

Journal of Commerce

Belly freight shouldering airlines' CO2 emissions burden: forwarders



Approximately half the world's cargo volume is carried in the bellies of passenger planes. Photo credit:

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<u>Greg Knowler, Senior Editor Europe</u> | Nov 6, 2025, 9:31 AM EST

ABU DHABI — The air cargo market is facing difficulties managing how CO2 emissions are calculated and apportioned between freighter aircraft and the bellies of passenger planes.

With the calculations based on weight, forwarder DSV told delegates at The International Air Cargo Association's (Tiaca's) annual Air Cargo Forum that the burden of CO2 emissions being generated by passenger aircraft was unfairly placed on the freight being carried below decks.

"Passengers with their weight and space around them occupy 80% of an aircraft and cargo 20%, but because cargo is denser and uses all available space, the weight might

be 50:50," Achim Martinka, DSV's vice president of global air freight, commercial and sustainability, said Wednesday.

"Under the current calculation methods by IATA [International Air Transport Association], the total CO2 generated by that passenger aircraft will be 50:50, so cargo must shoulder a bigger proportion of the CO2 costs despite only using 20% of the aircraft and utilizing the space far more efficiently than passengers," Martinka said.

With regulations in Europe putting a price on carbon under the EU emissions trading system, "we are not talking small numbers," he said.

"If you are moving 100 tons from Paris to Chicago it might be a 40% difference between using a freighter or a passenger plane," Martinka said. "With the current calculation methodology, if a shipper wanted to lower his CO2 footprint, one of the many options we could suggest would be to send cargo on a freighter instead of belly cargo."

Weight-based measure 'not perfect'

Brendan Sullivan, global head of cargo at IATA, said the CO2 calculation uses a weight-based allocation principle to share total flight emissions. The industry standard allocates a proportional share of the total CO2 emissions to freight and passengers based on their respective weight, including checked baggage.

"It is not perfect — there is no perfect methodology for this — but it is a transparent and an industry-wide standardized way to calculate CO2 emissions," Sullivan told the *Journal of Commerce* at the Tiaca event. "In the future we will be able to refine the transparency and ultimately drive reduced emissions."

Sullivan noted that assessing carbon emissions from freighters was a straightforward process, with fuel burn directly corresponding to the weight of the cargo and aircraft.

Helene Goury, sustainability manager at Air France KLM Martinair Cargo, said airlines were aware of the challenge faced by shippers and were looking at ways to make the CO2 calculations fairer.

"One of the barriers to make sure we compare and measure in the same way is the data, because a lot of decisions are being made based on data, and if the data is not right, how can we make the right decision?" she said. "It is a challenge we are trying to solve, and it is taking time because it is not an easy task."

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