

Air Cargo Sustainability Report 2023

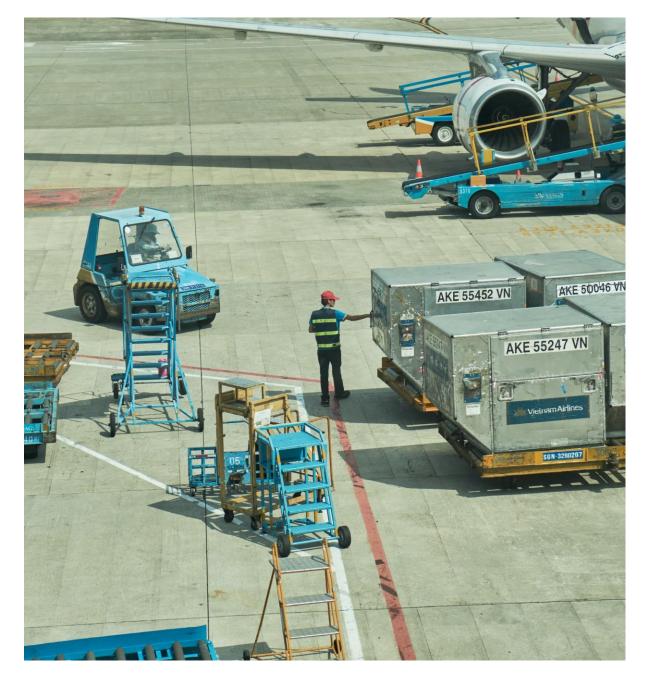
Results of the 3rd annual air cargo industry sustainability survey

March 2023



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Executive summary

Conducted for the third year from October 2022 to January 2023, the annual Air Cargo Industry Sustainability Survey reveals interesting trends affecting the sector and its approach to sustainability:

- Sustainability remains a broad concept, with many ways to define it for the 258 companies having participated in the survey. However, environment still dominates how industry defines it.
- 2. Globally, the sustainability pressure has increased by 9 points compared to last year, mainly driven by expectations from customers (78%), employees (69%) and business partners (62%).
- 3. The pressure from regulators is increasing year on year: only 37% of the respondents in 2021 were indicating regulatory pressure while it is now 55%.
- 4. For the first time, we asked companies what their objectives are when defining and implementing sustainability initiatives: improve their commercial and financial performance and be compliant with regulations are the top two objectives, aligned with the growing pressure coming from customers and regulators.

- 5. For airports and freight forwarders, modernizing infrastructure and operations is very important when driving sustainability projects. Airlines and ground handlers are looking at attracting and retaining staff as a side benefit, probably as they are suffering from post-pandemic workforce shortages.
- 6. Companies see a clear link between their ESG actions and their reputation (85%) and attractiveness (67%) but less so for their profits (44%).
- 7. Sustainability is key for the leadership with 92% of the respondents confirming it is supported by their CEO and 81% said sustainability is a corporate strategic priority. 75% of them emphasized that sustainability is more important than last year.
- 8. While 76% have a sustainability strategy, this number hides notable differences between large (88%), medium (70%) and small companies (55%).
- 9. More and more companies have dedicated teams (57%) and budgets (45%) to drive sustainability. 70% declared their sustainability budget has increased compared to last year.

- Strategy in place yet more engagement needed, especially with suppliers through procurement process and industry collaboration.
- 11. 71%, 6 points increased compared to last year, measure their progress on concrete sustainability targets, and 52% produce a sustainability report. It is 10 points more than 2022!
- 12. The path to decarbonization is becoming clearer with airports demonstrating a more consistent strategic approach developed over recent years.
- 13. SAF engagement increasing but the results illustrate more efforts from government are required.
- 14. Very impressive results regarding industry tackling the challenge of single-use plastic.
- 15. The survey illustrates that associations need to play a larger role in increasing awareness of industry value in the global community.
- 16. People are the industry's single greatest asset and its impressive to see the additional focus being placed on training and creating a better working environment.

Director General's message



Glyn Hughes Director General, TIACA

Dear reader,

As the strongest fan of our industry, I am glad to see how more innovative and forward-thinking air cargo is becoming with each year. Sustainability is clearly on the minds of our industry colleagues, and this report is showing the direction air cargo companies are taking in the years to come.

Sustainability is a broad concept, including doing good for the planet, people and business. And we add at TIACA -through partnerships and innovation. Our industry sees this complexity, but the environment is a dominant topic, due to the important role we play in this area.

Pressures to be sustainable continue to increase from all stakeholders. Among them are regulators, adding sustainability focused laws in different parts of the world. They are aligned with overall companies' objectives of addressing regulation, together with maintaining commercial and financial performance.

However, there is still work needed to raise awareness in our industry of how sustainability can positively contribute to a company's bottom line. I am pleased to see continuous commitment from air cargo companies' leadership, who are placing sustainability as a strategic priority. But while resources are increasing, sustainability is a large undertaking and having teams in charge is a way for companies to show their real commitment to the change they are making.

Transparency is key to building trust and longstanding business relationships. It is great to see majority of companies coming forward by tracking the progress of their sustainability objectives, and over a half of them sharing results with the world. I hope TIACA's BlueSky program will facilitate this effort for the air cargo businesses big and small.

Finally, the success of our industry depends on the great talent it attracts. The next generation of air cargo leaders, men and women, want to work for an industry that is modern, agile and sustainable.

Let's work to make sure these talents want to join in, and TIACA is here to support all air cargo partners wishing to progress throughout their sustainability journey.

How to read this report

Methodology

This report is based on the third edition of the annual Air Cargo Industry Sustainability Survey, conducted from October 2022 to January 2023.

Designed by Change Horizon as part of the overall TIACA's Sustainability program, the annual survey aims to:

- Collect valuable insights on current focus and status of sustainability metrics within the industry
- Monitor the annual progress of sustainability work in air cargo industry
- Identify next priorities and gaps to address, that will feed TIACA's strategy to better support the industry in its sustainable transformation efforts

Changes compared to 2nd survey

The 3rd edition of survey is a continuation of the first two editions to provide year-on-year comparison. However, it includes a new question on how companies would rank their sustainability action.

How to read the analysis

The majority of the results are taking into account all 258 respondents: this is designated as "Group All".

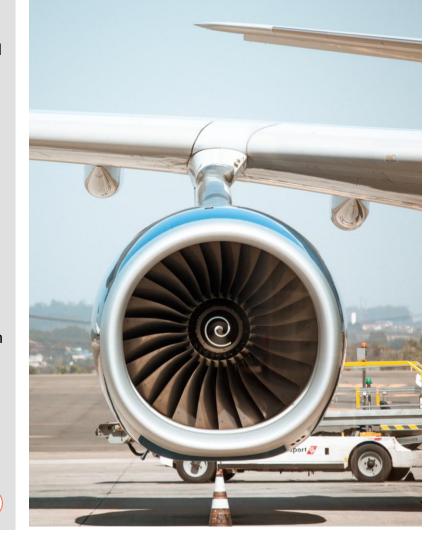
Where it made more sense, we looked only at responses from the 176 airlines, freight forwarders, airports and ground handlers. This is designated as "Group Core". Where analysis concerns only the "Group Core," is indicated, there rest of analysis is focused on all or most stakeholders."

