



# **QATAR AIRWAYS GROUP**

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## **SUSTAINABILITY REPORT 2018**

01 APRIL 2017 - 31 MARCH 2018

AEROPOLITICAL AND CORPORATE AFFAIRS





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“

Our commitment to a sustainable aviation industry is more resolute than ever and we are proud to continue to fly the flag for sustainable aviation and for the State of Qatar.”

H.E. Mr. Akbar Al Baker

Group Chief Executive, Qatar Airways Group





## Introduction from Qatar Airways Group Chief Executive



In Qatar Airways' 20<sup>th</sup> anniversary year, we have celebrated many highlights, including being recognised by Skytrax as "Airline of the Year" and Hamad International Airport being ranked as "Sixth Best Airport in the World". We introduced 14 new destinations and added 20 new aircraft, and our workforce grew to over 45,600 people across the group.

However, during this period, our business was disrupted by the illegal blockade imposed on the State of Qatar by some of its neighbours.

Despite our resilience, the illegal blockade affected a number of sustainability indicators. Fuel consumption increased due to airspace restrictions, and there was an immediate loss of 18 destinations in the blockading countries. With fewer passengers carried by our airline and travelling through Hamad International Airport, there was an immediate impact on the efficiency of our operations. This was partially re-balanced through the rapid expansion in our cargo operations, providing an essential life-line to the State of Qatar, central to its drive towards self-sufficiency.

Even with the illegal blockade persisting, we continued to drive long-term sustainability. As our approach to sustainability matures, the scope of our annual sustainability report has expanded to include new sections on Community, and Health and Safety.

The Community section describes our contribution to the State of Qatar's response to the illegal blockade, and highlights Qatar Airways' continued support for community development, both internationally and in the State of Qatar, through charitable initiatives, such as Educate A Child and Shafallah.

The Health and Safety section describes our approach to health and safety management and developing our safety culture. Highlights include Qatar Airways' renewed certification to IATA's Operational Safety Audit, the IATA Cabin Operations Safety Conference hosted in Doha, and our focus on stakeholder engagement through initiatives, such as Fire Safety Awareness Week.

The Environment section describes how Qatar Airways became the first airline in the Middle East, and just the fifth worldwide, to secure accreditation to the highest level in the International Air Transport Association's (IATA) Environmental Assessment programme. Alongside this, Hamad International Airport successfully renewed its certification to Level 3 of the Airport Council International's (ACI) Airport Carbon Accreditation.

I am pleased to present this report as a review of our resilience and continued achievement during a challenging year, and to reinforce our ongoing commitment to a sustainable aviation industry. We are proud to continue to fly the flag for sustainable aviation and for the State of Qatar.

Yours sincerely,

**His Excellency Mr. Akbar Al Baker**  
Group Chief Executive, Qatar Airways Group

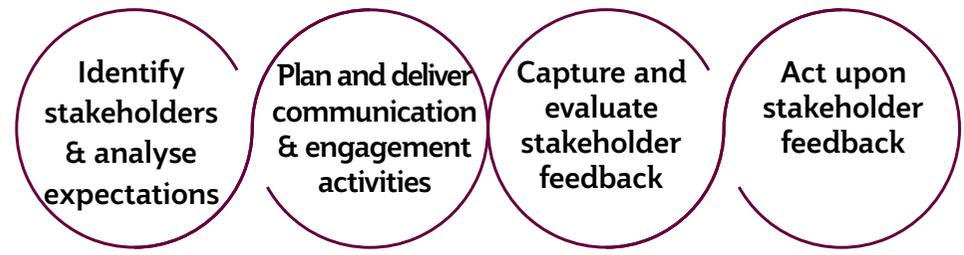




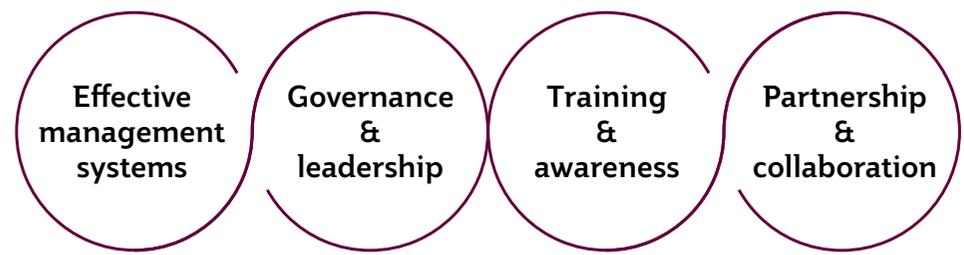
# Our Approach to Sustainability

Qatar Airways Group is developing a holistic approach to sustainability across its global operations. Examples of this are embedded within the Community, Health and Safety and Environment sections of this report.

Understanding stakeholder expectations helps to prioritise sustainability issues and to guide decisions regarding the allocation of resources to improve performance:



Qatar Airways Group's management approach to sustainability is integrated across our business operations:



In the coming years, the Qatar Airways Group Sustainability Report will be further developed, with enhanced alignment to internationally recognised reporting standards.

## The Scope of this Report

The Qatar Airways Group Sustainability Report 2018 covers the period 01 April 2017 to 31 March 2018.

The organisational boundary of this report includes the following businesses:

- ◆ Qatar Airways
- ◆ Qatar Airways Cargo
- ◆ Qatar Executive
- ◆ Dhiafatina Hotels
- ◆ Hamad International Airport
- ◆ Qatar Aviation Services
- ◆ Qatar Duty Free
- ◆ Qatar Distribution Company
- ◆ Qatar Aircraft Catering Company

The performance data presented in this report relates to the operations of international flights, hotels in selected international destinations, facilities and ground service operations in the State of Qatar and on-airport facilities at destinations within the European Union.

The scope of this report excludes other Qatar Airways Group businesses and joint ventures, Doha International Airport, and facilities and ground service operations at destinations outside of the European Union.





# Qatar Airways Group Overview



Qatar Airways is the commercial airline operation of Qatar Airways Group and the national carrier of the State of Qatar.



Qatar Airways Cargo is the world's third largest international cargo carrier, delivering quality air freight solutions and connecting businesses to more than 160 global destinations.



Qatar Executive is Qatar Airways Group's corporate jet subsidiary, offering luxury jet services for worldwide private charter.



Dhiafatina Hotels is Qatar Airways Group's hotel and spa management arm with six world-class hotels in Edinburgh, London, Doha, Melbourne and Switzerland. Dhiafatina also operates the Vitality Spa at Hamad International Airport.



Hamad International Airport is owned by the Qatar Civil Aviation Authority, and is managed by Qatar Airways Group.



Qatar Aviation Services provides ground handling services at Hamad International Airport for all airline operators alongside a range of critical customer services to passengers throughout the airport.



Qatar Duty Free operates the retail experience at Hamad International Airport, encompassing luxury retail, travel essentials, and food and beverage. Qatar Duty Free also operates Qatar Airways' in-flight duty free programme.



Qatar Distribution Company is the sole distributor of licensed retail products in the State of Qatar.



Qatar Aircraft Catering Company is one of the largest airline catering facilities in the world, providing catering for all flights leaving Doha alongside airport lounges and cafeterias, producing up to 150,000 five-star meals per day.





# Qatar Airways

Qatar Airways flies to more than 150 destinations spanning six continents. In welcoming more than 29 million passengers, the airline added 14 new destinations to its network in 2017-18, with plans for a further 15 destinations in 2018-19.

Qatar Airways continues to build upon its fleet of modern aircraft, taking delivery of 20 new aircraft during 2017-18, including 17 passenger aircraft and three cargo freighters, bringing its fleet to a total of 213 aircraft.

A significant fleet enhancement during 2017-18, was the inclusion of the world's first Airbus A350-1000 for which Qatar Airways is proud to be the launch customer.

Qatar Airways Cargo is the third largest cargo carrier in the world, with a fleet of 23 freighter aircraft serving more than 60 dedicated cargo destinations at 31 March 2018. Qatar Airways Cargo transported more than 1.3 million tonnes of freight during 2017-18.

By 31 March 2018, Qatar Airways employed more than 32,000 people stationed in Doha and at worldwide destinations.

## 2017-18 Highlights <sup>i</sup>



20 new aircraft



21,646 cargo flights



14 new destinations



29,162,478 passengers



32,184 employees



1,359,203 tonnes of cargo



167,738 passenger flights



90.6% on time performance

<sup>i</sup> Represents data from 01 April 2017 to 31 March 2018



“

At a time when Qatar Airways is experiencing unprecedented growth and expansion, the need for efficient, reliable and modern aircraft has never been greater.”

H.E. Mr. Akbar Al Baker  
Group Chief Executive, Qatar Airways Group



## Qatar Airways fleet <sup>i</sup>

**TOTAL FLEET 213**

2 Airbus A319LR	39 Airbus A320-200	6 Airbus A321-200	13 Airbus A330-200	13 Airbus A330-300
4 Airbus A340-600	23 Airbus A350-900	1 Airbus A350-1000	9 Airbus A380-800	9 Boeing 777-200LR
41 Boeing 777-300ER	30 Boeing 787 Dreamliner	8 Airbus A330F	2 Boeing 747-8F	13 Boeing 777F

## New aircraft delivered in 2017-18

7 New Airbus A350-900	1 New Airbus A350-1000	2 New Airbus A380
7 New Boeing 777-300ER	2 New Boeing 747-8F	1 New Boeing 777F

## Aircraft on order

**MORE THAN 300 AIRCRAFT ON ORDER WORTH MORE THAN US\$ 90 BILLION**

100 Boeing 777Xs (including options)	80 Airbus A320neo Family (including options)	60 Boeing 737 MAX 8 (20 firm, 20 options and 20 LOIs)	54 Airbus A350s	30 Boeing 787s
8 Airbus A330 Freighter options	7 Boeing 777-300ER	3 Boeing 777F	1 Airbus A380	

<sup>i</sup> As at 31 March 2018





# Hamad International Airport

Hamad International Airport provides a world-class passenger experience, representing everything that the State of Qatar stands for in terms of quality, sophistication and innovation.

Hamad International Airport continues to be one of the fastest growing hubs in the world, having welcomed more than 34 million passengers and recorded over 200,000 aircraft movements in 2017-18. Over 120 million international passengers have passed through the airport since it opened in 2014.

Hamad International Airport's expansion plans will increase its initial capacity of 30 million passengers per year to 50 million passengers per year upon completion.

During 2017-18, Hamad International Airport opened a new Climate Control Centre, which contributed towards the facilitation of over two million tonnes of cargo passing through the airport.

At 31 March 2018, Hamad International Airport's workforce included more than 1,300 employees.

## 2017-18 Highlights <sup>i</sup>

 34,212,750 passengers

 211,658 aircraft movements

 1,345 employees

 2,068,073 tonnes of cargo

 85.4% on-time performance

<sup>i</sup> Represents data from 01 April 2017 to 31 March 2018



## Our other businesses <sup>†</sup>

### QATAR EXECUTIVE



12 luxury jets

---

1,681 flights

---

30 Gulfstream jets on order

### QATAR DUTY FREE



40,000m<sup>2</sup> premium retail space

---

90+ high-end retail stores

---

30+ restaurants & cafes

### QATAR AVIATION SERVICES



212,178 flights handled in 2017

---

45 million pieces of baggage handled

---

99.5% on time performance

---

5,300 motorised and non-motorised items of ground service equipment

<sup>†</sup> Represents data from 01 April 2017 to 31 March 2018



## QATAR AIRCRAFT CATERING COMPANY



150,000 meals produced per day

---

46 loading bays

---

22 off-loading bays

---

150+ equipped catering trucks

## DHIAFATINA HOTELS



6 luxury hotels

---

4 countries

## QATAR DISTRIBUTION COMPANY



65,175 customers

---

75,900 transactions

---

92 employees

<sup>1</sup> Represents data from 01 April 2017 to 31 March 2018





# Community

As well as making a substantial contribution to the global economy and supporting millions of jobs worldwide, the aviation industry plays a key role in social development both on a local scale and internationally.

By connecting people, families and cultures, as well as facilitating the trade in goods and services, aviation offers a unique and essential method of travel and transportation. Air transport is no longer a luxury; it is a necessity.

During 2017-18, Qatar Airways flew over 29 million passengers and 1.3 million tonnes of cargo to over 150 global destinations. Qatar Airways Group recognises and values the United Nations' Sustainable Development Goals, and those set out within the Qatar National Vision 2030, by promoting social development, both in the State of Qatar and internationally.



When you have the power to contribute towards making a difference, it is your obligation to do so.”

H.E. Mr. Akbar Al Baker  
Group Chief Executive, Qatar Airways Group





## Delivering Our Social Responsibility

Our response to the illegal blockade imposed on the State of Qatar from June 2017 demonstrated to the world the distance that Qatar Airways will go to deliver its social responsibility to customers and other stakeholders.

The sudden measures taken against Qatar-registered aircraft to overfly the airspace of the Kingdom of Saudi Arabia, the United Arab Emirates, the Kingdom of Bahrain, and the Arab Republic of Egypt led to the immediate suspension of 18 destinations from Qatar Airways' global network. This action left passengers stranded, families separated, and caused major disruptions to suppliers working within the State of Qatar.

Moreover, these actions placed at risk the systems on which the entire aviation system, regulated by the International Civil Aviation Organization (ICAO), relies on for safety and security.

### Passenger Safety and Well-being

With the goal of minimising the risks to aviation safety created by the blockading countries, Qatar Airways co-ordinated closely with the Qatar Civil Aviation Authority to support actions with ICAO and provide the technical information required to develop contingency routes.

Qatar Airways' focus was to assist passengers and residents stranded by this unprecedented illegal action. By chartering flights operated by other airlines to reconnect and repatriate those affected by the blockade, Qatar Airways took responsibility for each and every passenger.

### A Lifeline Through Qatar Airways Cargo



As the blockade resulted in closure of all road access at the only land border to the State of Qatar and significantly reduced air freight, Qatar Airways Cargo played a crucial role in maintaining critical medical, food and manufacturing supplies to the country.

Qatar Airways co-ordinated a massive airlift lasting several weeks to maintain essential supplies. A new Climate Control Centre opened in May 2017, offering 2,470 square metres of cool storage, enabled Qatar Airways Cargo to handle the large volumes of food imports.

At the same time, to contribute towards the State of Qatar's accelerated national food security programme, Qatar Airways Cargo helped the country's largest dairy farm import over 4,000 cows from Europe and the United States. The farm now provides the residents of Qatar with an important local source of fresh milk and dairy products.





## No Borders, Only Horizons

Having resolved the most critical logistical challenges associated with the blockade, it was important that people around the world were aware of its impact on the unquestionable human rights of freedom and the ability to travel.

Qatar Airways' 'No Borders, Only Horizons' film brought to life the core belief that the world is a better place when we explore it together. The film was viewed more than 54 million times in the days following its launch.

The air, sea and land blockade imposed on Qatar by the Kingdom of Saudi Arabia, the United Arab Emirates, the Kingdom of Bahrain, and the Arab Republic of Egypt has underscored Qatar Airways' essential purpose as an airline – bringing people together and connecting the world.



As an airline, we do not believe in boundaries. We believe in bringing people together. The world is better that way.

We believe it is a right of all of us to go where we need to go, to feel the things we want to feel, to see the people we want to see.

That is why we will continue to fly the skies, providing our passengers with everything we can and treating everyone how they deserve to be treated.

We do this because we know that travel goes beyond borders and prejudice...

**That travel teaches compassion.**

**That travel is a necessity.**

**That travel is a right for all.**

**There should be no borders in the sky, only horizons.**





Hand holding a green pencil writing on a worksheet with math problems and a grid.

Handwritten numbers on the grid:  $19A$  and  $19B$ .

