

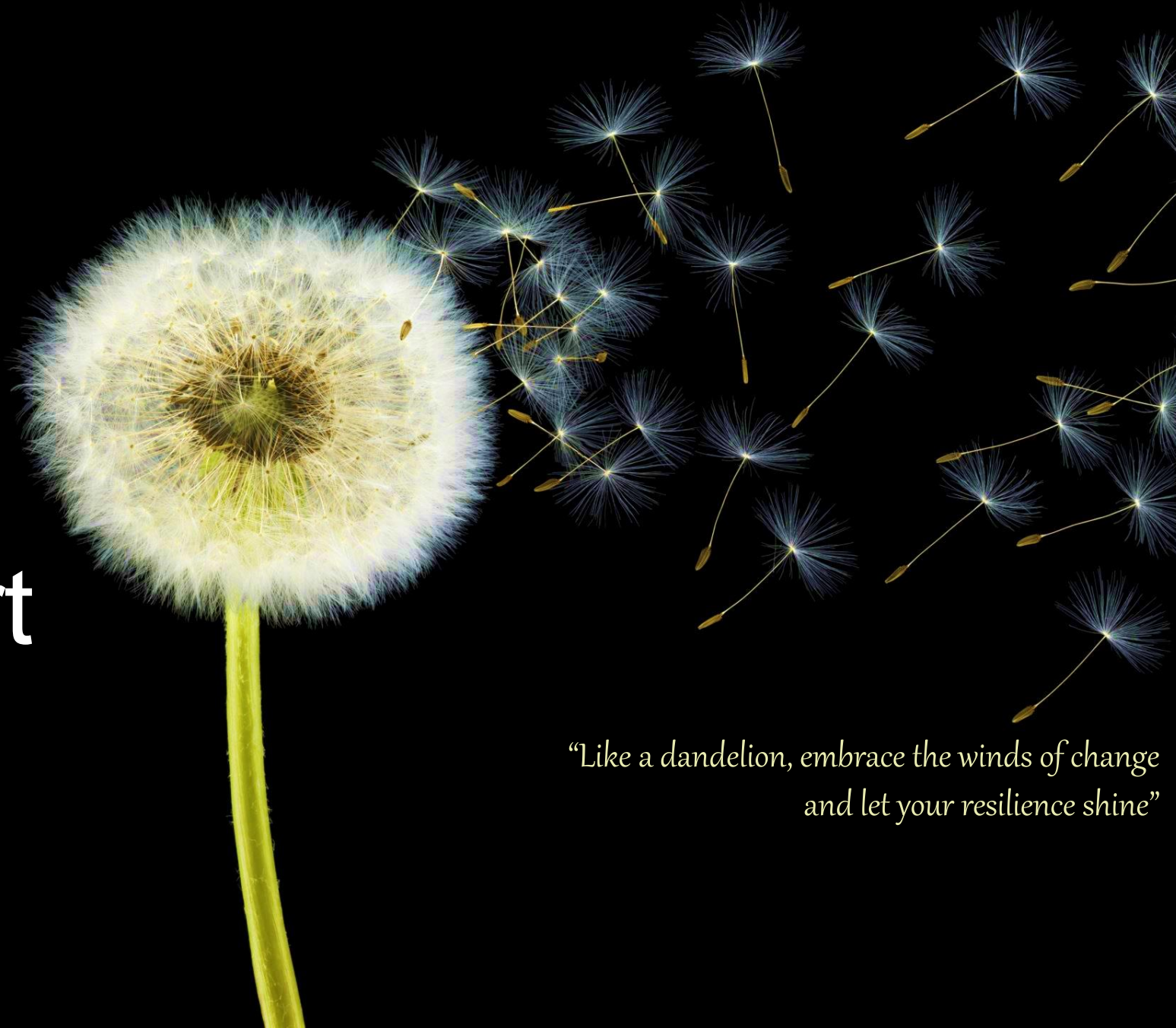


Air Cargo Sustainability Insights Report

Results of the 4th annual air cargo industry
sustainability survey

February 2024

Prepared by **CHANGEHORIZON**



*“Like a dandelion, embrace the winds of change
and let your resilience shine”*

Content

TIACA's message	3
Executive summary	4
About the report	5
Sustainability definitions	7
Sustainability pressures	10
Industry's maturity	12
Industry's priorities	20

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TIACA's message

Dear reader,

It gives us great pleasure to present the fourth version of the TIACA annual Insights Report which is a comprehensive across industry analysis of how the community is responding to the many critical aspects that comprise sustainable transformation.

Sustainability is a broad concept, covering actions directed at doing good for the planet, people, and business. And at TIACA we add through partnerships and innovation.

This year's report is compiled from nearly 300 responses from the entire industry covering airlines, airports, freight forwarders, ground handlers, shippers, equipment manufacturers, IT providers, and other bodies. The report analyzes data by industry sector as well as organizational size with a good mix of small, medium and large businesses. We also analyze the responses from a regional perspective.

Pressures to be sustainable continue to increase from all stakeholders, including customers, employees, business partners, regulators, local communities, and financial institutions.

We see significant increases in organizations' focus on energy efficiency and carbon footprints reductions. Fleet renewals feature in airline and ground handler strategies, as well as green more efficient buildings and optimization strategies leveraging innovation and digitalization.

The number of organizations who are allocating funds to sustainable initiatives has increased as have the number of companies with specific sustainability strategies and who produce annual sustainability reports.

Although there is one trend which appears quite regularly throughout the study which is the differential between large and small organizations. However, with regulations and customer demands for greater action increasing across the board, smaller organizations will continue to face additional challenges in demonstrating tangible moves forward.

TIACA has specific programs, specifically the BlueSky sustainability assessment program designed to support all organizations in understanding where they stand against industry best practices in many areas of sustainability.

In conclusion, we are very encouraged by how the entire industry is embracing the need for sustainable transformation as the next generation of air cargo leaders, men, and women, want to work for an industry that is modern, agile, and sustainable.

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



Glyn Hughes
Director General, TIACA

While TIACA continues to support and enable the industry with its sustainability program, I am calling all air cargo businesses to join in and:

- 1. Set up concrete targets** to accelerate their sustainability transformation
- 2. Measure progress made** by collecting data and facts regularly
- 3. Communicate** on achievements with transparency
- 4. Get recognized for the progress made** by embarking on BlueSky, TIACA's sustainability assessment and validation program

Executive summary

by Celine Hourcade, Sustainability lead for TIACA & Founder of Change Horizon

Conducted for the 4th time from November 2023 to January 2024, the annual Air Cargo Industry Sustainability Survey reveals interesting trends affecting the sector and its approach to sustainability:

1. While most air cargo stakeholders focus on environment when talking about sustainability, 22% of them integrate at least 3 dimensions to their sustainability definition, in line with the global use of the ESG terminology.
2. Commercial & financial performance, regulatory compliance and ability to attract and retain talents are the top 3 priorities for air cargo businesses.
3. Survey reveals that companies see a clear link between their ESG performance and their reputation (85%) and attractiveness (73%) but less so for their bottom-line (39%).
4. Globally, the sustainability pressure (67%) has increased by 3 points compared to last year and 9 points compared to the first report in 2021 mainly driven by demands from customers (80%), employees (73%) and business partners (69%).
5. The pressure from regulators keeps increasing year on year: only 37% of the respondents in 2021 were indicating regulatory pressure while it is now 61%, i.e. 6 points more than last year and 24 points compared to 2021!
6. C-suite prioritize sustainability: 91% of the respondents confirm it is supported by their CEO, 81% by their CFO and 97% highlight sustainability is equally or more important than last year.
7. While 71% have a sustainability strategy, this number hides notable differences between large (92%) and small companies (46%).
8. 62% indicate there is sustainability expertise at Board and Senior Executive Committee levels. For large European groups, this figure jumps to 85%.
9. Whilst 76% of large groups have sustainability teams and 61% have dedicated budgets, there is rarely in house sustainability expertise at small (28%) and medium (46%) size companies.
10. Survey shows companies are embedding sustainability in traditional corporate functions: 53% include ESG in their risk management process, 68% in their procurement process (4 points more than last year) and 69% in their partners' engagement approach (6 points more).
11. 74% of companies with a sustainability strategy feel that sustainability is embedded in their company's DNA.
12. Sustainability reporting becomes the norm: 79% (9 points increased compared to last year) measure their progress on sustainability targets, and 81% of them produce a sustainability report.
13. Not surprisingly, the air cargo industry first tackle its efficiencies and operational excellence and innovation and digitalization are fuelling the modernization efforts.
14. The industry continue investing in its people through training programs (79%) and employee well-being (76%). 70% declare they take action to advance their diversity and inclusion credentials.
15. Industry focuses on optimizing its energy consumption to decarbonize and reduce costs.
16. The industry accelerate asset modernization efforts: 75% of respondents declare they actively upgrade their fleet to cleaner aerial and ground vehicles. This is 25 points more than last year and it is driven by the 100% of ground handlers renewing their GSEs and cars and 91% of airlines modernizing their aircraft!
17. 88% of aircraft, OEM and ULD manufacturers and 64% of airlines are investing in lightweight materials to reduce weight of vehicles and ancillary equipment.
18. 71% of airports confirm they are transitioning to green buildings, and 79% are actively tackling their water management issues and 80% focusing on reducing their noise footprint.
19. Large groups increase their focus on SAF, but only 35% of respondents confirm they are actively involved in SAF projects.
20. Offsetting gains some traction, probably due to mandatory schemes with 43% of companies using offsetting mechanisms.
21. The air cargo industry is boosting its waste & water management efforts with 90% looking into the single plastic issue.
22. More outreach efforts are needed to explain how air cargo can protect biodiversity as 46% still do not see a role they could play in the fight against wildlife trafficking. This is an alarming 8 points more than last year!

About this report

Methodology

This report is based on the 4th edition of the annual Air Cargo Industry Sustainability Survey, conducted from November 2023 to January 2024.

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 3rd survey

The 4th edition of survey is a continuation of the first three editions to provide year-on-year comparison.

However, it includes 4 new questions reflecting the overall corporate ESG focus evolution across industries:

- Is sustainability supported by your CFO (Chief Financial Officer or equivalent)?
- Is there sustainability expertise at Board and Senior Executive Committee / Senior Management Team levels?
- Does your company include ESG in its risk assessment & management process?
- Which frameworks and standards does your sustainability report reference?

How to read the analysis

The majority of the results are considering all 280 respondents. We displayed results by company size, region and/or company type where relevant.