Comparison of data is done against previous two years where data is comparable. The 30 priorities described in the TIACA Air Cargo Sustainability Roadmap were introduced in time for the 2nd sustainability survey, therefore, for most of the industry's priorities, the comparison is done between 2023 and 2022 results.

Difference in result compared to previous years is displayed by showing this year's result in more vivid colour green, while previous years are muted colours or non-coloured bar charts.

Colour-coded circles showcase significant increase or decrease in numbers yoy.





The voice of the air cargo industry



Total respondents

176 +17%

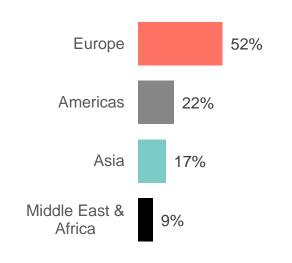
Respondents in Group Core

(airlines, airports, ground handlers and freight forwarders)

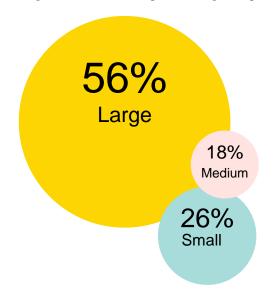
Respondents by company type



Respondents by region



Respondents by company size

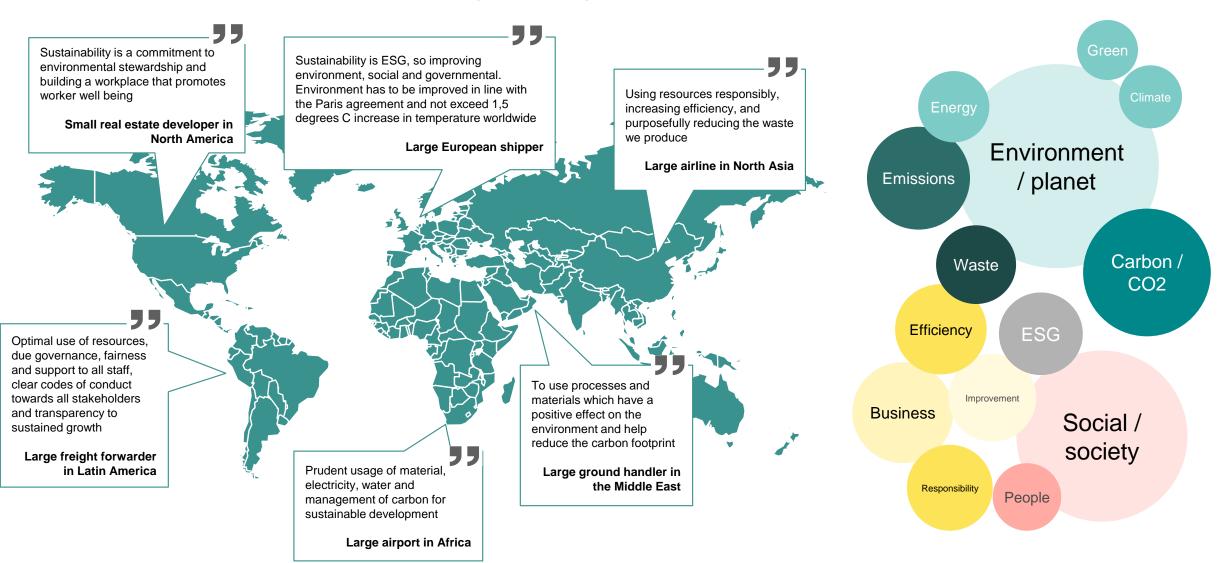






Sustainability remains a broad concept

While the concept of sustainability is maturing in air cargo, environment still dominates how industry defines it



Companies focus on their bottom-line and their regulatory compliance

Ranked priorities across Group Core

	Global ranking*	Airlines	Airports	Freight forwarders	Ground handlers
Improving our commercial & financial performance	1	1	4	1	2
Being compliant with regulations	2	2	1	2	1
Reducing our carbon footprint	3	5	2	5	4
Modernizing our infrastructure & operations	4	4	3	3	6
Attracting & retaining staff	5	3	5	4	3
Securing access to capital	6	6	6	6	5

Note: Answers to new question: "What are your main priorities? Please rank from 1 (most important) to 6 (least important)". *Global ranking is established with all respondents.

Top 3 objectives for airlines

Top 3 objectives for airports

Top 3 objectives for freight forwarders

Top 3 objectives for ground handlers

It's just good business. A company that focuses on sustainability and measures progress towards well defined goals will outperform companies that don't.

Air cargo infrastructure developer in North America

Modernizing infrastructure and operations is a top 3 priority for airports and freight forwarders, while attracting and retaining staff is the 3rd priority for airlines and ground handlers, probably as they are suffering from post-pandemic workforce shortages.

Company size focus

Global numbers show that small and medium size companies prioritize improving commercial and financial performance, as business survival is more actual.

Large companies place regulatory compliance as number one priority as regulation is often targeting the largest players first, like in the case of mandatory ESG disclosures in Europe and USA today.

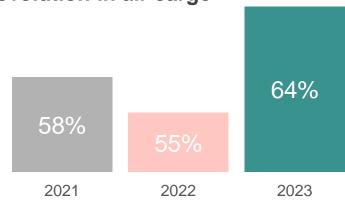
J J

The pressures for sustainable performance accelerates from all stakeholders

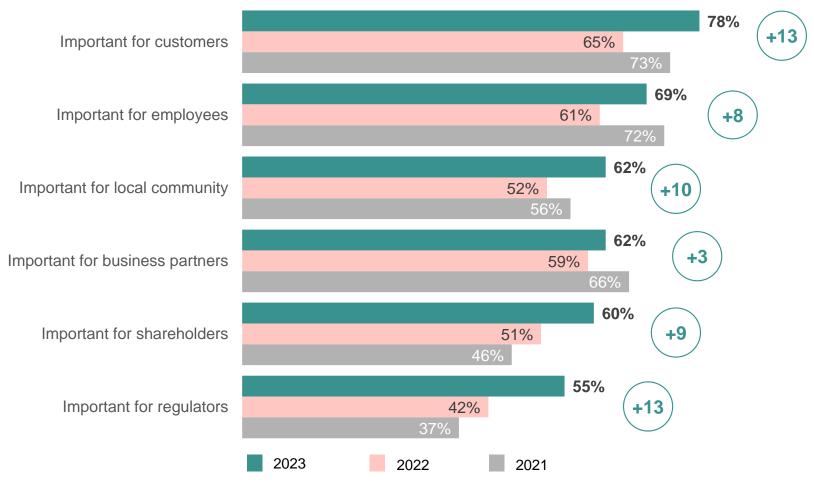


Globally, the sustainability pressure has increased compared to last year, mainly driven by customers and regulators