Math problems and solutions:

- $194 + 303 = 597$
- $103 + 273 = 376$
- $101 + 275 = 376$

Color-coded boxes:

- Yellow:  $103 + 273 = 376$
- Green:  $101 + 275 = 376$

Arithmetic problems:

- $192 + 162 = 354$
- $181 + 268 = 449$

Other numbers: 156, 237

Text: "Kösd az eredményeket a..."



## Education and Culture

Access to education is a fundamental human right. Yet millions of children worldwide remain deprived of educational opportunities. This is as a result of social, cultural and economic factors, including conflict and natural disasters.

### Educate A Child



Educate A Child is a global initiative launched by Her Highness Sheikha Moza bint Nasser of the State of Qatar, which aims to reduce the number of children who are missing out on their right to education.

With a target to educate at least 10 million out-of-school children, Educate A Child achieves substantial breakthroughs in providing children facing extreme poverty, cultural barriers and conflict-affected environments, with opportunities for a curriculum of primary education.

Qatar Airways has supported Educate A Child since 2013 by lending its comprehensive suite of communication platforms to raise awareness and showcase the initiative to our global passenger base.

Our customers are able to donate when purchasing tickets online, and when on board Qatar Airways' aircraft. Qatar Airways matches all funds donated on board.

Since 2013, Qatar Airways' customers and employees have raised US\$ 2.3 Million with a further US\$ 1.3 Million contributed by Qatar Airways as match funding.

## US\$ 3.6 Million

 donations to date

Donations collected to date have contributed to a variety of different projects across 43 countries, including:

- ◆ community reading programmes
- ◆ school construction
- ◆ teacher training
- ◆ adopt a school initiative
- ◆ boat schools for remote areas
- ◆ schools in deprived urban areas
- ◆ child learning centres and community strengthening in post-conflict zones





## Shafallah



The Shafallah Center was established in 1999 under the guidance of Her Highness Sheikha Moza Bint Nasser of the State of Qatar to provide exemplary educational and rehabilitative services to young people with intellectual disabilities.

The centre aims to help individuals achieve a more independent life and integrate into Qatari society, both through its support programmes and by raising awareness about disability.

Qatar Airways supports Shafallah’s vocational training programme by providing work opportunities for individuals in a supportive environment.

Qatar Airways’ partnership with Shafallah began in December 2014, when a pilot project was launched to employ individuals based at the Shafallah Center to assist the preparation of customer amenities provided on-board Qatar Airways aircraft.

Individuals are recommended for work at Qatar Airways by Shafallah based on their specific needs and abilities. They are provided on the job training and are given the same benefits and opportunities to learn, work and grow their careers as all Qatar Airways employees.

Since then, the partnership has grown with Qatar Airways opening a dedicated facility within its corporate offices, which now employs more than 40 individuals of 11 different nationalities, who are trained and supported by a team of Qatar Airways and Shafallah employees (Figure 1).

We plan to increase the number of individuals employed to 50 staff and to consider engaging individuals in other work areas to match their abilities.

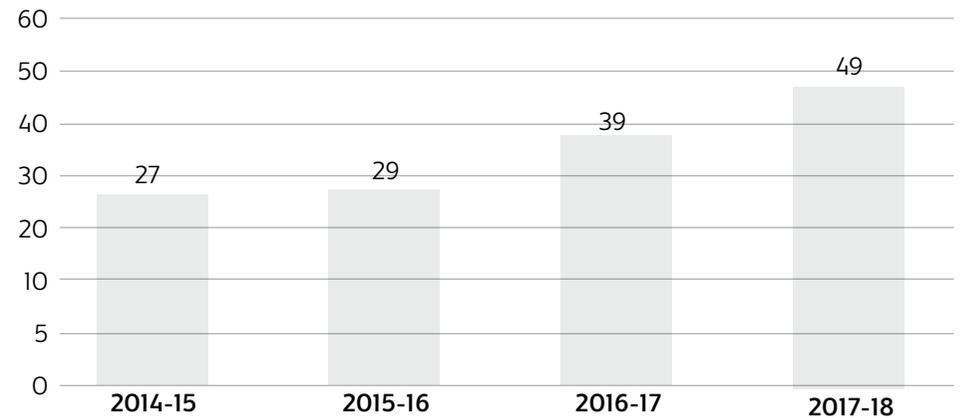
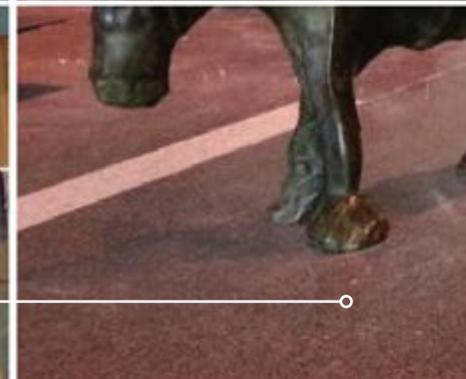


Figure 1: Number of individuals employed through Shafallah





## Community Education at Hamad International Airport

Hamad International Airport has further supported education by offering bespoke tours of the passenger terminal to groups of children and students throughout the year. Tours have ranged from behind-the-scenes insights into the airports award winning facilities and services aimed at primary aged children, to tours focused on specific learning objectives for a particular audience.

In August 2017, Hamad International Airport hosted children from the Qatar Institute for Speech and Hearing Rehabilitation. During this occasion, the children, accompanied by their caregivers, were able to explore the terminal building as well as experience being on board one of Qatar Airways' Airbus A380 aircraft. During their visit, airport staff were able to demonstrate the care offered to customers who require special assistance.

A similar initiative on International Day of Persons with Disabilities in December 2017, introduced children from the Shafallah Center to the airport passenger complex where their tour showcased how the airport is equipped to make travelling more comfortable for passengers with reduced mobility and those requiring special assistance. The tour included a ride on the airport passenger train.



In October 2017, Hamad International Airport welcomed a group of local high school and university students for an exclusive tour focused on preparation for the 2022 FIFA World Cup. Organised in collaboration with the Supreme Committee for Delivery & Legacy, the tour aimed to inspire its audience by showcasing the facility that will welcome football fans from around the world to this important event. As well as highlighting the airports premium facilities, the tour also showcased the many unique and iconic art installations featured throughout the passenger terminal.





## Health

Promoting health and well-being is an essential consideration for sustainable development. While major progress has been made in increasing life expectancy and reducing some common diseases, there remains a need to address many persistent and emerging health issues facing the global population.

### Orbis Charitable Trust

 In November 2017, Qatar Airways renewed its partnership with Orbis UK, a global charity that brings people together to fight avoidable blindness through access to quality eye care. Orbis UK trains eye teams, strengthens eye care services and works on the ground to provide lasting solutions to communities in need.

As its Official Airline, Qatar Airways flies Orbis UK's medical volunteers to the destinations in which they work to prevent and treat avoidable blindness, predominantly in developing countries in Africa, Asia and South America.

### Children's Brain Tumor Foundation

 The US-based Children's Brain Tumor Foundation aims to improve the treatment, quality of life and long term outlook for children with brain and spinal cord tumours through research, support, education, and advocacy to families and survivors.

Qatar Airways supports the Foundation by contributing to its annual fundraising event.



“

Qatar Airways believes that global aviation acts as a bridge between communities and people, and we are delighted to be able to support causes that affect individuals across every continent.”

H.E. Mr. Akbar Al Baker  
Group Chief Executive, Qatar Airways Group





## Local and International Community Support

Qatar Airways Group supports the following non-profit organisations on projects in local and international communities:



**Qatar Assistive Technology Center, Mada**, is a non-profit organization that strives to empower and enable people with disabilities through information and communication technology. The center works to improve digital inclusion for individuals with disabilities in the State of Qatar by providing advisory services and policy recommendations to private and public organisations.

Qatar Airways Group has engaged with Mada to make sure that the content and structure of the Airline's new website are accessible to people with disabilities.



**Qatar Charity** is focused on fighting global poverty in vulnerable communities through its humanitarian and development programmes.

Qatar Airways Group has supported the charity on a number of humanitarian projects, including distributing clothing and food supplies to families in need in countries such as Bosnia, Jordan, Tunisia, Bangladesh and Pakistan, as well as for Syrian orphans in Jordan. Qatar Airways Group also provides individuals in the lower-income workforce in the State of Qatar with Iftar meals



**Save the Dream** is a campaign conceived by the International Center for Sports Security in partnership with Qatar Olympic Committee and Ooredoo. The campaign focuses on critical issues in sport, such as corruption, betting fraud and transparency, as well as making a commitment to helping underprivileged children through participation in sports.

Qatar Airways is the official airline partner of Save the Dream, and has supported a number of international events.



**Dreama** provides support to orphan children, through its residential care homes and support services for children and adoptive families.

Qatar Airways Group provides general and project-specific support for such things as equipment needs, recreational outings, and Gharangao celebrations.





# Health and Safety

Qatar Airways Group is committed to maintaining the health and safety of our employees.

We aim to:



**eliminate hazards** and provide safe and healthy working conditions



**provide training and awareness** for all employees, and increase participation, consultation and communication



**promote** employee health and well-being

Qatar Airways Group will continue commit the resources required to achieve continual improvement in health and safety across its operations.

We are dedicated to developing our safety culture and a proactive, safety conscious workforce through collaboration, communication and training.



**report and investigate** all health, safety and fire related incidents



**measure performance** against health and safety objectives to drive continuous improvement



**comply** with relevant legislative and regulatory requirements





# Governance and Leadership

Qatar Airways Group’s Safety Management System enables group-wide compliance with the regulations and guidelines set out by Qatar Civil Aviation Authority, International Air Transport Association (IATA) and any specific legislation applicable to the countries in which we operate.

Key elements of Qatar Airways Group’s Safety Management System include:

- 

**Group Safety**

  - ◆ implementation of the Safety Management System
  - ◆ ensuring the investigation and mitigation of hazards and safety events
  - ◆ promoting a positive safety culture through strategic training and awareness

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- 

**Security Management**

  - ◆ identification and management of security risks at all corporate assets and facilities worldwide

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- 

**Compliance Monitoring**

  - ◆ supporting the audit programme for airline operations
  - ◆ ensuring that all activities are carried out in the correct and safest way possible

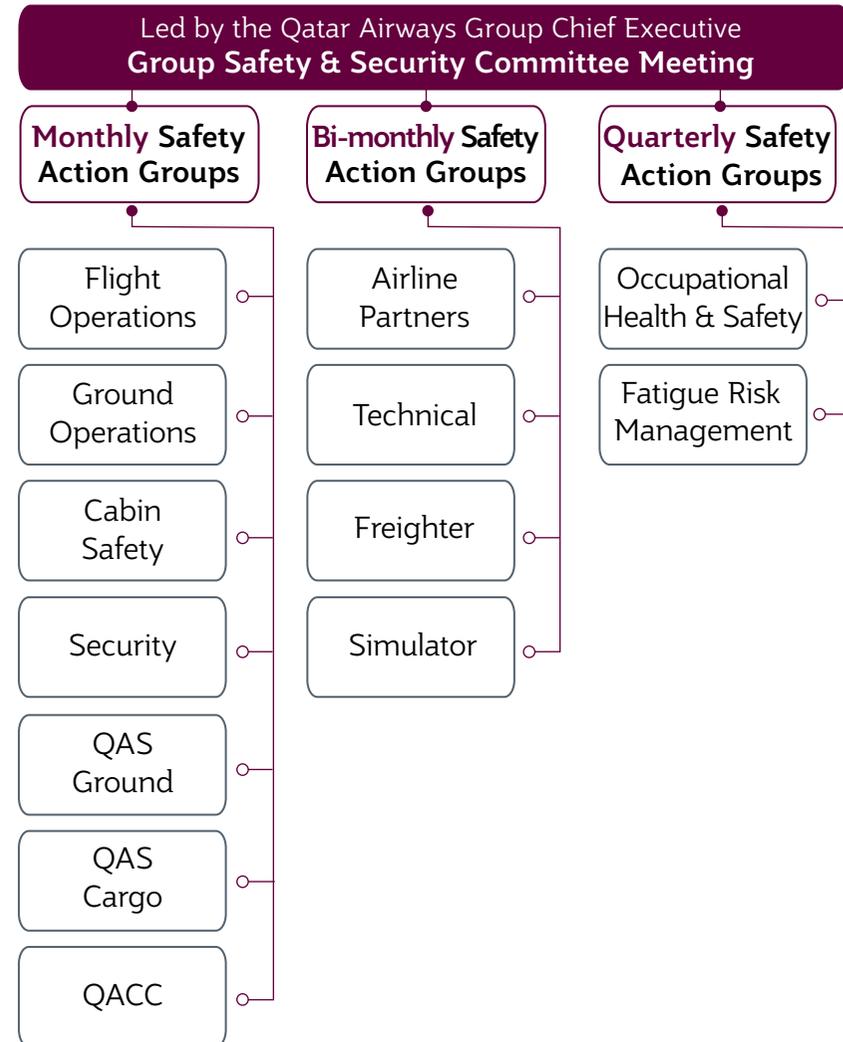
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**Business Resilience**

  - ◆ crisis management and contingency planning for major incidents
  - ◆ business continuity for other temporary operational disruptions

Led by the Qatar Airways Group Chief Executive, a group-wide safety governance structure is in place to review performance, and ensure that improvement actions are communicated throughout the organisation.







## Partnerships and Achievements

Qatar Airways Group works with a number of respected global and regional bodies to address shared objectives for safety, health and well-being.



**IATA Operational Safety Audit** sets the industry standards for airline operation management and control systems. This includes corporate organisation and management, flight operations, operations control, flight dispatch, aircraft engineering and maintenance, cabin operations, aircraft ground handling, cargo operations and operational security.

Qatar Airways was the world's first airline to complete IATA's Operational Safety Audit in 2003. Qatar Airways has successfully renewed its certification every two years since.



**IATA's Cabin Operations Safety Conference** is the global conference for cabin safety across the aviation industry. Qatar Airways hosted the 2017 event that brought together more than 200 representatives from across the globe, to gain insights and share cabin safety best practice.



**Highfield** is a global leader in compliance, work-based learning and apprenticeship qualifications. Through its partnership with Highfield, Qatar Airways is working to become a recognised food safety training centre.



### International Organization for Standardization

Qatar Aircraft Catering Company is certified to the International Standards for Quality Management Systems (ISO 9001:2015) and Food Safety System (ISO 22000:2005). Key managers and quality assurance specialists are trained as Lead Auditors for ISO 22000:2005.



### Aspetar

Aspetar is the first specialised Orthopaedic and Sports Medicine Hospital in the Gulf region. Qatar Airways collaborates with Aspetar on its "Step into Health" campaign. Aimed at promoting holistic health through moderate daily physical activity, Step into Health encourages participants to walk 10,000 steps or more every day.