Where it made more sense, we looked only at responses from certain type of stakeholders grouped as follow:

- Group Core: airlines, airports and ground handlers
- Customers: freight forwarders and shippers
- Manufacturers: aircraft, OEM & ULD manufacturers, GSE and packaging providers
- Other suppliers: GSAs, GSSAs, IT and data providers
- Influencers: academia, consulting, media, trade associations and networks

Comparison of data is done against previous three years where data is comparable and when it was relevant.

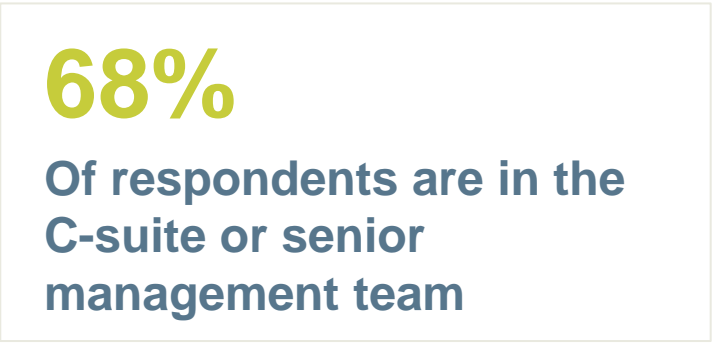
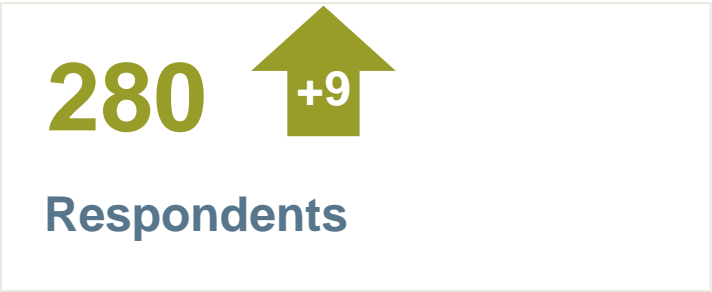
Acknowledgements

Report authored by Celine Hourcade, Sustainability lead for TIACA & Founder of Change Horizon.

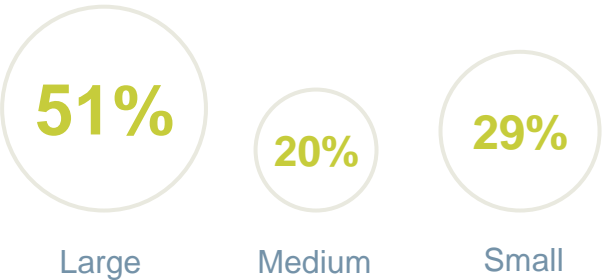
TIACA would like to thank all its partner associations who have contributed to promote the survey to their respective members, especially Airport Council International and ACI-North America, FEDAGSA, Air Cargo Belgium, and Neutral Air Partner.

Thank you also to HACTL and Edmonton International Airport for advertising and therefore supporting the costs of producing the report for the benefits of the industry.

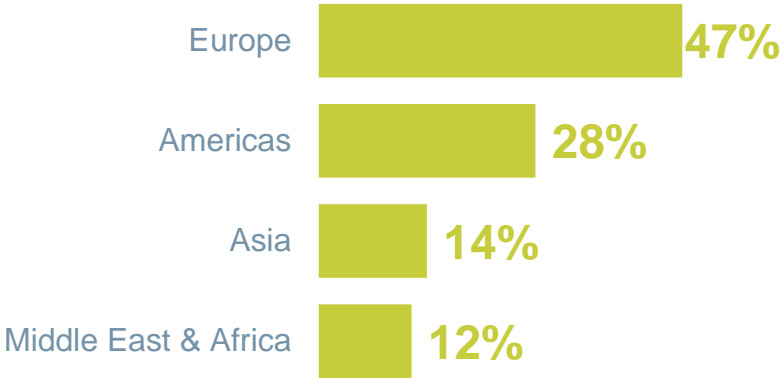
The voice of the air cargo industry



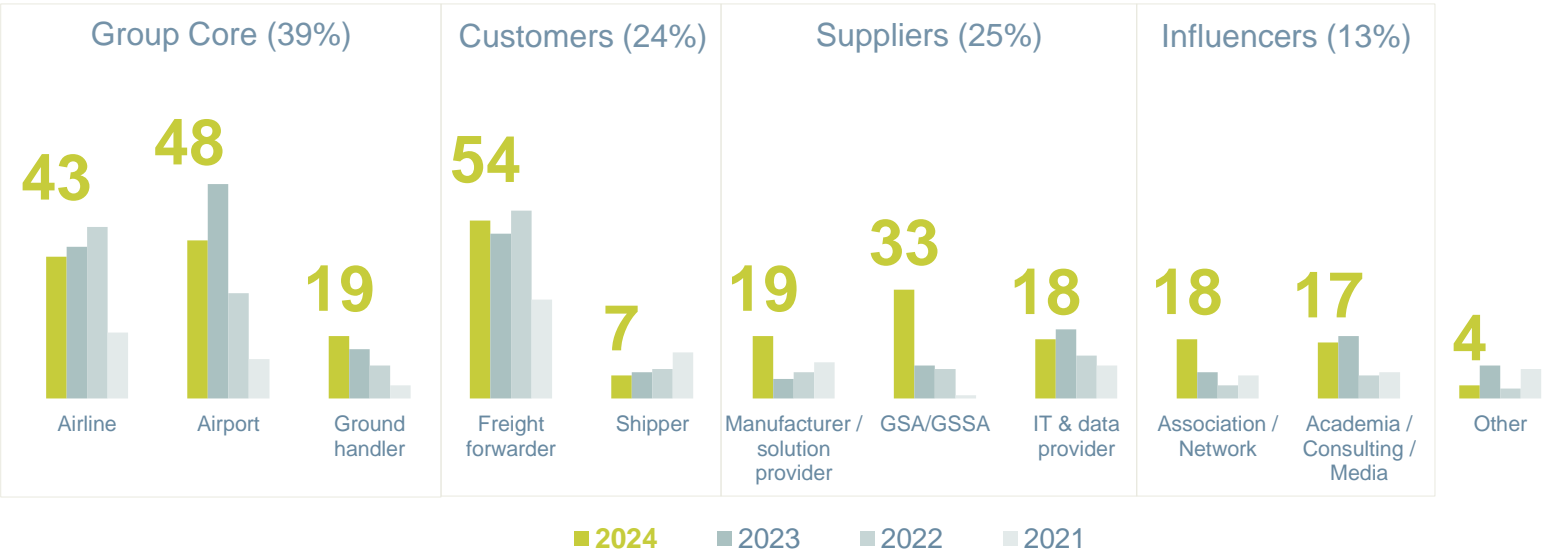
Respondents by company size



Respondents by region



Respondents by company type



Most air cargo stakeholders focus on environment when talking about sustainability

Across the air cargo industry, the concept of sustainability varies considerably

58%

Of the companies having detailed their definition of sustainability confirm they are focusing on environmental matters, mostly linked to carbon footprint and climate change

22%

Integrate at least 3 dimensions to their sustainability definition

- ESG: Environment, Social & Governance
- 3Ps: People, Planet & Profits
- TIACA's 3+2: doing good for the planet, the people and the business, enabled by innovation and partnerships
- 5Ps: People, Planet, Prosperity, Peace & Partnership
- 17 SDGs (Sustainable Development Goals defined by the United Nations)

How they define sustainability

For [...], sustainability refers to the responsible and ethical management of environmental, social, and economic impacts associated with its operations, products, and services. It encompasses strategies and practices aimed at minimizing negative effects on the environment, promoting social equity, and ensuring long-term economic viability.

GLOBAL IT SOLUTION PROVIDER

Pushing towards carbon neutrality by 2040 and comprehensive ESG leadership

MULTINATIONAL FREIGHT FORWARDER

Promote inclusive, sustained and sustainable economic growth, full and productive employment and decent work for all, use resources responsibly, ensure sustainable consumption and production models.

EUROPEAN GROUND HANDLER

The continuation of the organization's mission, while limiting the impact on the man-made and natural environment, and the people we serve.

US REGIONAL AIRPORT

Prioritizing the safety of our team members and customers, supporting and attracting diverse talent, providing our customers with a world-class travel experience and positioning [...] to compete in a low carbon economy are all integral to running a reliable operation and a profitable company that thrives forever

US AIRLINE

Reducing CO2 emissions, increasing circular economy, and fostering cooperation.

PACKAGING SOLUTION PROVIDER

Minimizing environmental impact and contributing to sustainable development across Africa. Ongoing improvements, innovation, and collaboration are integral to achieving a more sustainable future for cargo operations in the region.

AFRICAN AIRLINE

For [...], "Sustainability" refers to the effort to reduce the impact of aviation on the environment through the pursuit of the four pillars: Decarbonisation, Waste Management, Biodiversity and Wildlife and Advocacy and Innovation while maintaining the ability to fulfil our obligations as a business.

MIDDLE EAST AIRLINE

Moving towards Net Zero emissions on the Environmental impact areas while also progressing on other aspects of ESG

INDIAN AIRPORT

To radically reduce our carbon footprint while setting the highest social and governance standards. Make aviation continuously more sustainable by investing in the latest technology, improving flight operation efficiency, supporting innovative technologies, decarbonising ground handling and adding more green options for customers.