The sustainability pressure evolution in air cargo

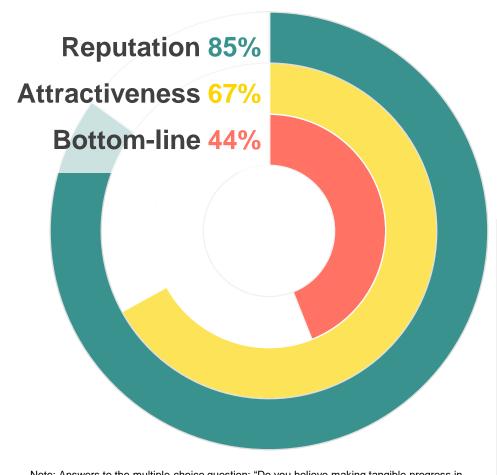


Why is sustainability important to your organization?



Note: Answers to the multiple-choice question: "Why does or should Sustainability matter to your company? (tick all that apply)"

Companies see a clear link between their ESG action and their reputation but less so for their profits



Note: Answers to the multiple-choice question: "Do you believe making tangible progress in Sustainability matters will or would impact positively your company's (please select all that apply)"

Other benefits gained from tangible progress on sustainability

Safer work environment and happier employees

Licence to operate and grow

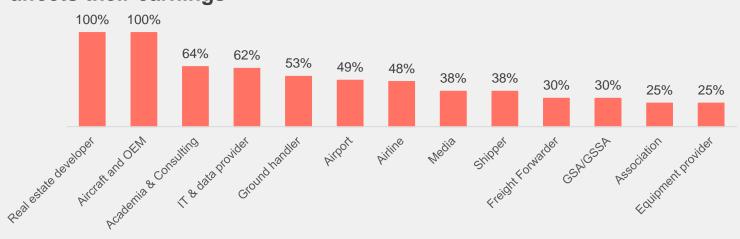
Risk management

No action will give a disadvantage to competition

Attracting investment opportunities for projects

Acceptance by society and regional community

Focus on bottom-line: companies that confirm sustainability action affects their earnings



Sustainability is a key priority for the leadership and beyond

92% -1

Confirm sustainability is supported by their CEO

81%

Place sustainability as a strategic priority

(but 12% mention that they don't see any concrete action)

75% +3

Emphasize that sustainability is more important than last year (from companies placing sustainability as a strategic priority) Being part of the solution and not part of the problem.

Intrinsic motivation and midlong term economic benefits.

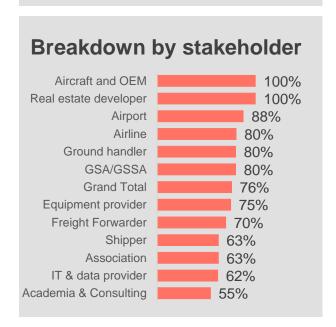
Large European freight forwarder

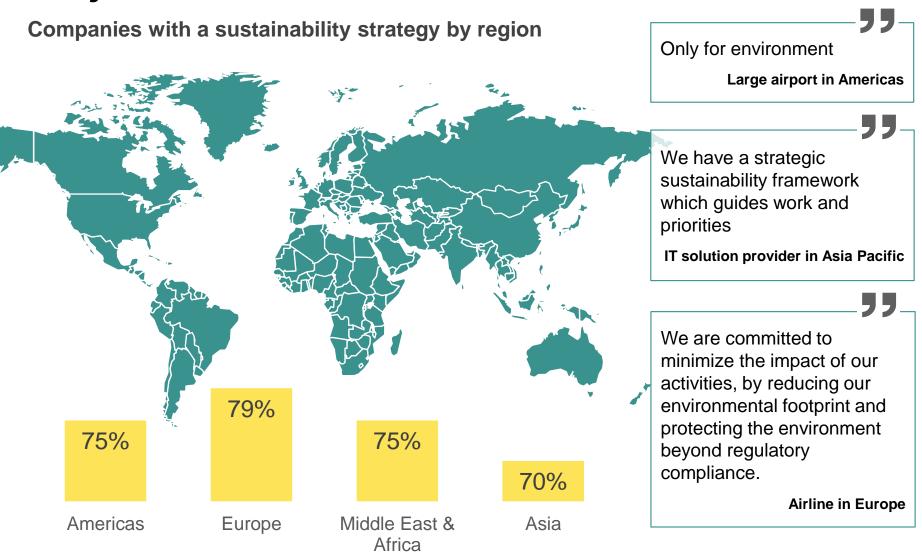


Most of large companies have a sustainability strategy defined by now

76% +3

Confirm to have a sustainability strategy (88% of large companies but only 70% of medium and 55% of small ones)





More and more companies have dedicated teams and budgets to drive sustainability

57% +5

Have a dedicated team in charge of sustainability agenda (at least one fully dedicated person) 45% +8

Have a dedicated sustainability budget

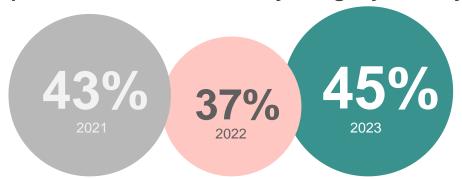
70% +10

Declare the sustainability budget has increased compared to last year

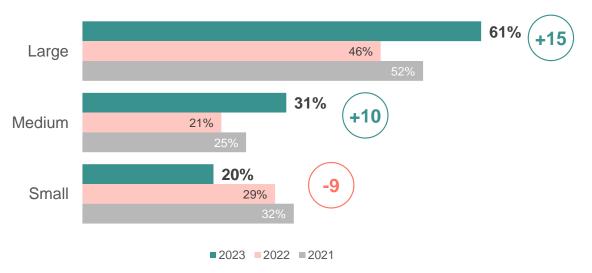
Budget is not strictly dedicated to Sustainability but increasing technical budget is used for sustainability measures

Large European airport

Companies with a sustainability budget year-on-year



Companies with a sustainability budget year-on-year by size



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IMMEDIATELY IMPLEMENTABLE
ON LANE LEVEL OR ALL TRANSPORTS
CERTIFICATION OF USAGE

OUR HVO PARTNERS







THAT'S HOW



While strategy is in place, more engagement is needed with staff, partners and suppliers

76% +3

Confirm to have a sustainability strategy in place

73% -8

Say sustainability is part of the corporate DNA

(from companies with a sustainability strategy)

64% -4

Declare sustainability is part of company's procurement processes

66% +2

Say they engage with industry partners to advance their sustainability goals

Partnerships progress, but more needs to be done on sustainable sourcing and procurement

