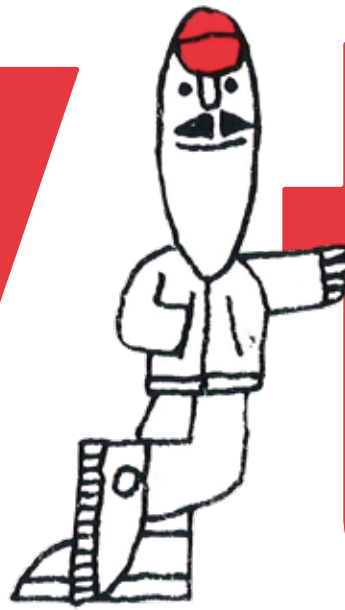




**you name it**

**we**

**fly it**





cargolux  
airlines international

Aéroport du findel  
Luxembourg

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# 01

message  
from  
the ceo



# message from the CEO

GRI 102-14

The year 2020 was unlike any other for many reasons. The heavy workload pandemic-related restrictions and upheaval of our traditional working patterns posed a set of unprecedented challenges both for the industry and for Cargolux. Keeping our employees safe worldwide while navigating sanitary measures, travel restrictions, and increased demand required dedication and resourcefulness. Yet one core consideration remained intact: our commitment to sustainability.

Early in the year, as the pandemic progressed and lockdown situations emerged, the importance of air cargo in the global supply chain was increasingly highlighted. The considerable decrease of passenger operations and the related belly-hold capacity, created a surge in demand for cargo carriers. Airlines such as ours were heavily solicited to fly essential supplies, including PPE and healthcare products, where they were most needed.

As international flights became scarce, our airline provided an air bridge between Europe, Asia, and the Americas. Cargolux and its teams worked tirelessly to keep goods flowing despite the circumstances and leveraged our position and expertise to keep communities safe. Numerous charter flights were organized to ensure populations were equipped to face the pandemic.

The welfare of our employees is a priority topic for Cargolux and was our primary concern since the outbreak of the pandemic with numerous measures introduced to preserve their health and protect them against the virus. Early in the year, the company focused on procuring protective equipment to keep its personnel safe and reduce contamination risks. As the virus spread to all four corners of the globe, sanitary measures were implemented such as working from home where ever possible and modified shift patterns for those whose presence was required on site. A monitoring system was also introduced for flight crew to avoid layovers in severely affected areas and minimize exposure to stringent quarantine requirements at destinations.

The team demonstrated immense flexibility and this approach enabled the company to respond to the increased demand. The network was adapted to pressing requirements and capacity was optimized to ensure the supply chain kept moving as efficiently as possible. The heavy loads, long routes, and uncongested skies also yielded enhanced efficiency allowing our airline to achieve impressive results in terms of fuel efficiency. This performance coupled with the fuel efficiency initiatives in place reflect our strong commitment to sound flight operations.

Always intent on staying at the forefront of the industry, Cargolux pushed forward with numerous projects throughout the year in addition to handling the heightened demand. Our journey towards digitalization continued and several solutions were implemented in line with the foreseen schedule. The organization also introduced a new and improved cyber security program to enhance safety within the Cargolux network. The integration of the IT department within the company structure was finalized, providing a solid support system. This was a significant asset especially as inter-personal communication moved online due to home working.

Despite these unforeseen circumstances and restrictive measures, Cargolux still managed to move to its new headquarters; a building designed with sustainability in mind. As well as providing enhanced energetic features and supporting a waste avoidance philosophy, it was conceived to eliminate single-use plastic in all areas including catering. The office space is connected to the maintenance center to streamline processes and foster exchanges between employees. Although conditions in 2020 did not allow us to explore the full potential of this work environment, I am confident that having most Luxembourg-based employees in a single location will positively contribute to personal and professional development.

GRI 102-14

Cargolux's commitment to social, environmental, and economic viability runs deep and is engrained in each of the company's endeavors. The airline celebrated its 50<sup>th</sup> anniversary in 2020, a milestone that reflects how important ethical and sustainable practices are to ensure a long-lasting operation. I am pleased to see how far the company has come from its humble beginnings and I look forward to the developments ahead.

As environmental and social questions become increasingly central to business decisions in the industry, Cargolux can be proud of its achievements so far. However, there is still a long way to go and many challenges ahead to remain a leader in sustainable operations. We have several projects under development for the voluntary reduction of CO<sub>2</sub> emissions. We are also closely looking into our CSR targets to fine-tune them and establish a roadmap that covers all our identified material topics in a coherent and holistic manner. This framework will help shape our future business strategy and define progression areas for the future.

There are many interesting developments ahead for the company and I look forward to working on these topics in close cooperation with our stakeholders. Closing on this eventful year, I would like to conclude by extending my heartfelt thank you to the Cargolux team around the globe who have demonstrated dedication and commitment throughout this challenging year. I would also like to salute our customers, partners, and all other stakeholders for engaging on this CSR journey with us. I look forward to continuing on this path to cement Cargolux's position as a leading provider of sustainable air cargo solutions.

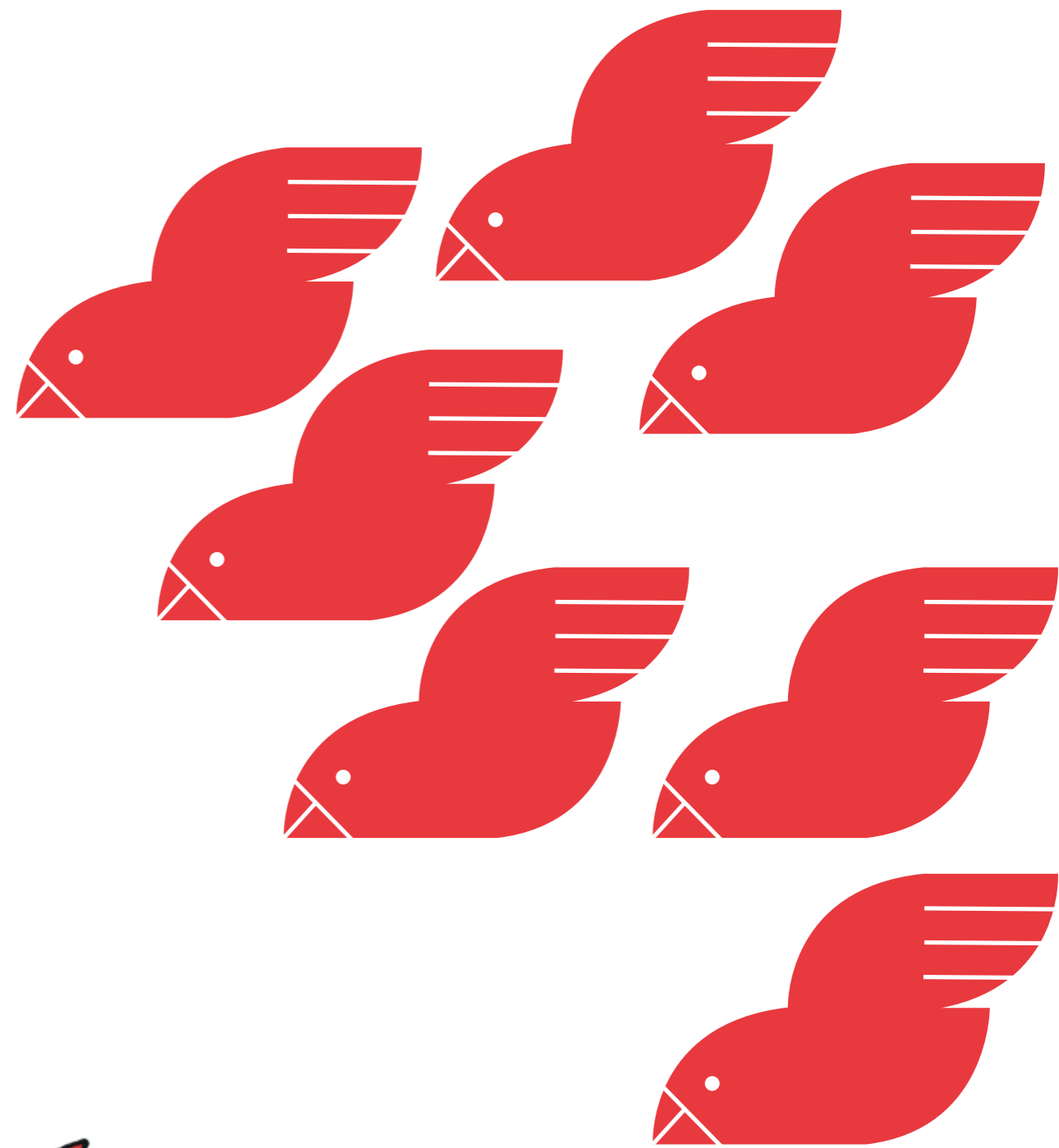


**Richard Forson**  
President and  
Chief Executive Officer



# 02

about our  
company



# our mission, vision and values

GRI 102-16

## our vision

To be "The Global Cargo Carrier of Choice"

## our mission

We deliver consistent flexibility and reliability through our valued and dedicated employees creating sustainable benefits for all stakeholders in a safe environment.

## the cargolux spirit

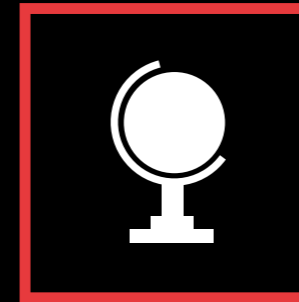
- **Leading by example**
- **Respecting each other**
- **Working as a team**
- **Being dedicated and passionate**
- **Going the extra mile**
- **Being cost efficient**
- **Being flexible**
- **Delivering service excellence**

# our activities

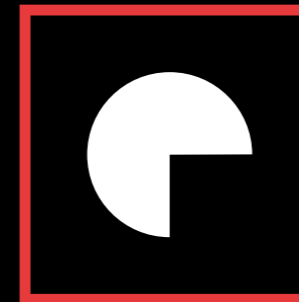
GRI 102-1 | GRI 102-2  
GRI 102-3 | GRI 102-4  
GRI 102-5 | GRI 102-6  
GRI 102-7



**56\***  
Scheduled flight destinations worldwide



**30+**  
Countries



**3.6%**  
Worldwide market share



**6<sup>th</sup>**  
IATA ranking for scheduled cargo carriers, measured in FTKs

Cargolux Airlines International S.A., headquartered in Luxembourg, is a leading provider of reliable, high-quality air cargo services, and the Global Cargo Carrier of Choice. In half a century of operations, Cargolux has become an expert in handling a variety of delicate shipments. Live animals, perishables, temperature-sensitive commodities, and outsized freight, all benefit from Cargolux's experienced touch. The airline offers an extensive product portfolio that gives customers expert treatment for even the most unusual requirements. Cargolux is unequalled in the provision of services that call for management of sensitive and valuable shipments.

Starting with a single Canadair CL-44 swing-tail aircraft in 1970 with a capacity of about 30 tonnes, the company developed into Europe's number one all-cargo airline, ranking 6<sup>th</sup> in IATA's scale of freight operators. Cargolux was the world's first operator of both the 747-400F and the 747-8F. Today, the airline operates a fleet of 30 747 freighters. With more than 85 offices in over 50 countries, Cargolux works cooperatively with trucking contractors to move cargo over its worldwide network that covers some 75 destinations.

Cargolux Italia, the airline's subsidiary based in Milan, was Italy's largest all-cargo carrier in 2020. Cargolux continues to build on its existing core competency, pushing global consistency and leveraging the evolution of its global network to fulfill industry-specific needs. The airline thinks beyond just the in-flight needs of its cargo. It responds to customers' door-to-door requirements.

The company's flexible charter services offer the advantage of dedicated, tailored solutions for its clients. The airline operates a number of charter aircraft that can be booked and deployed at very short notice. With staff stationed across the globe, Cargolux Charter gives customers 24/7 coverage.

As well as regular fleet upkeep, Cargolux's maintenance center, based in Luxembourg, offers third-party maintenance services. Specialized in Boeing 747 maintenance, the airline offers a range of specialized maintenance services such as, but not limited to, avionics modifications, structural repairs, worldwide AOG support and hangar maintenance up to and including C-checks.

\* The Cargolux Route Map reflects the network as at 31 December 2020. The network was adapted throughout the year to cater for market requirements in the context of the COVID-19 pandemic.

# destinations route map 2020



This Route Map reflects the network as at 31 December 2020. The network was adapted throughout the year to cater for market requirements in the context of the COVID-19 pandemic.

□ ■ (ALSO) FLOWN BY CARGOLUX ITALIA



## building bridges: competency & confidence

GRI 102-12 | GRI 102-13

### Industry association memberships

Cargolux takes its commitment to the business community and industry seriously. Integral to the development of industry-wide solutions are partnerships that can afford opportunities for expansion, progress, and advancement.



**IATA**  
Trade association for the world's airlines helps to guide and formulate industry policy on critical aviation issues



**Safety Management Best Practices**  
EASA CAT-CAT, IATA Safety Group, IATA Hazard Identification Task Force & EASA European Operators Flight Data Monitoring Initiative. These groups promote safety in the industry



**Airlines for Europe (A4E)**  
Europe's largest airline association represents the interests of airline members and their customers



**Cargo iQ**  
This IATA interest group improves end-to-end processes in the air cargo transportation industry



**Good Distribution Practice (GDP)**  
This certificate attests that Cargolux's management system meets World Health Organization guidelines and the EU directive "Guidelines on Good Distribution Practice of Medical Products for Human Use"



**Cool Chain Association**



**International Air Transport Association IATA TTTF**  
Time and Temperature Task Force



**IATP**  
International Airlines Technical Pool



**IAAIA**  
International Association of Airline Internal Auditors



Animal welfare association memberships



**IPATA**  
International Pet and Animal Transportation Association



**ATA**  
Animal Transportation Association



**IATA LAPB**  
Live Animal and Perishables Board



**UFW**  
United for Wildlife

Luxembourg association memberships



**FEDIL**  
Business Federation Luxembourg



**Cluster for Logistics**  
Association of logistics service providers, research institutes and other organizations, promoting members, optimizing activities, and building competencies



**CHINALUX**  
China-Luxembourg Chamber of Commerce



**IIA Luxembourg**  
Institute of Internal Auditor Luxembourg Chapter



**Loic**  
Luxembourg Open Innovation Club

CSR association memberships and collaborations



**UN Global Compact**  
Cargolux pledged to act in a socially and environmentally responsible manner in 2007 and to support the SDGs in 2016



**SAFUG**  
The Sustainable Aviation Fuel Users Group is a cross-industry initiative aimed at promoting and marketing sustainable aviation biofuels



**RSB**  
Roundtable on Sustainable Biomaterials



**INDR**  
Luxembourg's National Institute of Sustainable Development



**IMS Luxembourg**  
Inspiring More Sustainability



**Chambre de Commerce Luxembourg (Groupe de Travail développement Durable)**



**Vision Zero**  
Reducing the number and severity of workplace accidents

awards & recognition



**Cargolux Passes 7<sup>th</sup> IOSA Audit**  
Cargolux passed its seventh (bi-annual) IOSA audit, assessing operational management and control systems. The exceptionally good results in this internationally recognized evaluation system reflect Cargolux's commitment to continuously monitor and enhance procedures and establish high standards



**GDP**  
Cargolux successfully passed its GDP renewal audit



**Ecovadis' Gold Rating**  
Based on the sustainable development standards of the Global Reporting Initiative (GRI), the United Nations Global Compact, and ISO 26000, this rates sustainability in global supply chains and the airline's corporate social responsibility performance



**SkyCell award**  
Cargolux has been recognised as "The safest Partner Airline" by SkyCell at their Quality Award Ceremony



**ESR label by INDR**  
Cargolux has been recognised as 'Socially Responsible Enterprise' by Luxembourg's INDR








## at a glance

GRI 102-7 | GRI 103-1  
GRI 103-2 | GRI 103-3  
GRI 201-1

Cargolux keeps on creating wealth for stakeholders through the economic value it generates and distributes. To be able to create value over the short, medium, and long-term, Cargolux relies on different capitals and leverages – intellectual and human, natural and manufactured, etc. – that the company needs to continuously invest in.

### consolidated figures 2020

	2020	2019	2018	2017	
	Total income in USD '000	3,170,697	2,258,650	2,634,033	2,263,553
	Profit/loss for the year in USD '000	768,669	20,242	211,206	122,301
	Shareholder's equity in USD '000	1,930,505	1,157,246	1,183,008	985,365
	Tonnes sold	1,107,071	1,009,338	1,053,626	1,067,238
	Tonne-kilometers flown (millions)	8,934	8,091	8,409	8,480
	Available tonne-kilometers (millions)	13,013	12,316	12,375	12,102
	Employees worldwide (CV & C8)	2,368 (as at 31 December 2020)	2,253	2,136	2,027
	Luxembourg	1,726 (as at 31 December 2020)	1,630	1,531	1,436
	Boeing 747-8 freighters (units)	14	14	14	14
	Boeing 747-400 freighters (units)	10	11	11	11
	Boeing 747-400ERF (units)	6	5	2	2

# corporate governance

AS AT DECEMBER 31, 2020

GRI 102-18

## board of directors

### Luxair Representatives

#### Paul Helminger

Chairman of the Board of Cargolux, Director

#### Tom Weisgerber

Premier Conseiller de Gouvernement Ministry for Sustainable Development and Infrastructure, Director

#### Giovanni Giallombardo

Chairman of the Board of Luxair Group, Director

### Luxembourg State Representative

#### Anouk Agnes

Conseiller de Gouvernement 1<sup>ère</sup> classe au Ministère d'État, Director

### BCEE Representative

#### Françoise Thoma

President and Chief Executive Officer Banque et Caisse d'Épargne de l'État, Director

### SNCI Representative

Société Nationale de Crédit et d'Investissement (SNCI), Director (corporate mandate) represented by

#### Patrick Nickels

Conseiller de Gouvernement 1<sup>ère</sup> classe

### Cargolux Staff Representatives

#### Dirk Becker

Captain, Director

#### Christine Dargan

Manager (Sr) Crew Control, Director

#### Bettina Faulhaber

Manager Sales & Marketing Crew Training, Director

#### Darrell Myers

Captain, Director

#### Yves Hendel

Assistant Lead Technician Line & Hangar Maintenance, Director

### HNCA Representatives

#### Shengzhen Kang

Chairman of Henan Airport Group, Director

#### Mingchao Zhang

Chairman of Henan Civil Aviation Development and Investment Co, Ltd, Director

#### Shengbo Yuan

General Manager of Luxembourg Project Office of HNCA, Director

## committees of the board of directors

### Compensation Committee

#### Paul Helminger

#### Françoise Thoma

#### Tom Weisgerber

#### Shengbo Yuan

### Audit Committee

#### SNCI represented by Patrick Nickels

#### Françoise Thoma

#### Tom Weisgerber

#### Shengbo Yuan



# executive committee

GRI 102-18

GRI 102-18

**Richard Forson**  
President and  
Chief Executive Officer



**Maxim Straus**  
Executive Vice-President  
and Chief Financial Officer



**Onno Pietersma**  
Executive Vice-President  
Maintenance & Engineering



**Domenico Ceci**  
Executive Vice-President  
Sales & Marketing



**Claude Zehren**  
Executive Vice-President  
Flight Operations



# shareholders

GRI 102-18

35.10%

LUXAIR

35.00%

HNCA

10.91%

BCEE

10.67%

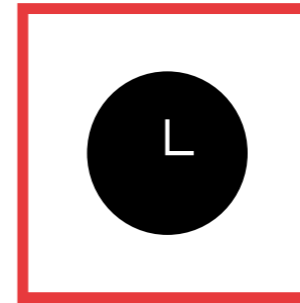
SNCI

8.32%

LUXEMBOURG STATE

# operational structure of the organization

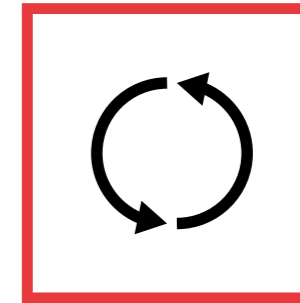
GRI 102-18



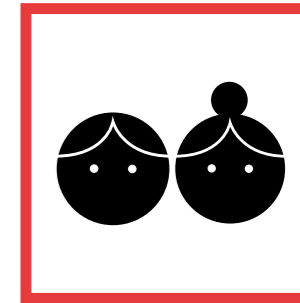
commercial planning & development



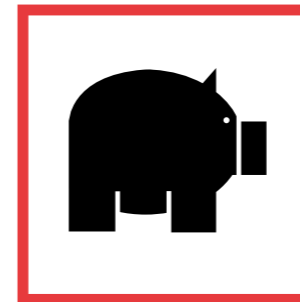
corporate



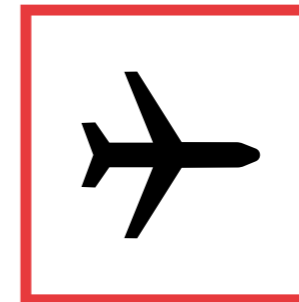
global logistics



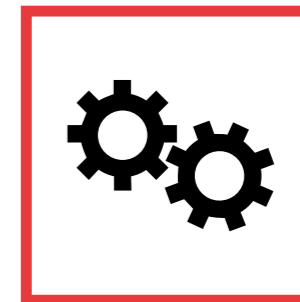
human resources, legal affairs & compliance



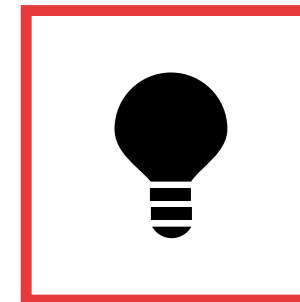
finance & administration



flight operations



maintenance & engineering



sales & marketing

## CSR governance

Cargolux has constituted a CSR Committee comprised of members from across the organization. The Committee is sponsored by the CEO and chaired by the Head of Corporate Communications & CSR. Key functions relevant for the company's CSR program and from each division have been mandated by the division's respective EVP to fulfill all CSR-related duties.

The CRS Committee meets periodically to define and review CSR policies, priorities, strategy, targets and KPIs. As subject matter experts in their fields, each committee member coordinates working groups within their area to address CSR-related issues. They also monitor the CSR performance within their area and support the development of the program in line with company objectives.

# car<sup>50</sup>lux

ANNIVERSARY

THANK YOU  
FOR YOUR SUPPORT



cargolux —  
celebrating  
50 years  
of success

In 2020,  
Cargolux celebrated  
a remarkable  
milestone, a milestone  
seldom reached by  
an all-cargo carrier,  
its 50<sup>th</sup> anniversary.

The year should have been one of festivities, looking back at the extraordinary journey the company has been through and its achievements throughout the years. However, this anniversary year was overshadowed by the global pandemic and its unprecedented consequences. Despite these hurdles, Cargolux rose to the challenge, and continued to deliver essential supplies where they were most needed.

Throughout its half-century of existence, the cargo carrier has faced numerous challenges, but determination has always been stronger. Looking back at the origins and the history of Cargolux, it becomes clear that passionate people and dedication are central to success. Cargolux's unique story itself is one of perfect timing. In the late 60's, the Luxembourg government was eager to diversify the economy and had approached Loftleiðir Icelandic which was operating out of the Grand-Duchy at the time, to discuss partnerships. Several options were explored; a first-class hotel, a tour operator, and a cargo airline.

Loftleiðir was converting to a jet operation and had surplus CL-44 aircraft, and Salén, a shipping company based in Sweden had been analyzing opportunities in the air cargo industry. Through mutual connections, the three parties got in contact and initiated discussions on the possibility of a joint venture.