ASIAN AIRLINE

Hong Kong Air Cargo Terminals Limited

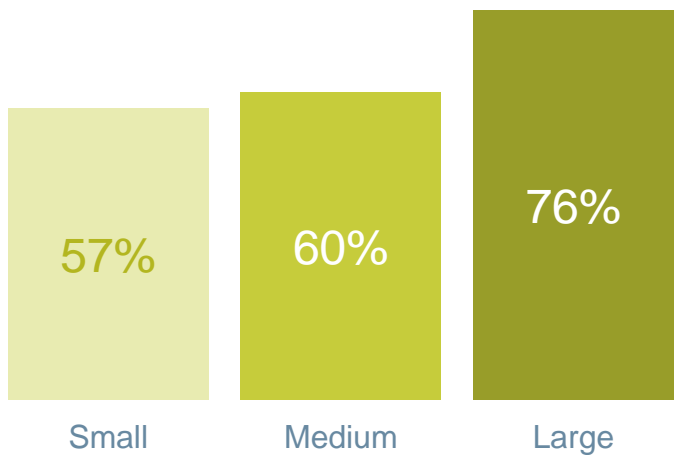
People and Planet before Profit



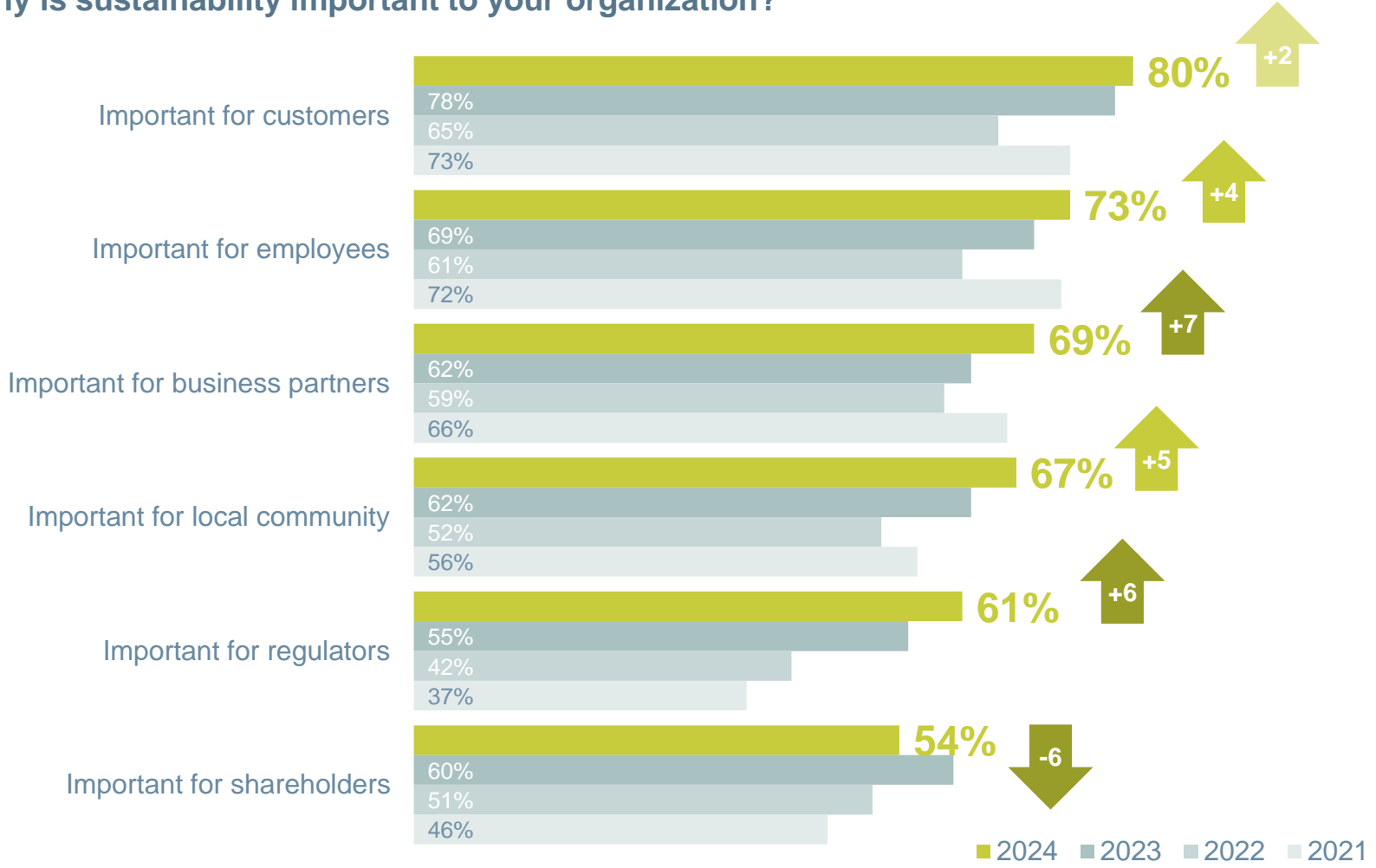
Regulators and business partners increase their pressure for sustainability



The sustainability pressure varies significantly by company size



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)"

The business case of sustainability



Air cargo businesses primarily focus on their bottom-line and their regulatory compliance

	Group Core (airlines, airports, ground handlers)	Customers (forwarders & shippers)	Manufacturers (aircraft, OEM, GSEs, Packaging)	Other suppliers (GSSAs, IT & data providers)	Global ranking*
Improving our commercial & financial performance	1	1	1	1	1
Being compliant with regulations	2	2	2	3	2
Attracting and retaining staff	5	3	4	2	3
Reducing our carbon footprint	4	4	3	4	4
Modernizing our infrastructure and operations	3	4	5	5	5
Securing access to capital	6	6	6	6	6

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

How can sustainability credentials contribute to their success?



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)”. In their comments, survey participants mentioned regularly the positive impact on their compliance, competitiveness and survival.

C-suite & Boards prioritize sustainability

91%

Confirm sustainability is supported by their CEO
For Group Core, this is 96%

94%

Confirm CEO places sustainability as a strategic priority
But 15% of them declare they don't see any concrete action

97%

Highlight sustainability is equally (42%) or more (55%)
important than the previous year

81%

Confirm sustainability is supported by their CFO
For Large companies, this figure jumps to 87%

62%

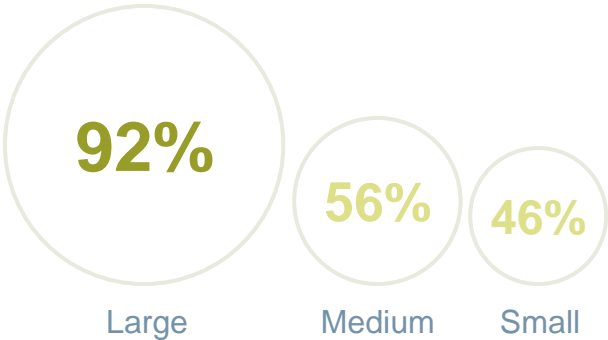
Indicate there is sustainability expertise at Board and Senior
Executive Committee levels
For Large European groups, this is 85%



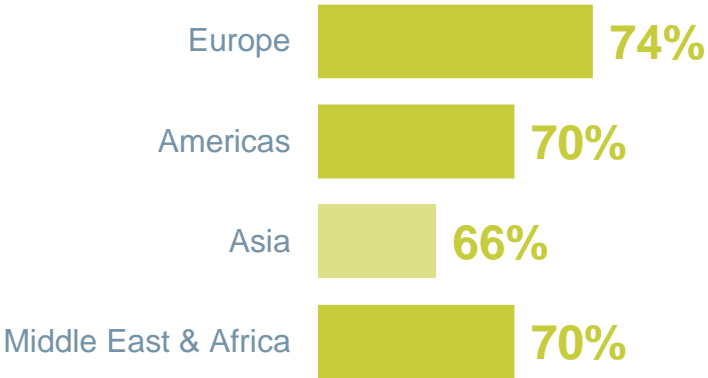
Delivering on commitments: 71% have a strategy



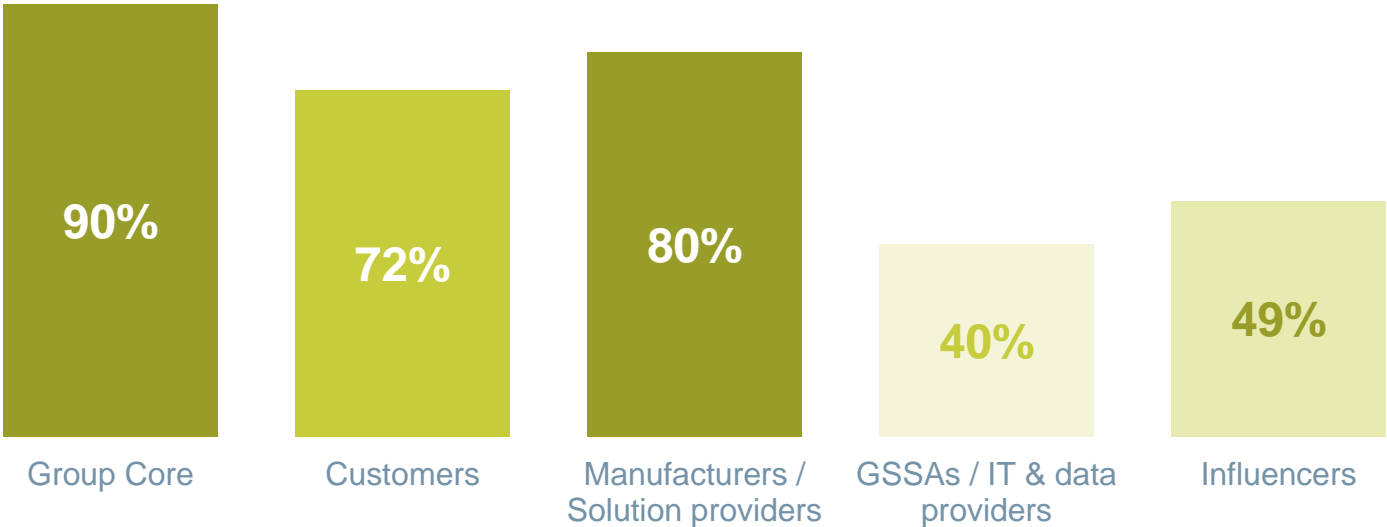
Companies with a sustainability strategy, by company size



Companies with a sustainability strategy, by region



Companies with a sustainability strategy, by company type

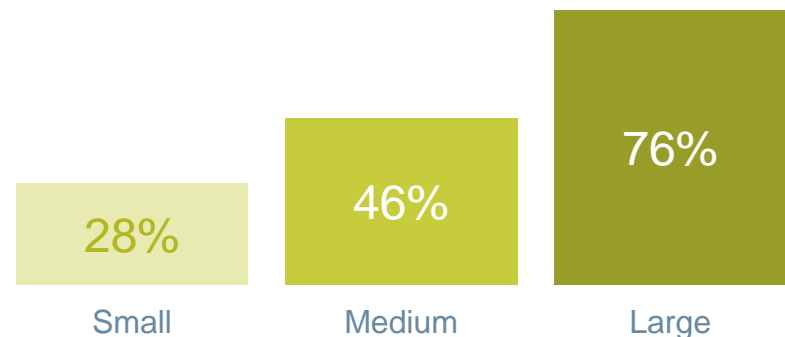


The rise of sustainability teams in large groups

56%

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

There is rarely in house sustainability expertise at small and medium size companies



18% of respondents having indicated their job title have Sustainability, CSR or ESG specified in their title