75% +5

Support business partners

55% -1

Lead change through sustainable sourcing and procurement

68% +6

Contribute to the global picture through industry collaboration

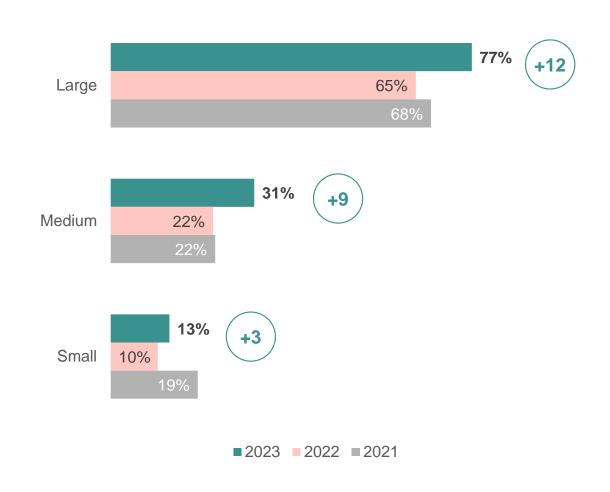
66% +1

Companies with sustainability teams or at least one person in charge do sustainable procurement and sourcing



Most of big companies produce a sustainability report

Companies that produce a sustainability report



71% +6

measure progress on concrete sustainability targets

52% +2

share their sustainability performance externally

52% +10

produce a sustainability report

Global sustainability reporting trends

Only 52% of air cargo businesses report on their sustainability performance, however this number jumps to 77% for large companies.

It is still way below the global average of 96% (largest 250 companies) according to 2022 KPMG data.







Lifting air cargo to new heights

Join Industry Leaders Making Air Cargo more sustainable with the BlueSky Sustainability Verification Program.

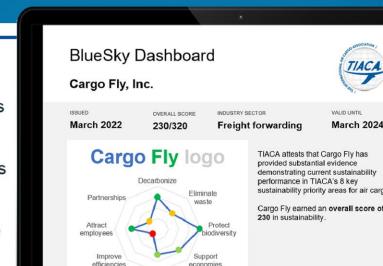
Complete the BlueSky Desktop Verification to:

- Take advantage of the only sustainability rating system in the air cargo industry.
- Get public recognition and improve brand image and reputation.
- Showcase your company's performance against peers.

Learn more at tiaca.org

The BlueSky dashboard consists of

- Summary of the evaluation results
- Spider diagram highlighting performance in the 8 priority areas
- Detailed scoring breakdown in Environment, Society and Culture & Leadership areas





8 key objectives for sustainable air cargo



Environment

- Decarbonize
- 2. Eliminate waste
- 3. Protect biodiversity

Society

- Support local economies and communities
- 5. Improve lives and well-being

Culture & leadership

- 6. Improve efficiencies and profitability
- 7. Attract, retain and develop employees
- 8. Build and nurture partnerships

^{*} The 30 actionable priorities are defined in full detail in the TIACA Air Cargo Sustainability Roadmap. As the 2022 survey was launched before the Roadmap was finalized, the questions on investments in innovation and development of innovative solutions to reach more people with healthcare and essential goods were not covered in the questionnaire last year. These areas have been incorporated in the 2023 survey.

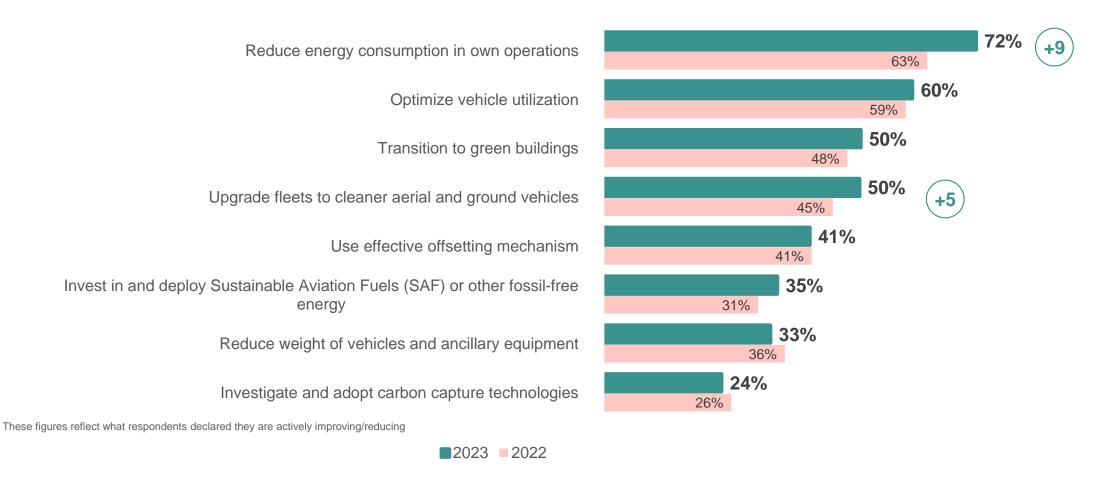
The 30 actionable priorities from most to least focus for air cargo stakeholders

2023	change	•
1.	+ 9	Drive continuous improvement and operational excellence
2.	-	Invest and support innovation
3.	+ 3	Contribute to the global picture through industry collaboration
4.	+ 10	Accelerate sustainable digitalization
5.	-4	Invest in training & education
6.	+ 2	Support business partners
7.	-5	Improve employee experience
8.	-3	Optimize vehicle utilization
9.	-6	Reduce energy consumption in own operations
10.	+ 3	Upgrade fleets to cleaner aerial and ground vehicles
11.	A +1	Invest in and deploy SAF or other fossil-free energy
12.	-5	Advance diversity & inclusion
13.	-2	Lead change through sustainable sourcing & procurement practices
14.	+ 4	Improve local air quality
15.	=	Combat illegal trafficking and smuggling of goods and humans

2023	Rank change	
16.	+3	Reduce noise
17.	-8	Eliminate single-use plastic and foam
18.	+ 10	Transition to green buildings
19.	+4	Enhance connectivity to unlock new markets and create more jobs
20.	A +1	Improve operations & traceability to eliminate perishable waste
21.	-4	Promote air cargo as a career choice
22.	+2	Improve water management
23.	-	Reach more people with healthcare and essential goods
24.	-4	Further enhance live animals' transportation practices
25.	-9	Combat illegal wildlife trade to protect endangered species
26.	+3	Reduce weight of vehicles and ancillary equipment
27.	-2	Promote circular economy
28.	-6	Use effective offsetting mechanisms
29.	A +1	Replace hydrofluorocarbons with natural refrigerants
30.	-4	Investigate and adopt carbon capture technologies

Industry focuses on reducing energy consumption to decarbonize

How companies reduce (or plan to reduce) their carbon footprint



Sustainable in everything we do

Greening our cargo operations in Brussels through innovation and partnership



Towards a carbon-free airport



Towards a circular airport



Towards a better living environment



Building an intermodal logistics hub



Sustainable jobs in an inclusive work environment



Sustainable Aviation Fuels



Net Zero Carbon logistics buildings



Electrification of Ground Handling



Digital Green Lane



Aviato Academy to attract & foster talents

Together with 21 international partners,
Brussels Airport takes the lead in the EU Green deal project
for the green airports and aviation industry of the future.