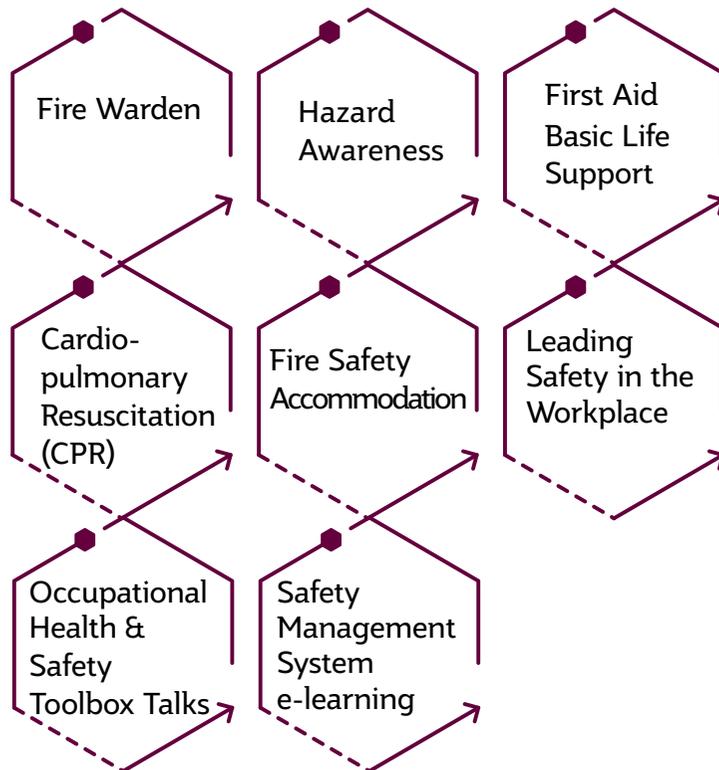


# Training and Awareness

Employee engagement is central to the development of a positive safety culture. Qatar Airways has a series of training and awareness initiatives to support this goal.

## Safety Critical Training

Safety critical training provides employees with the skills and awareness required to work safely. A suite of safety training courses aims to reduce workplace accidents and to embed a culture of reporting.



## Safety Leadership

Safety leadership involves inspiring the right behaviours, setting an example and encouraging peers to do the right thing. Qatar Airways Group’s “Leading Safety in the Workplace” workshops impart the values of trust and care in leadership to ensure safe working practices are followed.

## Aviation Risk Management Training

Qatar Airways has an extensive programme of aviation risk management training to ensure the continual development of employees in safe management practices across our aviation operations, including:





“

We strive for excellence in everything we do, including our preparedness in a crisis.”

Eng. Badr Al Meer, Chief Operating Officer, HIA





## Emergency Exercise

In May 2017, Hamad International Airport and Qatar Airways conducted a joint emergency exercise “Delta Oryx 2017”.

The full-scale emergency exercise was facilitated in coordination with more than 28 government agencies, stakeholders and partners, to test the effectiveness and cohesiveness of their respective procedures and readiness of the emergency response facilities.

Delta Oryx 2017 placed focus on practising preparedness for handling an aircraft accident outside the airport perimeter, simulating a crash landing into the sea.

The exercise also tested specialised forces’ arrangements for rescue at sea including, the Qatar Navy, Qatar Emiri Air Force, Qatar Coast Guard, and the Internal Security Forces. Delta Oryx 2017 seamlessly interfaced with Hamad Medical Corporation’s emergency exercise by activating all public hospitals and selected primary health care facilities in Qatar.

### Delta Oryx 2017 involved:

- 1 30-seater mock aircraft

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- 2 Qatar Airways aircraft chutes

---

- 2 Internal Security Forces vessels

---

- 3 military helicopters

---

- 5 Qatar Coast Guard vessels

---

- 5 airport safety and security vehicles

---

- 10 passenger buses

---

- 39 mannequin casualties

---

- 40 ambulance response vehicles

---

- 60 volunteer family members & friends

---

- 170 volunteer passengers



## Safety Performance

### Lost Time Injury Frequency Rate

The Lost Time Injury Frequency Rate (LTIFR) measures the number of lost time workplace injuries per 1 million hours worked. Across Qatar Airways Group, the LTIFR has reduced by 49.5 percent over the past five years, from 9.9 in 2011-12 to 5.0 in 2017-18 (Figure 2).

Following an initial period of significant improvement, the LTIFR has been maintained during a period where Qatar Airways Group has experienced rapid expansion. While the LTIFR remains relatively low in comparison to industry averages, we recognise that we can and must re-double our efforts to reduce this rate further.

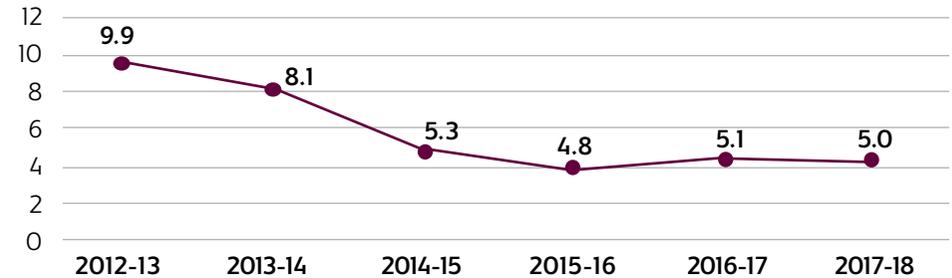


Figure 2: Lost Time Injury Frequency Rate for all Qatar Airways Group staff

### Proactive Workplace Safety Inspections

Proactive inspection plays an integral part in developing and improving safety performance. Across Qatar Airways Group, over 4,500 workplace safety inspections were completed during 2017-18. This has been directly linked to a reduction in lost time incidents and improvement in the reporting of safety hazards and concerns.





# Fire Safety

Qatar Airways Group operates numerous commercial buildings and accommodation for over 22,000 employees and their families. A holistic approach to fire safety is adopted to reduce the likelihood of fire, develop the arrangements to respond to fire, and engage with employee and their families to raise awareness.

## Fire Protection

Proactive fire protection measures are implemented across all Qatar Airways Group buildings:

- ◆ all premises are subject to a fire risk assessment to identify potential areas of improvement
- ◆ commercial premises are subject to an annual evacuation drill
- ◆ special evacuation procedures for individuals with disabilities are regularly reviewed

The number of fires per 1,000 staff across Qatar Airways Group premises has reduced from 0.37 in 2016-17 to 0.28 in 2017-18. The number of fire related injuries has reduced from seven in 2015-16 to zero in both 2016-17 and 2017-18.

## Fire Safety Engagement

**Fire Safety Week** Qatar Airways Group's annual Fire Safety Week focuses on raising awareness of fire safety in residential buildings.

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**The Surge Game** The Surge Game is an interactive smartphone application developed for employees, to highlight the dangers of overloading electrical extension cords.

---

**Home Fire Safety Visits** Home fire safety visits have been undertaken across Qatar Airways residential buildings to improve fire safety and reduce false fire activations.





# Medical Care

Qatar Airways Group recognises the importance of employees' physical and mental health. By proactively supporting health and well-being, we aim to:

- ◆ reduce health related absences
- ◆ increase employee engagement
- ◆ reduce stress and enhance productivity

## Health Care for All

During 2017-18, Qatar Airways' Medical Centre moved to a new purpose built facility within the Hamad International Airport campus. The state-of-the-art clinic offers:



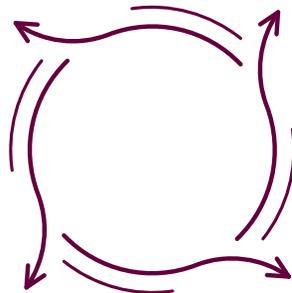
Specialist medical assessments for flight crew, cabin crew and other operational staff



Medical tests and assessments required for employees' residency in the State of Qatar



Primary health care for all staff



Occupational health assessments

In 2017-18, the new facility completed 7,780 crew medical assessments and 15,474 primary health care appointments, including occupational health and psychological services.



Qatar Airways has always been a strong advocate for promoting better health and well-being among its staff.”

H.E. Mr. Akbar Al Baker  
Group Chief Executive, Qatar Airways Group

## Safety Critical Medicine

A newly established Occupational Health department is working closely with Qatar Airways Group subsidiaries to introduce regular safety critical medical assessments. The aim is to ensure that employees performing safety critical duties are not only fit, but also remain safe to perform these jobs.

Medical assessments include:

- ◆ vision and hearing
- ◆ Body Mass Index (BMI)
- ◆ blood pressure
- ◆ blood sugar

Full respiratory assessments and computerised lung function tests are conducted for specialised roles.

As well as reducing safety risk, medical assessments also help to identify previously undiagnosed health issues, allowing early intervention and management.



“

We remain committed and dedicated to providing the leadership and resources necessary to meet our vision for environmental sustainability.”

H.E. Mr. Akbar Al Baker

Group Chief Executive, Qatar Airways Group





# Environment

At Qatar Airways Group, we believe in our responsibility to care for the environment. Our ambition is to demonstrate environmental leadership through our global airline and airport operations, aviation and catering services, retail outlets and hotels.

We aim to:



achieve lower and more efficient greenhouse gas emissions to help tackle **climate change**



reduce, reuse and recycle waste, manage noise and control emissions to air and water to reduce our impact on the **local environment** wherever we operate



support conservation and consume energy, water and materials efficiently to help protect **natural resources**

We will openly communicate our environmental performance to develop the trust on which long-term environmental leadership is built.

## Qatar National Vision 2030



Qatar Airways Group is proud to contribute towards the Qatar National Vision to “transform Qatar into an advanced society capable of achieving sustainable development” by 2030.

### Pillars of Qatar National Vision 2030



Economic Development



Human Development



Social Development



Environmental Development

Preserving and protecting the environment, including air, land, water and biological diversity





# Governance and Leadership

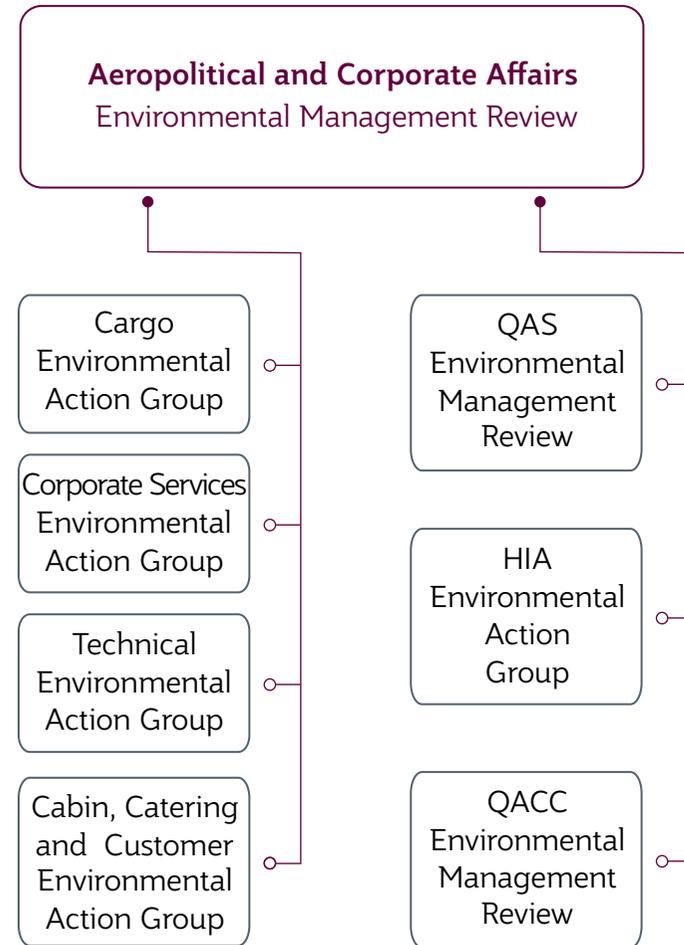
Qatar Airways Groups' Environmental Management System provides the foundation for delivering continual improvement against our environmental policy and objectives.

Our business leaders are committed to:

- 1 \_\_\_\_\_  
considering environmental issues during business planning
- 2 \_\_\_\_\_  
embedding environmental management within our operational procedures
- 3 \_\_\_\_\_  
incorporating environmental expectations within personal responsibilities and training
- 4 \_\_\_\_\_  
integrating environmental requirements within our procurement decisions

A framework of management meetings enables our business leaders to review performance and drive progress towards Qatar Airways Group's environmental objectives. Each meeting has the authority to implement change in the areas of operation that they are accountable for in order to drive continual improvement in environmental performance.

## Qatar Airways Group Environmental Management Review Framework







## Partnerships and Achievements

Qatar Airways Group collaborates with a number of influential bodies in addressing the most important sustainability challenges facing the international aviation industry.



**IATA's Environment Committee** is a policy group of appointed member airlines focusing on key sustainable development issues, including climate change, alternative fuels, cabin waste, endangered wildlife, as well as broader corporate social responsibility issues. Qatar Airways regularly participates in the meeting of the committee as an active member.



**IATA's Environmental Assessment Programme (IEnvA)** independently assesses and accredits airline environmental management systems against two stages of implementation.

Qatar Airways' environmental management system was accredited to IEnvA Stage 2 in December 2017.

The certification covers passenger and cargo airline operations, catering and cabin services, aircraft maintenance and repair, cargo ground services, and all corporate functions.

**IEMA** The **Institute of Environmental Management & Assessment (IEMA)** is the largest environmental professional membership organisation in the world.

As corporate members of IEMA, Qatar Airways has collaborated on developing environmental competency and training programmes.



**Airports Council International's (ACI) Airport Carbon Accreditation** programme awards airports at four levels for the management of greenhouse gas emissions: Mapping, Reduction, Optimisation, and Neutrality.

Hamad International Airport reached Level 3 Optimisation in April 2017.



**Tarsheed** is Qatar's National Programme for Conservation of Energy Efficiency. Qatar Airways and Hamad International Airport are partnering with Tarsheed on awareness, training and building efficiency assessments.



**Arab Air Carriers' Organizations' Environmental Policy Group** contributes to the development of regional and global aviation environmental policy.



**USAID's Reducing Opportunities for Unlawful Transport of Endangered Species (ROUTES)** Partnership is a select group of private sector, non-government organisations and government agencies collaborating to combat wildlife crime across transportation networks.

Qatar Airways joined the ROUTES Partnership in October 2017.



**United for Wildlife's Transport Industry Declaration** brings together wildlife charities, government agencies and private companies to fight the illegal trade and trafficking of wildlife.

Qatar Airways signed the Declaration in March 2016.



The **Sustainable Aviation Fuel Users Group** engages airlines with the common purpose to accelerate the development and commercialisation of sustainable aviation biofuels.



“

I am proud to say that in spite of the current situation, we continue to provide our award-winning, five-star service to all our passengers. We are carrying forward our robust expansion plans, and will continue to grow and expand to exciting new destinations across the globe.”