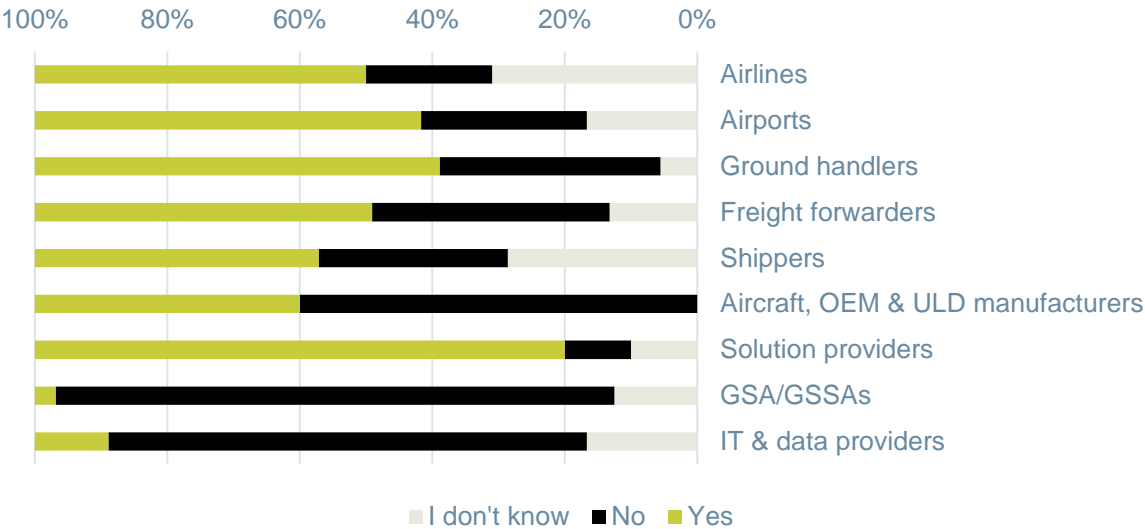
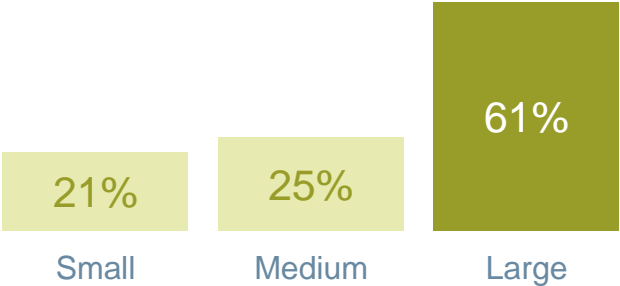


Still 58% of companies don't have a specific sustainability budget

42% 

Of companies confirm they have a dedicated budget to drive sustainability initiatives

Companies with a dedicated sustainability budget, by company size



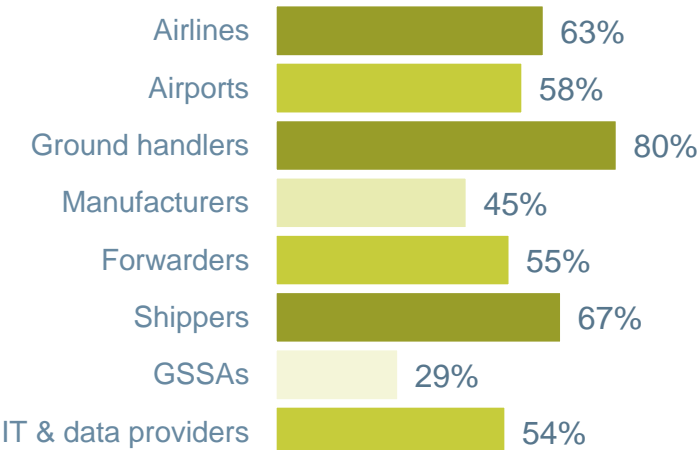
46%

Of companies with a dedicated sustainability budget have increased it compared to last year, potentially consolidating their leading advantage

From talks to action: embedding sustainability in corporate functions

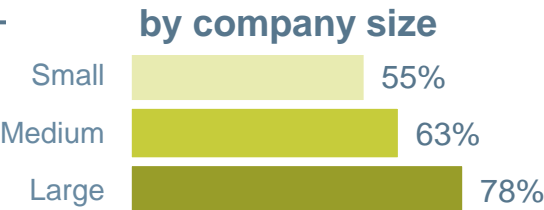
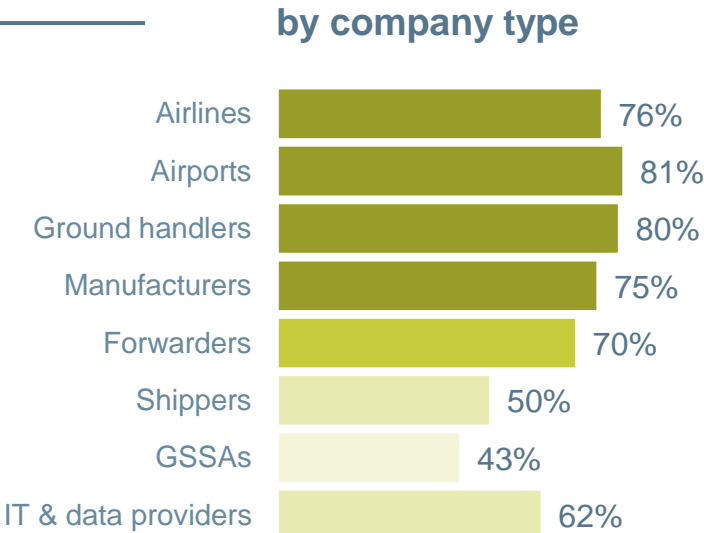
Risk management

ALL  **53%**



Procurement

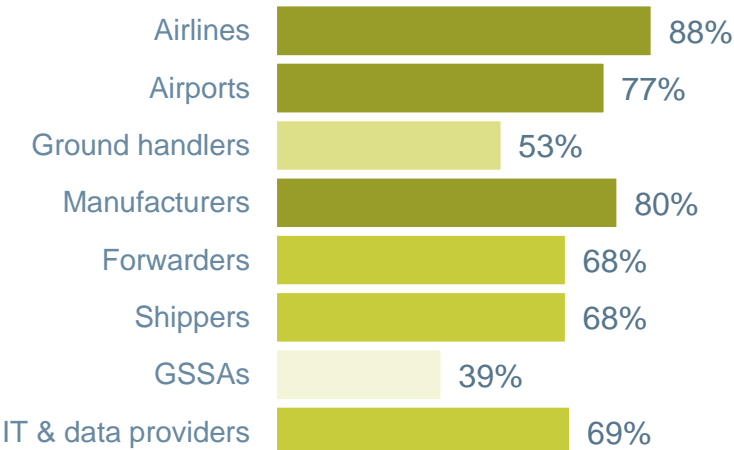
ALL  **68%** 



Out of the 233 companies having answered yes to the question "Does your company include sustainability considerations in its procurement process?"

Partners' engagement

ALL  **69%** 



Out of the 233 companies having answered yes to the question "Does your company engage with industry partners to advance its sustainability goals?"

Sustainability reporting becomes the norm

79% 

Of companies with a sustainability strategy defined measure performance and progress against their sustainability targets

76%

Of them* share their sustainability performance and progress externally

** Of companies with a sustainability strategy defined and who measure performance and progress against their sustainability targets*

81%

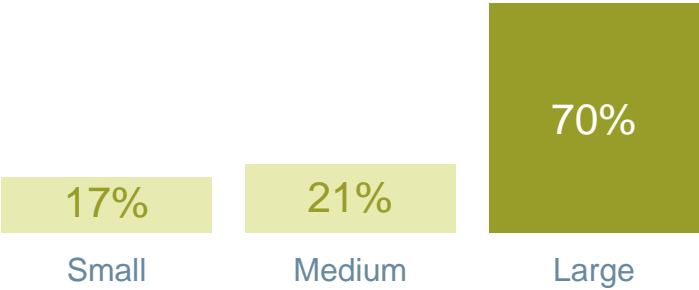
Of them** produce a sustainability report

*** Of companies with a sustainability strategy defined and who measure performance and progress against their sustainability targets and share them externally*

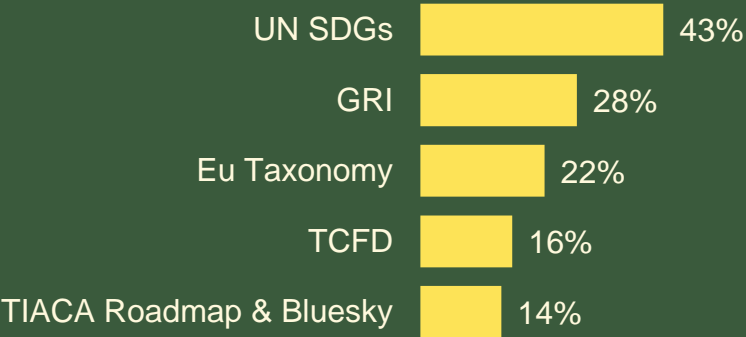


45%

Of surveyed companies produce a sustainability report, but this number hides huge differences by company size



The top 5 most referenced sustainability reporting frameworks





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

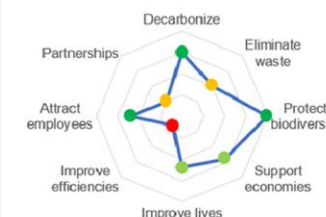
BlueSky Dashboard

Cargo Fly, Inc.