On March 4<sup>th</sup> 1970, the three ambitious partners shook hands to create what was to become one of the world's leading all cargo-carriers. The airline would be based in Luxembourg, at the heart of Europe, and each entity would contribute with its unique expertise; Loftleiðir was responsible for operational and technical matters, Salén for sales, and the Luxair group for administration; Cargolux was born.

With a single aircraft and a handful of employees the operation was on track and the airline wasted no time in getting off the ground! On May 10<sup>th</sup>, the Air Operator Certificate was issued and Cargolux operated its very first flight the next day. This initial service was a ferry flight from Stockholm-Arlanda to New York-JFK to pick up strawberries and iceberg lettuce.

It quickly became clear that the airline was animated by a unique pioneering spirit and employees were committed to making it a sustainable enterprise. By the end of 1972, the airline was operating a total of 5 CL-44 freighters, three of which were the stretched version that offered more volume and therefore presented significant commercial advantage.

50 years after our foundation on 4 March 1970, we are proud of being one of the world's leading cargo carriers.

A heartfelt thank you for your support throughout the years.

www.cargolux.com | info@cargolux.com | follow us   



The following year, Cargolux took a big step forward and entered the jet age with the acquisition of a DC-8 freighter. The Loftleiðir maintenance division that had been maintaining the company's aircraft was moved to Cargolux's home base in Luxembourg and became an integral part of the airline. A dedicated maintenance hangar and head office complex was also inaugurated at Luxembourg airport; a sure sign of the company's sustainability.

The next huge leap forward, that would shape the airline's image forever, was the decision in 1977 to purchase a 747-200 freighter. The jumbo jet offered a capacity of approximately 100 tons compared to the CL-44's 34-tons. The industry was skeptical about an all-cargo carrier investing in such a huge aircraft, but the bet paid off and another one was ordered that same year, as the CL-44 were phased out.

After a decade of expansion and bold decisions, in the beginning of the 80's, the airline faced severe headwinds. The upward spiraling of fuel prices and escalation of financing costs combined with a depressed global economy spelled difficult years for the company, but the unwavering spirit and determination persisted. Despite the challenges, Cargolux managed to strengthen its commercial activities. As well as enhancing its stronghold in the Far East, the carrier benefitted from a strong North American market that offered renewed business opportunities.

As business picked up, Cargolux decided to phase out its DC-8's in the mid-80s and focus on jumbo jets. In 1990, the airline placed an order for 3 Boeing 747-400 freighters with an option for several more. The new generation aircraft presented many advantages compared to its predecessor; it was quieter, more fuel-efficient, and boasted a higher payload. In November 1993, Cargolux was the first carrier to operate the 747-400 freighter; a true reflection of the company's pioneering spirit.

The 90's marked a decade of solid expansion. The airline's global network grew significantly as did the number of employees worldwide. Cargolux was steadily emerging as a key player in the industry and its capacity to deliver service excellence was now widely recognized within the industry. To remain at the vanguard of the industry, the airline decided to discontinue its use of the 747-200 model and concentrate on more modern freighters. By the year 2000, Cargolux operate a single model fleet of 747-400 and to ensure state-of-the-art training for its crew members, the airline also welcomed the world's first 747-400F full-flight simulator.

Building on its achievements, Cargolux continued to seek new market opportunities and fine-tune its services to offer ever-more tailored transport solutions to customers. The all-cargo carrier continuously pushed boundaries to establish itself as a leader in the industry. In 2005, Cargolux and Boeing announced that the Luxembourg-based carrier would be the launch customer for its next generation freighter, the 747-8F, along with NCA. As a long-standing customer for the aircraft manufacturer, Cargolux significantly contributed to the design of the freighter that remains to this day the quietest and most fuel-efficient aircraft in its category. After lengthy delays on the project, Cargolux takes delivery of the world's first 747-8F in October 2011 and becomes the world's first airline to fly this type of aircraft. The aircraft is the first of 14 that Cargolux will eventually acquire and still operates to this day.

To accommodate this new model, and ensure optimal maintenance services, the airline also launched the construction of a new Maintenance Center at its home base in Luxembourg; a project that is completed in 2009.

During this period, Cargolux continued to explore new ventures together with some Italian interests. Cargolux Italia, a new cargo airline based in Milan-Malpensa, is inaugurated the same year.

As Cargolux continues to bolster its leading position worldwide, in 2013, the all-cargo carrier will enter a new commercial cooperation with HNCA. This new partner will mark a significant turning point in the company's strategy and establish Cargolux as the leading provider of services to China. The following year, HNCA is officially welcomed as a new shareholder in Cargolux and the airline develops a complementary hub in Zhengzhou, the capital of the Henan province in the heart of China. The dual hub strategy now forms the backbone of Cargolux's operation in China and significantly contributes to the Europe-China Air Silk Road project.

Throughout its history, Cargolux has continuously established itself as a pioneer and trailblazer in the air cargo industry. This resilience is what enables the company to keep delivering its mission in troubled times such as those we are currently experiencing. In half a century of existing, the Luxembourg-based operator has come a long way from its humble beginnings. The drive and determination, bold decision making, and undeterred ambition are the reflection of a unique spirit that lives today and enabled Cargolux to become the Global Cargo Carrier of Choice.

In retrospect, the year 2020 was a reflection of Cargolux's dedication and the team spirit that made it famous throughout the industry. The drive and passion of employees enabled the company to navigate changing restrictions on a global scale to keep the supply chain moving. Even after 50 years, Cargolux continues to deliver its mission with pride and commitment, a work ethic forged by the forefathers that still lives on in the team worldwide today.



# 03

sustainability  
approach





# journey to sustainable development

GRI 102-11

## our CSR journey 2020

Cargolux is committed to mitigating the impact of its operations on the environment and has taken numerous steps in this direction throughout the years. Since the airline signed the UN Global Compact in 2007, formalizing its engagement to sustainable practices, the initiatives and progress have been meticulously documented. Looking back on this journey, it is clear that efforts have been made in all corners of the organization and CSR has become deeply engrained in the company's philosophy and values.

Over the years, Cargolux has faced numerous challenges but its commitment to sustainability has been unwavering, and 2020 is a remarkable example of this. The world faced an unprecedented situation with a global pandemic affecting all areas of our daily lives, causing us to change our work habits. The company had to re-think its organization to preserve the health and safety of employees throughout the network while ensuring its core mission, transporting goods by air. The airline was confronted with continuously changing restrictions and subjected to stringent sanitary measures. Yet, despite navigating these constraints, Cargolux continued to consider its impact and make progress in the area of CSR.

True to its solid engagement, the company continued to work on projects aimed at ensuring economic, social, and environmental sustainability. The digital transformation continued, and several new tools were implemented to enhance processes throughout the organization. The company also achieved the in-housing of its IT services, allowing for a better overview of requirements and issues within the IT infrastructure. Given the circumstances, the move was challenging but it allowed the company to provide better support to employees, especially with a large part of the workforce working remotely. The implementation of a solid cyber-security program also allowed to minimize risks related to breaching and ensure company data remained secure while employees worked from home.

As passenger operations ground to a halt, cargo carriers such as Cargolux were required to fill the capacity gap in the market. The high volumes and sustained demand throughout the year allowed the airline to optimize both its loads and routings leading to enhanced operational efficiency. The heavy loads and long flights in uncongested skies allowed Cargolux to reduce its fuel consumption and achieve excellent results in terms of fuel efficiency. The airline also continued to monitor its fuel expenditure for international flights in order to have a solid basis for offsetting calculations ahead of the implementation of CORSIA.

One of the cornerstones of responsible and efficient business continuity in the midst of a pandemic was the establishment, early on, of a crisis committee, led by the CEO. This working group, comprised of key people throughout the company, monitored the situation on a daily basis, gathering data from the Ministry of Health, the WHO, and local authorities, in order to devise appropriate responses. As the situation unfolded worldwide, the company established both trigger thresholds and multiple contingency plans to keep the operation moving while ensuring employee safety. The emergency preparedness and swift action plans devised by the company enabled it to navigate the more intense crisis periods while responding to customer demand.

Cargolux's exceptional response to the pandemic reflect the company's commitment to sustainable operations and employee welfare. The organization upheld its commitment to customers without compromising operational safety or its CSR engagements. The challenges that arose in 2020 were unprecedented yet the company kept its commitment to sound operations. Projects were implemented to drive Cargolux's 2025 Strategy and the digitalization journey continued as foreseen.

The airline also demonstrated strong social engagement throughout the year. Cargolux maintained an air bridge between China and Europe to transport vital supplies

at the height of the pandemic, flying volumes of Personal Protective Equipment (PPE) from their production site in Asia to Europe. The company provided a number of charter flights both for the Luxembourg government and other countries, supporting the fight against COVID-19. In addition, the airline also made several donations both financial and material, including PPE, to a number of organizations.

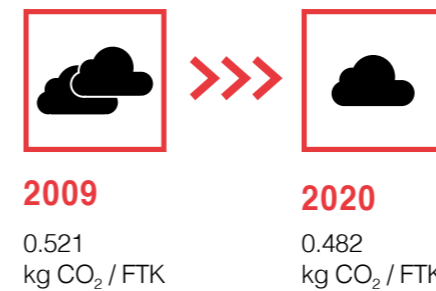
## community: engaging & building

The airline's deep roots in Luxembourg stem from its inception in 1970. Throughout its history, Cargolux has fostered strong ties with local governments, communities, and industry organizations. Now, with 50 years of membership in Luxembourg's vibrant business community, commitment to promoting partnerships at home & abroad is even stronger.

## digitalized: land & skies

The "Cargolux 2025" strategy ensures that the company addresses the challenges of today and tomorrow while preparing for evolutions within the industry. It allows Cargolux to translate challenges into sustainable advantages and allows the airline to remain a leader in the industry. The company's CSR program, in place since 2008, continues to engage stakeholders and to use their input to guide organizational momentum. Despite the highly competitive nature of the air cargo industry and its volatile nature, Cargolux has eagerly upheld its commitment to Corporate Social Responsibility. Dedication towards customers, local communities, employees, and shareholders are the hallmark of Cargolux's innovative approach to business, the industry, and leadership.

## Reducing carbon footprint



## Ecovadis' Gold Rating



Driven by Cargolux's solid environmental program, in 2021 Cargolux scored 68/100 in the evaluation by Ecovadis.

Ecovadis provides a solution for the monitoring of sustainability in global supply chains. This methodology is based on sustainable development standards of the Global Reporting Initiative GRI, the United Nations Global Compact and ISO 26 000.

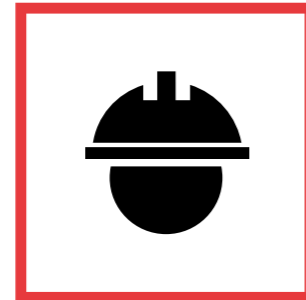
# stakeholders

GRI 102-40

Cargolux's sustainability approach is based on continuous dialogue with internal and external stakeholders with whom Cargolux interacts at various levels:



customers



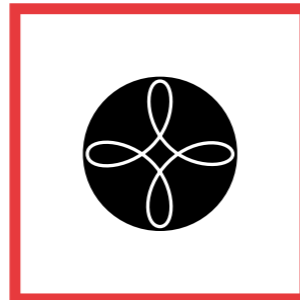
employees



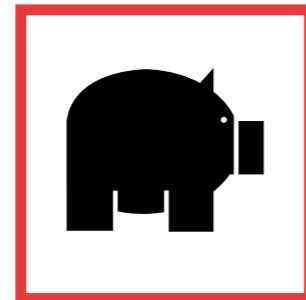
financial institutions



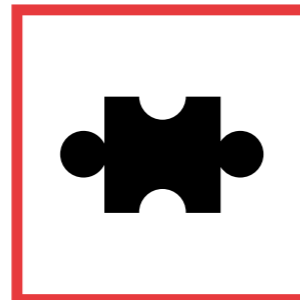
suppliers



joint ventures



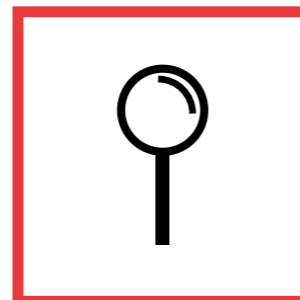
shareholders



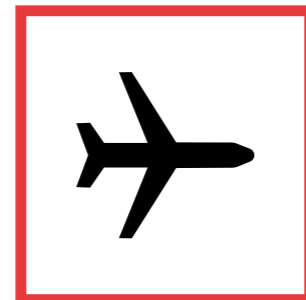
sub-contractor



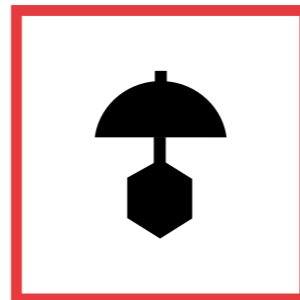
competition



auditing bodies

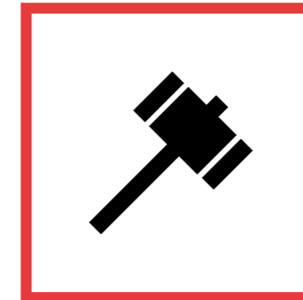


aviation sector

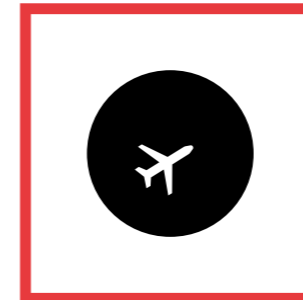


NGOs

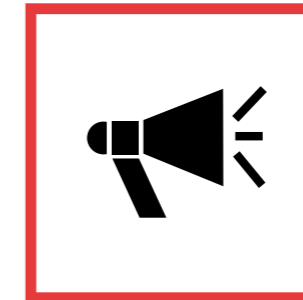
GRI 102-40



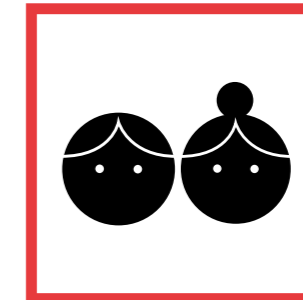
authorities and government



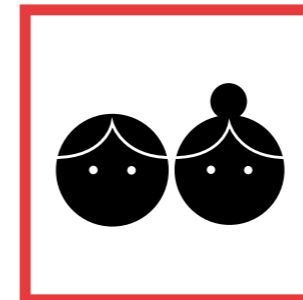
shippers



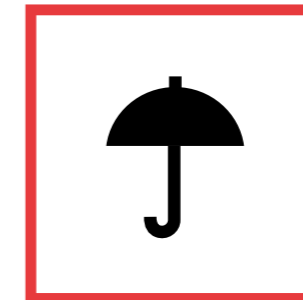
trade unions



board of directors



communities



insurance companies



media



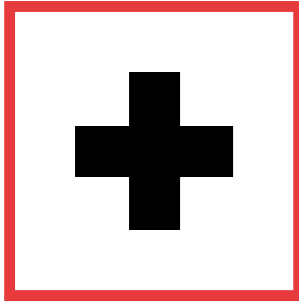
academia

**Cargolux included internal and external stakeholder consultation in the materiality analysis carried out to prepare this report. [1]**

[1] Cargolux included internal and external stakeholder consultation in the materiality analysis carried out in 2019 to prepare this report.

# shared values creation strategy

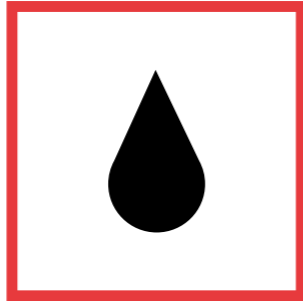
Cargolux is continuously working to maximize the value it creates for all stakeholders. To sharpen the way the airline tackles sustainability, it conducted a materiality analysis. This analysis assessed the significance of the economic, social, and environmental impacts of Cargolux's activities and their influence on stakeholders' decisions. Top priorities – i.e. material topics – have been identified: [2]



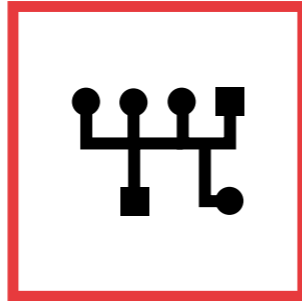
health & safety



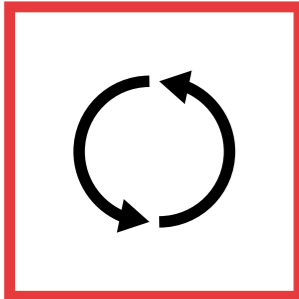
emissions



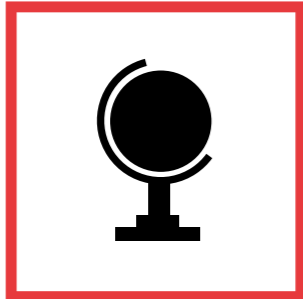
fuel efficiency



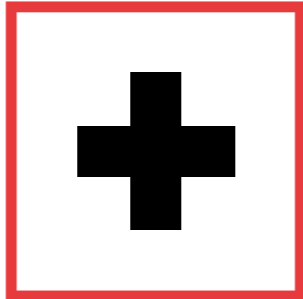
network efficiency



waste management



ethics



emergency preparedness

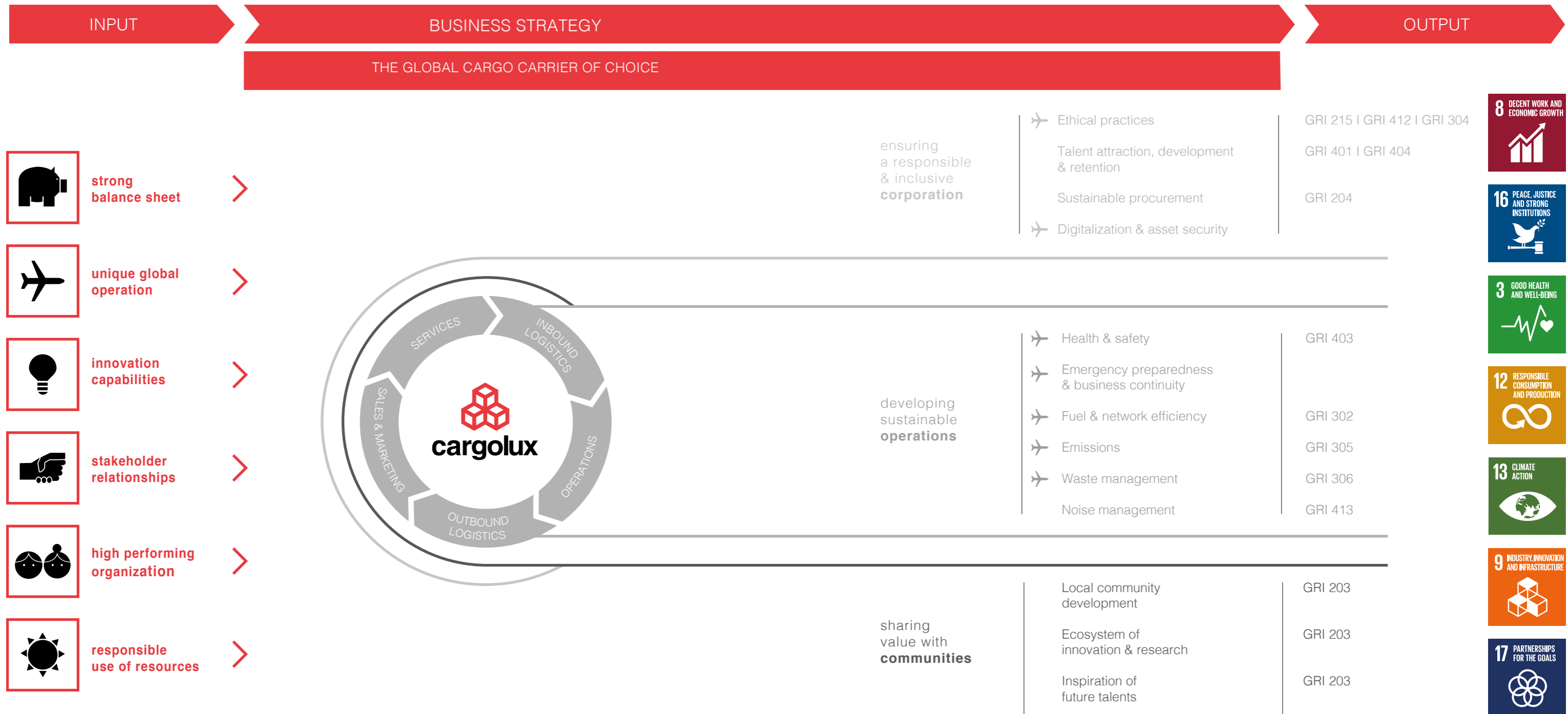


digital & physical assets



[2] to find more about the methodology, see the "About the Report" section page.

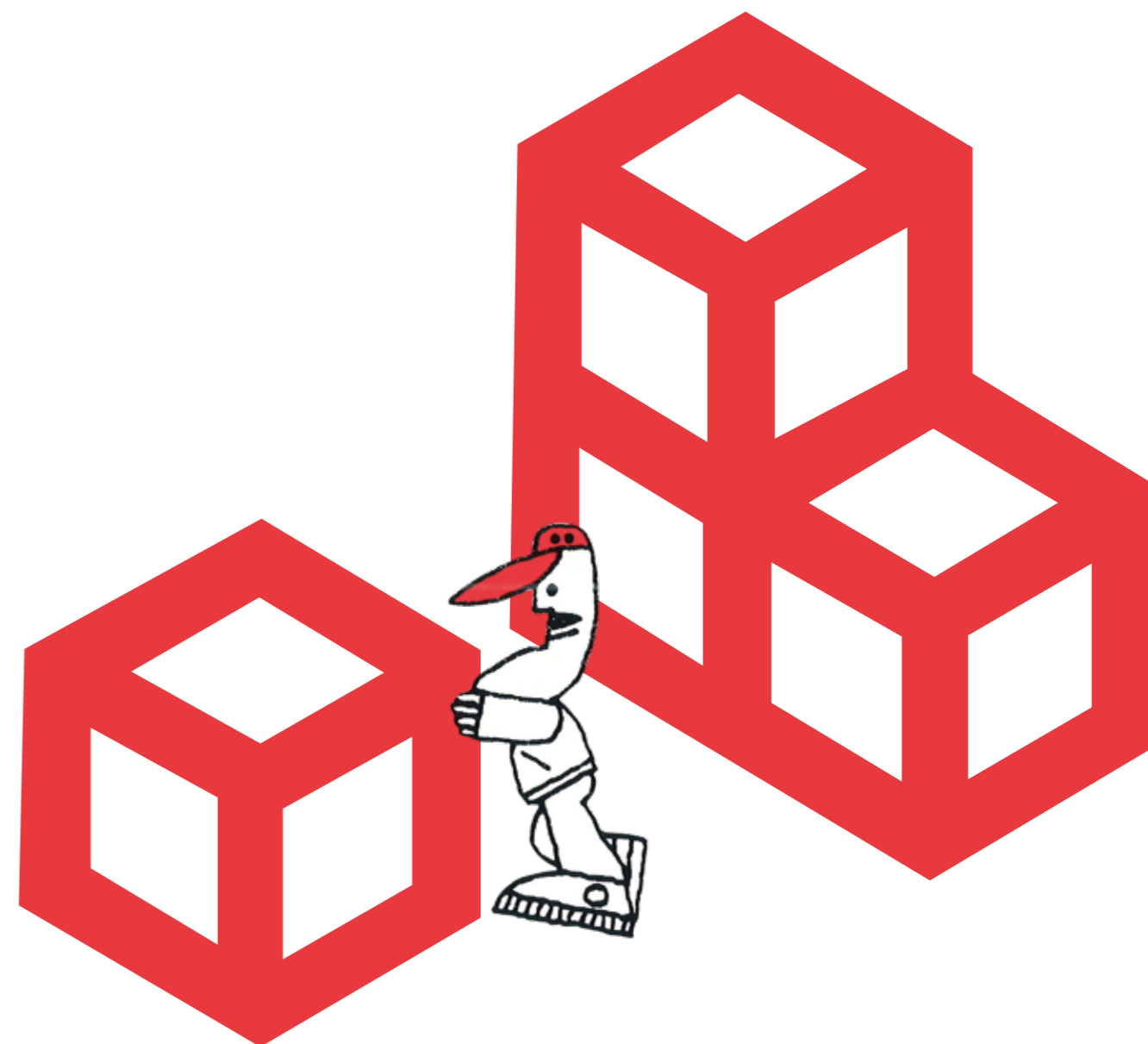
# our value creation model



✈️ Material topics

# 04

our  
sustainability  
commitments



# ensuring a responsible & inclusive corporation

GRI 103-1 | GRI 103-2

## a. ethics

A leader in the field of air cargo, Cargolux is committed to paving the way for ethical and sustainable business practices. Flying cargo around the world while adhering to multiple different regulations can pose challenges but the company has established a solid set of procedures and vetting processes to ensure its core business is conducted in a transparent and fair manner.