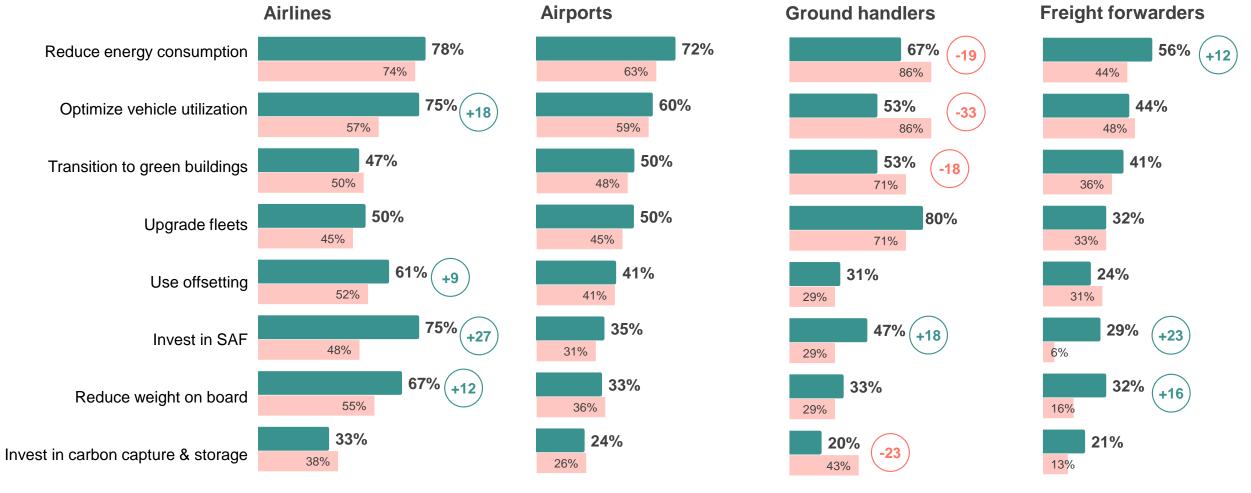






The path to decarbonization varies by company type

How companies from Group Core reduce (or plan to reduce) their carbon footprint



These figures reflect what respondents declared they are actively improving/reducing

SAF commitments make (slow) progress overall but are led by large companies

35% +4

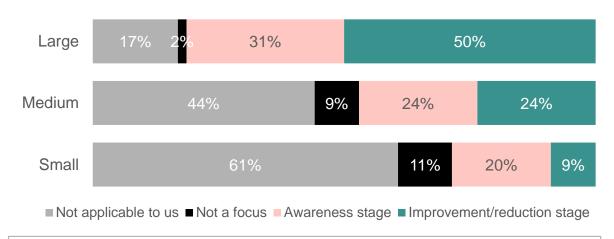
Actively involved in deployment of SAF

Encompassing 75% of airlines, 35% of airports, 29% of freight forwarders and 47% of ground handlers

33% +2

Still do not see a role they could play in the uptake of SAF





Airlines and ground handlers lead the efforts to deploy SAF and freight forwarders start to look at it

75% of airlines confirm SAF is a priority area, up 27 points compared to last year, followed by 47% ground handlers with 18 points yearly growth. However, still 40% of ground handlers do not see a role they could play in deploying SAF.

Airports are at awareness raising stage (54%), 26 points increased in 12 months, and 35% saying they are making concrete efforts to deploy SAF.

While less than a third of freight forwarders confirm SAF implementation initiatives, it represent a big jump compared to 2022 (+ 23 points).



WORKING TOGETHER WITH OUR INDUSTRY PARTNERS TO LOWER OUR FOOTPRINT



Winner of TIACA Air Cargo Sustainability Award - Corporate 2022

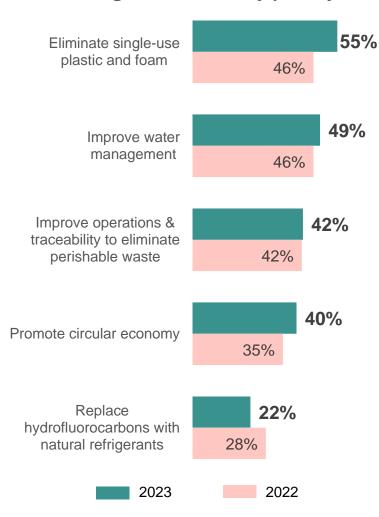






Single-use plastic reduction top waste management issue with airlines leading the efforts

Waste management efforts by priority



Eliminating single-use plastics has grown in action, but decreased in focus

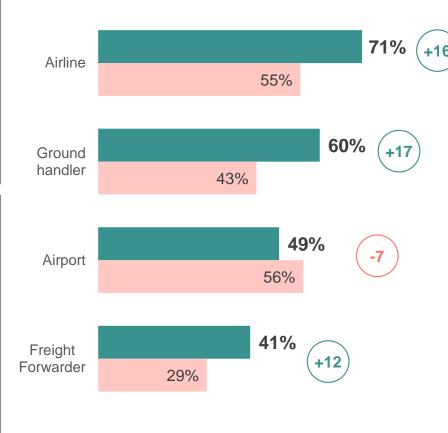
Addressing single-use plastics ranked number 9 in 2022, and it dropped to 17 place in 2023.

Although plastics-focused data did not exist in 2021, waste management overall ranked 8 out of 18 areas of focus that year.

Regional priorities in single-use plastic management efforts are equalizing

Europe has lost its leading position in singleuse plastic reduction efforts, with 53% companies acting. Asia is now leading the action with 59% companies reporting it, 21 points increased compared to 2022, 58% of Americas, 16 points increase, Middle East and Africa – 53%, 15 points more.