ISSUED	OVERALL SCORE	INDUSTRY SECTOR	VALID UNTIL
March 2022	230/320	Freight forwarding	March 2024

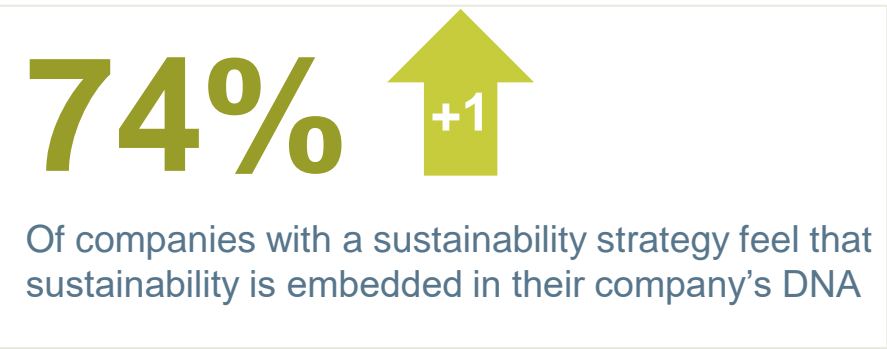
Cargo Fly logo



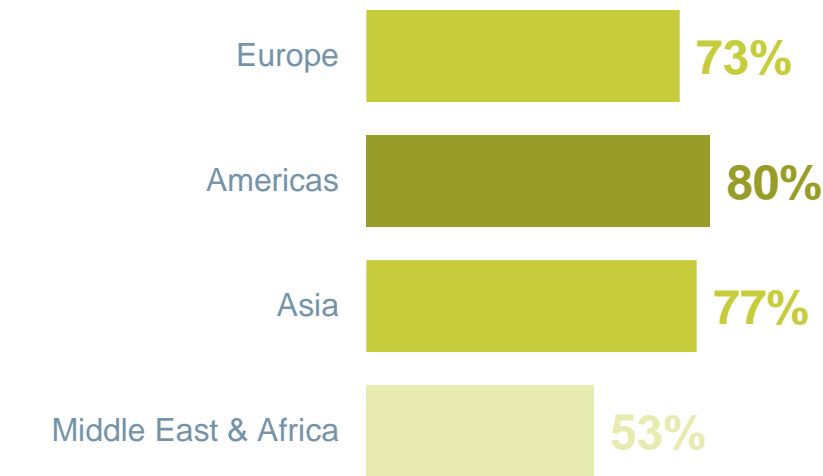
TIACA attests that Cargo Fly has provided substantial evidence demonstrating current sustainability performance in TIACA's 8 key sustainability priority areas for air cargo.

Cargo Fly earned an overall score of 230 in sustainability.

Sustainability starts being part of the corporate culture



Companies with a sustainability strategy & culture, by region



Industry priorities: the 8 key objectives for a sustainable air cargo

The 4th TIACA Air Cargo Sustainability Survey is aligned with the 30 actionable priorities which are addressing the 8 key objectives for sustainable air cargo transformation. Each of the 30 actionable priorities are defined in full detail in the TIACA Air Cargo Sustainability Roadmap.

Environment

Decarbonize

Eliminate waste

Protect biodiversity

Society

Support local economies & communities

Improve lives & well-being

Culture & leadership

Improve efficiencies & profitability

Attract, retain & develop employees

Build & nurture partnerships



Environment

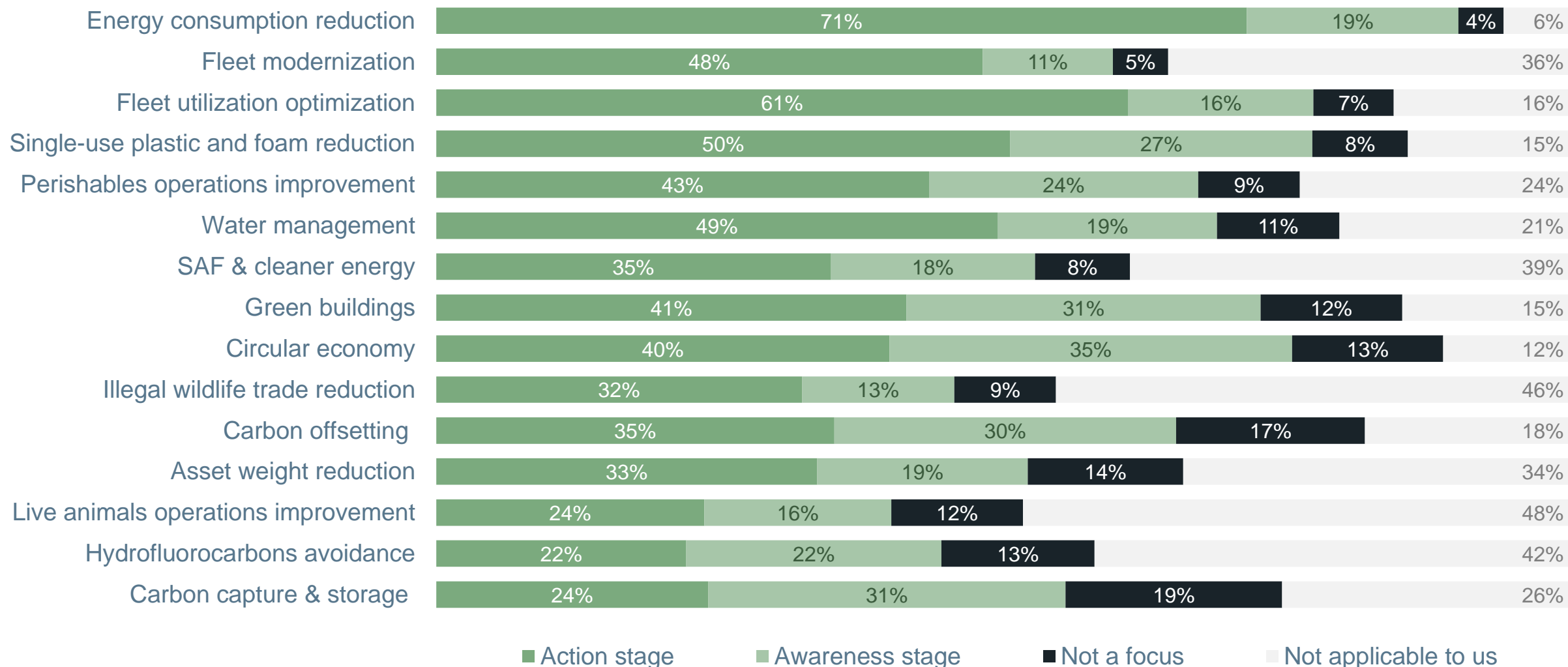
Decarbonize

Eliminate waste

Protect biodiversity

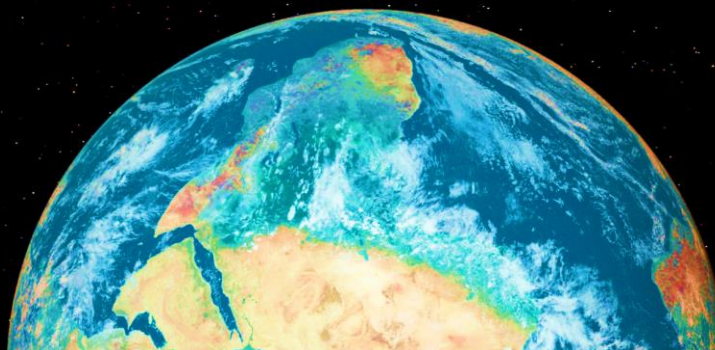
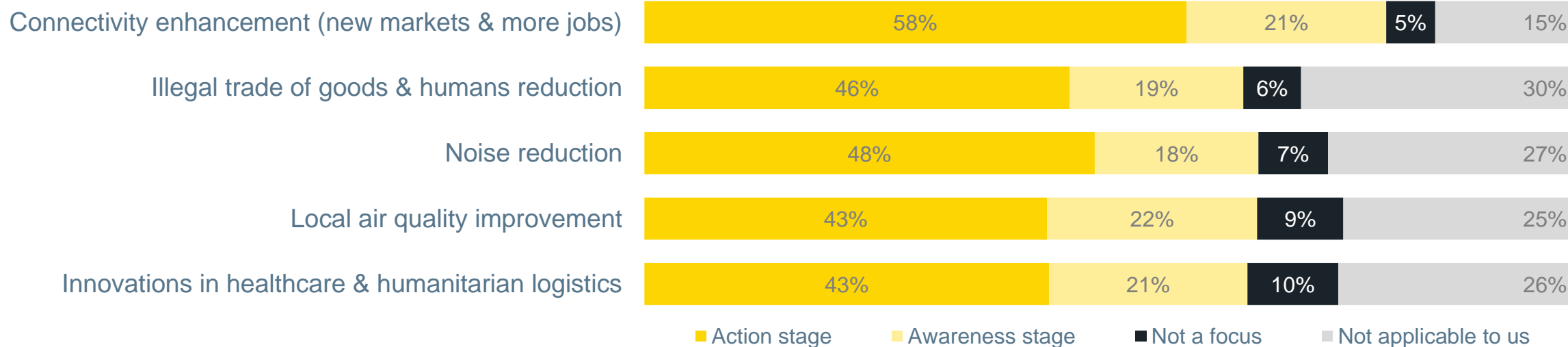
Environmental focus

All answers to the question: “Please indicate what you do to decarbonize, eliminate waste and protect biodiversity”



Society & local community focus

All answers to the question: “Please indicate what you do to improve lives and well-being and support communities in need”