After a decade in existence, the Compliance department gained solid maturity and developed strong mechanisms to ensure the company and its employees are safeguarded at all times. To better fulfill its mission and continue acting in an efficient manner, the department underwent restructuring and was split into different teams each with a primary focus area. There are now three key functions: Compliance, Compliance Communications, and Export Controls Compliance, complimented by a dedicated Data Protection Unit.

One of the segments that witnessed the most significant change in 2020 is Export Controls. This dedicated entity ensures all laws, regulations, and operational restrictions related to the export of goods are respected throughout Cargolux's operation. In under a year the unit grew from 2 to 12 people and now counts round-the-clock coverage for shipment integrity; ensuring the entire network has access to in-house support for documentation screening and checking as required. This allows the Compliance team to have swift interaction with the Sales department for enhanced collaboration and transparency.

For 2020, the Compliance team estimates that the number of shipments they checked is in the millions, with over 80% of them screened to comply with import requirements. "The importance of such robust compliance controls grew significantly over the past year and it was vital for us to remain at the forefront of the industry. Our whole team was trained extensively on the subject to ensure suitable knowledge on the subject whether it is their direct field of expertise or not", explains Javier Coto, Vice-President Compliance.

In addition to strengthening shipment controls, Cargolux continued its broad due diligence program and continued vetting its business partners to ensure adherence to ethical practices. The process was fine-tuned and adapted to individual suppliers based on pre-defined criteria. In addition to existing suppliers, each new business provider posing a medium-to-high risk on-boarded by the company in 2020 was assessed against stringent norms to minimize any risk to the company's activities.

Going one step further in the company's extensive Know Your Supplier (KYS) and Know Your Customer (KYC) approach, Cargolux has launched a thorough customer vetting process. Each client will be evaluated against a set of defined standards to ensure it upholds the same values and principles as the company in terms of ethical and sustainable business. "We are the first known cargo airline to assess our customers in this way. We are aware that this is a bold step, but it truly reflects our commitment to principled, informed practices and our dedication to a sustainable business model throughout the industry. Even after 50 years in existence, Cargolux still managed to establish itself as a pioneer in air cargo", smiles Javier.

Following work started the previous year, 2020 also saw the formalization of the internal Compliance program, developed in accordance with ISO 37001, Anti-bribery management systems. The international standard was used as a benchmark to devise internal policies and ensure adherence to them. The industry witnessed a very dynamic year, and it was therefore crucial to ensure employees and partners remained vigilant despite unprecedented circumstances.

GRI 103-1 | GRI 103-2  
GRI 205-1 | GRI 412-1

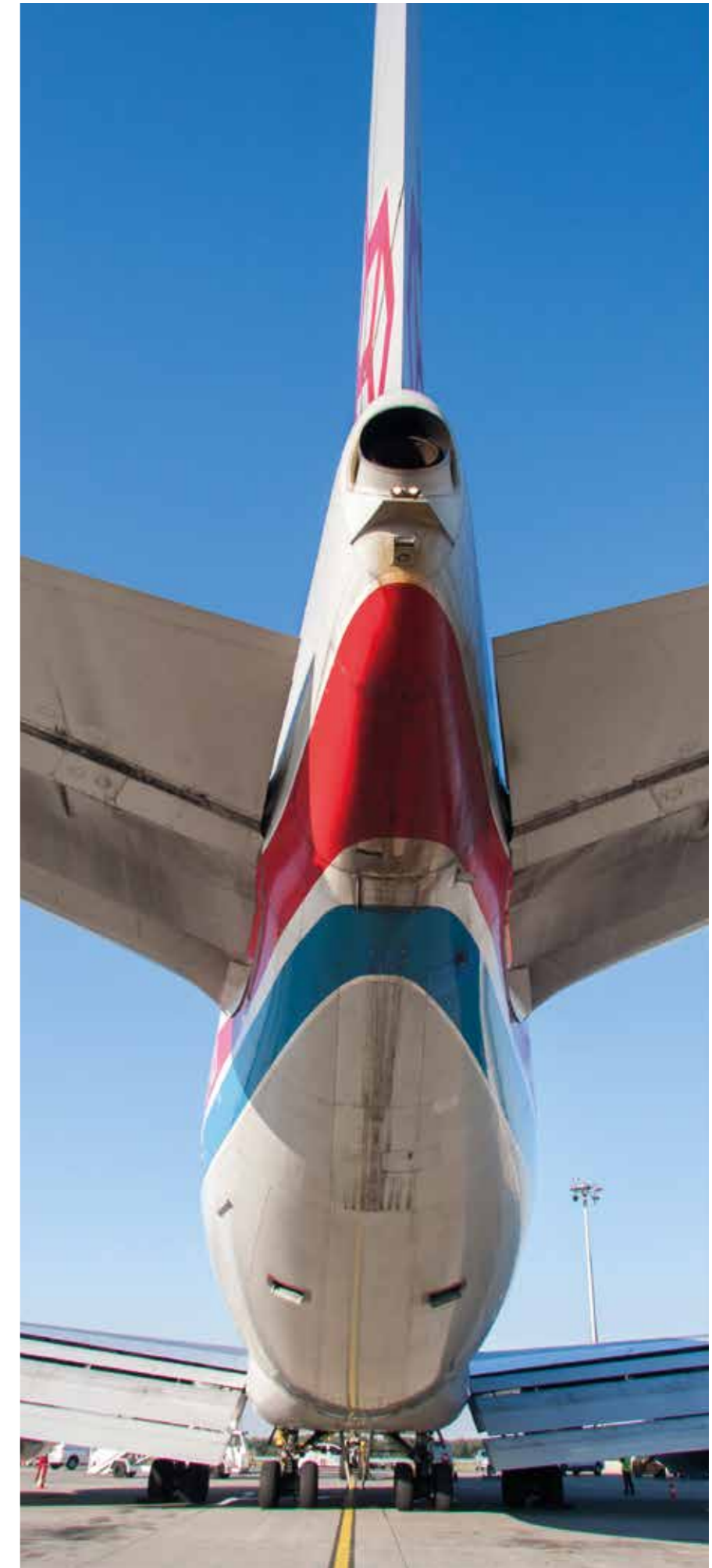
To ensure enhanced guidance and method for all employees, a revised and re-structured Code of Conduct was issued internally over the Summer. The document is split into two distinct branches; principles, that include standards applicable to the whole company, and processes that are tailored to individual departments. Each cluster of principles is linked to related SDGs, providing an overview of the company's values and priorities in terms of sustainability. The release of the new Code of Conduct was followed by a training campaign for all staff, combining webinars and online modules to ensure a comprehensive approach and overarching understanding of the topic.

As a responsible actor in the Luxembourg business community, Cargolux has signed the Mediation Charter with the Mediation Center in Luxembourg ("*Centre de médiation civile et commerciale*") on 19 October 2020. As a signatory of this charter, the airline will consider the mediation option in case of a conflict which may eventually lead to a court dispute in order to find a mutually acceptable solution between the concerned parties through a negotiation process.

### Operations assessed for risks related to corruption

Due diligence	2020	2019
Area 1	10	7
Area 2	21	15
Area 3	12	7
Area 4	4	4
HQ	20	5
<b>Total</b>	<b>67</b>	<b>38</b>

Area 1: The Americas,  
Area 2: Europe and the Middle East,  
Area 3: Asia & Pacific,  
Area 4: Africa



**In this area... Cargolux does this...**

**Impact & boundary**

Implemented throughout the world, strong, simplified, comprehensive and easy-to-understand policies and procedures provide tools that allow staff to:

- **flag ethical concerns,** potential human rights infractions and potential business issues
- **identify and address challenges:** strict guidelines force remote locations (GSAs & GHAs) to comply with anti-bribery rules and may trigger a 'snowball effect' in the associated airports

- **safeguard the teams, business environment and company assets:** Cargolux was an original member of the IATA working group implementing shipment screening and vetting for compliance with export control laws

Formal commitments to Human Rights, anti-discrimination and harassment allows Cargolux to guide its suppliers to look more closely at, and modify, their own practices.

**Management approach & components**

The main objective for this area is to ensure that every staff member and group that interacts with Cargolux (e.g., suppliers, customers, etc.) understands the basic principles of compliance, export controls, and the rationale behind them that has been woven into the fabric of Cargolux.

Cargolux is working toward being fully compliant with the ISO 37001 anti-bribery certification. Streamlined, targeted, on-demand Compliance & Ethics training ensures all actors are well-informed, practice personal data protection, understand embargo requirements, respect competition law, prevent fraud, corruption, and ensure confidential reporting.

**GDPR:** Cargolux sees GDPR basically as health and safety for data. It takes its responsibility for information disclosure, integrity and data protection very seriously. The organization is committed to data protection, transparency and ethical behavior in this area. A GDPR hotline guarantees anonymity to all callers who have issues regarding GDPR regulations and/or adherence.

Grievance resolution follows the Cargolux standard practice of engaging all parties in meaningful dialogue focused on positive resolution and outcomes.

**Evaluation & adjustments**

Compliance is structured to provide outstanding service to the company and clients, and to further strengthen ethical supply chain activities. Clear targets provide a solid base for measuring direct and indirect impacts, collecting statistics and analyzing trends. The Compliance and Ethics team stays on the leading edge of the industry. All elements of the Compliance and Ethics program are reviewed and simplified regularly to ensure ease of use and thorough understanding of main elements.

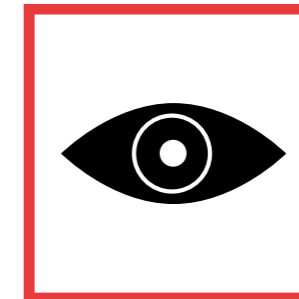
The Cargolux focus remains on priority policies. The main areas include ethical supply chain mechanisms, compliance updates and training, and GDPR. Export Control is aided by the shipment integrity system, which is built upon ethical supply chain principles.

Ethics and compliance training targets specific groups, while on-demand webinars are an additional tool to ensure accessibility. Topics include anti-corruption and conflict of interest, respect for human rights, personal data protection, embargoes, harassment in the workplace, understanding and preventing fraud, corruption, and confidential reporting. A consultation desk assists employees in the practical application of policies.

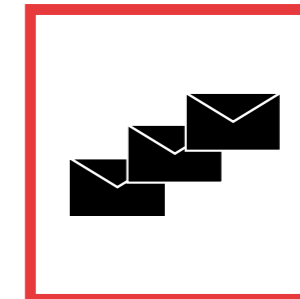
**Compliance and ethics**



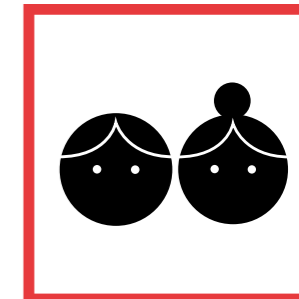
**67** due diligence



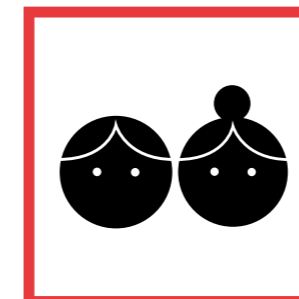
**2** station visits\*



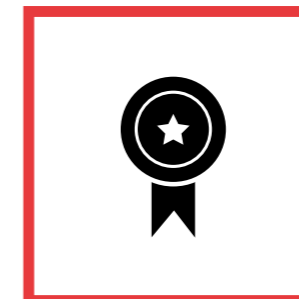
**2,548** compliance consultation desk inquiries answered



**0** incidents of corruption identified



**2,987** total participation compliance training



**1,726** trained Cargolux personnel

\*Station visits were limited due to COVID-19 travel restrictions.

## b. our people

GRI 103-1 | GRI 103-2 | GRI 405-1

As an all-cargo carrier working on a global scale, Cargolux requires a wide range of highly skilled talents. The company therefore places a particular focus on recruiting dedicated people to fit the dynamic workplace. With its international network, Cargolux offers a multi-cultural and diverse environment while fostering a unique company spirit over its 50 years of existence. Building on its expertise and professionalism, the airline has also developed a good reputation as an employer both in Luxembourg and within the industry.

This exceptional commitment and team spirit were highlighted in the difficult circumstances of 2020. Employees worldwide worked hand in hand to face the unprecedented challenges and high workload generated by the sanitary situation. The Cargolux workforce pulled together to devise solutions and navigate the restrictions. The team embodied the commitment "You name it, we fly it!" and went one step further: "you name it, we fly it, in any circumstances".

### Women at Cargolux

	2020	2019
Women worldwide	434	404
HQ	234	214
Line stations	193	183
Permanent contract (wwide)	420	392
Part-time (wwide)	64	59
Executive Mgmt role	3	3
Senior Mgmt position	0	1
Female pilots	20	16
BoD	4	4
Female staff	18%	18%

### Talent management

With relatively stable workforce growth, Cargolux supports numerous jobs in industries, locally and abroad, that are directly related to its air freight activities such as freight forwarding, trucking, storage facilities, and airports.

### Talent attraction & retention

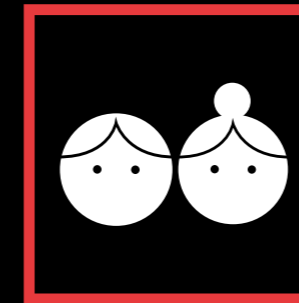
Despite the unprecedented situation, the recruitment process continued in 2020, albeit in a different manner. Interviews and selection test were handled virtually, supported by a solid IT infrastructure. This enabled the recruitment program to continue as expected, in line with company requirements. One of the challenges faced by the team was the on-boarding of new hires, especially as regards interactions with co-workers. To counterbalance the lack of on-site socializing, the recruitment team encouraged new recruits to initiate discussions and pro-actively develop relations.

Due to sanitary restrictions, job fairs, school visits, and other field events were suspended, however, Cargolux gained significant visibility thanks to the media coverage of its role during the pandemic. This was complemented by a solid presence on social media, allowing the company to stay in touch and present on the job market.

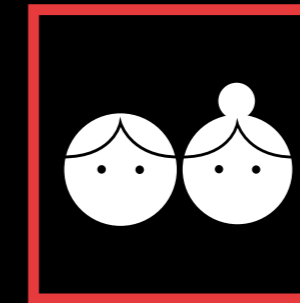
In addition to its online presence, the airline also benefited from the dedication of its very own employees. As Anne-Sophie Mangen, Manager Recruitment, explains: "Our people are our best ambassadors. They are proud of working for Cargolux and many of the candidates we meet have heard positive feedback from our employees." The recruitment team also received a number of spontaneous calls from individuals offering help after witnessing the high workload faced by the company: "People have been telling us how great it must be to be part of such a success story", adds Anne-Sophie.

GRI 102-8 | GRI 404-1  
GRI 404-3

### Our people



**2,368**  
staff worldwide



**1,726**  
staff at the HQ  
in Luxembourg

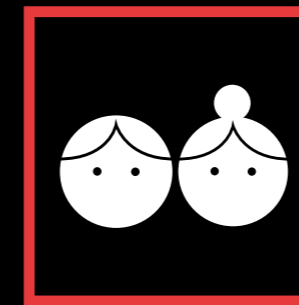


**2,286**  
staff on permanent  
contract



**226**  
staff on part-time contract

### New staff



**+5.1%**  
increase of staff  
throughout the network



**+9.4%**  
total new hires



**+9.3%**  
new hires in Luxembourg



**+9.5%**  
new hires at stations

### Employee development



**Training**  
on average,  
each employee enjoyed  
53 hrs of training  
in 2020



**Appraisal Program**  
15% of the staff received  
regular performance  
and career development  
reviews



**In this area... Cargolux does this...**

**Impact & boundary**

Cargolux's HR practices aim at fostering productive and forward-looking collaboration between generations. The airline puts strong emphasis on supporting future professionals and participates in a range of initiatives that include school visits and internship programs.

The company participates in events that give youngsters the chance to gain personal impressions of daily work requirements in the air freight industry, first-hand information about career opportunities, and allow them to explore job opportunities and possible career paths.

**Management approach & components**

Recruiting new staff that is frequently comprised of the next generation provides an exciting view of what is to come for Cargolux. The influx of young professionals is a welcome trend that brings dynamic energy and enthusiasm which are the hallmarks of the Cargolux culture. Established employees enthusiastically mentor and guide new recruits; helping them build confidence in their ideas and providing an avenue for engaging colleagues in dialogue about how their ideas support the company's goals and objectives.

Different generations working side-by-side changes the conversation. The older generation feels confident that it is leaving a legacy while the younger generation benefits from the running start that comes with rapid knowledge transfer.

Grievance resolution follows the Cargolux standard practice of engaging all parties in meaningful dialogue focused on positive resolution and outcomes.

**Evaluation & adjustments**

Employee consultation follows a structured approach that allows engagement with an eye to practicality. Communication to the impacted employee groups is followed up with interviews and collaborative problem-solving. A cost-benefit analysis, which includes safety considerations, is performed for leading ideas/

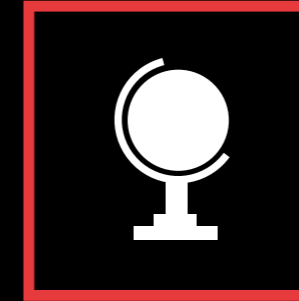
suggestions and key influencers in each area are selected to help lead the required behavior change.

A great 'litmus test' for whether the system is working, is the level of push-back from employees – which for the new building and other initiative was close to nil.

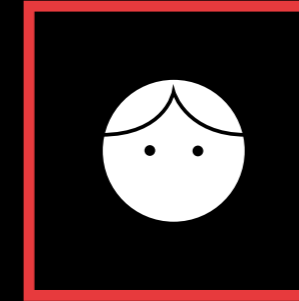
**Parental leave (started in 2020)**

	2020	2019
Men	42	36
Women	14	8

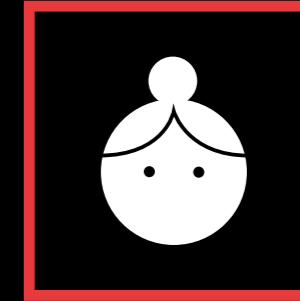
**Turnover**



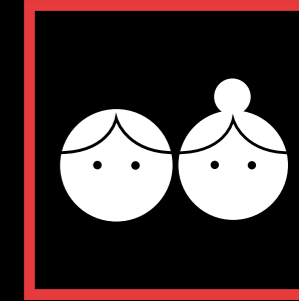
**4,3%**  
turnover rate worldwide



**3,6%**  
men

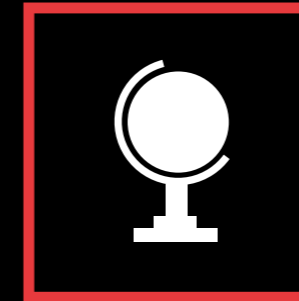


**6,0%**  
women

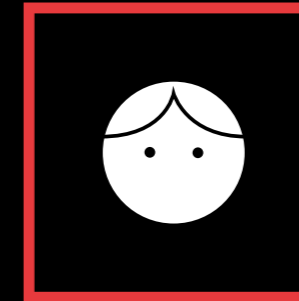


**3,7% under 30**  
**3,8% 30-50**  
**5,6% over 50**

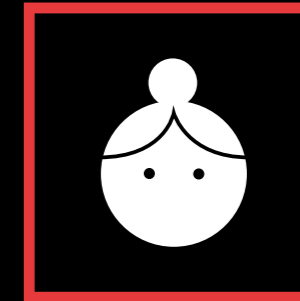
**New hires**



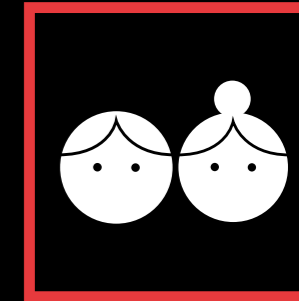
**9,4%**  
new hires worldwide



**73,9%**  
men

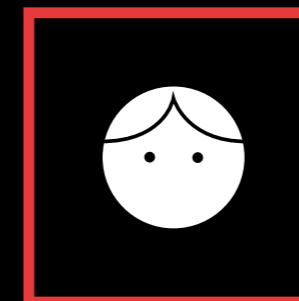


**26,1%**  
women

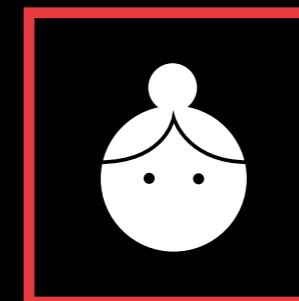


**25,2% under 30**  
**8,70% 30-50**  
**3,40% over 50**

**Parental leave (started in 2020)**



**42**  
men



**14**  
women

**Talent development**

The Cargolux workforce comprises highly skilled, experienced professionals who follow an extensive program of regulatory and specialized training. The company also prides itself on offering a wide array of additional training from technical knowledge to soft-skills and language, allowing employees to hone their skills and develop professionally. The Corporate Training department is continuously fine-tuning its course catalogue to cover both essential and supplementary training.

When the pandemic hit, solutions had to be found rapidly to ensure mandatory and regulatory training could be maintained. Although extensions were granted for certain certifications, other traditionally class-based trainings had to be held on digital platforms either with e-learning modules or in a virtual classroom format. For courses requiring hands-on sessions, arrangements were made to ensure all sanitary measure were complied with during the course.

Strongly committed to continuous skill enhancement, in 2020, the training catalogue was not limited to mandatory trainings. Non-essential courses were maintained, allowing employees to evolve and gain new skills despite circumstances. These sessions were converted and adapted to the virtual format to provide the same quality learning experience as a classroom training.

The digitalization of courses and expansion of online trainings was already a core focus for Corporate Training before the sanitary crisis. Significant investments were made into high-end communication tools and platforms to offer users an optimal learning environment. As Carole Milani, Manager Corporate Training & Development, highlights: "The virtual classroom is and will remain the future of training in many areas. We are happy to have explored this route early, it allowed us to be prepared and ready from the onset of the pandemic."

**In this area... Cargolux does this...**

**Impact & boundary**

Cargolux sees its future in its people. The aviation industry requires high levels of expertise that come from a well-aligned training, development, and regulatory compliance program. Cargolux Corporate Training has, at its core, a philosophy of continuous learning and development, with on-the-job training, teaching and learning as primary focus. Cargolux acknowledges that this is a pillar in retaining, attracting and developing talent, which impacts its success. Learning opportunities go well beyond the mandatory technical qualifications trainings. In line with the philosophy of continuous learning, employees are encouraged to work towards relevant degrees or other professional accreditation, and to develop essential soft skills.