H.E. Mr. Akbar Al Baker  
Group Chief Executive, Qatar Airways Group





# Impact of the Blockade on Operational and Environmental Performance

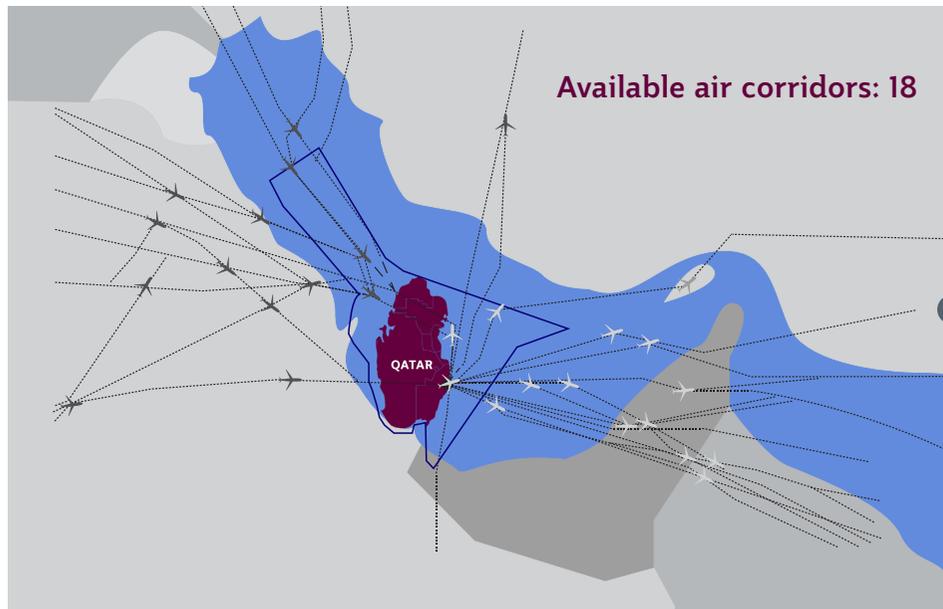
Qatar Airways Group tracks environmental performance using selected efficiency metrics, which include operational impact per:

- ◆ Revenue Tonne Kilometres (RTK)
- ◆ Number of Passengers (PAX)
- ◆ Traffic Units (TU)<sup>i</sup>

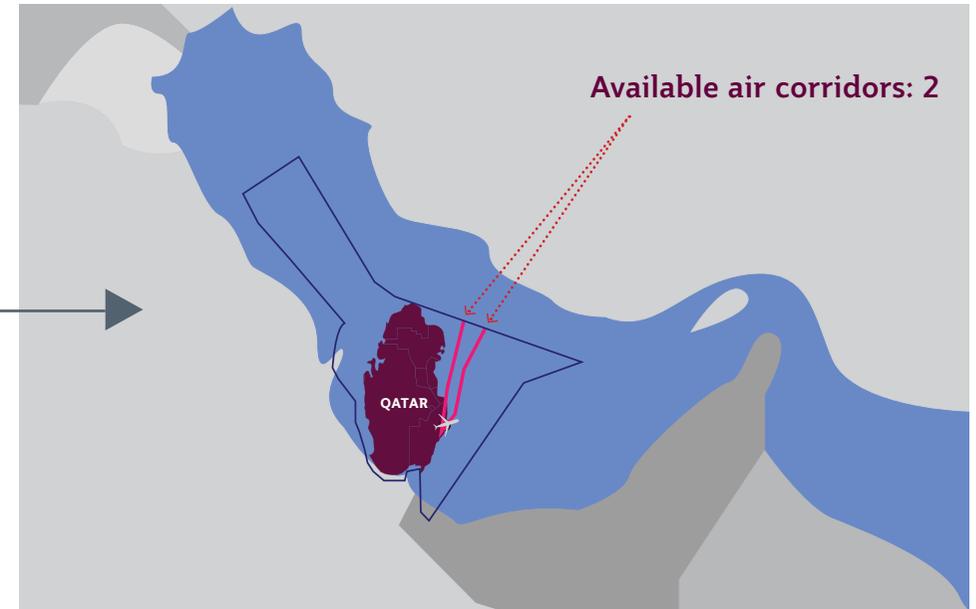
As a result of the illegal blockade imposed on the State of Qatar by some neighbouring countries, airspace restrictions reduced the number of air corridors from 18 to 2 and increased the flight time and distance to many destinations, causing more fuel consumption and hence, emissions.

The temporary reduction in the number of passengers flying with Qatar Airways and passing through Hamad International Airport had an initial negative impact on a number of Qatar Airways Group's environmental performance indicators.

Qatar Airways' available air corridors before 5 June 2017



Qatar Airways' available air corridors on 5 June 2017



<sup>i</sup> TU is defined as one passenger movement or 100kg of cargo arriving or departing





# Energy and Climate Change

Responding to climate change is one of aviation’s greatest challenges. International aviation produces approximately two percent of global man-made carbon emissions.<sup>i</sup>

The international aviation industry has adopted ambitious targets to reduce carbon emissions from aviation:

- ◆ improve aviation fuel efficiency by 1.5 percent each year from 2009 to 2020
- ◆ achieve carbon neutral growth in international aviation from 2020
- ◆ reduce net CO<sub>2</sub> emissions by 50 percent by 2050, relative to 2005 levels

## OBJECTIVE

Qatar Airways supports the international aviation industry’s goals for reducing aviation’s contribution to global climate change and is committed to its own objectives for energy and climate change:

- ◆ optimise energy demand through technology and operational practices
- ◆ pursue the adoption of low carbon energy sources

The industry is pursuing a four-pillar strategy to address aviation’s contributions to climate change and to meet industry’s target to mitigate CO<sub>2</sub> emissions from aviation:

- 1 new technology, including the deployment of sustainable alternative fuels
- 2 more efficient aircraft operations
- 3 infrastructure improvements, including modernised air traffic management systems
- 4 a single global market-based measure to fill the remaining emissions gap

<sup>i</sup> IATA Fact Sheet: Climate Change & CORSIA  
[www.iata.org/pressroom/facts\\_figures/fact\\_sheets/Documents/fact-sheet-climate-change.pdf](http://www.iata.org/pressroom/facts_figures/fact_sheets/Documents/fact-sheet-climate-change.pdf)



# CORSIA

## ICAO Assembly Resolution A39-3<sup>i</sup>

In October 2016, at the 39th session of the International Civil Aviation Organization (ICAO) Assembly, Member States agreed to implement a global market-based measure in the form of the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), to address any annual increase in total CO<sub>2</sub> emissions from international civil aviation above 2020 levels.

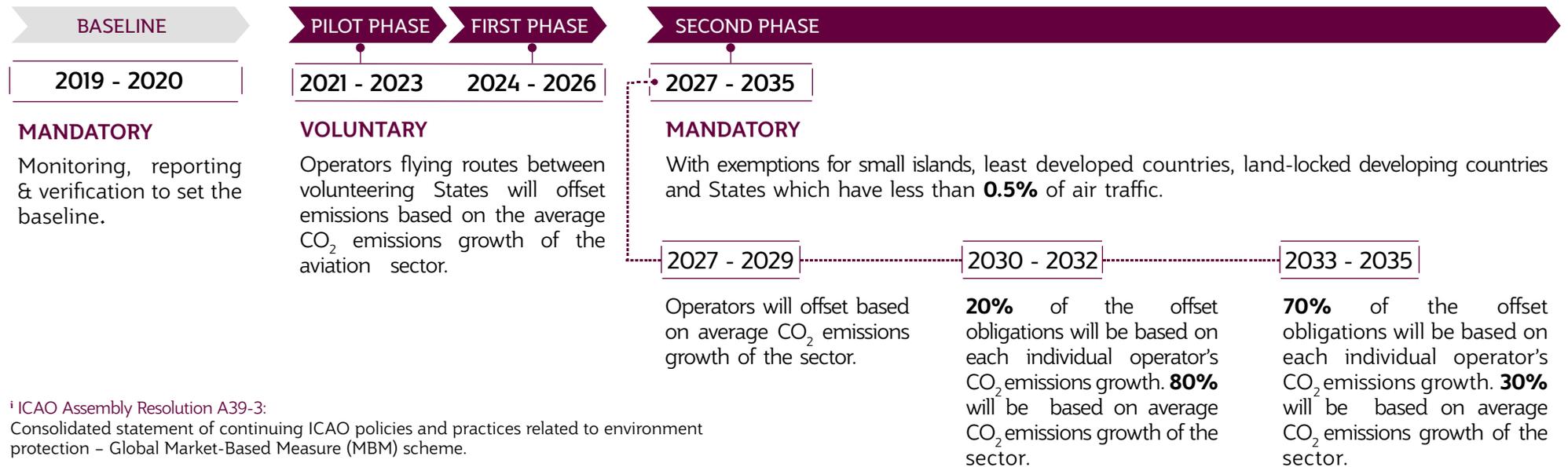
CORSIA is part of a basket of measures, which includes technologies, operational improvement, sustainable alternative fuels and market-based measures, to achieve ICAO's global aspirational goal of carbon-neutral growth from 2020 onwards.

CORSIA is global offsetting mechanism under which aeroplane operators will be required to purchase and cancel CORSIA eligible emissions units to offset the increase in CO<sub>2</sub> emissions covered by the scheme.

## Offsetting Requirements

The main design elements of CORSIA are:

- ◆ a phased implementation
- ◆ the rules related to the calculation of offsetting requirements



<sup>i</sup> ICAO Assembly Resolution A39-3: Consolidated statement of continuing ICAO policies and practices related to environment protection – Global Market-Based Measure (MBM) scheme.



## Monitoring, Reporting and Verification Requirements

On 27 June 2018, the ICAO Council adopted the international Standards and Recommended Practices for Monitoring, Reporting and Verification under CORSIA as the First Edition of Annex 16, Volume IV.

From 01 January 2019, all aeroplane operators which...

- ◆ operate aeroplanes with a Maximum Take-Off Mass exceeding 5,700 kg
- ◆ emit more than 10,000 tonnes of CO<sub>2</sub> per year on international flights

...must report annual CO<sub>2</sub> emissions for all international flights to their national administrating authority.

All international civilian operations of aeroplanes are covered by CORSIA, including scheduled and non-scheduled flights, passenger and cargo flights, training and maintenance flights, as well as general aviation and private jets.

Exemptions from CORSIA's reporting and offsetting requirements include:

- ◆ humanitarian, medical and firefighting flights
- ◆ State flights
- ◆ flights operated with aeroplanes with a Maximum Take-Off Mass below or equal to 5,700 kg
- ◆ operators whose total annual CO<sub>2</sub> emissions from international aviation are below or equal to 10,000 tonnes



The State of Qatar is one of more than 70 States that have volunteered to participate in the Pilot phase of CORSIA, leading both Qatar Airways and Qatar Executive to submit Emissions Monitoring Plans to Qatar Civil Aviation Authority by 30 November 2018.

Qatar Airways recognised the important role that CORSIA plays in addressing climate change and supports its implementation based on the following understanding:

- ◆ CORSIA should be the only market-based measure applying to CO<sub>2</sub> emissions from international aviation
- ◆ CORSIA must supersede all existing or planned national and regional market-based measures to ensure double counting of emissions and excessive cost to the industry are avoided





## Qatar Airways Group Carbon Footprint

To meet Qatar Airways Group's commitment to achieve lower and more efficient greenhouse gas emissions, the carbon emissions associated with business operations are calculated and independently verified annually.

Qatar Airways Group has been measuring Scope 1<sup>i</sup> and Scope 2<sup>ii</sup> CO<sub>2</sub> emissions since 2014-15.

	2014-15	2015-16	2016-17	2017-18
Scope 1	12,139,530	14,607,835	17,677,160	19,694,432
Scope 2	307,034	366,392	408,263	281,729
Scope 3	-	-	-	117,114
<b>Total Scope 1 and 2</b>	<b>12,446,564</b>	<b>14,974,227</b>	<b>18,085,423</b>	<b>19,976,160</b>
<b>Total Scope 1, 2 and 3</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>20,093,274</b>

Table 1: Qatar Airways Group total CO<sub>2</sub> emissions in tonnes since 2014-15

The organisational and operational boundary of Qatar Airways Group's carbon footprint continues to expand. Changes during 2017-18 include:

- ◆ Scope 1 and Scope 2 CO<sub>2</sub> emissions at Qatar Airways' airport operations at outstations across the European Union
- ◆ Scope 3<sup>iii</sup> CO<sub>2</sub> emissions associated with employee accommodation in Doha
- ◆ Scope 3 CO<sub>2</sub> emissions associated with tenants at Hamad International Airport that are not part of the Qatar Airways Group
- ◆ Carbon equivalent emissions (CO<sub>2</sub>e) associated with other Scope 1 greenhouse gases, including methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O)

Scope 1, Scope 2 and Scope 3 CO<sub>2</sub> and Scope 1 CO<sub>2</sub>e emissions for the Qatar Airways Group are presented in Table 2.

	Qatar Airways	Qatar Executive	Qatar Aircraft Catering Company	Qatar Aviation Services	Qatar Duty Free	Qatar Distribution Company	Dhialfatina Hotels	Qatar Airways Outstation in European Union	Hamad International Airport (directly managed)
Scope 1 CO <sub>2</sub>	19,565,096	78,989	14,694	27,334	115	3	4,071	28	4,101
Scope 1 CO <sub>2</sub> e	19,685,343	79,474	14,754	27,496	115	3	4,552	28	4,126
Scope 2 CO <sub>2</sub>	56,098	-	15,912	16,408	3,740	1,317	9,458	1,485	177,310
Scope 3 CO <sub>2</sub>	93,553	-	48	46	78	22	-	-	23,368

Table 2: Qatar Airways Group 2017-18 CO<sub>2</sub> and CO<sub>2</sub>e emissions in tonnes

<sup>i</sup> Scope 1: Direct greenhouse gas emissions from sources that are owned or controlled by the Qatar Airways Group, for example, emissions from combustion in owned or controlled boilers, vehicles, etc.

<sup>ii</sup> Scope 2: Greenhouse gas emissions from the generation of purchased electricity consumed by the Qatar Airways Group.

<sup>iii</sup> Scope 3: All other indirect greenhouse gas emissions that are a consequence of the activities of the Qatar Airways Group, but occur from sources not owned or controlled by the Qatar Airways Group.



## Qatar Airways' CO<sub>2</sub> Emissions

### Aviation Fuel

Qatar Airways measures carbon efficiency relating to aviation fuel consumption as CO<sub>2</sub> emissions (kilograms) per Revenue Tonne Kilometre (RTK).<sup>i</sup>

Qatar Airways' RTK in 2017-18 increased by 9.6 percent from the previous year, while CO<sub>2</sub> emissions from aviation fuel consumption increased by 11.3 percent (Figure 3). However there has been a positive trend in carbon efficiency since 2014-15, with 2017-18 efficiency remaining 1.0 percent better than 2015-16 and 2.4 percent better than 2014-15 (Figure 4).

This fluctuation in efficiency in 2017-18 from 2016-17 can be attributed to the additional fuel required to reach our destinations due to airspace restrictions resulting from the blockade. An initial reduction in passenger numbers was partially re-balanced through the rapid expansion in Qatar Airways' cargo operations.

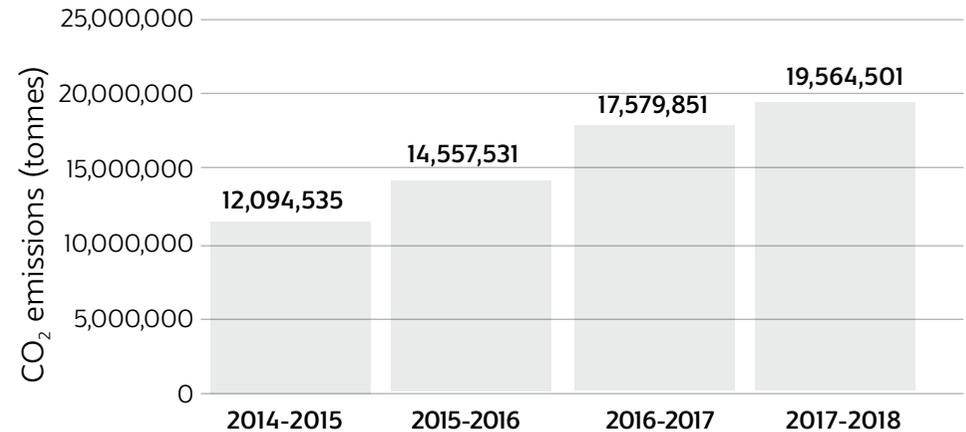


Figure 3: Qatar Airways annual CO<sub>2</sub> emissions from aircraft fuel since 2014-15

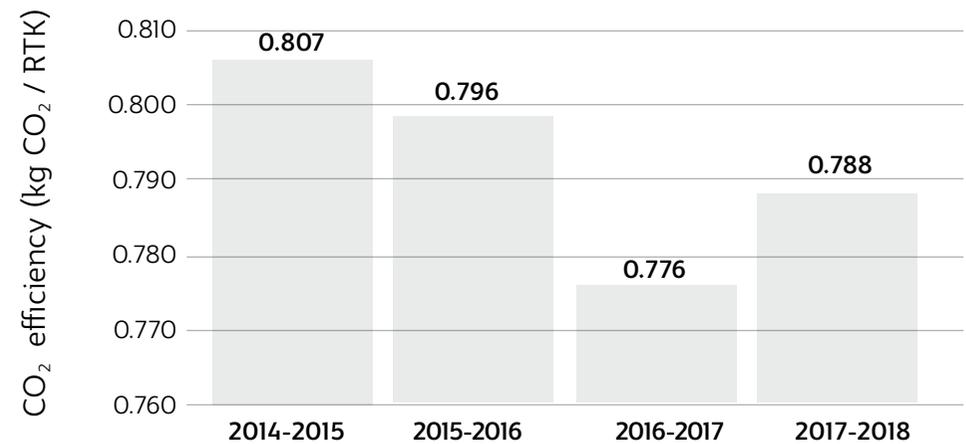


Figure 4: Qatar Airways annual CO<sub>2</sub> efficiency since 2014-15 <sup>ii</sup>

<sup>i</sup> Utilised capacity for passengers and cargo expressed in metric tonnes, multiplied by the distance flown. (CAEP, ICAO, 2006)

<sup>ii</sup> Carbon efficiencies are not verified



The resilience of Qatar Airways' carbon efficiency is partly due to the continued emphasis placed on fuel optimisation. Qatar Airways' Aircraft Fuel and Emissions Programme brings together key business functions to collaborate on aviation fuel saving measures, focusing on four areas (Table 3).