Culture & leadership

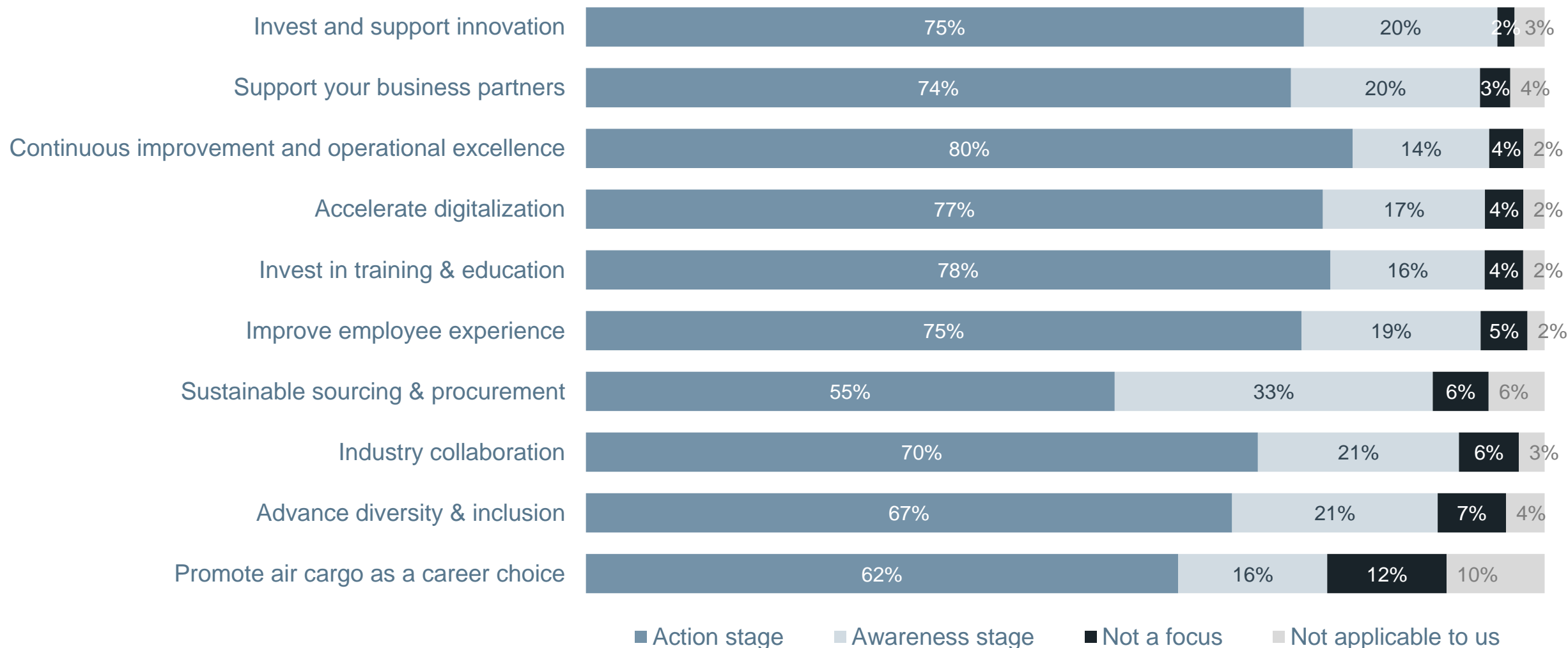
Improve efficiencies & profitability

Attract, retain & develop employees

Build & nurture partnerships

Corporate culture & leadership focus

All answers to the question: “Please indicate what you do to attract, develop and retain your talents, improve efficiencies & profitability, and build & nurture partnership”



The air cargo industry continues to focus on their efficiencies, profitability and modernization

Rank 2024	Rank change	Actions
1	▲ +1	Investment in & promotion of innovation
2	▲ +4	Business partners engagement & support
3	▼ -2	Continuous improvement & operational excellence
4	no change	Digitalization
5	no change	Training & education
6	▲ +3	Energy consumption reduction
7	no change	Employee experience
8	▲ +11	Connectivity enhancement (new markets & more jobs)
9	▲ +4	Sustainable sourcing & procurement
10	▼ -7	Industry collaboration

Rank 2024	Rank change	Actions
11	▲ +1	Diversity & inclusion
12	▼ -2	Fleet modernization
13	▼ -5	Fleet utilization optimization
14	▲ +1	Fight against illegal trade of goods & human trafficking
15	▲ +2	Single-use plastic and foam reduction
16	no change	Noise reduction
17	▲ +3	Perishables operations improvement
18	▼ -4	Local air quality improvement
19	▲ +4	Innovations in healthcare & humanitarian logistics
20	▲ +2	Water management

Rank 2024	Rank change	Actions
21	▼ -10	SAF & cleaner energy
22	▼ -1	Promotion of air cargo as a career choice
23	▼ -5	Green buildings
24	▲ +3	Circular economy
25	no change	Fight against illegal wildlife trade
26	▲ +2	Carbon offsetting
27	▼ -1	Asset weight reduction
28	▼ -4	Live animals' operations improvement
29	no change	Hydrofluorocarbons avoidance
30	no change	Carbon capture & storage

Note: Actions are ranked based on companies confirming they are focusing on these sustainability areas, either by raising awareness on the subject or taking action to improve or reduce their impact. The focus means these subjects are part of the companies' agenda but does not represent the maturity level of the actions.

Decarbonize
Eliminate waste
Protect biodiversity

Support local economies & communities
Improve lives & well-being

Improve efficiencies & profitability
Attract, retain & develop employees
Build & nurture partnerships

- *Drone delivery service in controlled airspace*

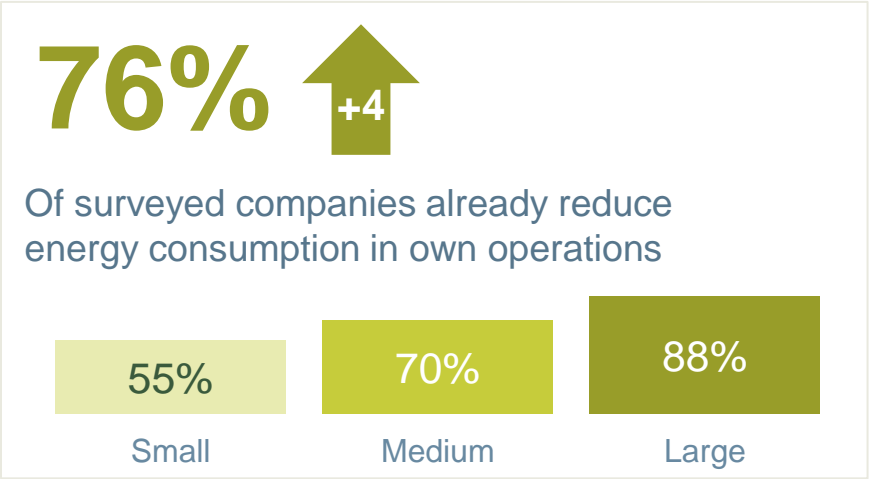
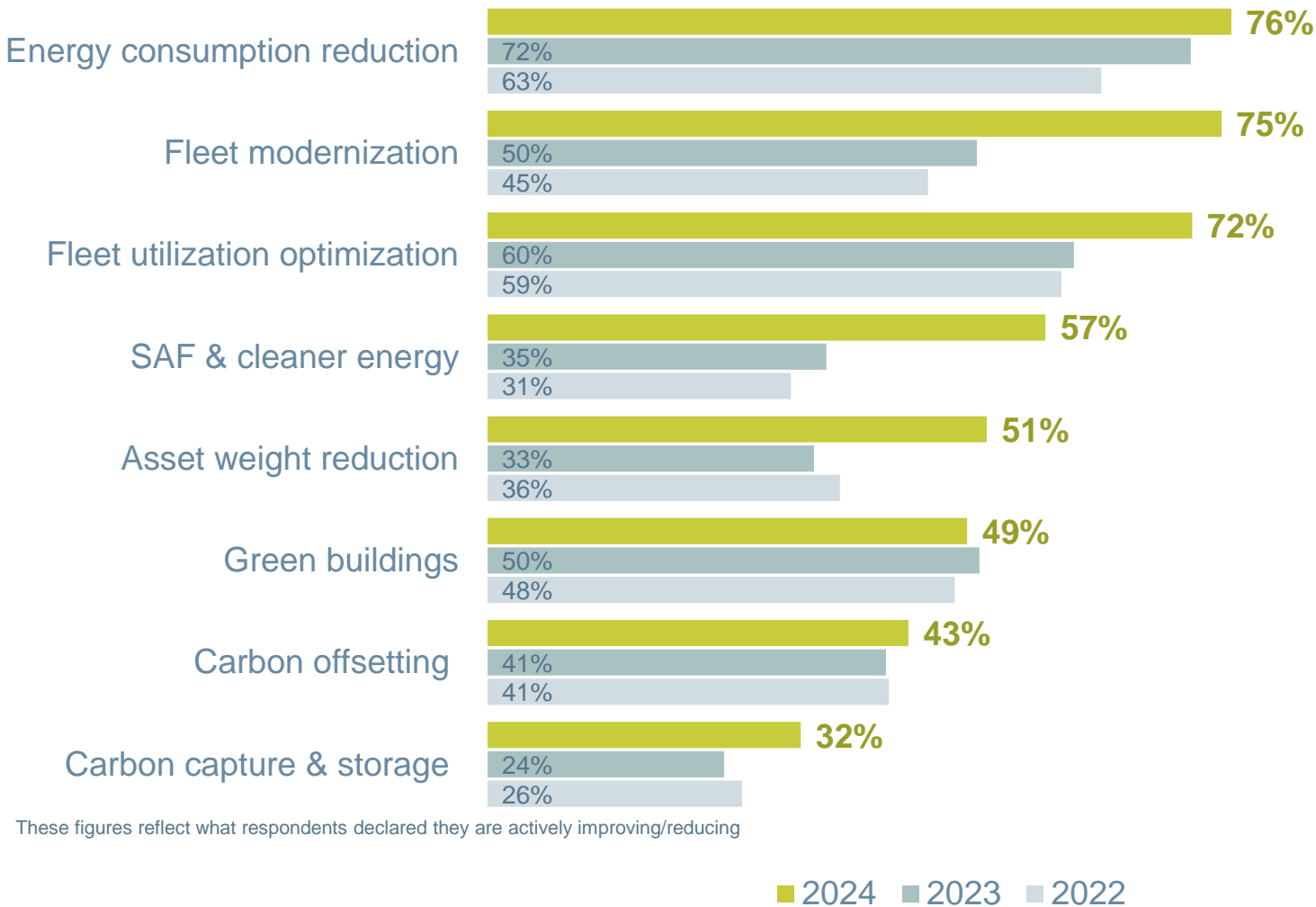
- *Reforestation and biodiversity initiatives*

- *Hydrogen and SAF agreements*



Industry focuses on its energy consumption to decarbonize, and reduce costs

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



The industry accelerate asset modernization efforts

Fleet modernization

75% 

Upgrade fleets to cleaner aerial and ground vehicles

This is 100% of ground handlers renewing their GSEs and 91% of airlines modernizing their aircraft

Asset weight reduction


51% 

Reduce weight of vehicles and ancillary equipment

This is 88% of aircraft, OEM and ULD manufacturers and 64% of airlines investing in lightweight materials



Fleet utilization optimization

72% 

Optimize vehicle utilization

This is 77% of Group Core (airlines, airports and ground handlers) and 86% of IT & data providers offering digital optimization tools