Performance management and succession planning are the backbone of organizational achievement. Success depends on a dedicated and talented team. A structured succession planning framework aligns internal knowledge and skills to ongoing operational activity.

Cargolux's commitment to career development for all employees in the company's global network is unwavering.

Ground Operations Training includes Compliance training in the classroom, online and via blended learning solutions. Webinars for Personal Data, Embargoes, Harassment in the Workplace, Fraud, Corruption, and Confidential Reporting are available on demand. Technical apprenticeships continue successfully, following the EASA Part-66 B2 practical tasks and Part-66 B1 apprenticeship programs. As well, classroom continuation training improves troubleshooting skills and knowledge of all technical staff, including mechanics.

**Regulatory Compliance Training:** standardization enables the highest level of training quality for the flight crews and third-party customers. Continuous investments ensure that training devices are operating to the latest standards and requirements mitigating all specific work-related hazards.

**Management approach & components**

Cargolux makes every effort to treat all personnel equally. To this end, the organization focuses on cross-pollination and collaboration to promote equality and improve gender relations.

**Standardize and Sustain** focuses on maintenance and engineering. This program uses a systematic method for organizing and maintaining activities and equipment. The emphasis is on minimizing wasted effort and costs, while integrating Lean Philosophy into day-to-day activities and leadership practices.

**Brainwaves:** A company-wide suggestion scheme encourages

employees' creative thinking and provides a channel for innovative ideas to enhance the airline's efficiency, productivity and to improve the performance and quality of day-to-day work. Suggestions are evaluated by specialists in the relevant area of the organization; successful proposals are implemented, and the creative employees are rewarded.

Grievance resolution follows the Cargolux standard practice of engaging all parties in meaningful dialogue focused on positive resolution and outcomes.

**Evaluation reports adjustments**

As well as quarterly reports to the executive, the team's work on the HR HUB allows individuals and managers to pull the appropriate reports from the system in real-time. HR's process of large-scale engagement is

complimented by data collection and evaluation. Focus is put on in-person contact and conversation. Feedback, evaluation results, and quantitative data are all used during the decision-making process.



### c. sustainable procurement

Cargolux strives to conduct responsible business, not only in the global supply chain but also within the realms of its own procurement processes. The company has a long-standing commitment to anti-bribery awareness and has been implementing measures over the years to minimize exposure throughout the network. Following the formalized risk assessment conducted in 2019, a new e-Procurement tool, Zycus, was selected and implemented over the past year with the aim of going live in early 2021. The electronic platform will provide increased transparency for tenders, enhanced collaboration both internally and with suppliers, and eliminate the use of paper documents considerably.

As part of its purchasing procedures, the airline considers the environmental impact of its suppliers and endeavors to choose local partners where possible. This well-established pattern was challenged in 2020, as PPE became an essential resource for Cargolux, and local production is in extremely limited supply. Overall, although the proportion of local orders decreased in terms of value, it did not significantly drop as regards the number of orders placed.

Another side-effect of the pandemic was the shift in the nature of the orders placed. As restrictions were implemented, and a number of employees moved to home office, there was a surge in demand for laptops while requests for paper, prints, and stationery declined. With the heightened demand for specific segments of purchasing, the focus was on sourcing the required items to ensure the company was equipped to face the crisis. The team successfully navigated the changing restrictions worldwide while strictly adhering to the in-house purchasing policies to avoid shortages and fulfill business-critical requirements.

As an additional move towards more sustainable consumption, in 2020, Cargolux signed the Zero Single-Use Plastic pledge. The initiative was widely welcomed within the company and measure were taken in this direction, the most noticeable of which was the elimination of plastic bottles. Due to sanitary requirements, the total removal of plastic has not yet been achieved. However, the company has established a standard to uphold its commitment: when plastic is used, it is recycled material. This applies both to the headquarter premises, as well as for the aircraft; all crew catering from Luxembourg uses recycled plastic. Always intent on going one step further, Cargolux has asked all catering companies throughout its network to strive and provide similar solutions.

GRI 102-9 | GRI 102-10  
GRI 103-1

### In this area... Cargolux does this...

#### Impact & boundary

Cargolux purchases a wide variety of goods (e.g., fuel, equipment, office supplies, etc.) and services (e.g., legal, brokerage, accounting, GHA, GSA, security, OSSA, authority & airport services, cargo handling, etc.) from over 640 suppliers worldwide.

Sustainable procurement is a priority and the Cargolux Procurement Policy guides all staff through a consistent and vetted process which considers the environmental impact of goods (e.g. investments, transportation, storage, etc.). As well as protecting and guiding the organization, it positively impacts suppliers and local communities connected to Cargolux by causing them to consider their decisions regarding important aspects of their business model. In general, better and more transparent C&P processes have a positive impact within the company, the communities and the industry.

Cargolux's objective is to guarantee the optimal balance between the quality of goods and/or services and cost effectiveness. This fundamental principle ensures that the airline can support its partners, and service providers,

with sustainable business practices. This is especially important in such a highly competitive field.

Generally, each department throughout Cargolux is responsible for procuring its required goods/services in conjunction with the procurement department using a standard tender process. The Cargolux Business Partner Vetting External Questionnaire ensures that no matter who is contracted for services or goods, there is a consistent approach to vetting providers. Potential suppliers are selected based on objective criteria such as technical expertise, level of experience, quality of proposed staffing, relevant credentials, resources, geographical coverage, and/or possession of necessary licenses (where applicable). Cargolux takes pride in working with suppliers of different sizes and ownership structures. It chooses suppliers based on their ability to provide high-quality, cost effective goods/services.

GRI 103-3 | GRI 204-1

	2020	2019
Number of vendors	610	691
Local (*)	343	371
Number of orders	2,946	3,999
local	2,372	3,251

\*Local: Luxembourg and neighboring countries (France, Belgium and Germany)



**Management approach & components**

From order placement to fulfillment, the whole Cargolux supply chain is transparent. The company uses a system that streamlines procurement process tasks. This enables compliance to be completed with little delay or lag time.

Cultivating and encouraging local providers is an important element in the process. The contracts and procurement process provide direction on how to assess targets and impacts, while adjusting for the highest possible impact. The validation program guarantees transparency in the selection process and provides a platform where skilled providers can easily be found. The tender process includes receiving at least three bids for any specific requirement and then conversations with the supplier and process owner to refine their understanding of any boundaries or constraints. All contracts must specify the goods/ services required, milestones, and the method and timing of payments. As an international company, suitable segregation of decision-making and duties between the department requiring the goods/services, the procurement process, and payment approval is fundamental.

Compliance staff liaise with all parts of the organization, but mainly station and regional managers, for everyday consultation. They regularly conduct due diligence exercises and formal reviews, with key procurement departments (Fuel, Ground Handling, Sales Dept for General Sales Agents...). The compliance team works with Internal Audit (investigations and audits), and Finance (monitoring financial activities). Three different sections deal with reporting & control, training & communications, and general compliance support for the business. The formalized risk program, which includes an extensive business partner vetting questionnaire, ensures that internal and external documentation communicates standard processes and reinforced measures for identifying risk, ensuring due diligence, and considering the ethics-side of the SDGs.

Grievances are handled using a standardized approach which includes an anonymous hotline where employees can ask questions, gain clarification, and register issues.

**d. digitalization & asset security**

Digitalization and asset security are central to Cargolux's development strategy. The company is committed to ensuring its property and assets are functioning optimally and are effectively protected against threats both physical and cyber-related. As the digitalization journey continues, it is vital to continually evaluate risk and devise solutions to keep the business running in a safe and productive manner.

In 2020, Cargolux achieved the final steps to gain full management of its IT systems and infrastructure, including the development and maintenance of a full Azure cloud environment. In addition to being an ambitious step forward, the migration was handled during the company's move to its new Headquarters in the midst of a lockdown due to the pandemic.

Tight restrictions were introduced in Luxembourg and employees whose presence was not required on site moved to home office. The Cargolux IT department was faced with the additional challenge of delivering a stable network to ensure staff could work remotely while managing the ongoing migration to the new Headquarters with its external supplier. The team mitigated the risk linked to that dependency by reinforcing its network expertise and by creating a secondary emergency network independent from its main external supplier. The aim was to guarantee the business continuity of our 24/7 operations.

To ensure minimal risk for the company's assets, an extensive cyber security program was launched with an external service provider at the beginning of 2020.

An assessment was conducted, and a roadmap established allowing Cargolux to gain visibility on the requirements for implementing a state-of-the-art security program. Internal resources were also allocated to the program to gain a full overview over the progress, to implement enhanced security measures, and to bring security awareness to employees. A robust corporate cyber security infrastructure depends on each and every one. Therefore, awareness campaigns and mock attacks were conducted to ensure the workforce is informed to recognize and address potential threats.

An additional element of the cyber security program was the roll-out of Windows 10 throughout the company. As well as providing a modern and integrated workplace for employees, the new operating system enables the installation of appropriate modern security defenses on each Cargolux-owned device. To cater for Windows 10 and its advanced Microsoft package, each employee had to be issued a new computer. Delivering these new computers while respecting all sanitary measures required a well-organized schedule. Each HQ-based employee was allocated a set time to go on-site and pick up their new device, any subsequent issue was resolved by the company's service desk.

Meanwhile, the service desk was also in the process of being moved fully in-house. A total of 13 persons were recruited by Cargolux in 2020 to assist with the transition and to ensure a smooth shift from the previous external service provider. The aim was to have a fully functional support service available around the clock at the beginning of 2021. This will allow personnel throughout the network to have access to tailored help from the IT team

at any time of the day. The ambitious move will also enable the company to have a complete overview over the issues encountered and to develop adequate solutions supported by a growing knowledge base fully documented centrally.

Always at the forefront of efficient and swift digitalization, the IT team continued to work on a variety of projects throughout the year. As Olivier Beaujean, Chief Information Officer, explains: "Cargolux is truly committed to its digitalization program and in 2020 we were involved in over 52 IT-related projects. Although the pandemic was an additional hurdle in implementing IT projects, the agility and dedication of Cargolux's workforce helped to mitigate any negative impact.

With all the projects in the pipeline and the restrictions in place, the IT team had to set clear priorities and adapt to established company requirements. A list of the ten most important projects for Cargolux was devised and the employees involved in those projects were present on site when needed to avoid any delay. With all these projects well underway, the progress made by Cargolux IT is remarkable and the work will continue in 2021 to ensure an efficient and secure workspace for all employees.

**Evaluation & adjustments**

Simplification, optimization, alignment and standardization of the expression of risk to ensure clarity throughout the organization is an important area. Risk assessment practices, including clarity of expression of risk, terms of reference, rating system, and process steps, are available and aligned throughout the organization.

Evaluations are done in conjunction with local staff and suppliers.

Procurement trends are reviewed periodically to ensure the Cargolux procurement policy reflects the current, and global, supply/ demand landscape. Compliance Officers are involved in all aspects of assessment and improvement. Examples include eliminating plastics in the pallet packing area and members of the team have gone so far as to visit flower farms in Kenya to assess adherence to guidelines and rules.

**In this area... Cargolux does this...**

**Impact & boundary**

Digital touches everything. Cargolux uses a vast amount of digitalized information to make decisions throughout the organization. Ensuring the integrity of that data is of utmost importance. The Cargolux 2025 strategy, endorsed in 2017, guides the organization in accommodating and keeping abreast of digital trends. The strategy has three pillars: Strategic Measures, Business Process Review, and a Digital Roadmap. This Roadmap is at the heart of ongoing updates and the evolution of systems, processes and procedures, across Cargolux. It also ensures that the organization has physical control over its digital assets.

Cargolux staff focus on projects that increase efficiency throughout operations. Ongoing process review and procedure streamlining allows teams to consider the big picture and how it connects tactical activities with strategic possibilities in the future.

From virtual reality training for mechanics and pilots (in addition to simulator training), to **predictive maintenance** programs and **CRM sales solutions**, digital touches every corner of Cargolux. Customer satisfaction is at the heart of the Cargolux philosophy, so client-facing platforms also have enhanced interfaces.

**Management approach & components**

Cargolux uses a 'high-return' strategy to determine the focus of its digital transformation energy. Some of the projects that are netting huge returns include:

The **CV pharma Service Capabilities Map** indicates important pharma capabilities within the CV network. This interactive map enables customers to swiftly and remotely match comprehensive services to their needs (e.g.: CV pharma service [2-8°C/15-25°C/frozen], CV pharma active/passive solutions).

**TEAMworks!** This cross-divisional system saves time and effort while streamlining processes. The system provides a single digital view of information that predicts the schedule and shows the real-time status for all the steps of a turn-around from the aircraft's arrival at the gate for loading/off-loading, fueling and take-off. This allows any issue to be mitigated quickly and transparently, substantially reduces paper use, and improves communication and visibility for both internal and external stakeholders.

**OHS risk assessment** loads information automatically into the **IQSMS** system.

**HR HUB** The HR hub provides a central location for HR related items such as job openings, an employee suggestion scheme, or a course catalog for upcoming trainings.

Paperless **CMR** consignment notes (**e-CMR**) provide real-time access to shipment information, accelerate administration, improve accuracy, reduce discrepancies and handling costs, and improve the control and monitoring of shipments.

**Revenue management** and **ERP** provide improved cost management.

**TMS** (truck management system) supports the logistics process and reduces waiting time and fuel burn.

The electronic Air Waybill (**e-AWB**) simplifies the air cargo process, reduces paper, administration time, and delays. It also provides transparency regarding the provenance and destination of every shipment.

**Electronic Flight Bags (EFBs)** provide pilots with ongoing connections to flight and ground operations and a variety of data and information.

**Validaide CSR Global Logistics:** This supplier qualification and risk assessment tool removes guesswork, manual effort, and paper from the transport supply chain. Customers and Cargolux teams use one platform where data is compiled automatically to access current, real-time service capability information for cargo origins, transit, and destinations.

**Paperless maintenance checks** reduce thousands of pages of documents down to an electronic tablet.

Grievances and issues are handled in a standardized manner with end users contacting the end-user service desk to register an issue. Each issue is tracked to completion, closed out within the system, and follow-on developments noted.

**Evaluation & adjustments**

At the heart of Cargolux's Roadmap for automation and digitalization, is the focus on identifying opportunities for further digitalization and automation, as well as opportunities to streamline processes. This focus ensures continuous and high-quality tools, systems and processes. The ongoing focus on individual project debriefs and lessons learned exercises, ensures that suggestions for improvement are captured and codified to be used to create innovations for future projects.

Each system provides structured reports and efficiently evaluates associated processes and procedures. Quarterly reports that detail progress, issues, and suggested solutions, are provided to the executive so their input can be used during the decision-making process.

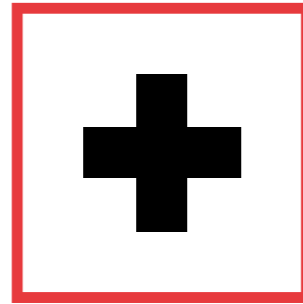
*Throughout the pandemic, Cargolux transported essential supplies where they were most needed*



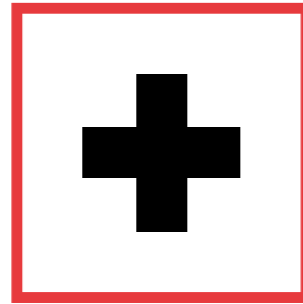
# developing sustainable operations

GRI 103-1 | GRI 103-2  
GRI 403-6

## a. health & safety



**15,331**  
lost days for sickness



**383**  
lost days for accidents

### Occupational Health & Safety

Occupational Health and Safety (OHS) is a primary focus throughout Cargolux, and the team is intent on ensuring a healthy and safe work environment. Strongly engaged at all levels within the airline, the OHS department's role was even more crucial in 2020. As the COVID-19 pandemic swept through the company's network bringing unprecedented sanitary measures and restrictions, OHS played a crucial role in assisting staff and ensuring business continuity. From Personal Protective Equipment (PPE) distribution, to workplace assessments and related improvements, the team was on all fronts to keep infection risks at the lowest level for staff members.

The department was first made aware of the outbreak by its employees in Area 3 (Asia). The company's first response was to equip all flight crew with appropriate PPE and raise awareness of required sanitary protocols when traveling to Asia. Measures were immediately put in place to ensure adequate stocks of masks, disinfectant wipes, and sanitizing gel.

By the end of January, as the virus spread worldwide, concern grew within Cargolux and a crisis management committee was created on 1 February. This unit, comprised of upper management and key department heads, monitored the situation and its evolution on a daily basis and discuss appropriate measures to ensure business continuity

while keeping all employees safe. At this point, OHS dedicated one person full-time to crisis management in order to cover all health and safety related matters and ensure best practices were upheld in the workplace both in Luxembourg and in the company's outstations.

The Luxembourg headquarters served as a central point for all COVID-19 issues, gathering and disseminating information, acquiring and distributing PPE throughout the network. The home base served as a consultancy hub for its international stations and meetings were held twice daily to ensure all concerns were addressed and appropriate action taken to preserve employees' welfare both on the ground, in the air, and en-route for traveling flight crew.

The new requirements were nothing short of challenging to implement. As an international operator active worldwide, the company drew on its previous experience of large-scale epidemics in its network such as the SARS outbreak in South Asia and Ebola in West Africa. Recommendations from the World Health Organization, IATA, EASA, and the Luxembourg Ministry of Health were closely monitored, allowing the company to establish its own, more stringent sanitary protocol. The OHS department also introduced an extensive staff support process. Once an employee is diagnosed positive to the virus, the team gets in touch with him/her to determine who they were in contact with, assess the risk posed by this contact, and assist with potential quarantine measures.

GRI 103-2 | GRI 403-6

During the first lockdown, the majority of office staff was required to work from home while work patterns of those required on site has to be adapted to respect sanitary measures. PPE was distributed to all Cargolux employees and sanitizer made available throughout the premises. OHS carefully managed these stocks to ensure availability for all workers and the supplies were expertly managed as no shortage of vital hygiene products occurred. Shifts were segregated into smaller groups to avoid non-essential contact, while physical handovers moved to digital platforms to further reduce inter-personal contacts.

These restrictions coupled with strong business activities proved to be a real learning curve for all those involved. As Luc Loschetter Head of Occupational Health, Safety & Environment puts it: "At the beginning we had no idea of the scope of this pandemic. As the situation developed, it became clear we had to re-think our entire procedures to keep the operation running while ensuring employees' health and safety. Our whole workforce was impacted but they showed exceptional resilience and strictly applied our recommendations to keep the business afloat. Each individual effort reflected employees' dedication and it made our job more manageable in the long-run".

As an additional precaution, it was decided that an in-house testing facility would be set-up for employees. Once the decision was made, the OHS team set to work, and the center was opened a week later; fully equipped and staffed with 4 nurses. To cater for shift workers and crewmembers, the facility is open from 5 am until midnight every day. A testing point

was also established in the new HQ with a weekly presence to offer an additional screening point. Appointments must be taken ahead of time, but the service is available to all employees, including those working from home. Towards the middle of the year, the company also introduced the option of rapid testing for staff to offer additional peace of mind while performing duties on site.

For a few months over the summer, as the infection rates remained low, and Luxembourg opened up again, employees were re-introduced to on-site working. The return was based on a rotational system with each team split in two and alternating home office and workplace on a weekly basis. Each one of the company's premises, including the brand-new HQ where the company moved mid-pandemic, had to be assessed by OHS along with the company doctor to ensure the strict sanitary protocol could be adhered to. Each space, including catering facilities, common areas, and meeting rooms were arranged to follow the required measures.

2020 was largely dominated by the COVID-19 pandemic from an Occupational Health and Safety perspective, but the team did not lose sight of the company's commitment to OHS. Although items were prioritized to ensure proper sanitary measure to prevent the spread of the disease, other safety issues continued to be addressed throughout the company. The team continued to assist managers in keeping their specific risks low and prevent any work-related accidents and incidents. The year was extremely busy for the industry but as the experience proved, Cargolux's commitment to Health & Safety is unwavering.

**In this area... Cargolux does this...**

**Impact & boundary**

OHS is a critical internal service provider. Worker health and well-being is influenced by a myriad of situations and circumstances, so the OHS team works fluidly with different parts of the organization to ensure optimal conditions. The Cargolux Health and Safety team is vigilant in its mission to improve the quality of activities that ensure a healthy and safe work environment.

Occupational Health & Safety are significant pillars for all Cargolux

teams and a primary focus within their activities. There is nothing more important than keeping Cargolux and associated staff safe and healthy, which impacts the company, the community, and the industry. By disseminating high-quality safety thinking and practices beyond the borders of Cargolux installations, the perception of issues and challenges related to Health and Safety activities are changed, while the value of life and a hazard-free work environment are emphasized.

**Management approach & components**

The OHS Management System is fully detailed in the OHS manual that is available for consultation by all employees. It is fully aligned with the ISO 45001 standard which is applied to all processes and explains the scope of the department's activities. OHS is committed to ensuring a safe work environment and strives to engage all employees to this aim. A dedicated Consultation & Participation procedure has been defined internally recognizing that employees are represented by the Delegation on matters affecting their Health & Safety and therefore ensuring that Cargolux complies with the Luxembourgish law for consultation, which requires them to consult with employees on matters affecting their OHS.

Risks and potentially hazardous areas are analyzed and documented according to a defined process. All reported accidents and incidents are also investigated to identify shortcomings and mitigate any further risk. The company fosters a no-blame culture, encouraging employees to flag areas of improvement. Cargolux has a solid Risk Assessment procedure to ensure risks are reduced to an acceptable. This includes on-site assessments, identifying potential risks areas and implementing improvements. The OHS department

also prioritizes action according to risk and fosters a pro-active attitude towards OHS.

Workers' health is a primary focus; in addition to its yearly influenza vaccination campaign, OHS also implemented in-house COVID-19 testing, both anti-genic and PCR for its employees. They are also regularly equipped with PPE to ensure the highest level of protection in the workspace.

OHS regularly communicates on its activities and campaigns include:

OHS posters (digital and hard copy), working at height assessments, vibrating tools practices, digitalized risk assessment (which provides information and recommendations regarding road safety), and an international vaccination program. To ensure staff and third-party contractors are following labor code regulations and best practices, training and controls implementation are also areas of focus.

Grievance resolution follows the Cargolux standard practice of engaging all parties in meaningful dialogue focused on positive resolution and outcomes.

**Evaluation & adjustments**

The OHS team tracks and rates all types of injury, occupational diseases, lost days, absenteeism, and number of work-related fatalities. OHS provides information on workload stress, monitors and follows up with anyone who is absent from work for more than 6 consecutive weeks.

The Cargolux HQ in Luxembourg is certified ISO 45001 and these guidelines are further applied company-wide.



100% of Luxembourg-based workers covered by a H&S management system certified by an external party.

**OHS in figures:**

	2020	2019	2018
<b>Number of incidents</b>			
Internal incidents	30	42	36
External incidents	19	18	15
<b>Total</b>	<b>49</b>	<b>60</b>	<b>51</b>
<b>Lost days</b>			
Accidents	383	347	321
Sickness	15,331	14,682	14,722

*Some of the complementary data required by GRI 403-9 is currently not available, Cargolux is committed to disclose it in the next CSR report.*

**Operational Safety**

GRI 103-1 | GRI 103-2 | GRI 103-3  
GRI 403-2

**In this area... Cargolux does this...**

**Impact & boundary** The airline industry is filled with complex objects, machines, technology, processes, and systems. Operational Safety is a collaboration between many teams throughout the company. Due to its control mechanisms, it is considered a high-risk, ultra-safe industry. Identifying risks, and barriers in order to mitigate them is extremely important in this field. Operational Safety supports the company by monitoring all available data to keep their specific risk low. Digitized operational safety data provides big data analytics that covers every aspect of operational safety, ensuring that most information available can be accessed during analysis. Having a system that can process big data and produce meaningful information, allows Cargolux to keep risks under control by using data-driven decision-making. This improves accuracy, and provides objective, valid information. It also reduces silos and increases understanding of operational problems and/or issues. A well-functioning system means that incidents and disruptions during aircraft operations are kept at low level and reduces the potential for accidents.