Single-use plastic reduction efforts for Group Core



Airports and freight forwarders are ramping up efforts to combat wildlife trafficking

38% +2

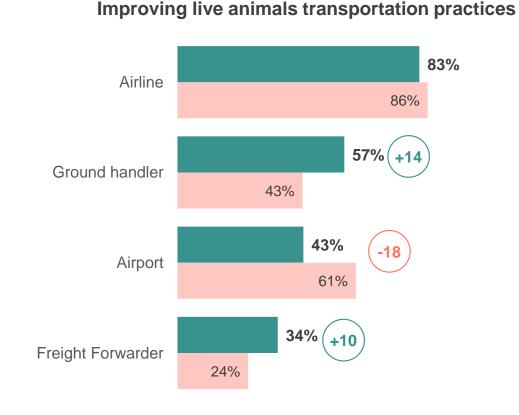
Still do not see a role they could play in the fight against wildlife trafficking Encompassing 6% of airlines, 23% of airports, 3% of freight forwarders and 36% of ground handlers

42% -8

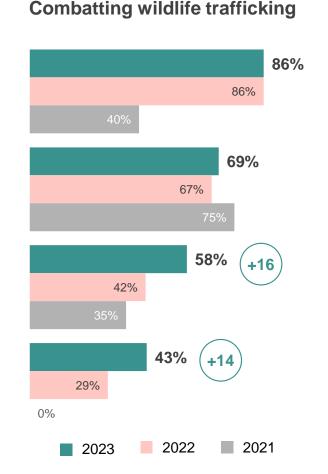
Looking to improve live animals' transportation practices

Through awareness raising and improvement actions

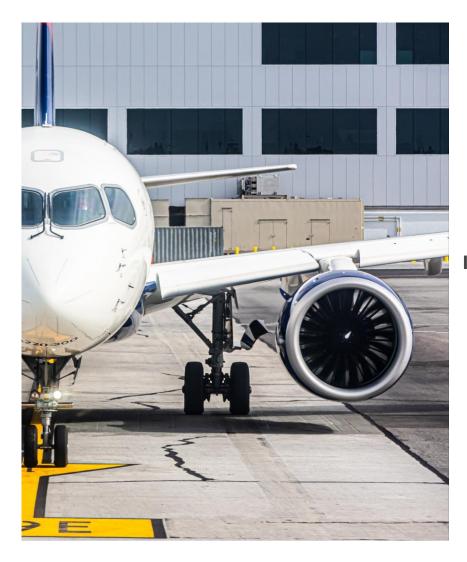
Group Core companies who take concrete action to address the issue and through awareness raising



Note: Graphs are showcasing data on companies' positive answers to being at awareness stage and taking concrete action to improve their impact or prevent negative impacts. Live animals' transportation practices graph is based on a two years comparison as the question did not exist in 2021 survey edition.



Freight forwarders start to tackle noise, airlines and ground handlers accelerate their focus on air quality



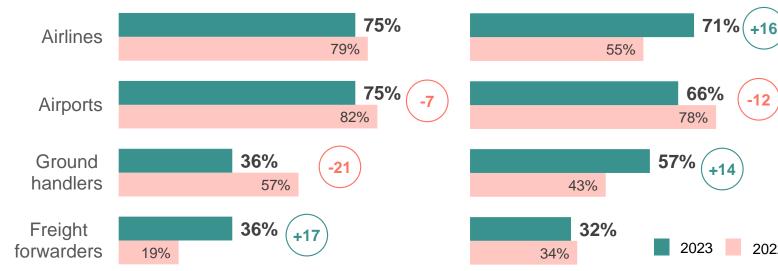
52% +2

Companies taking action to reduce their noise impact

52% +7

Companies making an effort to improve local air quality

Improvement & reduction stage for Group Core



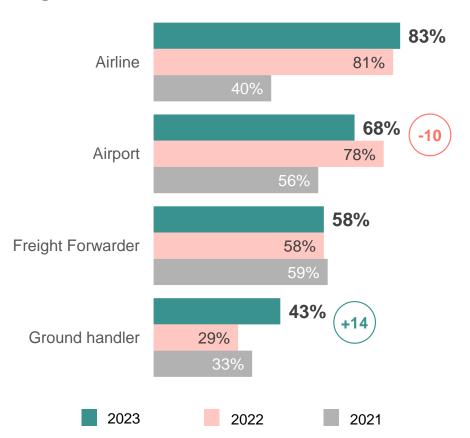
Action against smuggling of people and goods sees little to no progress

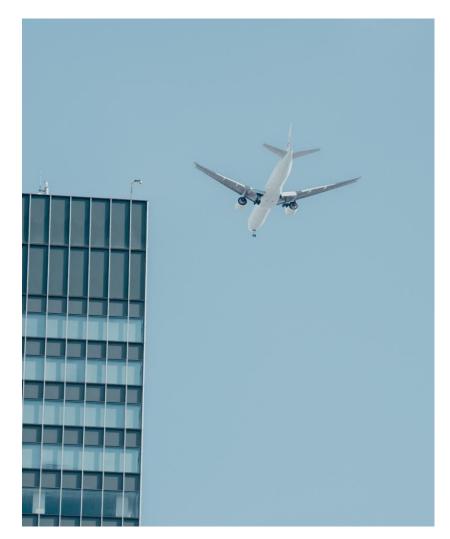
38% -3

Making effort to combat smuggling of goods and human trafficking

33% -7

See no role they could play in fighting illegal traffic of goods and humans Companies from Group Core who take concrete action to address the issue or are at awareness stage







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STRATEGIC GEOGRAPHY-

REDUCED CARBON FOOTPRINT DUE TO MINIMAL CONGESTION ON & OFF AIRPORT

PROVEN AGILE REACTIONS
TO GLOBAL CHALLENGES





MORE INFO: cargo@flypittsburgh.com



Barely half of industry understands its role in creating economic value

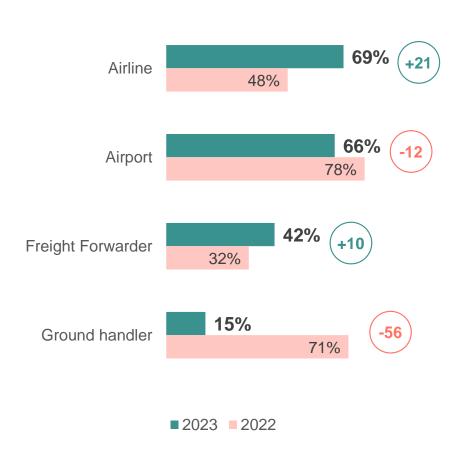
52% +3

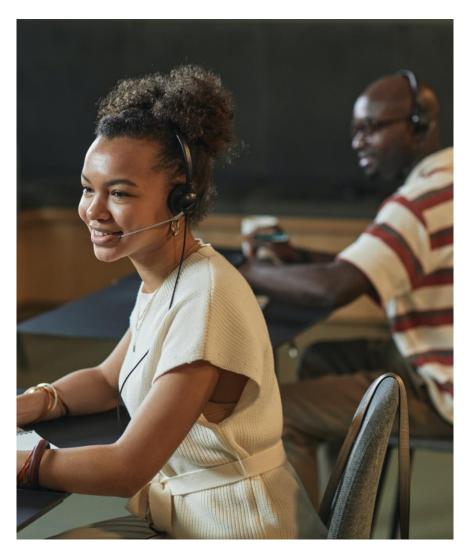
Taking action to improve connectivity for new markets and to create new jobs