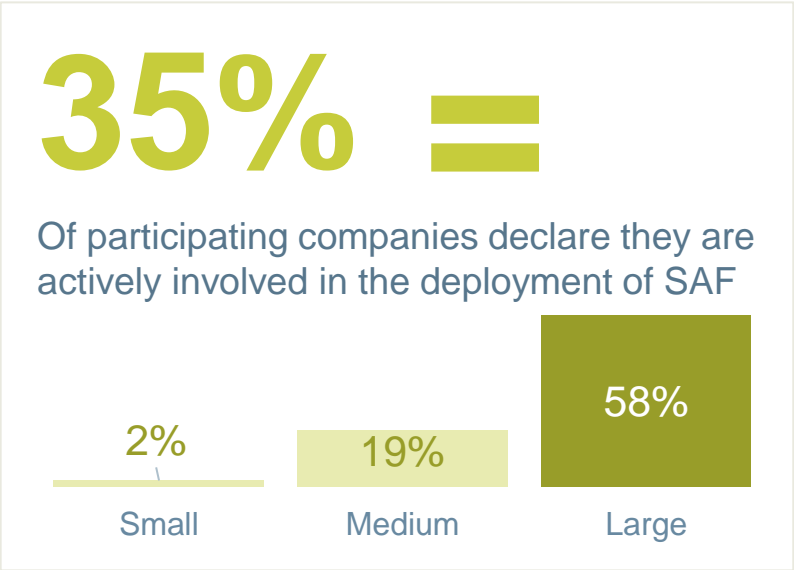
Transition to green buildings

49% 

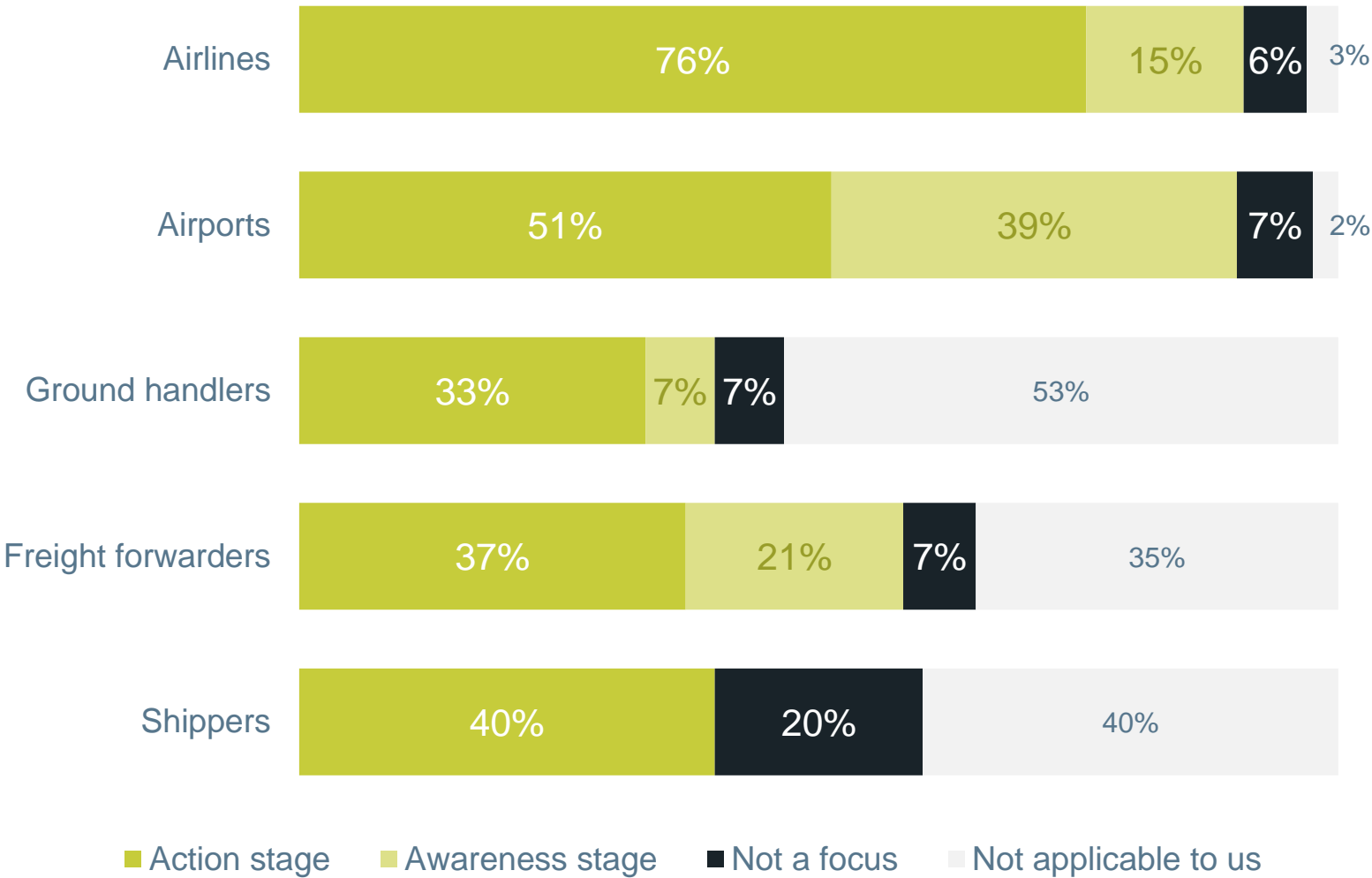
Transition to green buildings

This is 71% of airports showing huge investments in more energy efficient cargo facilities and 63% of IT & data providers probably looking at balancing the carbon footprint of data processing and storage

Large groups increase their focus on SAF



SAF investment and deployment by company type



Offsetting gains some traction, probably due to mandatory schemes

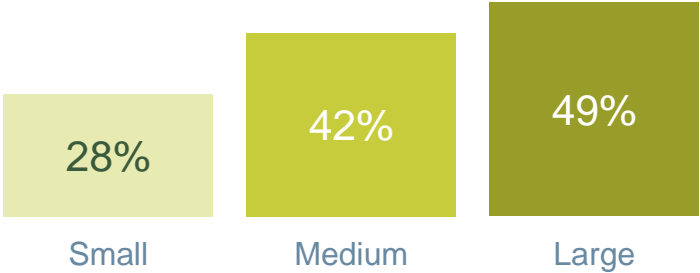
80%

Of surveyed companies confirm they already use offsets or are investigating the options

This is 85% for Group Core (airlines, airports and ground handlers)

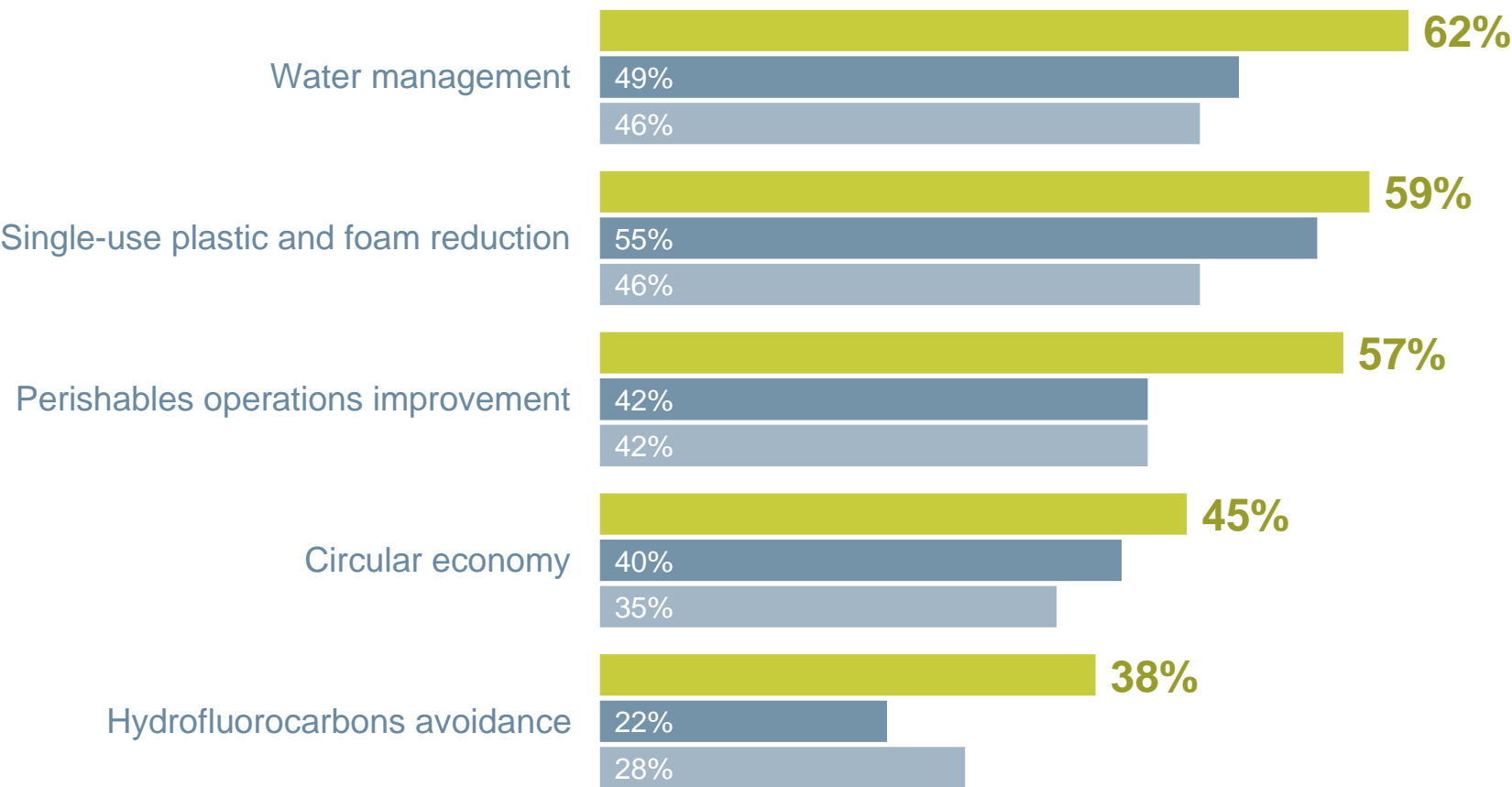
43% 

Of surveyed companies already use effective offsetting mechanisms



The air cargo industry is boosting its waste & water management efforts

How companies actively improve their waste & water management



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

■ 2024 ■ 2023 ■ 2022

90%

Of surveyed companies focus on eliminating single-use plastic and foam (action or awareness stage)

100% of companies in Asia are looking at the plastic issue!

79%

Of airports confirm they are actively managing, saving and protecting water. That is 17 points more than the industry average!

More outreach efforts are needed to explain how air cargo can protect biodiversity



46%

Still do not see a role they could play in the fight against wildlife trafficking. ***This is an alarming 8 points more than last year!***

59%

Actively combat wildlife trafficking.

This is 93% of airlines and 70% for Group Core (airlines, airports and ground handlers).

78%

Of surveyed companies are looking to improve live animals' transportation practices, through awareness raising and improvement actions

For Group Core (airlines, airports and ground handlers) this figure jumps to 90%.