**Management approach & components** Using the guidance material issued by ICAO and the rules and regulations published by the European Commission, Cargolux has set up a dedicated Aviation Safety Department that supervises the Safety Management System. The System uses a variety of data sources and tools to understand whether the processes within the aviation field of the organization work as intended and where they need adjustment or adaptation. Incidents and lapses are investigated to ensure causes are identified in order to allow recommendations for improvement to be issued.

**Evaluation & adjustments** Data is consolidated from a multitude of systems and applications to provide easy-to-use information that streamlines flight operation processes for Cargolux and third parties. Analytical tools allow Cargolux to gain intelligence that Operational Safety uses when presenting findings and recommendations to management. The Safety Management System provides a conduit to the operational team where standard systems allow consistency of processes and grievance resolution across the organization.

**Human Factors: Pilot Peer Support Program**

GRI 103-1 | GRI 103-2 | GRI 103-3  
GRI 403-3

**In this area... Cargolux does this...**

**Impact & boundary** Cargolux's Pilot Peer Support Program, that considers the individual, is a model for the industry. Offered in close cooperation with the Mayday Foundation and Cargolux's Human Factors manager Gunnar Steinhardt, it guarantees extensive, confidential, assistance to help pilots overcome the challenges of a serious incident and/or other issues impacting a pilot's wellbeing and/or mental health.

**Management approach & components** The peer-to-peer support is highly appreciated within the pilot community. Pilots in need may request assistance via the Mayday Foundation either from a peer within the Cargolux volunteer group, or from others in the Mayday Foundation pilot peer community. Cargolux's Human Factors Manager, Gunnar Steinhardt, MHP (Mental Health Professional), is also available to provide assistance. The support system is designed, implemented, and monitored by the Cargolux Advisory Group comprised of colleagues from the group of pilot representatives, the Chief Pilot, and the Human Factors Manager. Peer-to-peer volunteer pilot counsellors call upon their years of professional experience during counselling calls. This shared background allows them to fully understand, the concerns and impacts of the caller's issue. Volunteers are trained and supported by the independent Mayday Foundation. This highly confidential program, which was activated close to 2 years before being required by the mandatory EASA regulation (February 2021), holds empathy and strict confidence as central. All volunteers in the program sign a confidentiality agreement and are trained to respect, understand, and protect the caller's confidentiality. If necessary and requested, a professional referral is coordinated by the Mayday Foundation. Grievance resolution, which constitutes one of the program's cornerstones, is also of utmost importance. Should the caller be dissatisfied with the assigned peer, that person can provide the caller with alternatives such as switching to a different peer or contacting the Clinical Director of the Mayday Foundation. In its aim to assist pilots in need of support, the Mayday Foundation has access to a wide range of resources and channels. If a grievance is not resolved, the individual has the option to send a complaint to any of the following: the Cargolux PSP Advisory Group, Human Factors Manager, EVP Flight Operations, VP Flight Operations, Chief Pilot's Office or HR, where the complaint is handled discretely and appropriately.

**Evaluation & adjustments** All electronic communication and records are securely stored within encrypted systems and are stored and destroyed according to the Data Protection Act. Personal data is bound by confidentiality and restricted to the CISM (Critical Incident and Stress Management) Team of the Mayday Foundation for the duration of the support provided. The Mayday Foundation is completely independent from Cargolux. No data or information is shared with Cargolux unless explicit permission has been granted. General, de-identified high-level data is provided to the PSP Advisory Group and appropriate management bodies to ensure appropriate oversight and action.



## b. emergency preparedness & business continuity

The emergency and business continuity processes established by Cargolux are based on extensive experience and decades of analysis of both the workplace and operations worldwide. Over its 50 years of existence, the company has strived to keep its personnel safe while ensuring critical services are delivered. In 2020, however, the emergence of a global pandemic was an unprecedented development for Cargolux. Thankfully, management and the teams reacted swiftly and devised solutions to ensure the employees' welfare was preserved while keeping the business afloat.

As of early March, when the COVID-19 pandemic started progressing, Cargolux quickly established a Business Continuity Management (BCC) Group led by the CEO & President, to monitor the situation worldwide. The working group comprised key operational and strategic management personnel, each with unique requirements and challenges related to their area of expertise. Initially, these were analyzed on an hourly basis to ensure all aspects were covered. This collaborative approach allowed the company to gain a holistic view of the global situation and make data driven decisions both to protect employees and to navigate restrictions within the network.

In order to keep employees updated on a regular basis, a solid internal communication campaign was established. Staff were kept informed about changes in sanitary restrictions and company-wide measures through emails while a special COVID-19 newsletter was introduced to provide insight into the operational situation and business updates. A dedicated intranet page was created to gather all necessary information for employees such as company-devised measures and recommendations, track and trace procedures, and

testing options. These sources of information were complemented by a COVID-19 mailbox to address individual concerns.

Cargolux's first priority was to preserve employees' health and minimize risks of infection in the workplace both on the ground and in the air. The strategic overview provided by the BCC allowed the company to divide employees into categories and devise measures adapted to the different fields of work. As a primary precaution, all employees were issued surgical masks and sanitizer, and measures were adapted as the situation unfolded. Office workers whose presence on site was not essential were required to work from home while those on the frontline were divided into split shifts to further reduce transmission risks and remote handovers were introduced to further segregate teams.

In order to keep the flight crews safe and avoid exposure to contamination, pilots were issued with protective equipment since the outbreak of the virus in China. The destinations were closely monitored and, layovers were suspended, or the hotel location changed to a different area to keep risks as low as possible. To ensure continued network service, technical stops were introduced for destinations with layover bans.

The minimal workforce requirements were analyzed, and this indicator was used to define the on-site presence. Briefings and handovers moved to digital formats and a one-hour buffer was introduced to allow shift changes without interaction between groups. As Onno Pietersma, Executive Vice-President Maintenance & Engineering, explains: "The primary concern for management was to keep our people safe. We introduced a rotation system to minimize interactions and re-thought our work pattern to allow for increased distance when contacts cannot be avoided. Clear procedures were devised on the line throughout the network allocating a clear sequence during turnovers to ensure different teams did not overlap. Despite these profound changes to their working habits, the teams were determined to ensure work was done in a safe and timely manner. In addition to the high

workload throughout the year, all scheduled checks were performed as expected in 2020 which is a huge achievement that the team can be proud of."

Cargolux offers its employees free of charge COVID-19 testing on a weekly basis. This initiative, coupled with the company's solid track & trace procedure, allowed contact cases to be easily identified and isolated in order to curb the transmission risk. Infection and transmission rates worldwide were also assessed to anticipate potential risk areas. Once the company-established trigger points were reached, measures were introduced for both ground staff in the area and travelling flight crew. Numerous scenarios were developed by the BCC to ensure back-up plans were available as required on an operational basis.

Business Continuity is a pillar of the company's sustainability and the unforeseen circumstances of 2020 have allowed the breadth and depth of the skills available within Cargolux, to bear on this most unique and challenging of environments. The determination of the teams and management's swift reactions have allowed Cargolux to face a high workload while navigating stringent sanitary measures. This unforeseen situation will enable the airline to embed the lessons learnt from this experience into its strategy to future-proof the company.

## In this area... Cargolux does this...

### Impact & boundary

As well as protecting staff, customers, suppliers and communities throughout the world, the business continuity and emergency preparedness plan ensures the continued operation of Cargolux. Always intent on being a good corporate citizen, the plan takes into consideration local requirements (such as health and emergency response regulation) and adheres to the highest global standards. Given the high-risk classification of the air transport and logistics industry, Cargolux works to ensure it meets and even exceeds required standards. The team shares its knowledge regularly with other industry groups and associations.

The business continuity and emergency preparedness plans cover, but are not limited to; natural disasters (such as tornadoes, floods, blizzards, earthquakes, and fires), accidents, sabotage, power and energy disruptions, communications, transportation, safety and service sector failure, environmental disasters (such as pollution and hazardous materials spills), cyber-attacks and hacker activity.

### Management Approach & components

Key influencers are actively engaged in emergency preparedness and business continuity discussions. The Cargolux plan is incorporated into all parts of the organization. Integration points and overlaps are clearly defined through assessment exercises that pinpoint strengths. Defined areas of focus and/or improvement ensure there are no gaps. Scenario planning, redundancy in systems and processes, integrated reviews, and training, all combine to ensure that every person associated with Cargolux understands and is knowledgeable about the overarching plan and mitigation

measures in place for any potential occurrence. Each person involved in the plan is apprised of their specific responsibilities and duties related to continuity and preparedness. For example, the team provides business continuity checklists for staff and suppliers.

Grievance resolution follows the Cargolux standard practice of engaging all parties in meaningful dialogue focused on positive resolution and outcomes.

### Evaluation & adjustments

As well as engaging team members throughout the organization in the conversation of preparedness, the emergency response and business continuity exercises include reviewing global best practices, trends, and the evolution in this important area. The highest standards are applied in this critical area.

Reports are provided to the Executive Committee, but more than standard reports, the Emergency Preparedness and Business Continuity team understands that the plan is only as good as the knowledge and skill of people associated with it. Knowledge-sharing and meaningful exchange of new ideas and concepts is a top priority.

### c. fuel & network efficiency

GRI 103-1 | GRI 103-2  
GRI 302-4 | GRI 305-5

2020 was an extraordinary year for Cargolux in terms of fuel efficiency with excellent results recorded. The COVID-19 pandemic heavily affected international travel, drastically reducing the amount of traffic in the skies globally. This situation yielded unforeseen advantages for Cargolux; benefitting from optimized levels, and more direct routings.

These positive outcomes were however balanced by other considerations that hindered efficiency efforts. One of the biggest areas of potential fuel savings is the reduction of APU usage when on the ground. For health reasons (COVID), however, crews are now frequently using the APU to ensure constant airflow on the flight deck and the upper deck. Another area that suffered a slight setback in 2020 is the Flight Crew Discretionary Fuel upload. The request for additional fuel grew slightly over the year, a tendency that could be linked to the general uncertainty about rapidly changing restrictions worldwide.

To help crewmembers make better, data driven decisions about extra fuel, a Fuel Briefing Dashboard (FBD) is in the final process of development and will soon be made available to crews. This platform gathers information on historical data for a particular city pair over the past 60 days to provide a statistical overview of the fuel consumption for that city pair.

In addition to this tool, a fuel efficiency coaching program will be introduced for line pilots. The aim is to promote open, transparent discussion between flight crews and trainers to raise awareness about fuel-efficient techniques and procedures while in flight. Sustainability topics and best practices will also be integrated in the training programs to ensure a thorough understanding of fuel-efficient principles through all phases of flight.

The Maintenance & Engineering division have made progress as regards the calendar-based engine washing program. The cleaning procedure removes dirt and grit that accumulates in the engines, especially over the winter months thus reducing internal engine temperature and subsequent fuel burn. The procedure which was previously done on an ad hoc basis will now be integrated into regular maintenance checks to ensure optimal efficiency at all times. The required hardware to implement this scheduled washing was installed in 2020.

Since the launch of its Fuel Efficiency program in 2016, Cargolux has made significant progress in this field. A total of 15 initiatives were measured over 3 years and the most effective ones were developed into a 5-year roadmap. The airline has now reached a year on year improvement plateau in terms of efficiency. However, true to its commitment to sustainability, the company continues to explore new areas of potential improvement.

#### Cargolux and Cargolux-Italia

	2020	2019
Savings from fuel saving initiatives (tonnes)	6,005	7,230
CO <sub>2</sub> emissions saved (tonnes)	18,916	22,774

#### Network efficiency

Cargolux operates on a worldwide network spanning over 70 destinations\* with two main hubs in Luxembourg and Zhengzhou. As an all-cargo carrier, Cargolux has the advantage of being able to react flexibly to customer requirements by adjusting the schedule at short notice. The extensive network focuses on commercial gateways and is complemented by interline agreements and extensive Road Feeder Services to provide door-to-door transport solutions. This also allows the airline to optimize loads and keep unused capacity to a minimum on its international flights. Routings and frequencies are continuously evaluated and adapted in line with business requirements. As a result, resources are optimized, and the impact of the company's operations is limited.

In 2020, the air cargo industry experienced sustained demand while the travel restrictions imposed throughout the network generated considerable challenges. Nevertheless, Cargolux strived to find the best solutions to continue delivering vital supplies where they were needed.

*\*This refers to Cargolux's regular scheduled network. The network was adapted to market demand during the sanitary crisis.*

GRI 103-1 | GRI 103-2 | GRI 103-3

### In this area... Cargolux does this...

<b>Impact &amp; boundary</b>	The Fuel Efficiency Round Table, ongoing since 2016, has identified most areas of potential savings. Cargolux uses 15 different fuel-saving programs to reduce consumption and has gone from a 3- to a 5-year fuel management plan with the most effective initiatives.
<b>Management approach &amp; components</b>	<p>Cargolux adheres to several programs that are designed to achieve substantial reductions in CO<sub>2</sub> emissions, save fuel, improve safety, and/or decrease congestion.</p> <p><b>CDO</b> (Continuous Descent Operations) &amp; <b>CDAs</b> (Continuous Descent Approach) create efficient descents. <b>Performance Based Navigation</b> (PBN) uses generic navigation requirements that reduce the need to maintain sensor-specific measures for routes and procedures.</p> <p><b>Core Engine Compressor Wash</b> process (for GENX-2B, CF6-80C2B5F and selected RB211-524H2-T engines with low N3 speed margin).</p> <p>Many of these programs also have added community benefits such as noise reduction.</p> <p>Grievance resolution follows the Cargolux standard practice of engaging all parties in meaningful dialogue focused on positive resolution and outcomes.</p>
<b>Evaluation &amp; adjustments</b>	<p>Cargolux worked closely with ANA and several other airlines Air Navigation Service Provider (ANSP) to develop CDO arrivals for Luxembourg. A number of waypoints were created that allow pilots to efficiently plan the descent. CDOs and CDAs (Continuous Descent Operations and Approach) methodologies are a huge step-change in the industry and represent potential for significant fuel savings as well as substantial reduction in CO<sub>2</sub> emissions. A CDO arrival can log fuel savings of approximately 250 kg per flight for a B747, as the engines stay at near-idle thrust during the process. The lack of thrust during descent also means a quieter arrival; reducing noise for surrounding communities.</p>



## d. emissions

GRI 103-1 | GRI 103-2  
GRI 305-4 | GRI 305-2

Sustainability lies at the heart of Cargolux's philosophy and the company is committed to making a difference and promoting sound practices within the industry. With rising concern about CO<sub>2</sub> emissions and their impact on climate change, the cargo carrier is intent on mitigating the effect of its activities and is taking numerous steps to do so. The focus on heavy loads and long-haul routes coupled with a fleet of efficient 747 freighters enable Cargolux to have one of the lowest carbon footprints in the industry.

2020 was a particularly good year for the airline that registered its best carbon footprint on record, down 3% from the previous year. The average footprint was established at 0.482 / FTK for 2020, down from 0.497 kg / FTK in 2019. The result, achieved in a year of high fleet utilization, reflects the legwork done within Cargolux to truly integrate sustainable principles in its operations both in the air and on the ground.

Following years of preparation, the company is fully ready for the implementation of the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA). The scheme foresees mandatory offsetting for civil aviation flights as of 2024/2025 but the initial data gathering was already launched in 2019. This includes monitoring the fuel required for international flights which will then serve as a basis to determine offsetting requirements. Cargolux has also started collecting this information internally, monitoring and reporting on the figures to ensure full preparedness ahead of the CORSIA implementation.

In addition to the mandatory offsetting expected from CORSIA, the airline has made another big step to reduce its carbon footprint. At the end of 2020, Management approved the voluntary offsetting charter sectors performed by the company in 2021. This decision demonstrates the corporate engagement towards defining broader environmental targets.

	2020	2019	VARIATION
CO <sub>2</sub> efficiency / FTK	0.482	0.497	-3%
Lead-free (ltrs)	6,125	6,639	-7.74%
Diesel (ltrs)	17,674	20,503	-13.8%
Diesel / industrial machines (ltrs)	56,469	65,805	-14.19%

## Emissions Road Feeder Services

GRI 103-2 | GRI 103-3

In 2020, the Road Feeder Services department experienced an extremely busy year. The main focus was to keep the operation running while navigating constraints such as travel restrictions and border closures. The high volumes experienced throughout the year, particularly at the company's home base, posed numerous challenges. The team strived to find solutions and keep the goods flowing through the network despite the strenuous situation.

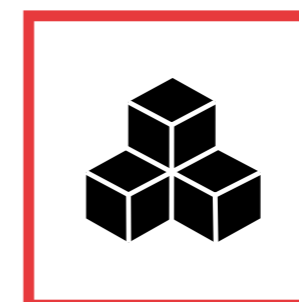
Nevertheless, the Trucking Management System (TMS) project continued to make progress throughout the year. In the initial phase, the tool was used for aircraft imports into the Luxembourg hub and the aim is to expand the application to export trucks within the network. The TMS has yielded significant benefits since its introduction in 2017; the load factor increased 21.7% by in 2020 compared to 2016 leading to a reduction of 6,679 trucks. Cargolux's suppliers' trucking fleet are gradually being upgraded to the latest standards. The remaining EURO 4 trucks from 2019 have been replaced by EURO 6 trucks in 2020 and the remaining EURO 5 trucks are foreseen to be upgraded during 2021.



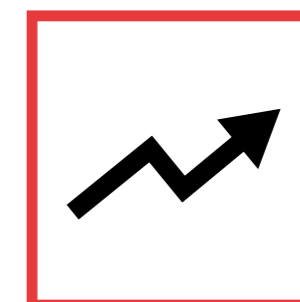
Variation % 2019/2020



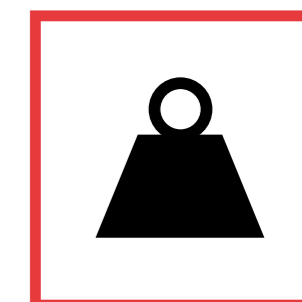
+16%  
trucks



+18%  
tonnes carried



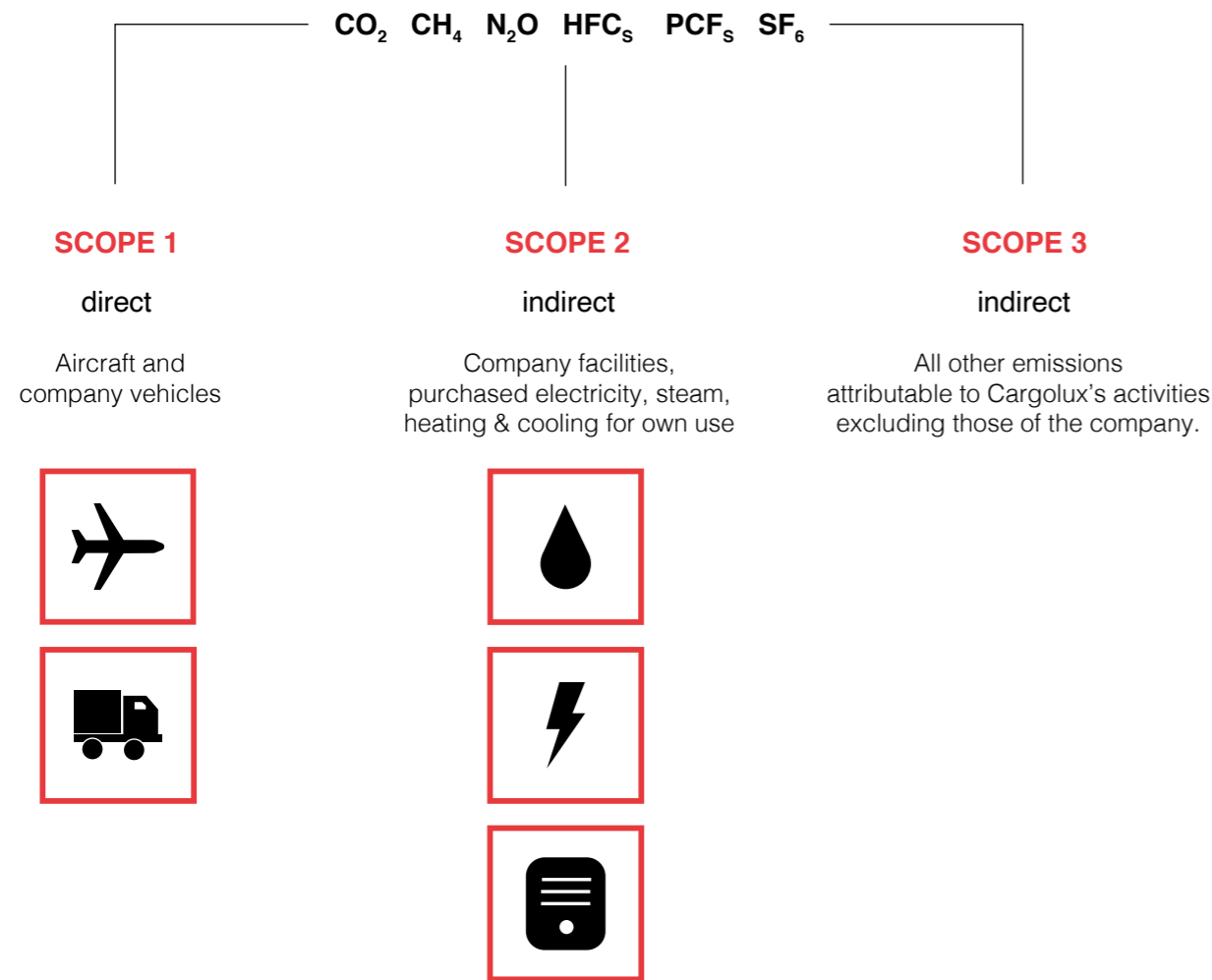
+19%  
mio km



+1.6%  
load factor (kg)

# the Greenhouse Gas Protocol defines three scopes of emissions

GRI 305-1 | GRI 305-2



SCOPE 1	SCOPE 2	SCOPE 3
The Cargolux Group shows exemplary greenhouse gas emissions management for its fleet. In 2020, the overall CO <sub>2</sub> efficiency reached 0.482/FTK for the combined CV & ICV fleets.	Cargolux offices and facilities recorded CO <sub>2</sub> emission of 2,524 tonnes for fuel and gas consumption during 2020. Use of electricity emitted no CO <sub>2</sub> , as it comes from renewable sources.	Category that covers all other indirect emissions attributable to Cargolux's activities excluding those of the company.

GRI 103-1 | GRI 103-2 | GRI 103-3

## In this area... Cargolux does this...

**Impact & boundary** This area is quite advanced in Cargolux, so the team focuses on optimizing environmental management program activities. More people within Cargolux understand the importance of the measures being taken, but also the bottom-line impacts.

The trucking management system and e-booking paperless processes all contribute to reducing waste and energy use. Portable Electronic Flight Bags are just one example of the focus on reducing unnecessary aircraft weight, which results in fuel savings.

**Management approach & components** Cargolux adheres to the EU Trading Systems (EU ETS) and the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) from ICAO. It follows the 2018 process for monitoring emissions. The organization has defined near- and long-term goals that follow IATA's targets for airlines to reduce CO<sub>2</sub> emissions to achieve carbon-neutral growth.

their areas, and opportunities that might impact the environmental management system (EMS) supply chain.