47% -6

Promote air cargo as a career choice

Companies from Group Core report they are contributing to improving connectivity and creating jobs





Low priority of promoting air cargo as a career may exacerbate industry's workforce shortage

55

47% -6

Promote air cargo as a career choice

This number jumps to 75% for companies, who rank attracting and retaining staff as number one objective

19% -28

Airports promote air cargo as a career choice. Medium-size airports are above average – 33%, while large ones are below average – 18%

100%

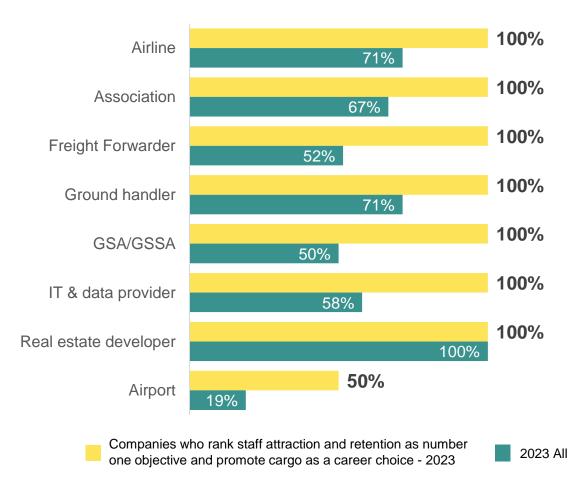
Airlines, freight forwarders, ground handlers, IT solution providers, GSAs and real estate developers who rank employee attraction and retention as number 1 objective, promote air cargo as a career choice

Airports are an exception (50%)

"Supply chain is not perceived as "good" a career as one in finance, product development or sales"

DHL Talent Gap 2022 study

How much companies promote air cargo as a career choice when they rank staff attraction and retention as number one objective



Workforce challenges probably fuel people focus

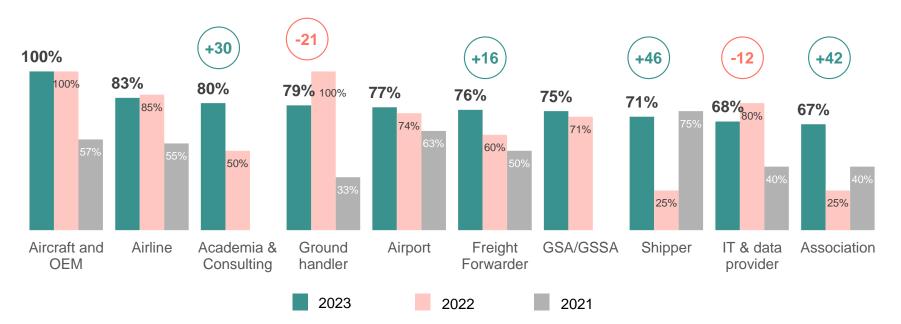
76% +3
Invest in training and education

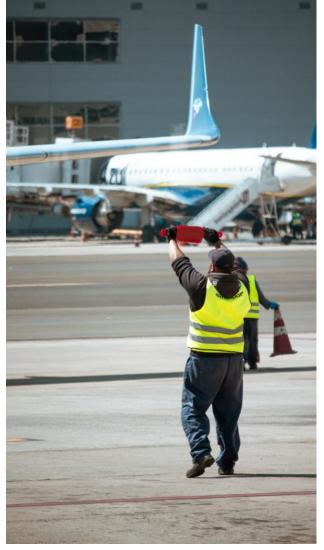
73% +2
Improve employee experience

68% +1

Advance diversity & inclusion

Companies who confirm they invest in employee training and education by stakeholder type





Companies that place staff attraction and retention as number one objective, invest in innovation

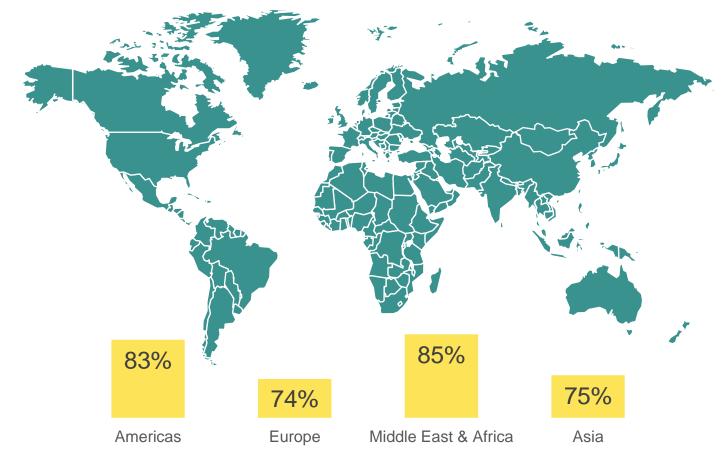
96%

Take concrete action to innovate or are learning about its opportunities

100%

Airports, freight forwarders, ground handlers, IT solution providers who place employee attraction and retention as number 1 objective, invest in innovation *Airlines are an exception (50%)*

Companies who are investing in innovation by region



Note: Investing and supporting innovation topic has been added for the first time in this year's survey and therefore year-on-year data is not yet available.

Digitalization is maturing for everyone and everywhere

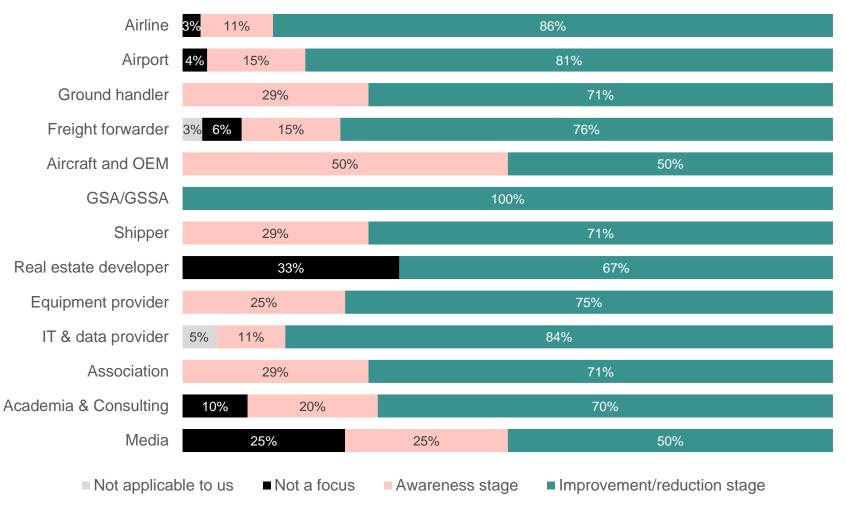
78% +12

Accelerating sustainable digitalization

What is sustainable digitalization?