	Aviation Fuel (tonnes)	CO <sub>2</sub> (tonnes)
Weight reduction	38,455	121,134
Route optimisation	3,961	12,477
Aircraft operations	34,822	109,689
Aircraft performance	5,710	17,987
<b>TOTAL</b>	<b>82,948</b>	<b>261,287</b>

Table 3: Estimated aviation fuel and CO<sub>2</sub> savings in 2017-18

### Weight Reduction

One of the most significant weight reduction initiatives across the Qatar Airways fleet is the ability to utilise Doha International Airport as an alternative aerodrome for diversions. Doha International Airport maintains full Air Traffic Control and Rescue and Fire Fighting services. Due to its close proximity to Hamad International Airport, Qatar Airways pilots are able to upload less contingency fuel, thus reducing weight and fuel burn during flight.

#### Estimated saving during 2017-18

- ◆ 12,806 tonnes of fuel
- ◆ 40,338 tonnes of CO<sub>2</sub>

### Route Optimisation

Reducing the distance travelled on each Qatar Airways route decreases fuel burn. Qatar Airways continues to review and optimise routes between Hamad International Airport and its destination airports. Despite airspace restrictions imposed on the State of Qatar in 2017-18, Qatar Airways was still able to reduce fuel consumption by careful route planning.

#### Estimated saving during 2017-18

- ◆ 3,961 tonnes of fuel
- ◆ 12,477 tonnes of CO<sub>2</sub>

### Aircraft Operations

Aircraft use small engines known as Auxiliary Power Units (APU) to provide electrical power for systems, such as lighting and air conditioning, while on the ground when the main engines are switched off. Since these engines consume fuel, Qatar Airways pilots limit the use of APUs by connecting to electrical power and preconditioned air supplied directly by the airport. Qatar Airways applies its APU policy at Hamad International Airport and at other destination airports where an alternative power supply is available.

#### Estimated saving during 2017-18

- ◆ 31,258 tonnes of fuel
- ◆ 98,462 tonnes of CO<sub>2</sub>

### Aircraft Performance

The enhanced foam wash carried out as part of the maintenance of Qatar Airways' aircraft engines removes airborne contaminants that build up during flight to restore engine performance and reduce fuel burn.

#### Estimated saving during 2017-18

- ◆ 1,013 tonnes of fuel
- ◆ 3,191 tonnes of CO<sub>2</sub>



## European Union Airport Operations

Qatar Airways is incrementally expanding the scope of its carbon footprint to include airport operations at destinations. All 31 destinations across the 20 countries that Qatar Airways flies to within the European Union have been evaluated for inclusion in the 2017-18 carbon footprint, with energy consumption data available in 74 percent of these.

The CO<sub>2</sub> emissions associated with our European Union destinations have been calculated using country-specific emission factors, and include all on-airport facilities (Figure 5).

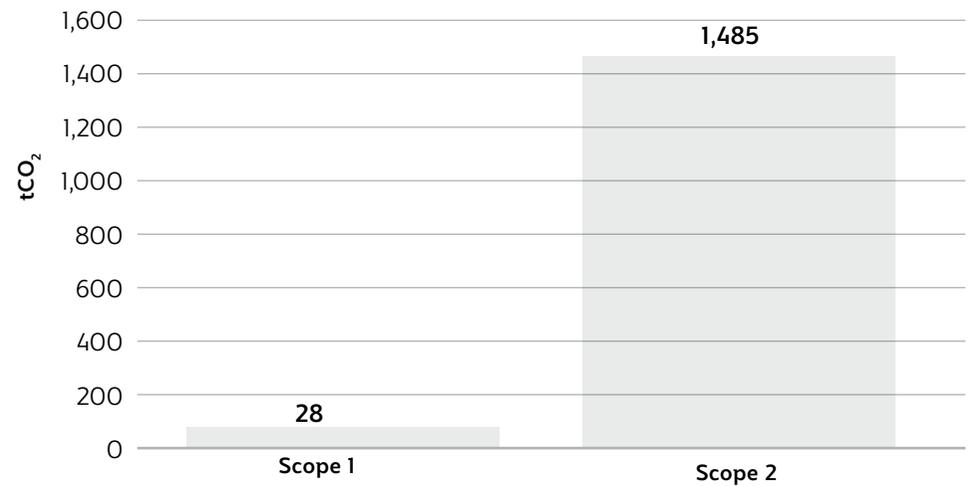


Figure 5: Qatar Airways Scope 1 and Scope 2 CO<sub>2</sub> emissions from EU airport operations, 2017-18



## Commercial Properties in Doha

Qatar Airways monitors the annual CO<sub>2</sub> emissions associated with energy consumption in commercial offices in Doha.

Until this year, CO<sub>2</sub> emissions have been calculated based on utility bills. To improve data integrity, since April 2017, monthly meter readings have been taken to create a new baseline against which future CO<sub>2</sub> emissions will be measured (Figure 6).

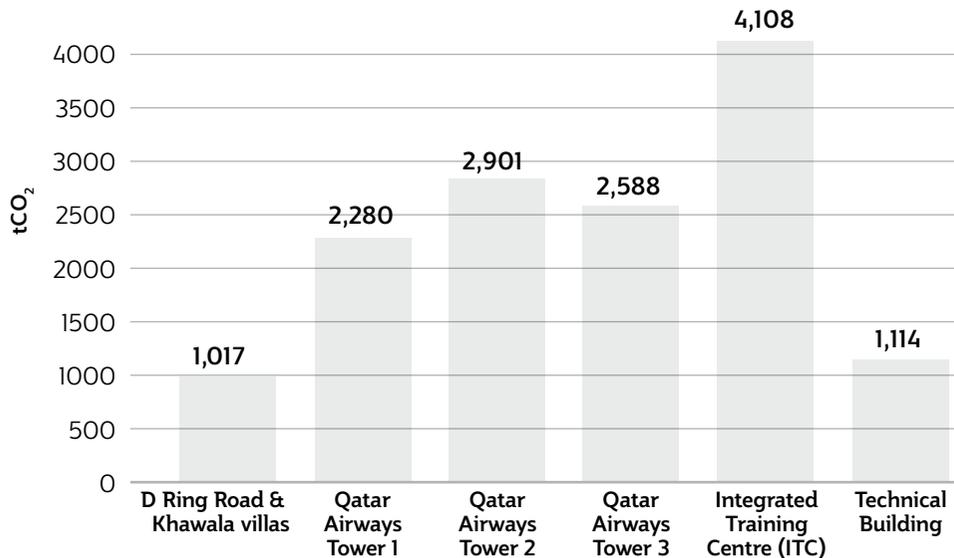


Figure 6: Qatar Airways Scope 1 CO<sub>2</sub> emissions from meter readings at commercial properties, 2017-18

## Residential Properties in Doha

The carbon footprint for Qatar Airways now includes Scope 3 emissions associated with employee accommodation in Doha. In 2017-18, Qatar Airways manages residential villas and apartments to accommodate its employees and their families. Scope 3 emissions associated with these properties were calculated as 93,553 tonnes of CO<sub>2</sub> for the year.



## Hamad International Airport's CO<sub>2</sub> Emissions

Hamad International Airport has been measuring Scope 1 and Scope 2 CO<sub>2</sub> emissions since opening in 2014. During this time, there has been a year-on-year increase in total CO<sub>2</sub> emissions. However, during 2017-18, Hamad International Airport's total CO<sub>2</sub> emissions reduced by 2.0 percent compared to the previous year (Figure 7).

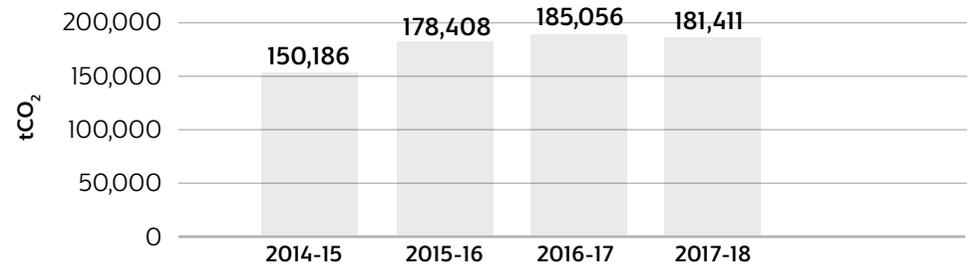


Figure 7: Hamad International Airport total annual CO<sub>2</sub> emissions since 2014-15

The reduction in total CO<sub>2</sub> emissions is attributed to a 1.2 percent reduction in electricity consumption combined with a change in the emission factor used to convert electricity into carbon dioxide. <sup>i</sup>

Approximately 99 percent of CO<sub>2</sub> emissions at Hamad International Airport are associated with indirect Scope 2 emissions from electricity consumption.

Scope 1 emissions comprise those associated with consumption of petrol and diesel by vehicles and other ground equipment.

<sup>i</sup> Country-specific carbon emission factors for electricity are provided by the International Energy Agency, and are updated on an annual basis in the agency's annual Statistics Reports.



## Hamad International Airport Carbon Efficiency

Hamad International Airport measures carbon efficiency as:

- ◆ CO<sub>2</sub> emissions (kilograms) per passenger (PAX)
- ◆ CO<sub>2</sub> emissions (kilograms) per traffic unit <sup>i</sup>

Carbon efficiency per passenger reduced by 9.4 percent in 2017-18 (Figure 8). However, the efficiency remained 4.3 percent better than the same efficiency in 2015-16 and 4.0 percent better than the baseline year.

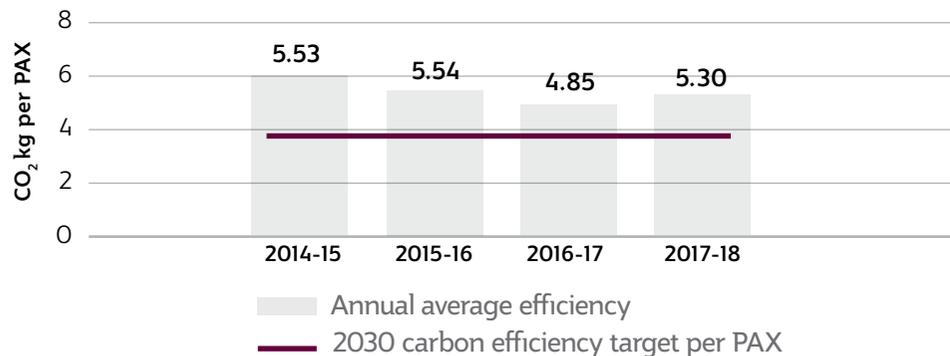


Figure 8: Hamad International Airport CO<sub>2</sub> efficiency per passenger since 2014-15 <sup>ii</sup>

Carbon efficiency per traffic unit diminished by 1.2 percent in 2017-18 (Figure 9). However, the efficiency remained 11.5 percent better than the same efficiency in 2015-16 and 13.2 percent better than the baseline year.

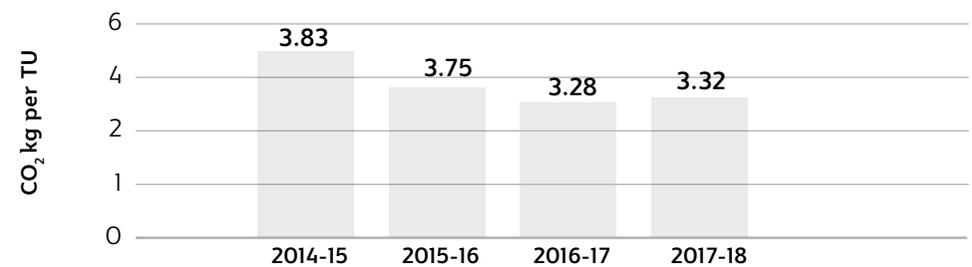


Figure 9: Hamad International Airport CO<sub>2</sub> efficiency per traffic unit since 2014-15 <sup>iii</sup>

The fluctuation in efficiency in 2017-18 from 2016-17 can be attributed to the reduction in passengers resulting from the blockade. Carbon efficiency against traffic unit was partially re-balanced in 2017-18 due to the rapid expansion in cargo operations at Hamad International Airport.

<sup>i</sup> TU is defined as one passenger movement or 100kg of cargo arriving or departing

<sup>ii</sup> Carbon efficiencies are not verified

<sup>iii</sup> Carbon efficiencies are not verified



“

We are committed more than ever to reflecting global environmental standards and minimising our environmental impact.”

Eng. Badr Al Meer, Chief Operating Officer, HIA





## Airport Carbon Accreditation

Hamad International Airport is certified to Level 3 of the Airports Council International's (ACI) Airport Carbon Accreditation.

As part of its carbon management plan, the airport has set a target to improve carbon efficiency per passenger by 30 percent by 2030 against a 2015 baseline. To meet this target, Hamad International Airport has dedicated cross-functional working groups to identify and promote energy and fuel saving initiatives across the whole airport.

Recent initiatives include the optimisation of air-conditioning use for passenger load bridges through integration with flight schedules, replacing conventional lighting with LEDs, and optimising light usage at the airport's boarding gates.