In addition to ongoing and new projects, Geraldine Guebel, Manager Environmental Management, takes time to answer queries and concerns from staff and external parties in a timely manner.

The airline is certified in the ISO 14001:2015 Environmental Management System Standard; a voluntary set of standards for effective environmental management. It includes identifying key stakeholders and determining their requirements, risks for

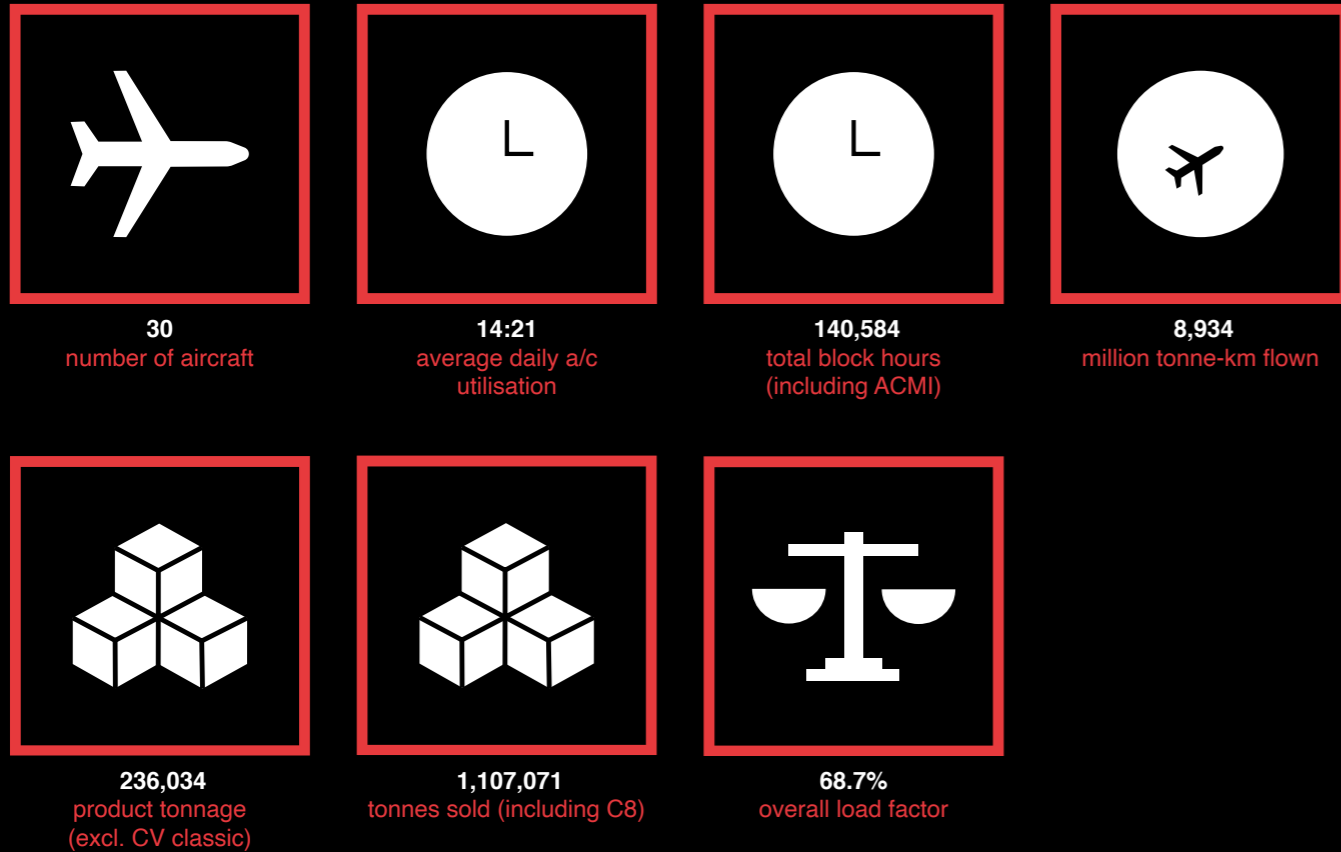
Grievance resolution follows the Cargolux standard practice of engaging all parties in meaningful dialogue focused on positive resolution and outcomes.

**Evaluation & adjustments** Cargolux follows the European requirement for a blended reporting solution with elements from each regulation (listed above). Documentation and reporting templates designed to fulfill requirements associated with the regulations support the methodology and emission calculation. Cargolux follows and meets industry targets focused on carbon neutral operations. The organization passed its last ISO 14001 audit with an excellent 'no findings'.

CO<sub>2</sub> emissions reduction & control are important elements associated with a carbon-neutral company. Cargolux complies with the European Union's Emissions Trading System (EU ETS) reporting requirements and continues to monitor and report CO<sub>2</sub> emissions.

Communication programs provide information regarding environmental successes in emissions control, fuel management, digitalized cargo management and logistics systems.





**e. waste management**

GRI 103-1 | GRI 103-2 | GRI 306-3

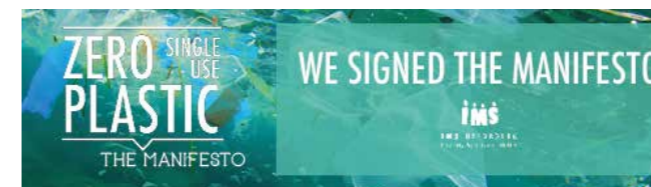
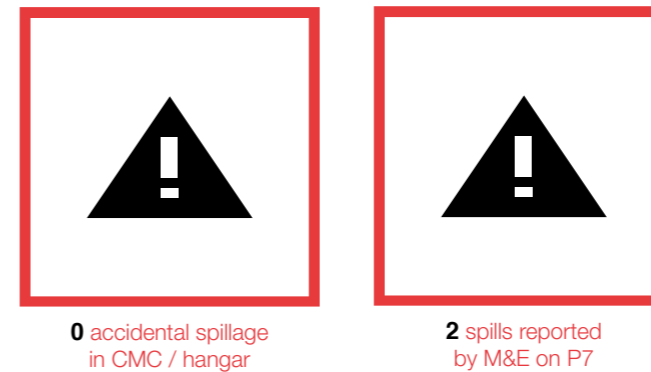
Waste management is a core component of sustainable work environments and one that Cargolux is strongly committed to. Waste reduction and responsible refuse elimination are integrated into the company's strategy with a focus on paperless operations and lean processes. Although digitalization and awareness campaigns have been instrumental in cutting down waste, the company is always looking for additional areas of improvement.

In 2020, Cargolux signed the IMS Luxembourg's Zero Single-Use plastic pledge, a formal commitment to eliminate single-use plastic within the company. This decision was taken as the company prepared to move to its new HQ in Spring, a building that was designed with sustainability in mind. As Alexander Riemann, Facility Management, Head of Building Projects explains: "The move to our new headquarters was the perfect opportunity to re-think our approach to waste

management. The catering facilities were set up to support a plastic-free organization, and the office space was organized around central waste collection points and communal printing corners. This streamlined approach reduces the number of plastic bags required for individual bins and the paper and ink requirements for multiple small printers." The sanitary restrictions and strict hygiene rules derived from the pandemic somewhat hindered the implementation of the ZSUP pledge. Due to these requirements, Cargolux was not in a position to completely remove single-use plastics but the project is on-going and the company has already adapted its premises to support the initiative.

Additional initiatives are in the pipeline to further Cargolux's commitment to responsible waste disposal. A project for the construction of a water treatment station next to the Maintenance Center is underway and a different oil absorbent product is being assessed to reduce the amount of discarded absorbent.

Spillage



The SuperdrecksKëscht fir Betriber is Luxembourgish environmental label, awarded annually, that recognizes companies' commitment and efforts to promote sound waste management.

Cargolux is signatory of the IMS Luxembourg's Zero Single-Use plastic pledge.

**In this area... Cargolux does this...**

**Impact & boundary** Like all businesses, Cargolux generates a certain amount of standard waste products such as paper and plastic, but the aviation industry also uses a number of products which are considered toxic. Added to this, the company performs on-site C-checks that produce different categories of waste and require specific reporting procedures. Activities handled by the Facility Management team include contractor control for the removal and disposal of hazardous substances (e.g., waste removal process validation, adherence to regulations and certifications). This team also tracks on-going developments and innovations that could improve their handling practices and further waste avoidance programs. With dozens of hazardous substances from kerosene to cement/concrete used in the construction of the new building, Facility Management is the central point of contact for all organizational requirements. Cargolux is committed to excellent recycling, reusing, and waste management programs. The airline's focus is to protect against local ground, air and water pollution, and to ensure the health and well-being of staff, communities, and stakeholders throughout the supply chain.

**Management approach & components** Cargolux's commitment to environmental awareness is ongoing. Lean and agile processes are at the heart of its strategy. The company's waste management program covers the headquarters in Luxembourg, the maintenance center, and rented offices at other locations. The 'Superdreckskescht fir Betriber', a local environmental label is renewed each year (via an audit) and recognizes the organization's exemplary waste management practices in waste avoidance, safe and environmentally friendly waste storage, selective collection, transparent waste recycling and disposal system. Cargolux has an ambitious, organization-wide program to reduce paper consumption and waste. It has worked towards eradicating paper from all divisions. Decision-making is effectively executed by an on-site presence in each building. More stringent waste avoidance and reduction measures are continuously iterated and implemented throughout the organization not just to reduce waste but to boost efficiency. Avoidance measures such as digitalization of processes and procedures (e.g., Electronic Flight Bags and crew iPads, removal of single-use plastics, replacing incandescent bulbs with LED lights, and extending recycling schemes) yield clear reductions in waste volumes. LED also replace traditional bulbs on the aircraft's vertical fin and wing illumination. Cargolux has a strict no-printing policy for operations manuals thus reducing the amount of paper required. The grievance process is built upon well-defined, stable processes and reinforces good behavior and Cargolux's drive to be a good corporate citizen.

**Evaluation & adjustments** Not only does ongoing review and iteration of positive environmental options reduce waste, it helps eliminate dependency on paper and other heavy processes that cause waste. By continuously reviewing data and using the results to search for better solutions, Cargolux staff are able to improve and adjust as new solutions come on the market.

**f. noise management**

GRI 103-1 | GRI 103-2  
GRI 103-3 | GRI 413-2

Cargolux operates the world's quietest 747 freighter aircraft. The advanced engine technology and wing design of the -8F reduces the already low 85db take-off noise footprint of the -400F by another 30%.

**Noise abatement**

Tailored procedures to further reduce noise: flaps management, idle reverse thrust, 3-engine taxi-in.

**In this area... Cargolux does this...**

**Impact & boundary** Cargolux's **noise protection program** ensures minimal noise disturbance to the surrounding area on approach and thus mitigates the negative effects of the operation on the neighboring communities

**Management approach & components** APU off, Idle Reverse Thrust, Three Engine Taxi, and Constant Descent Approach; all make a difference for the communities around the Luxembourg hub. Additional noise abatement measures can be seen in the CDO program. Grievance resolution follows the Cargolux standard practice of engaging all parties in meaningful dialogue focused on positive resolution and outcomes.

**Evaluation & adjustments** Following a similar protocol to the CDO(F) (Fuel), CDO (N) (Noise) uses different parameters to ensure minimum noise disturbance to the surrounding area on approach.



## sharing values with communities

GRI 103-1

To achieve a healthy future society, the community and individuals must work together. Cargolux cares about team spirit and, whenever possible, supports its employees to build ties to their business and social community. The organization encourages its team to partner with associations that focus on improving physical, mental and/or emotional well-being.

Cargolux recognizes the value of supporting local and global community events that work to create a healthier, kinder and better future for all. Not only does the organization provide ongoing support and sponsorship for many initiatives locally and abroad, most are spearheaded by Cargolux staff who are personally involved.

### a. local community development

Cargolux is committed to supporting community events and initiatives that contribute to a better, kinder, and healthier environment for all. A strong believer in team spirit, the organization strives to further projects in line with this philosophy.

As an international operator based in Luxembourg, Cargolux backs projects both at its home base and abroad. These initiatives encompass a wide range of items such as sports, culture, or the environment to name a few. Employees are also encouraged to get involved and approach the company with ideas and sponsorship proposals that could fall under this scope.

#### Creating new bonds

In 2020, many charity events and sponsorship programs were adversely affected by the pandemic but Cargolux's commitment stayed strong. In addition to supporting its traditional causes, the airline took a strong stance in the fight against the virus through financial contribution to research projects as well as material donations, such as PPE, to various organizations.

The particular circumstances of this year also saw the strong engagement of Cargolux employees. Proceeds from a company-organized garage sale were donated to several charities and staff also took the opportunity of donating the monetary equivalent of their year-end gift to charity. During the year-end period, the airline also donated Advent calendars to several schools and charities to spread the festive feeling in this difficult year.

**In this area... Cargolux does this...**

**Impact & boundary**

Cargolux recognizes that ties to local and global communities bring benefit to the business, the country, and society. The organization goes above and beyond with efforts to connect with and support the community. It supports apprenticeship programs, environmental research, the preservation of endangered species, cultural exchanges, and sponsors community events and non-profit organizations.

The organization cares about team spirit and, whenever possible, supports its employees to build ties to their business and social community. The airline partners with associations and organizations that focus on improving physical, mental or emotional well-being.

**Management approach & components**

Cargolux supports a number of community programs that include:

**Reaching Children & Youth:** kids.cargolux.com is an interesting and exciting vehicle to introduce children to the world of air freight. The site provides information and activities related to the air transport industry and Cargolux's business.

**FOC (Free of Charge)** transports: support a range of initiatives such as art, cultural institutions, research and humanitarian causes that add to the cultural vibrancy and reputation of Luxembourg and expose other populations to art and culture that they would otherwise not experience.

**Fight Against Covid:** Cargolux was actively engaged in the fight against COVID-19. As well as supporting the government for the procurement and transport of PPE, the airline also contributed financially to research programs led by the Luxembourg Institute of Health and the University of Luxembourg. The airline also donated PPE to various organizations in Luxembourg and abroad. At the beginning of the outbreak in February 2020, Cargolux, in coordination with the Luxembourg Ministry of Mobility and Public Works, dispatched a shipment of face masks and sanitary wipes to Zhengzhou (CGO) for distribution amongst the airline's business partners in CGO. The airline also sent a shipment of Tyvek protective equipment to China to help preserve the welfare of front line workers.

**Employee engagement:** Cargolux organized a **garage sale** giving employees the opportunity to purchase unused company furniture, proceeds were donated to 7 charities. Many employees converted their **year-end cash gift** into charitable donations that were distributed to 8 organizations worldwide. Ahead of the move to the new HQ, Cargolux employee took part in a vast **paper and cardboard collection**, the equivalent of the weight of the waste went to several charities.

**Corporate teams and sports clubs:** A healthy population is happier and more resilient. The organization supports active sports clubs that are run by its employees, corporate teams and other sports clubs in a variety of sport-related leagues and competitions. Despite the difficult circumstances, Cargolux continued to support **Tennis Club** Senningerberg, and **Top Squash** Sandweiler.

**Other Areas of Support and Sponsorship:** **Natur & Umwelt** a.s.b.l. works to protect biodiversity in a varied natural and cultural landscape through awareness-raising, advice, practical, scientific and political actions at the local, national and international level. Cargolux **Advent calendars** were donated to organizations dealing with health and poverty to spread joy during the festive season. Cargolux illuminated its HQ building in blue for **UNICEF's Go Blue** initiative on the occasion of World Children' Day.

**Evaluation & adjustments**  
GRI 103-3

Ongoing partnerships are integral within a well-functioning and community-minded organization. These partnerships only work with employee engagement and due diligence. Cargolux staff suggest and/or select community outreach programs to review. All requests are funneled through the HR department

using standard application forms that must be completed by the applying association. Selections are based upon the charity's reputation, focus of their activity, and alignment with Cargolux values. Ongoing partnerships are created with successful applicants.



*Cargolux's first aircraft was a Canadair CL-44. The model had a unique swingtail that allowed the loading of off-size cargo*



## b. inspiration of future talents

Cargolux offers a plethora of jobs in various environments and banks on science and technological innovation to remain a leader in the industry. This innovative focus is key for the organization to attract the required talents. With the particular sanitary circumstances in 2020, Cargolux was not able to take part in as many events and job fairs as in previous years. However, the growing interest in its activities due to the pandemic led to enhanced press and social media presence which bolstered its position as an employer.

Partnerships with educational institutions continued throughout the year and Cargolux hired 9 aircraft mechanics apprentices in the framework of its partnership with Lycée Privé Emile Metz. Cargolux runs an Apprenticeship Program for aircraft mechanics (Maintenance & Engineering division)

via the airline's long-erm, cooperative relationship with Luxembourg's Lycée Privé Emile Metz (LPEM). Successful apprentices are awarded a Luxembourg end-of-school certificate (Diplôme de Technicien) as well as an Aircraft Maintenance License that is recognized throughout the European Union. The company also continued to support the **Luxembourg Center for Logistics (LCL)** Chair at the University of Luxembourg and welcomed 2 Masters students who worked on the optimization of ULD management. Furthermore, Thomas Klein, Cargolux's Vice-President Business Intelligence & Corporate Controlling and Maxim Straus, the company's Chief Financial Officer are member of steering committees and the examination board of the LCL. Thomas Klein was offered the opportunity to teach a course about "airline fleet and network planning" as visiting lecturer at the LCL.

GRI 103-3

**Social Media Etiquette** is becoming more and more important. Cargolux published a social media etiquette guide to help employees understand required boundaries to being a savvy social media ambassador.

**Luxembourg Center for Logistics (University of Luxembourg):** Cargolux supports the development of Luxembourg as a logistics hub through this scheme. The company welcomes Masters students and encourages interest in this fascinating field. This year Cargolux welcomed 2 students to work on a project cammed "Optimizing the Utilization of ULDs

for Air Cargo". The Cargolux BI department along with the Global ULD services department have regular calls with both students to discuss their progress and obstacles. The company then provides support and guidance from an operational point-of-view and from an analytical point-of-view, by making them better understand the data they work with.

Grievance resolution follows the Cargolux standard practice of engaging all parties in meaningful dialogue focused on positive resolution and outcomes.

### Evaluation & adjustments

Cargolux follows a robust and well-thought-through process that encourages and supports personnel to present their ideas for evaluation against a backdrop

of robust fact-finding and reporting. Decision-making is based upon a criterion that considers value-add and alignment with overarching corporate goals.

GRI 103-1 | GRI 103-2 | GRI 203-1

## In this area... Cargolux does this...

### Impact & boundary

The logistics and aviation are being molded by advances in digitalization, automation and materials engineering. The importance of stable and consistent support for local science and technology events and activities means that this community can plan and execute a

robust and fruitful schedule that takes into consideration the many facets of good community development. Cargolux is proud and supportive of active and theoretical research that provides keener insight into the expansive logistics and air cargo industries.

### Management approach & components

Cargolux participates in a wide variety of endeavors to support this community and to inspire its talent for the future. Some ongoing support includes:

**Luxembourg Science Center:** The airline partners with the science and technology discovery center to help spark children's interest in this area. Cargolux sponsors exhibits, transports equipment and supports elements of interactive displays such as a wind tunnel.

**Luxembourg Open Innovation Club (LOIC):** Cargolux is an active member of LOIC, an association that regroups members of Luxembourg's business community to exchange best practices and discuss innovative processes.

**Digital Supply Chain Europe Summit 2020:** Cargolux took part in the first edition of this new international event created by the Luxembourg Ministry of Economy and dedicated to understanding the latest trends and challenges shaping the future of the supply chain and logistics sector.

School visits at Cargolux

Visits to schools

Hello Future sessions (FEDIL)

Fit4Jobs

2020 2019

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*Note: Many recruitment events were canceled due to the pandemic. Cargolux also suspended all visits on its premises to curb the spread of the virus.*

### c. ecosystem of innovation & research

Cargolux is determined to remain a leader in its industry and invests considerable resources in researching, developing and implementing innovative solutions. Whether big or small, company requirements are analyzed to identify any pain points and work towards alleviating them. Digitalization and flexibility lie at the heart of Cargolux's strategy and employees are encouraged to flag areas of potential improvement and discuss ideas with the support of the company's dedicated Innovation department to find adequate solutions.

In 2020, employees saw their work patterns disrupted as procedures and interactions moved online. The urgency and volatility of the situation required Cargolux to rapidly develop new tools and strengthen existing ones to face the heavy workload. The successful implementation of invoice classification with Artificial Intelligence (AI) in 2019 opened the way for more tasks to be automated. For example, a new system now allows the Charter department to record quotes automatically, thus providing an overview of all customer demands, reducing manual labor, and avoiding human error. A digital Sales project is also underway to provide customers, in addition to the current channels, the ability to interact digitally with Cargolux for quoting and booking, allowing for enhanced speed and efficiency on such transactions.

A crucial new element was also developed to monitor and inform on the changing COVID-related restrictions worldwide. A single platform was created, gathering data related to quarantine conditions and border closures worldwide providing end-users with a comprehensive picture of the situation in various locations. This in-house solution enabled Management to make data-driven decisions while a mobile application was available to flight crew to inform them of current conditions for a given destination.

Cargolux also engages with the innovation community at its home base in Luxembourg to keep ahead of trends and continuously search for the next bright idea. An active member of Luxembourg Open Innovation Club (LOIC), the airline regularly engages with other member of the Grand-Duchy's business community to exchange best practices, share experiences, and cross-pollinate ideas with link-minded companies. Recognized as a leading figure in the industry, Cargolux also took part in the Digital Supply Chain Europe 2020, an international event that took place in Luxembourg to shape the future of the logistics and supply chain.

GRI 103-1 | GRI 103-2 | GRI 103-3  
GRI 203-1

### In this area... Cargolux does this...

#### Impact & boundary

Cargolux is on a journey to better leverage its expertise, enable faster processes and streamline its connection with the customer, industry, and staff. Innovation and the digital transformation of the company enable creative solutions and inspiring design as tasks are automated.

Cargolux goes above and beyond to offer its customers the latest technology in transport solutions. Cargolux continually seek better, faster, and more accurate and safe ways to do things. Most project are synced with the ePMO (Enterprise Project Management Office).

#### Management approach & components

**Lean Maintenance & Engineering (M&E):** Lean training, complements improvement projects in capacity management, line, hangar and shops, Material, Sales, digital & paperless and steering cockpit. As well, aircraft modifications.

**M&E's e-mobility project:** uses digitalized processes for aircraft maintenance. iPads and electronic process management software save thousands of pages of paper, time, effort, and enables better information sharing, including allowing statistics to be tracked and reported more easily and accurately.

**Advanced Tool Management System (ATMS):** uses ubiquitous RFID (Radio Frequency Identification) technology to: 1) identify and trace tools, 2) decentralize storage solutions, and 3) improve tool maintenance.

**Capacity planning improvements:** connect teams globally, matching capacity to workload on the line and in the hangar. The system allows management to review the workload for the year and look for activity peaks and valleys. The schedule is then organized to ensure a steady, achievable level of activity, accounting for team availability.

**Light-weight Solutions:**  
The implementation of **SquAIR** timber

use that began in 2017 was extended in 2018 to include animal transport. **10ft Connectors:** Building upon the success of the environmentally friendly beam solution implemented in 2017, Cargolux helped with the certification of **10ft connectors** (10-foot pallet connectors) and acquired the solution in 2018. This certified component is constructed of aluminum. Typical 20ft pallet weighs around 500kg. This connector affords the possibility to safely connect two 10-foot pallets (that weigh around 120kg each). This is an optimal way to enable the transport of long cargo on the main deck via nose-loading while saving weight/fuel.