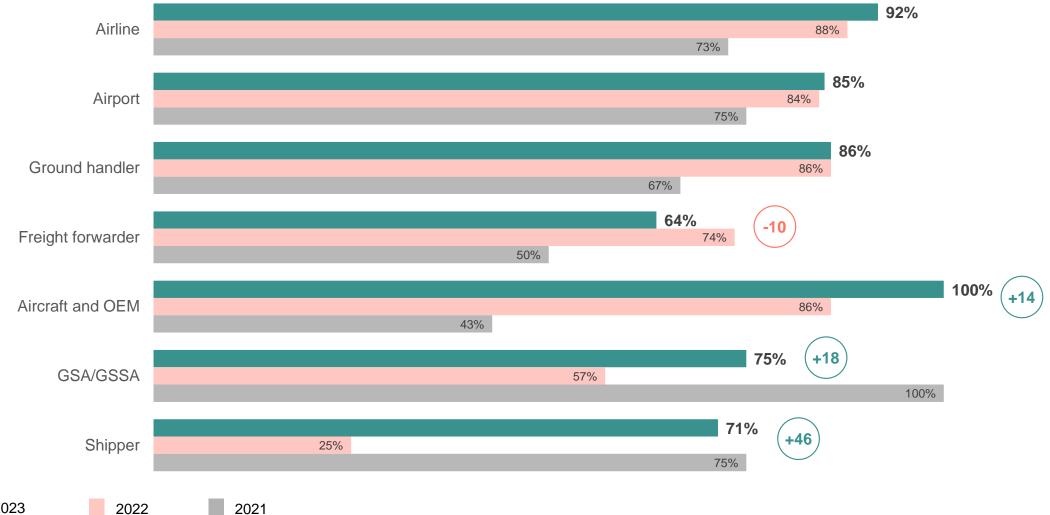
It is about addressing a company's negative impact and improving its positive impact on the planet and its people through optimized processes and better products they sell.

Digitalization progresses across stakeholders



79% of air cargo companies focus on improving efficiencies and operational excellence

Companies who take concrete action to improve operational excellence



Partnerships progress, but more needs to be done on sustainable sourcing and procurement

75% +5

Support business partners

55% -1

Lead change through sustainable sourcing and procurement

68% +6

Contribute to the global picture through industry collaboration

66% +1

Companies with sustainability teams or at least one person in charge do sustainable procurement and sourcing



Recommendations for organizations

Air cargo industry has significant work to do to advance in its sustainability journey. TIACA calls the industry to focus on the following areas:

1. Set your sustainability agenda

The time is now to start addressing sustainability, even if the ambition is built up over time. There is a role every air cargo company can play, no matter their size, business complexity or location

2. Ramp up the sustainability resources
Send a signal to your key internal and
external stakeholders of your ambition and

external stakeholders of your ambition and make sustainability a business differentiator

3. Address workforce challenges with people-focused strategy

Address the expectations of your staff and the talent you want to attract by placing job purpose, people-first mindset and innovative environment at the forefront of your company's communication

4. Build trust in your business by joining the BlueSky program

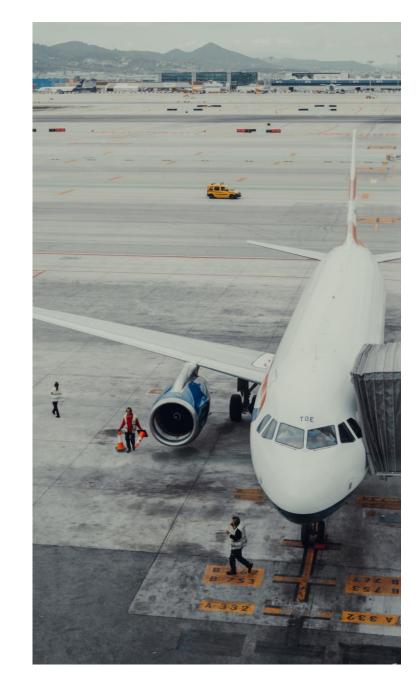
Build trust and take your place as the first user committed to positive change

5. Raise sustainability awareness

Train and involve staff at all levels of your company to get the buy-in the top levels and engage your employees to help you embed sustainability in your corporate culture

6. Get ready to address customers requests and regulation

Address ever growing pressures for more data, policies and soon – wide-ranging public disclosures with data collection systems, established policies and practices as part of your sustainability strategy





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Acknowledgements

Authors and supporters

Change Horizon team

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TIACA team

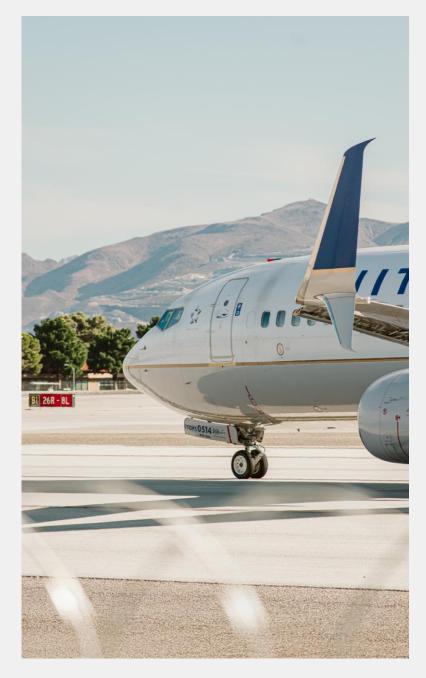
Glyn Hughes, Director General

Thank you to all supporting media and partner associations who have contributed to promote the survey to their respective members.

Additional sources

- 1. TIACA's Sustainability Program
- 2. TIACA's BlueSky Program
- 3. TIACA's Air Cargo Sustainability Roadmap
- Deloitte 2023 CxO Sustainability Report, Accelerating the Green Transition, 2023
- Big shifts, small steps, Survey of Sustainability Reporting 2022, KPMG International, October 2022
- 6. Profits with purpose: How organizing for sustainability can benefit the bottom line, McKinsey, 2014
- 7. The supply chain talent shortage: from gap to crisis, DHL, 2022

Pictures from Microsoft, Pexels and Unsplash



Trusted partner on your sustainability journey

No matter big or small, every company in air cargo has a role to play in making our industry more sustainable.

And we can help with clear guidance and pragmatic solutions.

STRATEGY

Materiality assessment & stakeholder management

Competitive benchmarking and ESG landscape

Definition of sustainability ambition and KPIs

Identification and design of sustainability policies

CONCRETE ACTION

Sustainability initiatives roadmap

Execution and monitoring of sustainability initiatives

Your decarbonization action & preparation for SBTi

AWARENESS & TRAINING

Engagement and training of staff on sustainability

Equipment of teams to address stakeholder requests on sustainability

STORYTELLING

Articulation of your sustainability ambition to key audiences

MEASUREMENT & REPORTING

Sustainability reporting process design

Sustainability report design and delivery

CHANGEHORIZON