During 2017-18, Hamad International Airport identified 314 individual initiatives to reduce energy consumption and associated CO<sub>2</sub> emissions across the airport campus:

Optimisation type	No. initiatives	Estimated savings in 2017-18	
		Electricity (kWh)	CO <sub>2</sub> (tonnes)
Lighting	266	2,665,067	1,297
Ventilation & cooling systems	43	7,326,837	3,566
Heaters	1	56,851	28
Transformers	4	571,406	278
<b>Total</b>	<b>314</b>	<b>10,620,161</b>	<b>5,169</b>

Table 4: Estimated electricity and CO<sub>2</sub> savings in 2017-18

For its Level 3 Airport Carbon Accreditation, Hamad International Airport has collected data to calculate Scope 3 CO<sub>2</sub> emission associated with:

- ◆ airport tenant fuel and electricity consumption
- ◆ Landing and Take Off (LTO) cycles and Auxiliary Power Unit (APU) usage for aircraft using the airport
- ◆ Hamad International Airport staff business travel
- ◆ Hamad International Airport staff travel to and from the airport
- ◆ passenger and visitor travel to and from the airport





**ATTENTION**  
LA CONDUITE DE CE VEHICULE  
EST EXCLUSIVEMENT RESERVEE  
AUX PERSONNES AUTORISEES  
THE DRIVING OF THIS VEHICULE  
IS EXCLUSIVELY RESERVED FOR  
AUTHORIZED PERSONS



## Ground Transport

### Off-airport Vehicles

Qatar Airways Group operates over 300 vehicles outside the perimeter of Hamad International Airport. A new transport management system is being phased in with a pilot of 100 vehicles being monitored since October 2017. Weekly reports issued by the transport management system since its implementation have revealed several improvements in driver behaviour:

56%  
reduction in over-speeding

36%  
reduction in harsh braking

84%  
reduction in critical over-speeding<sup>i</sup>

85%  
reduction in safety belt infractions

20%  
reduction in harsh acceleration

Future development of the transport management system will include capacity to:

- ◆ monitor and manage fuel consumption at the fleet level
- ◆ monitor vehicle tasks and workload
- ◆ prepare driver report cards
- ◆ optimise vehicle fleet size
- ◆ maximise passenger loads to reduce vehicle trips

### Airside Vehicles

There are over 2,300 vehicles operating within the perimeter of Hamad International Airport. A steering group is proactively working towards safer and more efficient vehicle operations by:

- ◆ collating fuel consumption and vehicle utilisation of all Qatar Airways Group vehicles operating airside
- ◆ developing an airside traffic simulation model to analyse and improve traffic flow
- ◆ developing airside vehicle telematics to provide vehicle operation and performance data

On-going investment in electric vehicles across the airport reduces direct emissions:

- ◆ Qatar Aviation Services has an established and growing fleet of electric ground handling vehicles (see Page 89), and other parts of the business, including Qatar Airways Cargo, are planning to adopt electric vehicles as an alternative to existing petrol and diesel powered vehicles.
- ◆ Another fuel saving initiative relating to airside vehicles is the use of split batteries that allow the hydraulic lifts of Qatar Aircraft Catering Company loading trucks to operate with the engine switched off.

<sup>i</sup> more than 10 kph over the posted speed limit



## Waste Management

Smart product design and specification can minimise waste and excess packaging. Identifying opportunities to reuse or recover materials for other purposes can also contribute towards lower levels of waste.

### OBJECTIVE

Qatar Airways Group's objectives for waste management are to:

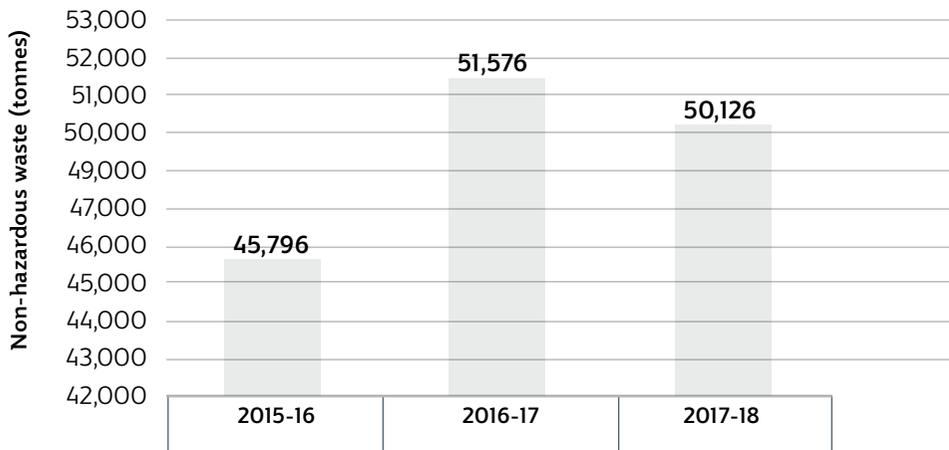
- ◆ minimise waste generation by adopting efficiency principles in design, procurement and operational planning
- ◆ reduce waste disposal by re-using, recycling and recovering energy from unwanted products and materials
- ◆ manage the risk associated with hazardous waste to a level that is as low as reasonably practicable

### Waste Management at Hamad International Airport

Through a centralised waste management facility at Hamad International Airport, Qatar Airways Group is able to monitor the quantity and type of waste generated from different airport activities, and how each type of waste is managed.

Since its opening in 2014, Hamad International Airport has seen an annual increase in total generation of non-hazardous waste. However, during 2017-18, the non-hazardous waste generated at Hamad International Airport reduced by 2.8 percent compared to the previous year (Figure 10).

Three new weigh bridges are planned to be strategically located around the Hamad International Airport campus. Once operational, the weigh bridges will improve measurement of waste collected from the airport.



### Catering Waste

During 2017-18, the following items were segregated for re-use and recycling by Qatar Aircraft Catering Company:

- 13,018 uniform items collected for charity
- 1,361 tonnes packaging waste recycled
- 52 tonnes magazines recycled
- 19,650 litres used cooking oil for bio-diesel

### Cargo Waste

Qatar Aviation Services is helping to reduce waste from cargo operations by returning load spreaders, wooden pallets used for loading cargo, to outstations for re-use. Once checked for structural integrity, an average of approximately 1,750 load spreaders are returned every month. As well as minimising waste, this initiative saves the cost of purchasing new spreaders.

### Plastic Waste

During 2017-18, Hamad International Airport introduced truck-mountable plastic waste cages at strategic locations across the airport campus. The cages improve containment and efficient collection of low density polyethylene plastics, increasing recycling rates and reducing the risk of wind-blown waste on the airport and the nearby coast.

### Used Batteries

In 2017-18, Hamad International Airport entered into an agreement with a new battery recycling facility within the State of Qatar. A total of 262 tonnes of used batteries was recycled during the period.

Figure 10: Hamad International Airport non-hazardous waste generation

The recycling rate for non-hazardous waste at Hamad International Airport has continued to improve over the last three years to an average of 42 percent during 2017-18, compared to 33 percent during 2016-17 (Figure 11).

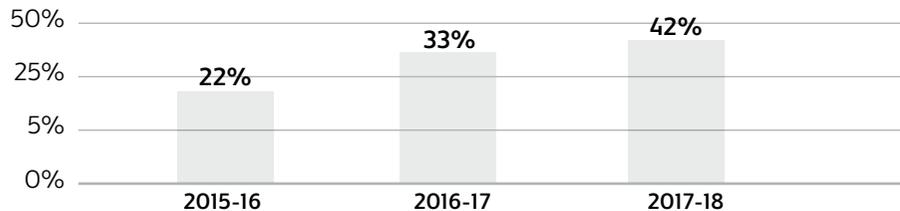


Figure 11: Hamad International Airport annual average recycling rate of non-hazardous waste





# Water and Land

Fresh water is the State of Qatar’s most scarce resource. Rainfall is infrequent and unpredictable, and ground water reserves are limited.

Desalinated seawater is the most prevalent source of water in the country, accounting for about half of the water used. Desalination is a costly and energy intensive process.

To reduce demand for desalinated water, the State of Qatar is investing in advanced technology to treat waste water to higher quality standards. Treated water is distributed for non-potable uses, such as irrigation and industrial processes, reducing demand for desalinated water.

## Water Management at Hamad International Airport

Hamad International Airport monitors water consumption for all airport users to enable the identification of conservation opportunities. The airport measures total volume of water consumption and water efficiency expressed as volume of water per passenger.

Since its opening, Hamad International Airport has seen a year-on-year increase in total water consumption. However, during 2017-18, total water consumed at Hamad International Airport reduced by 0.3 percent compared to the previous year (Figure 12).

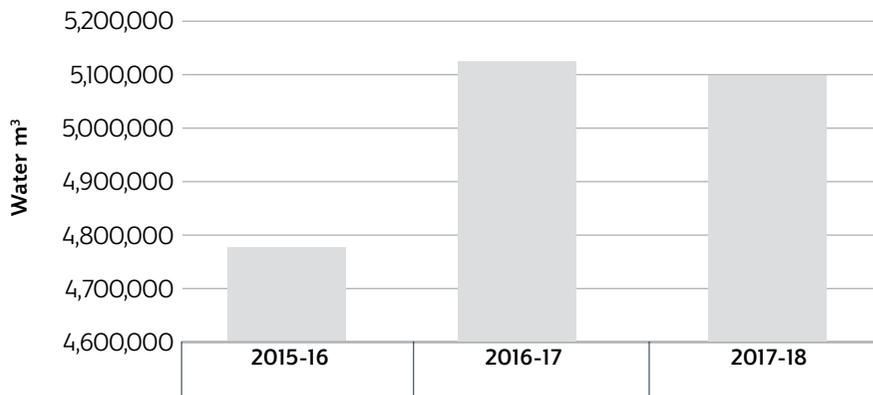


Figure 12: Hamad International Airport annual water consumption

### OBJECTIVE

Qatar Airways contributes towards the aims of the State of Qatar through its own water and land objectives to:

- ◆ optimise water demand through technology and operational practices
- ◆ adopt effective controls to prevent the contamination of water and land





## Water Management at Commercial Properties in Doha

Until this year, water consumption has been calculated based on utility bills. To improve data integrity, since April 2017, monthly meter readings have been taken to create a new baseline against which future water consumption will be measured (Figure 13).

During 2017-18, water consumption at Qatar Airways' corporate offices in Doha totalled 60,572 m<sup>3</sup>. During this same year, aerators were retrofitted to water faucets in office washrooms and kitchens, estimated to reduce water consumption by up to 60 percent.

### Harvesting Condensation

Qatar Airways recently installed six water storage tanks in the basements of three of its commercial properties to collect and recycle condensation water from the buildings' air conditioning which would otherwise be lost to the environment. Up to 1,500 litres of condensate water is recycled in each building every week and used as an alternative to potable water for cleaning external and basement areas.

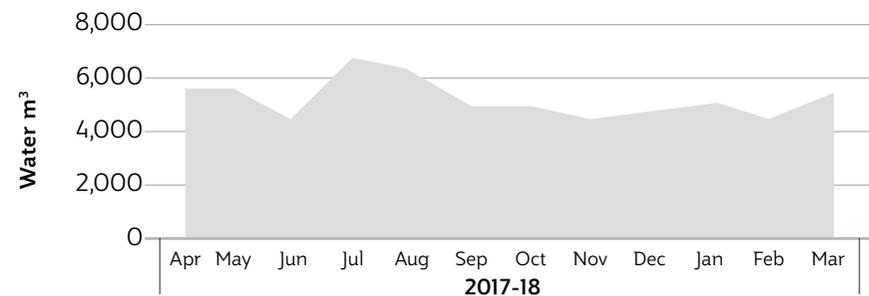
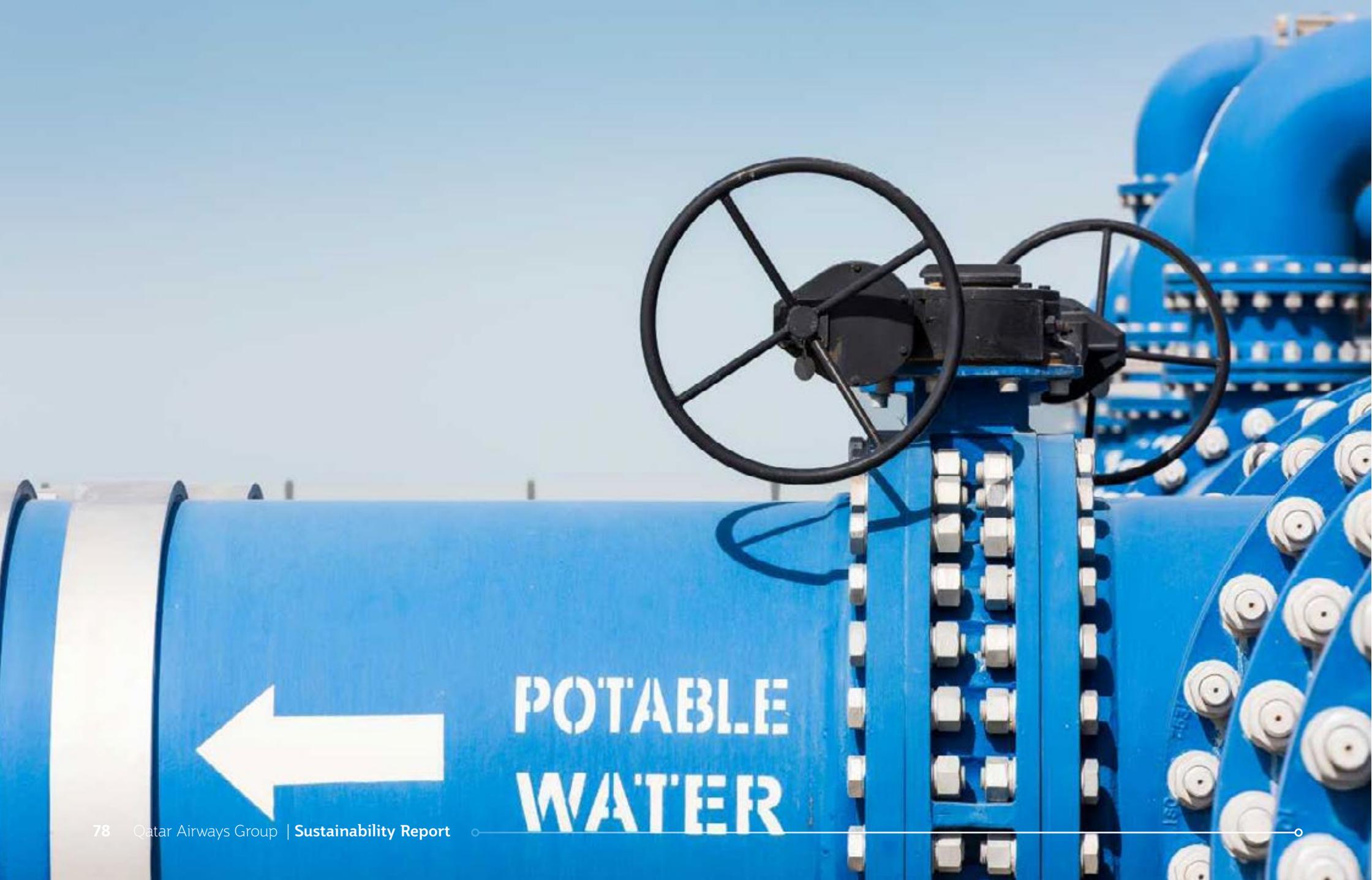


Figure 13: Qatar Airways monthly water consumption at corporate office locations <sup>1</sup>

<sup>1</sup> Including Qatar Airways Tower 1, Tower 2 and Tower 3, Training and Development Building, Technical Building, Integrated Training Centre and Khawala Villas.





## Preventing Pollution of Soil and Water

Qatar Airways Group takes a duty of care with respect to the use, transportation, storage and disposal of potentially hazardous substances, to reduce the risk of an uncontrolled release to the environment.

Across the business, spills and leaks are reported to a centralised occurrence reporting system. Recorded occurrences are reviewed to ensure corrective actions are applied where required.

To enable compliance to environmental regulations, and to protect ground water and the nearby coastal waters of the Arabian Gulf, Hamad International Airport monitors ground water, storm water and soil at fixed environmental monitoring stations around the airport, see page 89.

Zero significant pollution occurrences were recorded during 2017-18.

## Waste Water Treatment

Hamad International Airport's waste water treatment plant has a capacity to treat over 28,000 cubic metres of waste water per day. Waste water is transferred from across the airport campus to be treated and returned for use in irrigation for the airport's landscaping features. The treatment plant received over 2.1 million cubic metres of waste water in 2017-18, of which 96 percent was recovered for reuse (Figure 14).

Hamad International Airport is continuing to review its landscape irrigation systems to improve efficiency. The extent and type of plants used are also under review to further reduce water demand without adversely affecting the visual quality of the landscape.