Other corporate projects included:

LEAP and TMS begun in 2018

**EnPlore:** a software and data-platform that enables advanced data manipulation, data visualization, descriptive and predictive analytics which helps Maintenance improve its repair and overhaul operations

**Connected ULDs with Unilode units** equipped with Bluetooth tracking tags, enabling digital visibility over ULDs offering further transparency and enhanced tracking for shipments via Bluetooth readers at all warehouses operated by its customers.

#### Evaluation & adjustments

Cargolux follows a robust and well-thought-through process that encourages and supports innovation

which includes evaluating ideas, solutions and new projects throughout the process.

# 05

about  
this report



## about this report

GRI 102-42 | GRI 102-43  
 GRI 102-45 | GRI 102-46  
 GRI 102-48 | GRI 102-49  
 GRI 102-50 | GRI 102-51  
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 GRI 102-54 | GRI 102-56

This annual CSR report provides information about CSR performance and achievements during the period from 01/01/2020 to 31/12/2020.

Information contained here pertains to Cargolux's overall operations and geographic presence, except where otherwise specified in the report:

- Occupational Health and Safety related indicators cover the parent company only.
- Data monitoring and the company's waste disposal relate to its facilities in Luxembourg.
- Monitoring of fuel consumption and CO2 emissions for the fleet includes data from both Cargolux and Cargolux Italia. 100% of flight related CO2 emissions were in 2020 audited by Verifavia. Facilities related fuel consumption and CO<sub>2</sub> emissions only includes Cargolux HQ building and the Maintenance Center.

This report has been prepared in accordance with the GRI standards - core option. The previous report was published in October 2020. The next publication will be released in 2022 and will cover Cargolux's sustainable development achievements and performance for 2021.

Cargolux invites all interested parties to enter into dialogue about its sustainability policy, its activities, and this report. The company's policy, details about its activities, and previous reports, can be found on its website at <http://csr.cargolux.com>. This report will also be registered on the database of the UN Global Compact. All comments and enquiries are welcome and can be forwarded through the contact form on the aforementioned webpage, or by writing to [sustainability@cargolux.com](mailto:sustainability@cargolux.com).

## GRI content principles note

To prepare this report, Cargolux conducted a materiality analysis to identify the priority topics to report on according to the Stakeholder Inclusiveness and Materiality principles, with the support of the sustainability advisory firm Forethix. For more than 4 years, Cargolux has published a CSR report sharing its CSR ambitions based on both business priorities and in-depth stakeholder dialogue.

### Step 1: Raising awareness internally

In 2017, Cargolux's CSR team launched a first materiality assessment. It started with an exhaustive list of issues (42 topics - 7 economic topics, 13 environmental topics, and 21 social topics) based on in-depth desktop research on current market trends using a sector-specific benchmark analysis. The analysis was carried out using the applicable GRI sector supplement, as well as reports of the aviation sector and B2C companies displaying high maturity in terms of CSR reporting and performance.

In October 2017, Cargolux gathered input from internal stakeholders through 4 thematic workshops, organized around the domains of Economy, Environment, and Society and brought together experts from the various Cargolux corporate and operational areas: Human Resources & OHS, Compliance, Maintenance & Engineering, Environmental Management, Procurement, Flight Operations, Corporate Finance, Strategy & Development, Sales & Marketing, Global Logistics, and Corporate Communications.

The above-mentioned 42 topics were prioritized according to their level of impact, occurrence, and the control that Cargolux holds. An initial list of material topics emerged from these workshops.

After completing the workshops involving a sample of internal collaborators, Cargolux mapped both internal and external stakeholders which would gradually engage in the materiality analysis.

GRI 102-42 | GRI 102-43  
 GRI 102-44 | GRI 102-46

The mapping workshop resulted in a list of 19 stakeholder groups, prioritized according to their level of dependence on, and influence exerted upon Cargolux (see mapping page 34/35).

Based on this mapping, a stakeholder engagement plan was designed to cover the 2018-2020 period. Cargolux expects that increasing engagement will allow it to identify and anticipate future sustainability risks and opportunities, and respond to stakeholder expectations more effectively.

### Step 2: Engaging strategic internal body & customers

In 2018, Cargolux continued to improve the engagement process, involving external stakeholders in the materiality process. Aligned with the mapping and the engagement plan, customers were the first group to be involved. 17 customers were selected based on the sales volume, the nature of the relationship (short versus long term), and the capacity to be engaged (depending on their CSR maturity and their will to be engaged). They were mainly asked – by questionnaire – to assess the influence of Cargolux's economic, social, and environmental impacts on their assessments and decisions. The topics were rated from 1-not important, to 4-critical. The participation rate was 53% with 9 participants. Key topics were raised such as Cargolux's supply chain management (supplier environmental assessment, human rights assessment in the supply chain, and purchasing practices) and reporting practices relating to sustainability action plan & objectives.

Simultaneously, the CSR Board - composed of operational managers and top management - was integrated in the annual engagement process. They were mainly asked – by questionnaire – to assess the influence of Cargolux's economic, social, and environmental impacts on their assessments and

decisions. The topics were rated from 1-not important, to 4-critical. The participation rate was 63% with 50 participants. Key topics were raised such as efficient air traffic management, attracting talents, and employee engagement in CSR programs as well as CSR integration in the core business through values, policy, increasing employees' involvement in objectives and internal training.

### Step 3: Engaging employees & suppliers

In 2019, Cargolux continued to improve the engagement process, involving its suppliers and employees. Suppliers were asked – by questionnaire – to answer the main following elements:

- Their main expectations as suppliers in terms of Cargolux's purchasing practices
- The influence of Cargolux's economic, social, and environmental impacts on their assessments and decisions. The topics were rated from 1-not important, to 4-critical
- Their feedback on the report quality and content

The questionnaire was sent to 62 suppliers – representing our main suppliers in terms of volume/spending - and the participation rate was 6.82% with 11 participants. Key topics were raised such as the digital and physical asset security, job creation & retention, supplier environmental assessment and network efficiency.

Simultaneously, employees were asked – via questionnaire – to answer the main following elements:

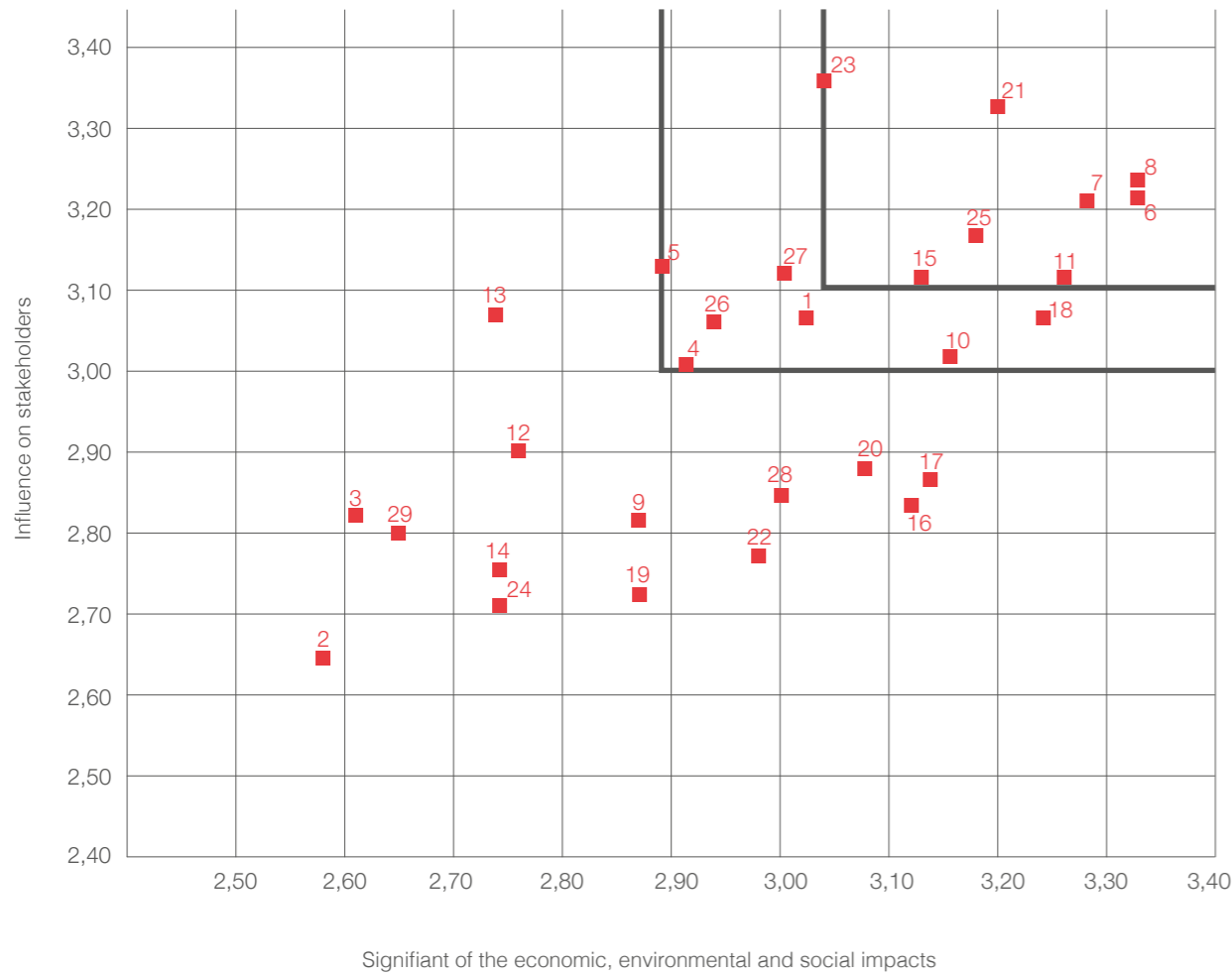
- Their CSR knowledge
- The influence of Cargolux's economic, social, and environmental impacts on their assessments and decisions. These topics were rated from 1-not important, to 4-critical
- Their will to be further engaged in Cargolux's CSR journey

The questionnaire was sent to all employees and the participation rate was 9.9% with 263 participants. Key topics were raised such as aircraft fuel efficiency, training and development, occupational health & safety and network efficiency.

Since 2017, all stakeholders engaged were weighted identically (without a multiplier) to give each participant equal importance.

Step 4: Selecting material topics

Through analysis of activities, the activities' economic, social, and environmental impacts and consulting both internal and external stakeholders, the following materiality matrix was created:

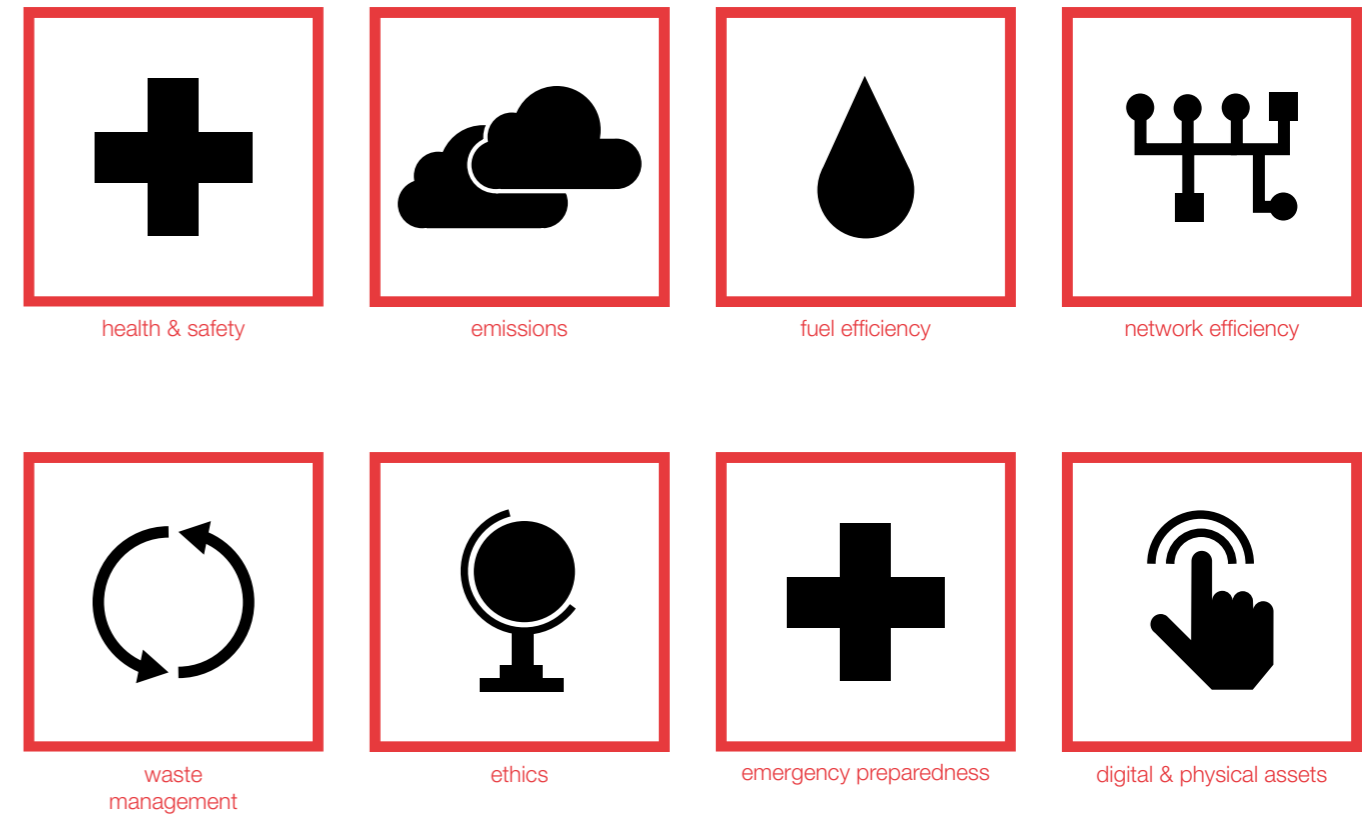


1	Job creation-retention	10	Efficient air traffic management	22	Employee engagement in CSR programs
2	Investment in local infrastructures	11	Network efficiency	23	Digital and physical asset security
3	Economic value distributed to communities	12	Material sourcing in procurement process	24	Package contents responsibility
4	Investment for sustainable innovation	13	Supplier environmental assessment	25	Emergency preparedness and business continuity
5	Purchasing practices and supply chain sustainability	14	Biodiversity and animal welfare	26	Local community investment
6	Ethic practices in business relationships	15	Waste management	27	Human rights: intermediaries and shippers
7	Emissions (aircraft and ground climate change)	16	Water management	28	Human rights in the supply chain
8	Fuel efficiency	17	Attracting talent	29	Humanitarian relief and resilience
9	Noise	18	Training and development for staff		
		19	Staff diversity		
		20	Staff welfare		
		21	Occupational health and safety		

Primary and secondary topics were established using a materiality threshold determined collectively by the Cargolux CSR Board:

- Primary material topics correspond to coordinates greater than or equal to (3.04 ; 3.10)
- Secondary material topics correspond to coordinates greater than or equal to (2.89 ; 3.01)
- Tertiary material topics correspond to coordinate bellow (2.89 ; 3.01)

As a result, the material topics that Cargolux will focus on are:

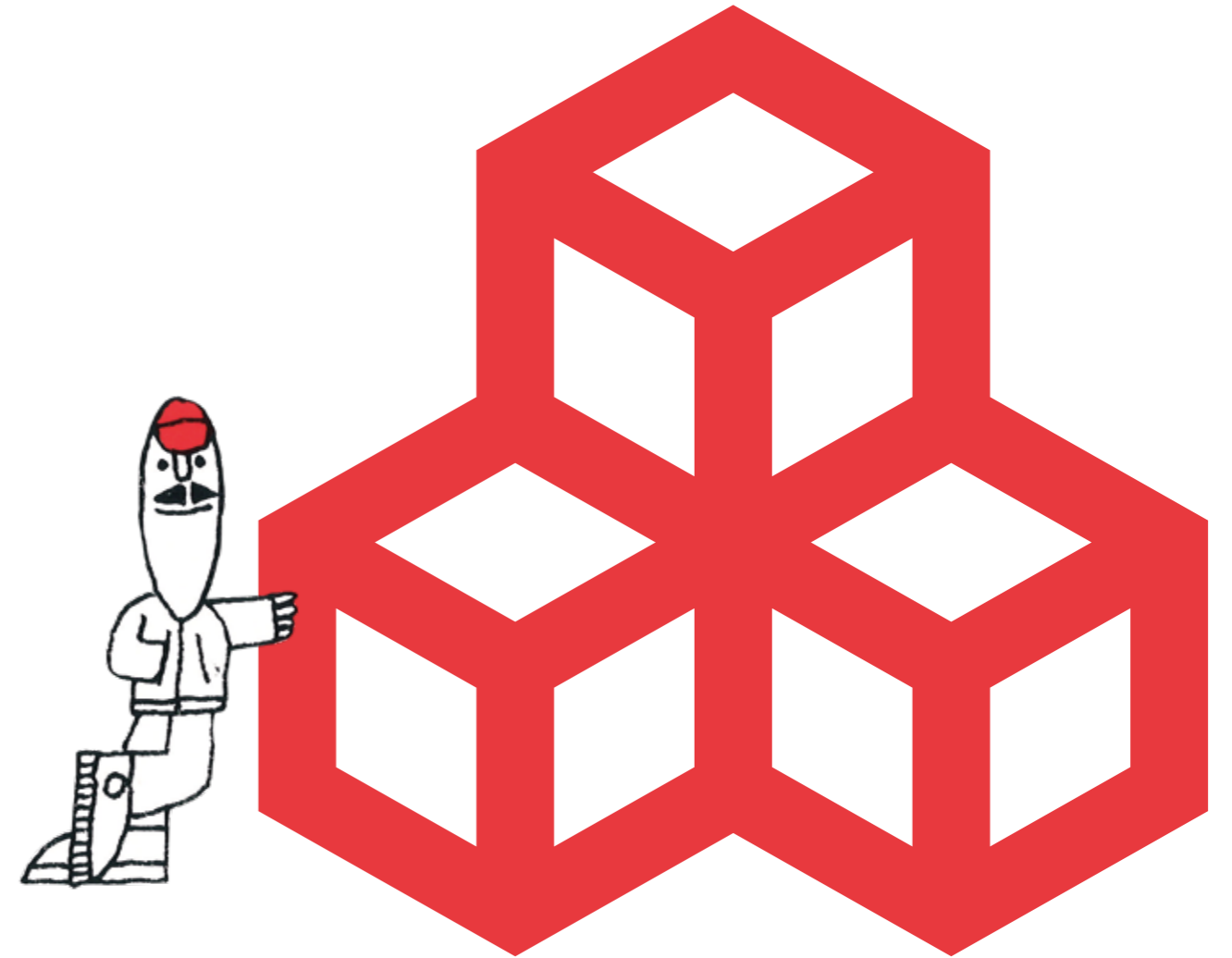


Next steps

Fuelled by a process of continuous improvement and dialogue with all stakeholders, the Cargolux CSR approach is based on a progressive and inclusive program of stakeholder engagement. At its heart is the fine balance between stakeholder engagement, continuous focus on sustainable business practices and innovation. This program will be renewed periodically to continuously engage new groups.

# 06

contribution  
to the UN's  
Sustainable  
Development  
Goals





# 07

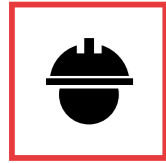
gri  
appendix





# gri appendix

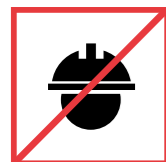
## SOCIAL



GRI 102-41

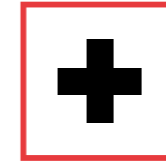
### employment

	2020	2019	2018
<b>Number of staff</b>			
Worldwide	2,368	2,253	2,031
Headquarter	1,726	1,630	1,531
Rest of the world	642	623	500
Cargolux Italia	120	121	not reported
Percentage of women	18	18	19
Permanent contract	2,286	2,208	1,996
Newly hired	222	241	243
<b>Collective Work Agreement</b>	<b>1,457</b>	<b>1,387</b>	<b>1,316</b>
Female	181	170	172
Male	1,276	1,217	1,144
Turnover	96	134	141
<b>Parental Leave (LUX)</b>			
Parental leave entitlement	397	401	383
Parental leave started in 2020	49	44	46
<b>Number of employees by age groups</b>			
under 30	302 (13%)	321	302
30-50	1,441 (61%)	1,347	1,214
over 50	625 (26%)	585	515



### absenteeism

	2020	2019	2018
Lost days for accidents	383	347	321
Lost days for sickness	15,331	14,682	14,722
Maternity leave	5,316	6,744	5,072



GRI 404-1

### occupational health & safety

	2020	2019	2018
<b>Number of injuries (accidents)</b>			
Internal	30	42	36
External	19	18	15
Injury rate	-	-	-
Work related fatalities	-	-	-
Occupational disease rate	-	-	-



### training

	2020	2019	2018
Number of training hours per employee	53	76	73

# gri appendix

## ENVIRONMENT

GRI 301-1 | GRI 305-1 | GRI 305-2



	2020	2019	2018
<b>materials</b>			
<b>A/C cleaning products (ltrs)</b>			
Honey bee	31,102	32,074	36,457
A/C cleaner	152	270	362
Hydraulic removal	28,125	29,035	32,720
	2,815	2,769	3,375
<b>De-icing and anti-icing product</b>			
Tarmac/airside (ltrs/kgs)	4,000 / 150	2,800/500	6,350/700
Salt (parking/road) (kgs)	7,575	11,150	9,120
<b>Paper (DIN A4) (kgs)</b>	13,800	14,490	23,905
<b>Cartridges*</b>	243	436	506

\* In previous years, Cargolux reported the number of cartridges used for personal printers. As of 2020, the figure will include the number of cartridges for personal printers and shared copy printers.