Reducing noise and air pollution continue being the license to operate and grow for Group Core

66%



Actively reduce their noise footprint

*This is **80%** for airports*

58%



Actively improve local air quality

*This is **65%** for Group Core (airlines, airports and ground handlers)*

*Only **26%** of companies in the Middle East & Africa actively make efforts to improve local air quality*



Support neighbouring homes with a dedicated window sound insulation program, sponsored by the airport.

EUROPEAN AIRPORT

Increase the share of electric vehicles to at least 55% by 2032 helping to reduce noise and improve air quality.

LARGE GROUND HANDLER

96% of air cargo companies focus on their efficiencies and operational excellence

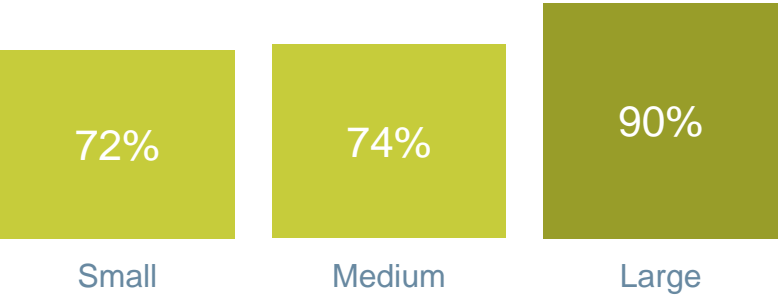
96%

Of surveyed companies focus on their efficiencies and operational excellence (action or awareness stage)

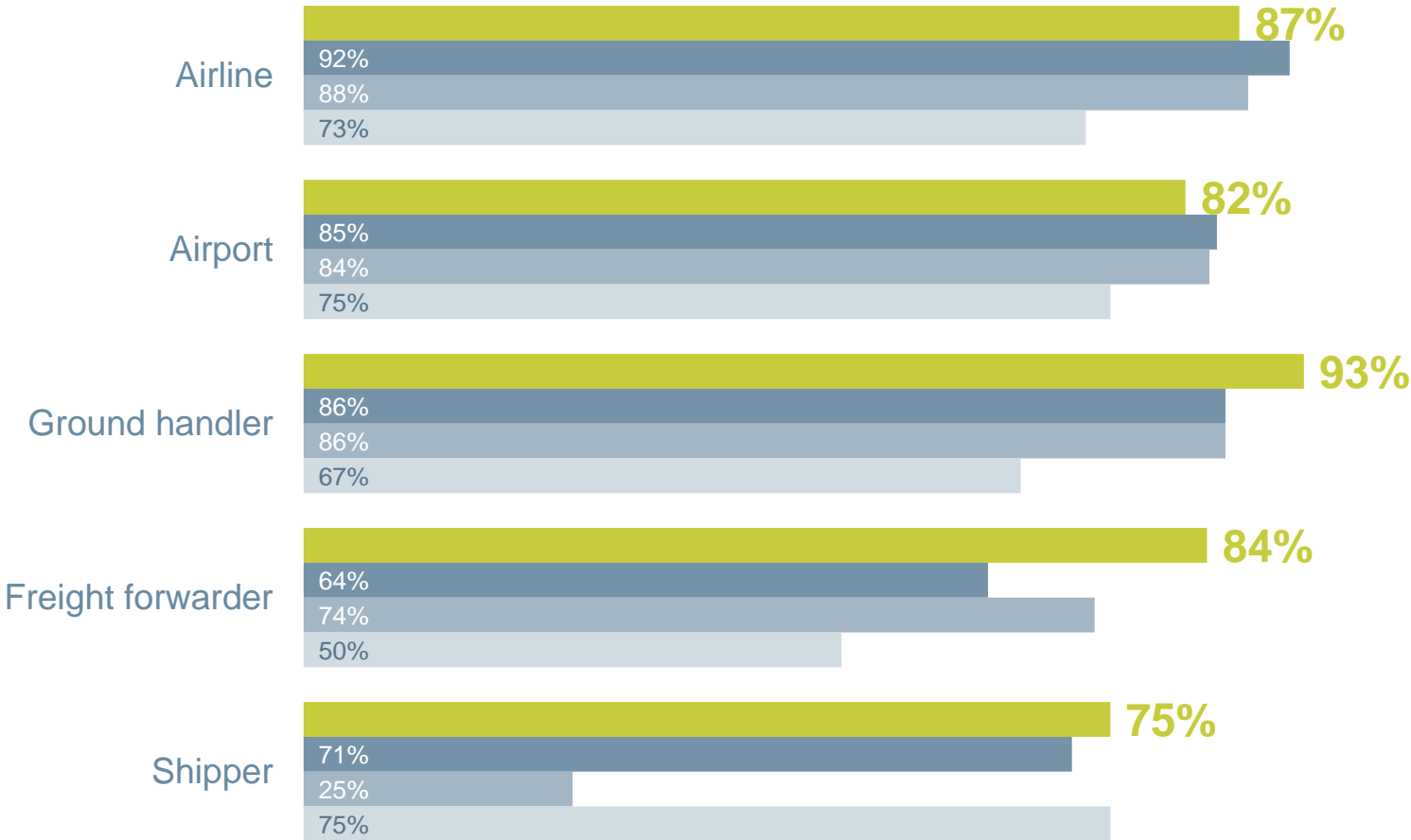
82%



Of surveyed companies confirm they take concrete actions to improve their operational excellence



Companies who take concrete action to improve operational excellence



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

2024 2023 2022 2021

Innovation and digitalization initiatives are fueling the modernization efforts of the air cargo industry

79%



Of surveyed companies confirm they take concrete actions to accelerate digitalization

77%

Of surveyed companies confirm they actively promote and invest in innovation

62%

Small

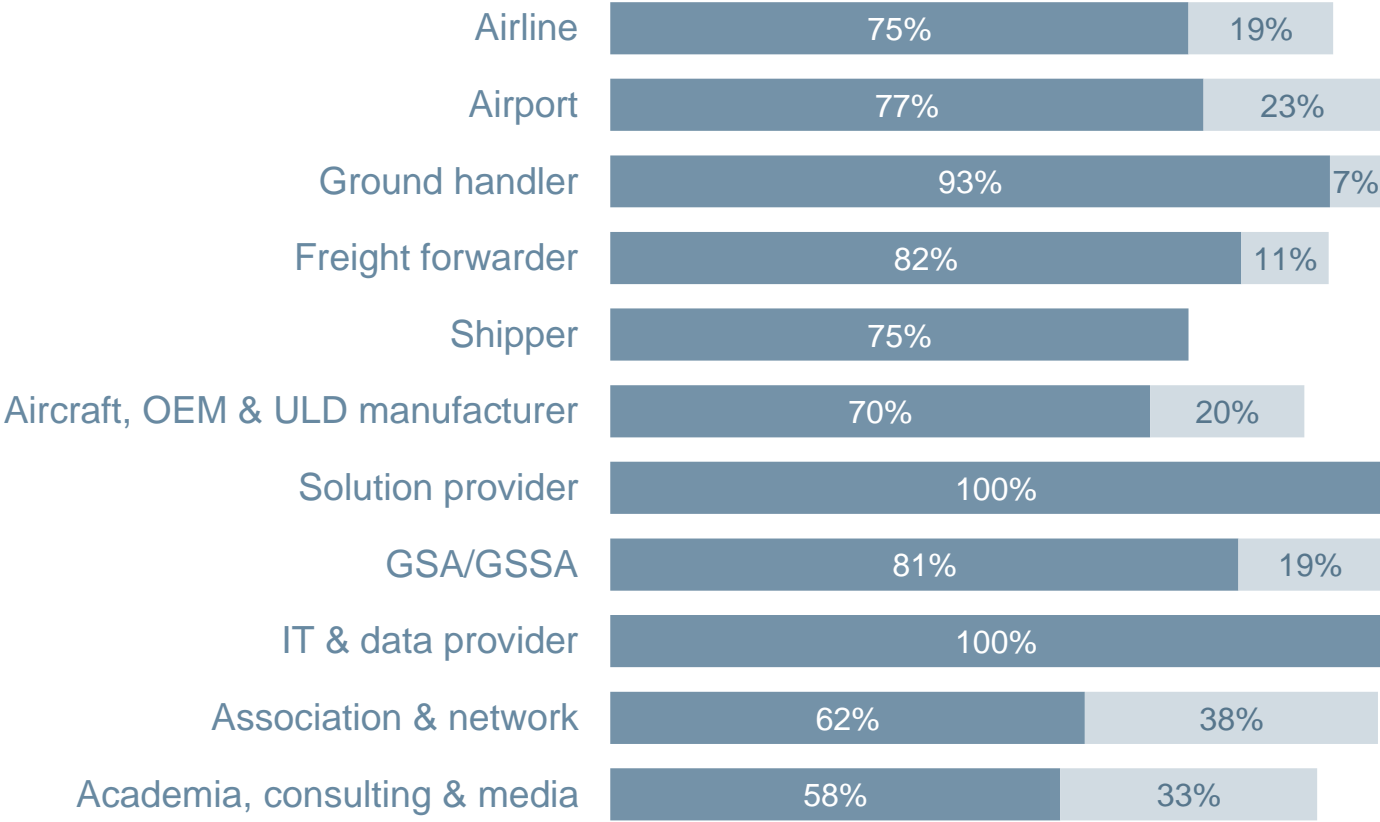
71%

Medium

88%

Large

Digitalization efforts by company type



The talents quest: air cargo invests in its people



“We have active Diversity & Inclusion targets and have a Diversity & Inclusion committee. We are constantly working on ways to enhance our employee's working environment and provide regular training to all employees. We also have started a PHD scholarship program investing in research in new aeronautical technology to reduce emissions.

LARGE GSSA

”100 stations with regional social outreach programs in health care, charity, environmental protection, and career development by 2027.

LARGE GROUND HANDLER

79% 

Invest in training and education

This is 81% for Group Core companies (airlines, airports and ground handlers)

76% 

Improve employee experience

This is 80% for Group Core companies (airlines, airports and ground handlers)

70% 

Advance diversity & inclusion

This is 81% for Group Core companies (airlines, airports and ground handlers)

Collaboration remains vital for the air cargo industry's success

76% 

Actively support their business partners

This is 100% for IT & data providers but only 65% for GSSAs

59% 

Lead change through sustainable sourcing & procurement practices

This is 67% for large companies

72% 

Contribute to the global picture through industry collaboration

This is 85% for trade associations & networks





*all the flowers of all the tomorrows are in
the seeds of today*

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