Figure 14: Waste water influent and treated water for re-use from 2015-16 to 2017-18





## Noise and Air Quality

Aircraft noise has its biggest impact on communities during take-off and landing, whereas engine emissions can have both local and global impacts on air quality.

Advances in aircraft technology and operations have led to significant reductions in aircraft noise and emissions. However, as aviation continues to grow, minimising the impact of noise and air quality on communities living close to airports remains one of the greatest environmental challenges for the industry.

Other considerations are the potential effects that ground equipment and vehicle fleet can have on air quality.

### OBJECTIVE

Qatar Airways Group's objectives for noise and air quality are to:

- ◆ comply with noise regulations and operational procedures
- ◆ quantify and limit the impact that aircraft, vehicles and equipment have on air quality

To reduce the impact of Qatar Airways' operations on local communities at our global destinations, we adhere to airport noise abatement procedures and local emissions regulations, and align with the environmental objectives of our airport stakeholders.



## Cleaner and Quieter Engines

The International Civil Aviation Organization (ICAO) adopted aircraft noise and engine emission certification standards to limit emissions that may impact local communities in the vicinity of airports.

All Qatar Airways aircraft are certified to Chapter 4, the most stringent noise standard for civil aircraft set by ICAO for aircraft built before 31 December 2017.

As of 31 March 2018, 38 percent of Qatar Airways' fleet was certified to CAEP 8, the most stringent standard for aircraft engine emissions set by ICAO (Figure 15).

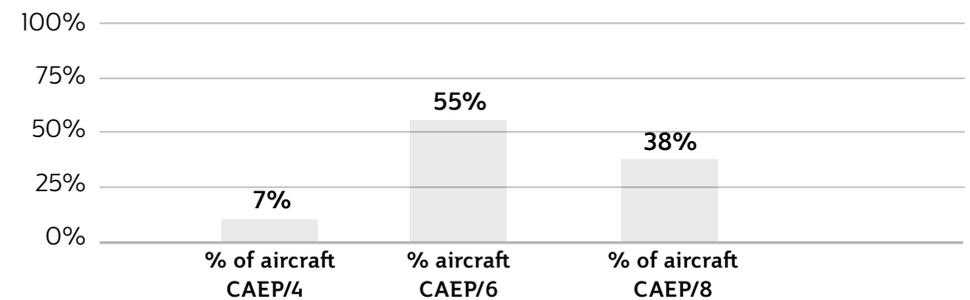
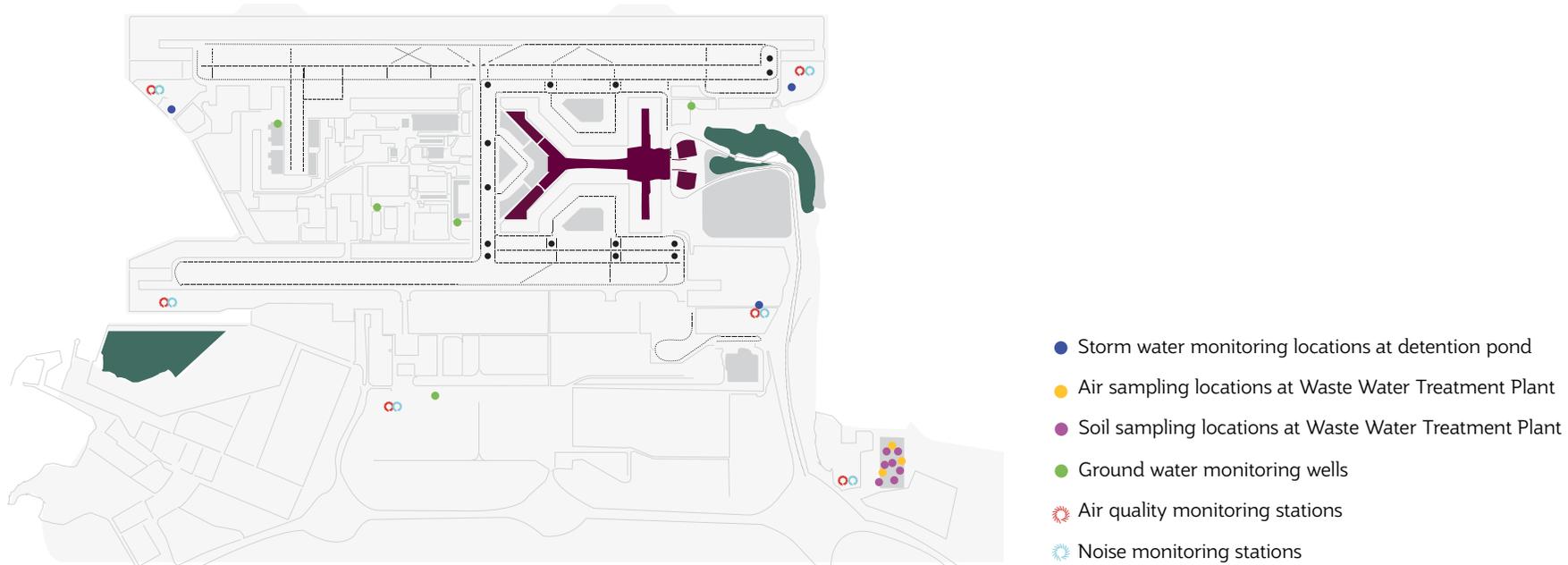


Figure 15: Percentage of Qatar Airways' aircraft by CAEP standards 4, 6 and 8 as of 31 March 2018



## Noise and Air Quality Monitoring at Hamad International Airport

Strategically positioned noise and air quality monitoring stations have been operational at Hamad International Airport since September 2017.



## Electric Vehicle Fleet

Qatar Aviation Services continues to invest in electric vehicles as an alternative to petrol or diesel powered vehicles for its ground handling operations at Hamad International Airport. Electric vehicles eliminate the emission of air pollutants including carbon monoxide, nitrogen oxides and particulates.

Qatar Aviation Services' electric vehicle fleet includes 105 electric baggage tractors and 75 electric forklift trucks, a total of 180 electric vehicles, compared to 141 at the end of the previous year. Building on the success of this initiative, Qatar Aviation Services aspires to replace its entire ground services fleet with electric vehicles within the next five years.



“

“We have zero tolerance to the illegal trade of endangered wildlife, and we are devoted to eliminating wildlife trafficking.”

H.E. Mr. Akbar Al Baker  
Group Chief Executive, Qatar Airways Group



# Nature and Conservation

The illegal trade in wild animals and animal products is one of the biggest threats to the survival of some of the world's most endangered species.

Qatar Airways Group has a zero tolerance policy towards the illegal trade of endangered wildlife and is actively engaged in stopping illegal wildlife transportation.

## OBJECTIVE

Qatar Airways Group's objective for wildlife is to:

- ◆ manage wildlife sensitively and invest in conservation projects

## United for Wildlife

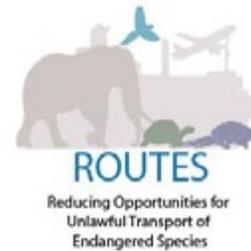


Since signing the United for Wildlife Transport Industry Declaration in March 2016, Qatar Airways Group has risen to the challenge of tackling global wildlife crime.

In signing the Declaration, Qatar Airways Group committed to putting measures in place to:

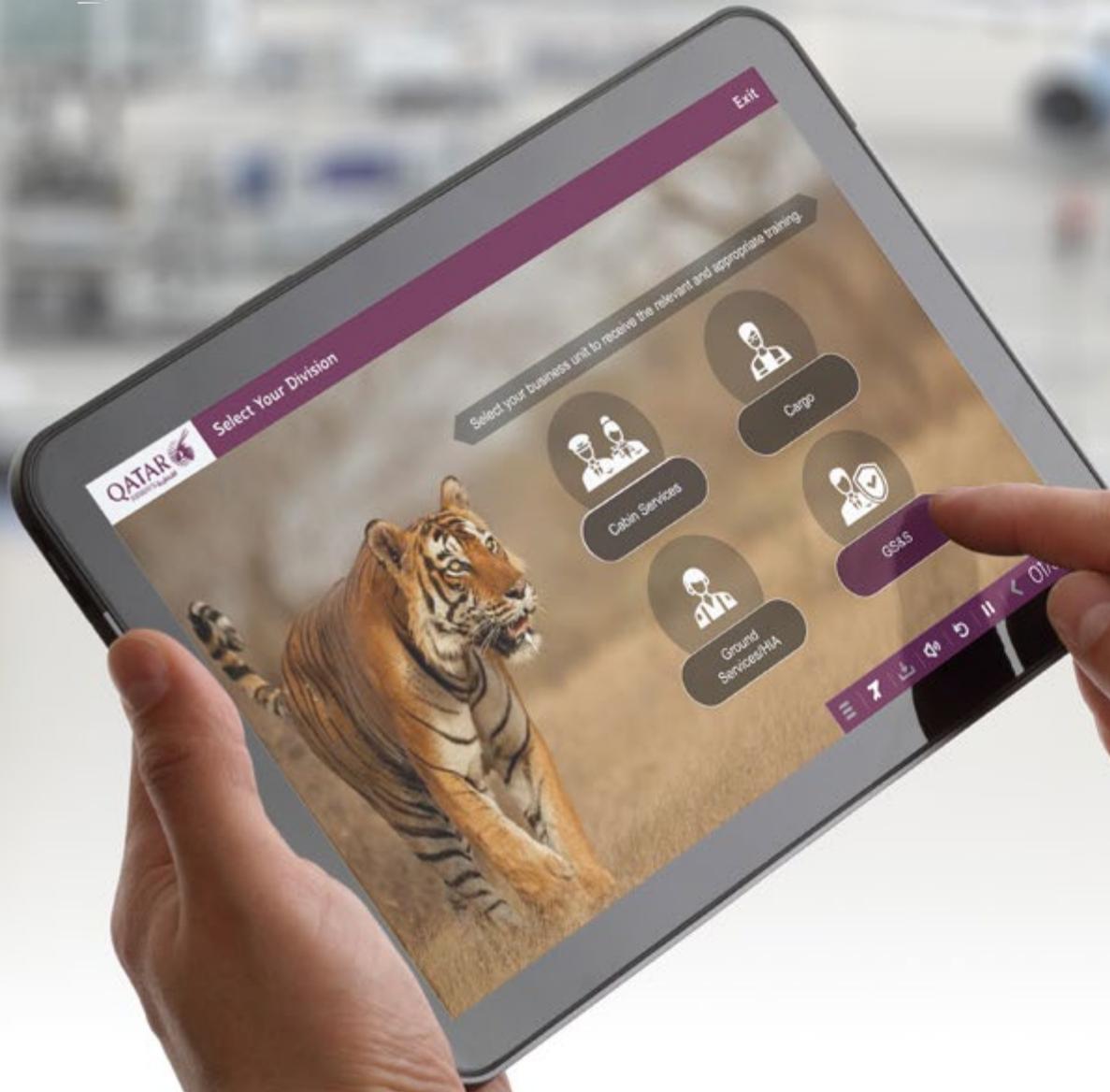
- 1 \_\_\_\_\_  
raise employee and passenger awareness of illegal wildlife transportation
- 2 \_\_\_\_\_  
improve detection of illegally transported wildlife
- 3 \_\_\_\_\_  
share intelligence and best practice with the industry

## ROUTES



To contribute towards the development of an effective response to wildlife crime, Qatar Airways Group joined USAID's ROUTES Partnership in October 2017. The ROUTES Partnership is a select group of private sector, non-government organisations and government agencies collaborating to combat wildlife crime across transportation networks. Since joining the partnership, Qatar Airways Group has made progress in developing its own training and awareness collateral, including:

- 1 \_\_\_\_\_  
monthly articles on commonly trafficked animals featured in our inflight magazine, *The Oryx*
- 2 \_\_\_\_\_  
a United for Wildlife video available on our inflight entertainment system, *Oryx One*
- 3 \_\_\_\_\_  
customer and staff awareness posters for display at Hamad International Airport and selected destinations





## Wildlife E-learning

Qatar Airways Group has developed a bespoke e-learning package, targeted at roles which are most likely to encounter illegal wildlife activity. The training, due to be launched in 2018-19, will familiarise employees with the impacts of wildlife crime, the common routes and methods used to smuggle wildlife upon aircraft, and how to report illegal wildlife activity.

## Detection, Rejection, and Reporting

Qatar Airways Cargo's upgraded booking system requires additional information for animal shipments, including Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) listings. This has improved detection rates and resulted in the rejection of numerous animal shipments.

Wildlife occurrences are reported internally using Qatar Airways Group's occurrence reporting system.

## A Collaborative Approach

Qatar Airways and Hamad International Airport have been working closely with government stakeholders responsible for security and customs at the airport. This has led to the development of shared procedures for reporting and following up on wildlife crime.

For example, the contribution of Qatar Airways and Hamad International Airport to the State of Qatar's National Ivory Action Plan, developed as a recommendation of CITES, augmented towards the Ministry of Municipality and Environment actions to prevent smuggling of ivory through the air transport network.<sup>1</sup>

<sup>1</sup> [https://cites.org/eng/prog/niaps/parties\\_of\\_Importance\\_to\\_watch\\_niaps](https://cites.org/eng/prog/niaps/parties_of_Importance_to_watch_niaps)





# Future Plans

Plans have been initiated across Qatar Airways Group to deliver continued positive impacts in community, health and safety and environmental performance, while supporting ever-more sustainable business practices over the longer term.

Qatar Airways Group's environmental improvement plans were first reported in the 2016-17 Sustainability Report. It is now possible to look back and review progress, and consider plans relating to community and health and safety issues.

	Improvement theme	Projects	Progress					
			QR	HIA	QAS	QACC	QDF	QDC
Safety	Training and Awareness	<b>Enhancing Training Through Technology</b> Identify innovative solutions for communicating across a diverse workforce, including virtual classrooms and smartphone apps.						
		<b>Manual Handling Programme</b> Reduce musculoskeletal injuries related to manual handling by increasing the competency of employees through the implementation of a certified built for purpose manual handling programme.						
		<b>Safety Root Cause Investigation and Training</b> Develop and implement a Health & Safety Root Cause Investigation framework and training program.						
		<b>Change Management</b> Develop employee awareness and competence to effectively lead and manage organisational change across the Qatar Airways Group.						
		<b>Risk Management</b> Integrate enterprise-wide risk management in line with global standards and implement it within Qatar Airways Group to enhance good corporate governance and effective internal controls.						
	<b>Health and Safety Management System</b> Undertake a comprehensive review to align Qatar Airways Group's Occupational Health and Safety Management System to the new International Standard, ISO 45001:2018.							
	<b>Safety Communities</b> Establish a company-wide community of safety champions to assist in the development, promotion and improvement of Qatar Airways Group's safety performance.							
<b>Outstations Outreach</b> <b>Consultation</b> Establish a consultative process to enhance occupational health and safety, and fire safety across Qatar Airways global operations.								