	2020	2019	2018
<b>emissions</b>			
<b>Direct emissions (Scope 1)</b>			
CO <sub>2</sub> emitted by aircraft (tonnes)	4,308,983	4,022,178	4,093,521
CO <sub>2</sub> emitted by GSE vehicles (tonnes)	62	70	66
<b>Indirect emissions (Scope 2)</b>			
Facilities (tonnes)	2,524	2,392	2,065



GRI 302-1 | GRI 302-2 | GRI 306-2

	2020	2019	2018
<b>consumption</b>			
Water (ltrs)	9,947	10,501	9,683
Electricity (kWh)	6,107,273	6,040,235	6,081,304
<i>The following data regarding the indirect Energy Consumption are only available for CMC</i>			
Heating (kWh)	4,821,000	5,338,400	4,346,000
Cooling (kWh)	512,600	482,900	527,200
Compressed air (m <sup>3</sup> )	1,227,533	1,348,663	1,289,051
<b>Jet A (tonnes)</b>	1,367,937	1,276,882	1,299,531
<b>Facilities</b>			
Natural gas (heating; paint cabins; BHKW)	1,034,443	958,223	887,631
Fuel (Heating systems for Lorang building, ltrs)	76,274	79,360	75,657
Fuel (sprinkler pumps, ltrs)	3,999	2,326	4,438
<b>GSE vehicles</b>			
Industrial Fuel (ltrs)	56,469	65,805	75,959
Diesel (ltrs)	17,674	20,503	19,075
Unleaded Gasoline 95 (ltrs)	6,125	6,639	6,393

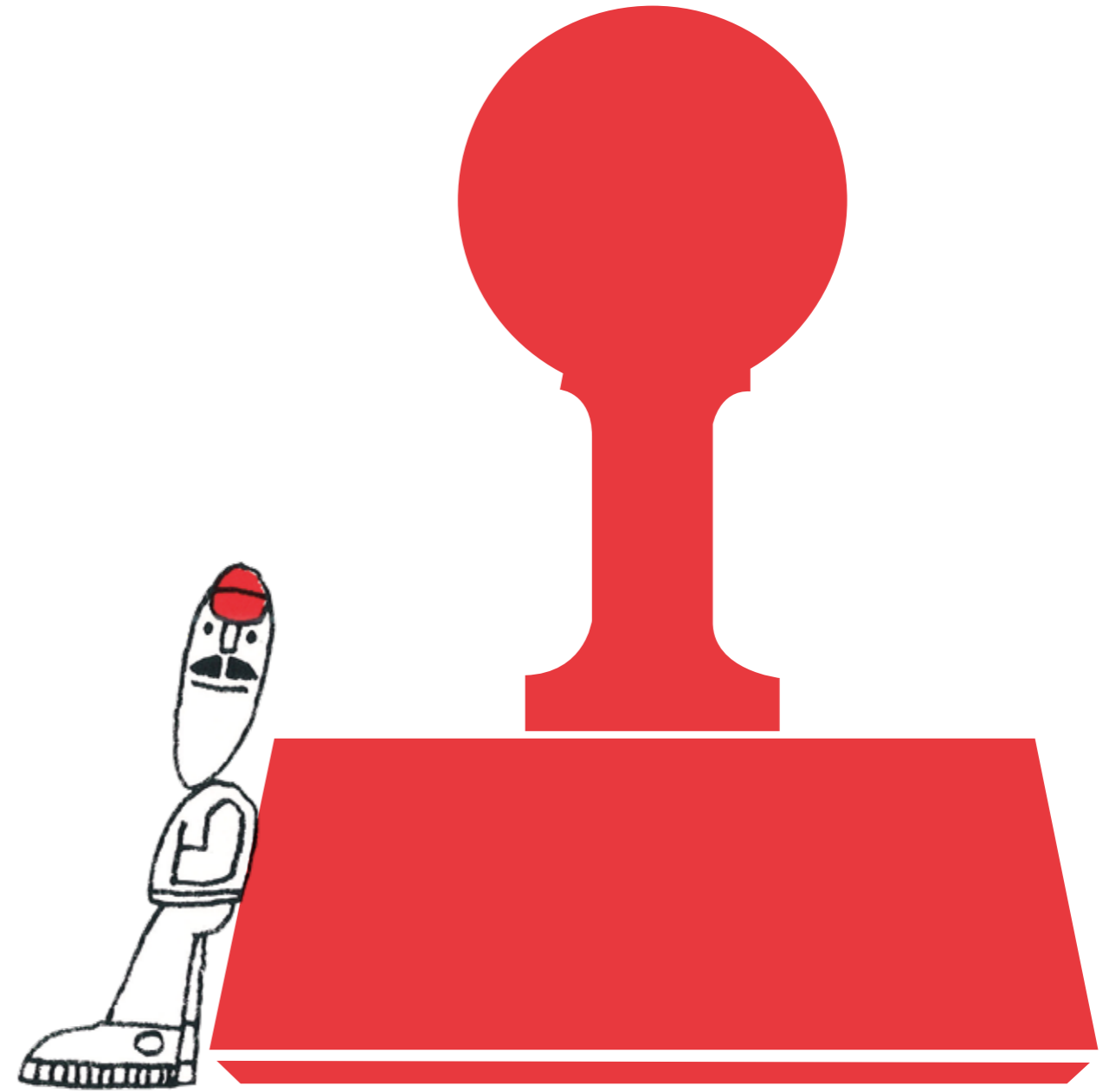


	2020	2019
<b>waste</b>		
<b>Hazardous waste</b>		
Composted (kgs)	164,250	33,000
Other (kgs)	142,466	161,725
Recycled (kgs)	378	32,502
<b>Total</b>	<b>307,094</b>	<b>227,227</b>
<b>Non-Hazardous Material</b>		
Landfilled (kgs)	-	1,180
Other (kgs)	63,783	9,684
Recycled (kgs)	93,888	231,903
<b>Total</b>	<b>157,671</b>	<b>242,767</b>

Wastewater from our maintenance operations at the maintenance facilities in Luxembourg are directly collected by the airport sewage system prior to a wastewater treatment plant.

# 08

**gri content  
index**



# gri content index

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GRI 103-3	Evaluation of the management approach		75
GRI 413-2	Operations with significant actual and potential negative impacts on local communities		75

# 09

**independent  
and limited  
assurance  
report**





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To the Shareholders of  
Cargolux Airlines International S.A.  
Aéroport de Luxembourg  
L-2990 Sandweiler

#### Independent Limited Assurance Report to Cargolux Airlines International S.A.

##### Scope

We have been engaged by Cargolux International S.A. ("Cargolux") to perform a 'limited assurance engagement,' as defined by International Standards on Assurance Engagements, here after referred to as the engagement, to report on Cargolux's 2020 Corporate Social Responsibility Report (or "CSR Report") (the "Subject Matter") as of 31 December 2020.

The sustainability information, narratives and indicators presented in the Corporate Social Responsibility report of Cargolux are included in the scope of our assurance engagement, with the exception of the indicators below:

- Jet fuel consumption
- CO2 emissions emitted by aircraft
- CO2 efficiency of aircraft operations
- Any indicator of which calculation depends on the above (e.g. Total Scope 1 emissions)

Other than as described in the preceding paragraph, which sets out the scope of our engagement, we did not perform assurance procedures on the remaining information included in the CSR Report, and accordingly, we do not express a conclusion on this information.

##### Criteria applied by Cargolux Airlines International S.A.

In preparing the 2020 CSR Report, Cargolux International S.A. applied the Global Reporting Initiative Sustainability Reporting Standards' ("GRI Standards") (the 'Criteria'). Such Criteria were specifically designed for reporting sustainability information. As a result, the Subject Matter information may not be suitable for another purpose.

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##### Management's responsibilities

Cargolux International S.A.'s management is responsible for selecting the Criteria, and for presenting the 2020 CSR Report in accordance with that Criteria, in all material respects. This responsibility includes establishing and maintaining internal controls, maintaining adequate records and making estimates that are relevant to the preparation of the subject matter, such that it is free from material misstatement, whether due to fraud or error.

##### EY's responsibilities

Our responsibility is to express a conclusion on the presentation of the Subject Matter based on the evidence we have obtained.

We conducted our engagement in accordance with the *International Standard for Assurance Engagements Other Than Audits or Reviews of Historical Financial Information* ('ISAE 3000') and the terms of reference for this engagement as agreed with Cargolux International S.A. on 20 January 2021. Those standards require that we plan and perform our engagement to obtain limited assurance about whether, in all material respects, the Subject Matter is presented in accordance with the Criteria, and to issue a report. The nature, timing, and extent of the procedures selected depend on our judgment, including an assessment of the risk of material misstatement, whether due to fraud or error.

We believe that the evidence obtained is sufficient and appropriate to provide a basis for our limited assurance conclusions.

##### Our Independence and Quality Control

We have maintained our independence and confirm that we have met the requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, and have the required competencies and experience to conduct this assurance engagement.

EY also applies International Standard on Quality Control 1, *Quality Control for Firms that Perform Audits and Reviews of Financial Statements, and Other Assurance and Related Services Engagements*, and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

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#### Description of procedures performed

Procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for a reasonable assurance engagement. Consequently the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed. Our procedures were designed to obtain a limited level of assurance on which to base our conclusion and do not provide all the evidence that would be required to provide a reasonable level of assurance.

Although we considered the effectiveness of management's internal controls when determining the nature and extent of our procedures, our assurance engagement was not designed to provide assurance on internal controls. Our procedures did not include testing controls or performing procedures relating to checking aggregation or calculation of data within IT systems.

A limited assurance engagement consists of making enquiries, primarily of persons responsible for preparing the 2020 CSR Report and related information, and applying analytical and other appropriate procedures.

#### Our procedures included:

- Assessment of the suitability of the reporting criteria and their consistent application.
- Inquires of management to gain an understanding of Cargolux processes for determining the material issues for Cargolux key stakeholder groups.
- Interviews with senior management and relevant staff at group level and selected business unit level concerning sustainability strategy and policies for material issues, and the implementation of these across the business.
- Interviews with relevant staff at corporate and business unit level responsible for data capture and preparation of the information in the CSR Report.
- Review of the processes for gathering and consolidating the specified performance data and, for a sample, checking the data consolidation.
- Checks on a sample basis of the quantitative information included in the CSR Report as well as its adequate compilation from data supplied by information sources. The tests have been defined to provide limited assurance levels in line with the criteria described in this report.
- Review of material qualitative statements in the report with regard to consistency and plausibility.

We also performed such other procedures as we considered necessary in the circumstances.

3

#### Limited Assurance Conclusion

Based on the procedures performed, as described above, nothing has come to our attention that causes us to believe that the CSR Report of Cargolux for the year ended 31 December 2020 is not presented fairly, in all material respects.

#### Restricted use

This report is intended solely for the information and use of Cargolux Airlines International S.A. for providing limited assurance over the sustainability information presented in the 2020 CSR Report, as per the scope described above, and is not intended to be and should not be used by anyone other than those specified parties.

Ernest & Young  
Société Anonyme  
Cabinet de Révision Agréé



Olivier Lemaire  
Partner

Léna Le Gal  
Senior Manager



Luxembourg, 15 June 2021

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## ASSURANCE STATEMENT

### Context

We have been engaged by Cargolux Airlines International S.A. to perform an independent verification with reasonable assurance of the CO<sub>2</sub> emissions from flights operated in 2020 subject to the Directive 2018/101/EC (EU ETS) and flights operated in 2020 subject to ICAO's Carbon Offsetting & Reduction Scheme for International Aviation (CORSA).

### Criteria

In order to prepare its 2020 emissions report for EU ETS and CORSA, Cargolux Airlines International S.A. followed the following rules:

- The EU ETS Directives (Directive 2008/101/EC of 19 November 2008 and Directive 2009/29/EC of 22 April 2009 amending Directive 2003/87/EC)
- The Commission Regulation 421/2014 of the European Parliament and of the Council of 16 April 2014 amending Directive 2003/87/EC
- The Commission Delegated Regulation 2019/1603 of 18 July 2019 supplementing Directive 2003/87/EC
- The Commission Regulation 2018/2066 of 19 December 2018 on the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC (MRR)
- The Commission Regulation 2018/2066 of 19 December 2018 on the monitoring and reporting of greenhouse

We conducted the independent verification based on the following verification criteria:

- ISO 14065:2013 – Greenhouse Gases – Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition
- ISO 14064-3:2019 – Greenhouse Gases – Specification with guidance for the validation and verification of greenhouse gas emissions and removals
- The IAF MD 6:2014 - IAF Mandatory Document for the Application of ISO 14065:2013;
- The Commission Regulation 2018/2067 of 19 December 2018 on the verification of greenhouse gas emission reports and tonne-kilometre reports and the accreditation of verifiers pursuant to Directive 2003/87/EC (AVR)

### Responsibilities

Cargolux Airlines International S.A. is solely responsible for the preparation and reporting of their emissions data, for any information and evidence that support the reported data, for determining the company's objectives in relation to emissions information and management, and for establishing and maintaining appropriate performance management and internal control systems from which reported information is derived.

In accordance with our verification contract with Cargolux Airlines International S.A., it is our responsibility to form an independent opinion, based on the examination of information and data presented in the emissions report, and to report that opinion to Cargolux Airlines International S.A.

We conducted our examination having regard to the verification criteria documents listed above. This involved a site visit previously to inspect the facilities and interview the staff responsible. It also included examining, on a test basis, evidence to give us reasonable assurance that the amounts and disclosures

1/2

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relating to the data have been properly prepared in accordance with the rules in terms of relevance, completeness, consistency, transparency and accuracy.

### Independence statement

We confirm that Verifavia SARL and the verification team are independent of Cargolux Airlines International S.A. and have not assisted in any way with the development of the emissions report, with the exception of this Assurance Statement.

### Opinion

We conducted a verification of the 2020 emissions by Cargolux Airlines International S.A. in its emissions report dated 01 March 2021. On the basis of the verification work undertaken to reasonable assurance, these data are fairly stated and contain no material misstatements or material non-conformities.

Total international and domestic CO<sub>2</sub> emissions: 3,843,243 tCO<sub>2</sub> (with an emissions factor of 3,15)



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Paris, 8 March 2021

Julien Dufour, CEO, VERIFAVIA SARL

2/2

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xezer-pacob-pahoz-fymec-gahus-hyvec-hekun-lofiz-cokul-sepum-ganup-fukil-mytes-kylug-hekom-kynib-mexex

## ASSURANCE STATEMENT

### Context

We have been engaged by Cargolux Italia to perform an independent verification with reasonable assurance of the CO<sub>2</sub> emissions from flights operated in 2020 subject to the Directive 2018/101/EC (EU ETS) and flights operated in 2020 subject to ICAO's Carbon Offsetting & Reduction Scheme for International Aviation (CORSA).

### Criteria

In order to prepare its 2020 emissions report for EU ETS and CORSA, Cargolux Italia followed the following rules:

- The EU ETS Directives (Directive 2008/101/EC of 19 November 2008 and Directive 2009/29/EC of 22 April 2009 amending Directive 2003/87/EC)
- The Commission Regulation 421/2014 of the European Parliament and of the Council of 16 April 2014 amending Directive 2003/87/EC
- The Commission Delegated Regulation 2019/1603 of 18 July 2019 supplementing Directive 2003/87/EC
- The Commission Regulation 2018/2066 of 19 December 2018 on the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC (MRR)
- The Commission Regulation 2018/2066 of 19 December 2018 on the monitoring and reporting of greenhouse

We conducted the independent verification based on the following verification criteria:

- ISO 14065:2013 – Greenhouse Gases – Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition
- ISO 14064-3:2019 – Greenhouse Gases – Specification with guidance for the validation and verification of greenhouse gas emissions and removals
- The IAF MD 6:2014 - IAF Mandatory Document for the Application of ISO 14065:2013;
- The Commission Regulation 2018/2067 of 19 December 2018 on the verification of greenhouse gas emission reports and tonne-kilometre reports and the accreditation of verifiers pursuant to Directive 2003/87/EC (AVR)

### Responsibilities

Cargolux Italia is solely responsible for the preparation and reporting of their emissions data, for any information and evidence that support the reported data, for determining the company's objectives in relation to emissions information and management, and for establishing and maintaining appropriate performance management and internal control systems from which reported information is derived.

In accordance with our verification contract with Cargolux Italia, it is our responsibility to form an independent opinion, based on the examination of information and data presented in the emissions report, and to report that opinion to Cargolux Italia.

We conducted our examination having regard to the verification criteria documents listed above. This involved a site visit previously to inspect the facilities and interview the staff responsible. It also included examining, on a test basis, evidence to give us reasonable assurance that the amounts and disclosures relating to the data have been properly prepared in accordance with the rules in terms of relevance, completeness, consistency, transparency and accuracy.

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### Independence statement

We confirm that Verifavia SARL and the verification team are independent of Cargolux Italia and have not assisted in any way with the development of the emissions report, with the exception of this Assurance Statement.

### Opinion

We conducted a verification of the 2020 emissions by Cargolux Italia in its emissions report dated 01 March 2021. On the basis of the verification work undertaken to reasonable assurance, these data are fairly stated and contain no material misstatements or material non-conformities.

Total international and domestic CO<sub>2</sub> emissions: 440,424 tCO<sub>2</sub> (with an emissions factor of 3,15)



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Paris, 8 March 2021

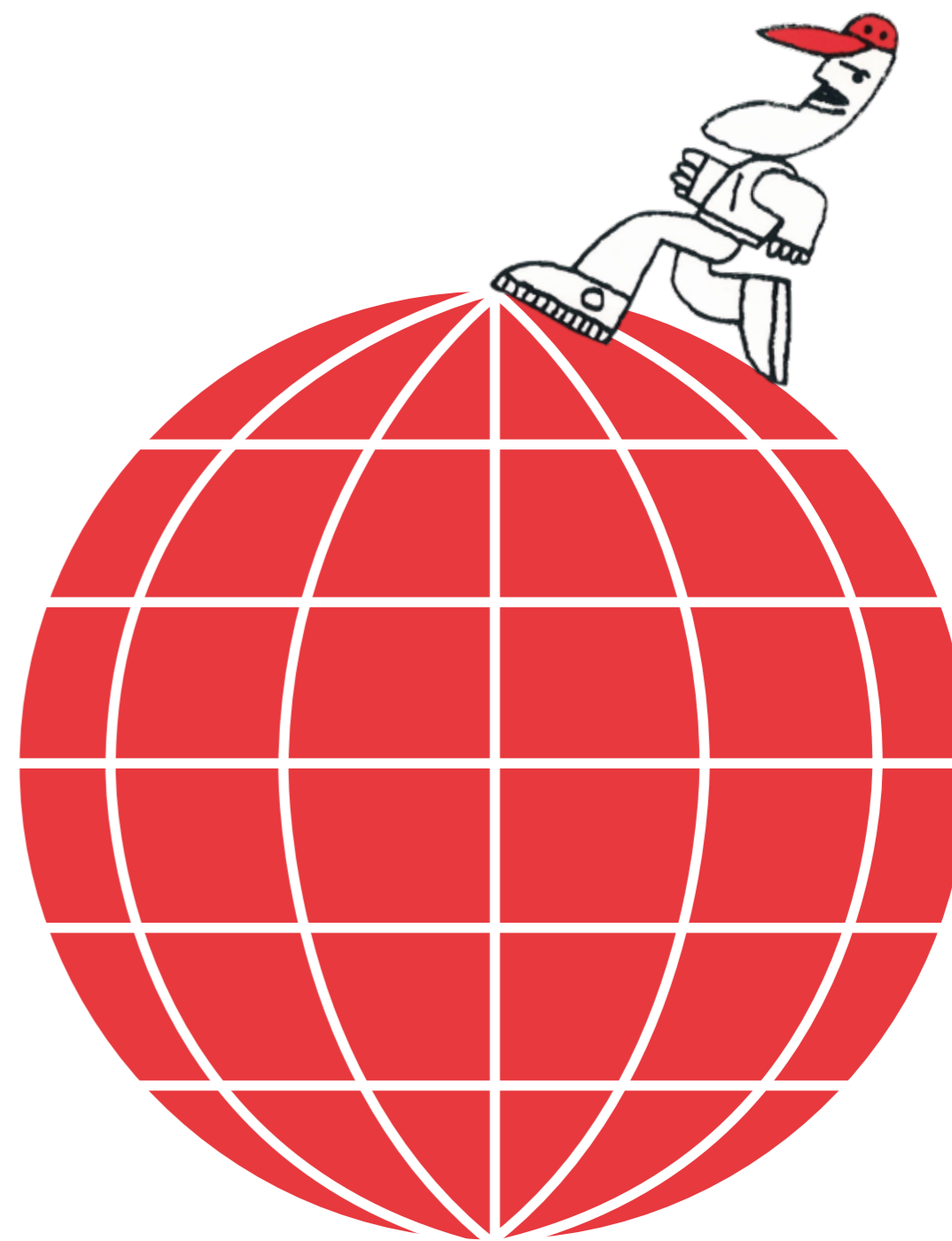
Julien Dufour, CEO, VERIFAVIA SARL

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# 10

**glossary**



# glossary

## A

**AI**  
Artificial Intelligence  
**ANSP**  
Air Navigation Service Provider  
**APU**  
Auxiliary Power Unit  
**ATA**  
Animal Transportation Association  
**ATK**  
Available Tonne Kilometers  
**ATMS**  
Advanced Tool Management System

## C

**C&P**  
Contracts & Procurement  
**CAPA**  
Centre for Aviation  
**CDA**  
Continuous Descent Operations & Approach  
**CDO**  
Continuous Descent Operations  
**CDO (F)**  
Continuous Descent Operations (Fuel)  
**CDO (N)**  
Continuous Descent Operations (Noise)  
**CHINALUX**  
China-Luxembourg Chamber of Commerce  
**CISM**  
Critical Incident & Stress Management  
**CITES**  
Convention on International Trade in Endangered Species  
**CO2**  
Carbon Dioxide  
**CORSIA**  
Carbon Offsetting & Reduction Scheme for International Aviation

## D

**DAC**  
Direction de l'Aviation Civile Luxembourg  
**DIMAS**  
Diplôme d'Initiation aux Métiers Aéronautiques et Spatiaux

## E

**e-AWB**  
Electronic Air Waybill  
**e-CMR**  
Electronic Consignment Notes (Convention relative au contrat de transport international de marchandises par route)  
**EAAP**  
European Association for Aviation Psychology  
**EASA**  
European Aviation Safety Agency  
**EPPSI**  
European Pilot Peer Support Initiative  
**EFB**  
Electronic Flight Bag  
**EMS**  
Environmental Management System  
**eMobility Trax**  
Electronic mobility  
**ePMO**  
Enterprise Project Management Office  
**ERP**  
Enterprise Resource Planning  
**EU**  
European Union  
**EU ETS**  
EU European Trading Systems  
**EVP**  
Executive Vice President  
**ExCom**  
Executive Committee

## F

**FAA**  
Federal Aviation Administration  
**FBD**  
Fuel Briefing Dashboard  
**FEDIL**  
Business Federation Luxembourg  
**FOC**  
Free of Charge  
**FRM**  
Fatigue Risk Management  
**FTE**  
Full Time Employee  
**FTK**  
Freight Tonne Kilometers  
**FWB**  
Freight Weight Bills

## G

**GDP**  
Good Distribution Practice  
**GDPR**  
General Data Protection Regulation  
**GHA**  
Ground Handling Agreement  
**GHG**  
Greenhouse Gas  
**GPS**  
Global Positioning System  
**GRI**  
Global Reporting Initiative  
**GSA**  
General Sales Agent

## H

**H&S**  
Health & Safety  
**HAWB**  
House Air Waybill  
**HCM**  
Human Capital Management  
**HQ**  
Headquarters  
**HR**  
Human Resources

## I

**IATA**  
International Air Transport Association  
**IATP**  
International Airlines Technical Pool  
**ICAO**  
International Civil Aviation Organization  
**IOSA**  
IATA Operational Safety Audit  
**IPATA**  
International Pet & Animal Transportation Association  
**IQSMS/IQ SMS**  
Safety Management Systems  
**ISO**  
International Organization for Standardization  
**IT**  
Information Technology

**K**

**Km**  
Kilometer

**N**

**NASI**  
Cargo Door Venting Systems

**R**

**RFID**  
Radio Frequency Identification  
**RSB**  
Roundtable on Sustainable  
Biomaterials  
**RCS**  
Ready for Carriage

**U**

**UFW**  
United for Wildlife  
**ULD**  
Unit Load Device  
**UN**  
United Nations  
**US**  
United States

**L**

**LAPB**  
Live Animal & Perishables Board  
**LCL**  
Luxembourg Center for Logistics  
**LCSB**  
Luxembourg Center for Systems  
Biomedicine  
**LED**  
Light-Emitting Diode  
**LTF**  
Lightning Training Flight  
**LIDO**  
Lufthansa Integrated Dispatch  
Operation  
**LOIC**  
Luxembourg Open Innovation Club

**O**

**OHS**  
Occupational Health & Safety  
**OPS/Ops**  
Operations  
**OSSA**  
Open Secure Storage Area

**S**

**SAFUG**  
The Sustainable Aviation Fuel Users  
Group  
**SDG**  
Sustainable Development Goals

**V**

**VAT**  
Value-Add Tax  
**VP**  
Vice-president

**M**

**M&E**  
Maintenance & Engineering  
**MHP**  
Mental Health Professional

**P**

**PBN**  
Performance Based Navigation  
**PET**  
Polyethylene (plastic)  
**PSP**  
Peer Support Program

**T**

**TTTF**  
Time & Temperature Task Force  
**TMS**  
Trucking Management System

