France based leading global airport operator.
- In **FY23/FY24**, IFC committed a **€212 million** loan for its own account to Fraport TAV Antalya, a joint venture by the two sponsors, for the expansion of the Antalya Airport, as part of a €2.3 billion financing package.
- The funds will go towards the upfront lease payment and the airport's capital expenditure program.

PROJECT HIGHLIGHTS

- Many firsts: IFC's **first project in Türkiye's aviation sector** and the **first transport project utilizing a bridge loan.**

- The project is expected to improve connectivity and support the country's tourism sector, which represents ~5% of Türkiye's GDP.

- **Expected savings:** IFC will also be supporting the sponsors in reducing the expansion's carbon footprint by **utilizing renewable energy generated on-site** and constructing **energy-efficient terminals**. The new expanded terminal buildings are expected to achieve **energy savings of at least 24%,** qualifying them for a **Leadership in Energy and Environmental Design (**LEED) Gold certification.

LIMA AIRPORT (PERU)

- Lima Airport Partners (LAP) was established in 2001 and has a 30-year concession to operate the Jorge Chavez International Airport, Peru's main hub in Lima.
- Since **FY07**, IFC has had 20% stake in LAP, alongside other investors, including Fraport AG, the Germany-based airport operator.
- In **FY22-FY23**, IFC committed a total of **US$101 million** to support LAP's US$2.4 billion airport expansion.

PROJECT HIGHLIGHTS

- LAP's new project includes the construction of a new control tower, a second runway and the expansion of the current single terminal.
- The expanded airport, to be completed in 2026, will double the current passenger capacity to 37.7 million passengers/year, increase domestic, regional, and international flight options, and **support tourism.**
- IFC stepped up to support our investee with a very large ticket during COVID impacted passenger recovery and high political risk.
- IFC is also providing LAP with advisory services to obtain IFC's Excellence in **Design for Greater Efficiencies (EDGE) green building certification** for the new terminal, the first in LAC to achieve this certification.
- **Expected savings:** At least 20% across energy, water and materials. The airport also consumes electricity from 100% renewable energy sources