NA: Not applicable



	Improvement theme	Projects	Progress					
			QR	HIA	QAS	QACC	QDF	QDC
Health & Well-being	Physical and Psychological Well-being	<b>Promotion</b> Promote physical and psychological well-being through communications and work sponsored activities.						
		<b>Assistance Programme</b> Establish a reintegration process to assist workers return to the workforce who are medically unable to complete their current roles.						
		<b>Personal Protection Equipment</b> Engage employees in the selection and procurement of Personal Protection Equipment to ensure high quality standards and maximise employee comfort and safety.						
		<b>Office Ergonomics</b> Develop and implement a standard to ensure the ergonomic workstations are utilised across the business.						
		<b>Nursing Mother Rooms</b> Establish and promote the use of nursing rooms.						
Fire Safety	Fire Protection	<b>Fire Standards Residential</b> Develop and implement a standard to identify acceptable company provided employee's accommodation within the State of Qatar.						
		<b>Fire Standard Crew Hotels</b> Develop and implement a standard to identify acceptable hotels for crew layovers.		NA	NA	NA	NA	NA
		<b>Fire Strategy Document</b> Ensure all commercial premises have a valid and tested fire strategy document.						
	Fire Engagement	<b>Enhance Competency</b> Implement a structured approach to raising the Fire Safety Management competency of safety teams across the Qatar Airways Group.						
		<b>Collaboration with Environment</b> Implement a joint internal awareness campaign to promote electrical safety and energy efficiency.						
		<b>Personal Emergency Evacuation Plans</b> Implement an online system to record and assist staff with limited or reduced mobility to evacuate safely.						
		<b>Technology</b> Develop a virtual home fire safety visit video and online e-learning.						



	Improvement theme	Projects	Progress					
			QR	HIA	QAS	QACC	QDF	QDC
Energy & Climate Change	Energy Management	<b>Measure and Monitor</b> Establish systems to measure and monitor electricity and gas consumption in operational buildings.			NA	NA	NA	NA
		<b>Training and Awareness</b> Raise awareness of energy management procedures for relevant employees and contractors.			NA	NA	NA	NA
		<b>Hamad International Airport Energy Working Group</b> Establish working group to identify and implement energy saving initiatives on airport campus.	NA		NA	NA	NA	NA
		<b>Hamad International Airport Energy Efficiency Target</b> Set an energy efficiency target for 2030.	NA		NA	NA	NA	NA
	Passenger Carbon Offset	<b>Carbon Offset Product</b> Identify and subscribe to a credible carbon offset investment mechanism.		NA	NA	NA	NA	NA
		<b>Ticketing and Sales</b> Update ticketing and sales IT systems to allow customers to offset carbon.		NA	NA	NA	NA	NA
	Vehicle Fuel Management	<b>Landside Vehicles</b> Establish systems to measure and monitor fuel consumption from landside vehicle fleet.		NA	NA	NA	NA	NA
		<b>Airside Vehicles</b> Establish systems to measure and monitor fuel consumption from airside vehicle fleet.	NA		NA	NA	NA	NA
		<b>Hamad International Airport Vehicle Working Group</b> Establish an airport vehicle working group comprised of airport stakeholders with airport vehicle permits.	NA		NA	NA	NA	NA
	Aircraft Fuel and Emissions	<b>Qatar Airways Aircraft Fuel and Emissions Programme</b> Enhance the Qatar Airways Aircraft Fuel and Emissions Programme to identify, measure and increase fuel savings from weight reduction, route optimisation, aircraft on the ground, aircraft performance and inflight decisions.		NA	NA	NA	NA	NA
Sustainable Alternative Fuels	<b>Algae Biofuel Project</b> Collaborate with Qatar University on phase 2 of the Algae Biofuel Project.		NA	NA	NA	NA	NA	



	Improvement theme	Projects	Progress					
			QR	HIA	QAS	QACC	QDF	QDC
Waste	Waste Management	<b>Non-Hazardous Waste</b> Establish systems to measure and monitor all types of non-hazardous waste to reduce volume of waste sent to landfill, guided by the waste management hierarchy.			NA		NA	
		<b>Hazardous Waste</b> Establish systems to manage and monitor all types of hazardous waste to prevent pollution.			NA		NA	NA
		<b>Office Waste Recycling Trial</b> Undertake a recycling trial in specified office locations to collect baseline data and lessons learned for wider implementation.		NA	NA	NA	NA	NA
		<b>Cabin Waste</b> Prepare scope and business case for cabin waste management project.		NA	NA	NA	NA	NA
		<b>Training and Awareness</b> Raise awareness of waste management procedures for relevant employees and contractors.			NA		NA	
		<b>Hamad International Airport Waste Management Working Group</b> Establish working group to identify and implement waste management initiatives on airport campus.	NA		NA	NA	NA	NA
		<b>Hamad International Airport Waste Efficiency Target</b> Establish robust baseline data for waste and set waste efficiency target.	NA		NA	NA	NA	NA
		<b>Cargo Load Spreaders</b> Return and re-use cargo load spreaders to cargo outstations to reduce waste.		NA	NA	NA	NA	NA
		<b>Vehicle Battery Recycling</b> Recycling of vehicle and equipment batteries.	NA	NA		NA	NA	NA
		<b>Waste Oil Recycling</b> Recycling of vehicle and equipment oil.	NA	NA		NA	NA	NA



	Improvement theme	Projects	Progress					
			QR	HIA	QAS	QACC	QDF	QDC
Water & Land	Water Management	<b>Measure and Monitor</b> Establish systems to measure and monitor water consumption in operational buildings.			NA	NA	NA	NA
		<b>Training and Awareness</b> Raise awareness of water management procedures for relevant employees and contractors.			NA	NA	NA	NA
		<b>Hamad International Airport Water Management Working Group</b> Establish working group to identify and implement water saving initiatives on airport campus.	NA		NA	NA	NA	NA
		<b>Hamad International Airport Water Efficiency Target</b> Set a water efficiency target for 2030.	NA		NA	NA	NA	NA
	Water & Land	<b>Spill Response Procedures</b> Review and update existing spill response procedures and ensure availability of spill kits.				NA	NA	NA
		<b>Report and Monitor</b> Ensure spills are reported on the occurrence reporting system and closed-out appropriately.				NA	NA	NA
		<b>Training and Awareness</b> Raise awareness of spill response procedures for relevant employees and contractors.				NA	NA	NA
Noise & Air Quality	Air Conditioning Equipment and Gases	<b>Maintenance Procedures</b> Review and update existing air conditioning equipment maintenance procedures.			NA	NA	NA	NA
		<b>Air Conditioning Equipment Inventory</b> Create and maintain an inventory of all air conditioning equipment and gases used in commercial buildings.			NA	NA	NA	NA
		<b>Compliance Plan</b> Develop and implement a plan for the replacement of old-generation equipment.		NA	NA	NA	NA	NA
	Aircraft Air Emissions	<b>Aircraft Air Quality Register</b> Maintain register of aircraft engine compliance to ICAO Air Quality Standards (CAEP).		NA	NA	NA	NA	NA
	Aircraft Noise Emissions	<b>Aircraft Noise Register</b> Maintain register of aircraft engine compliance to ICAO Noise Standards (Chapters).		NA	NA	NA	NA	NA



	Improvement Theme	Projects	Status						
			QR	HIA	QAS	QACC	QDF	QDC	
Nature & Conservation	Illegal Transportation of Endangered Wildlife	<b>Booking Systems</b> Review and update cargo booking system to include controls for endangered species.		NA	NA	NA	NA	NA	
		<b>Employee Training</b> Develop and deliver a training and awareness programme for the prevention of transportation of endangered wildlife.		NA	NA	NA	NA	NA	
		<b>Customer Awareness</b> Develop a customer awareness programme to deliver information at Hamad International Airport and on-board Qatar Airways flights.		NA	NA	NA	NA	NA	
	Sustainable Products and Contracts	<b>Materials Inventory</b> Review and maintain inventory of procured catering materials and identify any items that pose environmental risk.		NA	NA		NA	NA	
		<b>Environment and Sustainability Questionnaire</b> Develop an environment and sustainability questionnaire and issue to catering supply chain.		NA	NA	NA	NA	NA	
		<b>Prohibited Items</b> Review and update food policies to identify prohibited items.		NA	NA		NA	NA	
		<b>Contracts Review</b> Review and update standard terms and conditions to include environmental requirements.		NA	NA	NA	NA	NA	
		<b>Alternative Plastic Bags</b> Review the type of plastic bags used for retail, and identify alternatives with better environmental performance.	NA	NA	NA	NA		NA	
	Management & Stakeholder Engagement	Group Environmental Management System	<b>Certification of Qatar Airways Group's Environmental Management System</b> Develop, implement and maintain the Qatar Airways Group Environmental Management System. Aim to achieve certification to Level 2 of IATA's IEnvA scheme by December 2017.		NA	NA	NA	NA	NA
		Employee Accountabilities	<b>Environmental Accountabilities</b> Develop employee environmental competence matrix and include environmental accountabilities for all roles in all employee job descriptions.		NA	NA	NA	NA	NA
<b>Training and Awareness</b> Develop and deploy a mandatory environmental e-learning programme targeted to different competence levels.				NA	NA	NA	NA	NA	
Environmental Data		<b>Environmental Data Management Software</b> Develop environmental data management tool to standardise data collection analysis and reporting across the Group.		NA	NA	NA	NA	NA	





## Data Tables

### Employees

	Number of Employees			
	2014-15	2015-16	2016-17	2017-18
<b>Qatar Airways Group</b>	36,549	39,369	44,452	45,633
<b>Qatar Airways</b>	21,880	23,802	30,537	32,184
<b>Qatar Executive</b>	107	113	385	415
<b>Qatar Aircraft Catering Company</b>	1,501	1,867	2,389	2,383
<b>Qatar Aviation Services</b>	7,177	7,478	7,812	7,419
<b>Qatar Duty Free</b>	1,807	2,011	1,824	1,741
<b>Qatar Distribution Company</b>	91	100	95	92
<b>Dhiafatina Hotels</b>		77	71	54
<b>Hamad International Airport</b>	1,055	1,235	1,339	1,345

### Fleet, Flights and Destinations

	Fleet				Flights				Destinations	
	2014-15	2015-16	2016-17	2017-18	2014-15	2015-16	2016-17	2017-18	2015-16	2017-18
<b>Qatar Airways Group</b>	159	190	207	225						
<b>Qatar Airways</b>	151	182	196	213						
<b>-Passenger</b>			175	190	146,561	165,228	188,140	167,738	153	151
<b>-Cargo</b>			21	23		15,339	20,414	21,646	59	60
<b>Qatar Executive</b>	8	10	11	12			1,793	1,681		

### Operations

	Passengers				Aircraft Movements				Cargo			
	2014-15	2015-16	2016-17	2017-18	2014-15	2015-16	2016-17	2017-18	2014-15	2015-16	2016-17	2017-18
<b>Qatar Airways</b>	22,352,000	26,654,000	32,007,211	29,162,478					764,324	954,191	1,153,825	1,359,203
<b>Hamad International Airport</b>	27,421,927	32,413,942	38,169,168	34,212,750	193,332	222,868	250,419	211,658	1,208,138	1,534,553	1,821,361	2,068,073



## Community

Charitable Donations to Educate A Child (US\$)					Individuals Employed under Shafallah			
2014-15	2014-15	2015-16	2016-17	2017-18	2014-15	2015-16	2016-17	2017-18
718,817	1,116,052	821,608	654,345	289,814	27	29	39	49

## Health and Safety

Lost Time Injury Frequency Rate						Proactive Workplace Safety Inspections		Number of Fires per 1,000 Staff			Number of Injuries from Fire		
2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	Target	Completed in 2017-18	2015-16	2016-17	2017-18	2015-16	2016-17	2017-18
9.9	8.1	5.3	4.8	5.1	5.0	2,500	4,566	0.17	0.37	0.28	7	0	0

## Environment - Hamad International Airport (Waste)

Total Waste (tonnes)				Percentage of Non-hazardous Waste Recycled			
2014-15	2015-16	2016-17	2017-18	2014-15	2015-16	2016-17	2017-18
27,567	45,796	51,576	50,126	11%	24%	33%	42%

## Environment - Hamad International Airport (Water)

Potable Water Consumption (m³)				Waste Water Influent (m³)				Percentage of Water Treated for Re-use			
2014-15	2015-16	2016-17	2017-18	2014-15	2015-16	2016-17	2017-18	2014-15	2015-16	2016-17	2017-18
3,497,892	4,789,058	5,114,678	3,497,892	4,789,058	5,114,678	3,497,892	4,789,058	90%	95%	91%	96%



## Carbon Emissions

Carbon Emissions (CO <sub>2</sub> t)	Qatar Airways Group				Qatar Airways			
	2014-15	2015-16	2016-17	2017-18	2014-15	2015-16	2016-17	2017-18
<b>Total - Scope 1 and 2</b>	12,446,564	14,974,227	18,085,423	19,976,160	12,220,713	14,713,308	17,753,979	19,621,194
<b>Total - Scope 1, 2 and 3</b>				20,093,274				19,714,747
<b>Scope 1 (direct emissions)</b>	12,139,530	14,607,835	17,677,160	19,694,432	12,094,992	14,557,895	17,580,355	19,565,096
Aviation Fuel	12,110,601	14,573,440	17,631,165	19,643,482	12,094,535	14,557,531	17,579,851	19,564,501 <sup>2</sup>
Diesel	25,227	30,300	34,326	35,734				
Petrol	3,641	3,450	3,950	3,977	456	364	504	596 <sup>3</sup>
Liquid Petroleum Gas	61	646	7,719	8,590				
Natural Gas				2,648				
<b>Scope 2 (indirect emissions)</b>	307,034	366,392	408,263	281,729	125,721	155,413	173,624	56,098
Electricity	307,034	366,392	405,443	280,407	125,721	155,413	173,624 <sup>1</sup>	56,098 <sup>4</sup>
Natural Gas			2,820	8				
District Heating				8				
Combined Heat and Power				1,305				
<b>Scope 3 (indirect emissions)</b>				117,114				93,553
Electricity				117,114				93,553 <sup>5</sup>

Carbon Emissions (CO <sub>2</sub> t)	Qatar Duty Free				Qatar Distribution Company			
	2014-15	2015-16	2016-17	2017-18	2014-15	2015-16	2016-17	2017-18
<b>Total - Scope 1 and 2</b>	2,931	2,665	3,481	3,855	1,633	1,607	1,528	1,319
<b>Total - Scope 1, 2 and 3</b>				3,932				1,341
<b>Scope 1 (direct emissions)</b>	113	164	138	115	14	11	4	3
Diesel	97	130	117	100 <sup>11</sup>				
Petrol	16	34	21	15 <sup>11</sup>	14	11	4	3
Liquid Petroleum Gas								
Natural Gas								
<b>Scope 2 (indirect emissions)</b>	2,817	2,501	3,343	3,740	1,619	1,595	1,524	1,317
Electricity	2,817	2,501	3,343	3,740 <sup>12</sup>	1,619	1,595	1,524 <sup>13</sup>	1,317 <sup>14</sup>
Natural Gas								
District Heating								
Combined Heat and Power								
<b>Scope 3 (indirect emissions)</b>				78				22
Electricity				78 <sup>10</sup>				22 <sup>10</sup>



Carbon Emissions (CO <sub>2</sub> t)	Qatar Executive				Qatar Aircraft Catering Company				Qatar Aviation Services			
	2014-15	2015-16	2016-17	2017-18	2014-15	2015-16	2016-17	2017-18	2014-15	2015-16	2016-17	2017-18
<b>Total - Scope 1 and 2</b>	16,073	15,917	51,318	78,989	17,695	19,766	31,245	30,607	37,334	42,556	43,649	43,742
<b>Total - Scope 1, 2 and 3</b>								30,655				43,788
<b>Scope 1 (direct emissions)</b>	16,073	15,917	51,318	78,989	5,236	6,098	14,430	14,694	21,948	26,507	27,139	27,334
Aviation Fuel	16,066	15,909	51,314	78,981 <sup>6</sup>								
Diesel					4,688	5,098	6,407	5,808 <sup>8</sup>	19,942	24,508	24,965	25,347 <sup>8</sup>
Petrol	7	8	5	7 <sup>7</sup>	487	354	398	395 <sup>8</sup>	2,006	1,999	2,173	1,987 <sup>8</sup>
Liquid Petroleum Gas					61	646	7,624	8,491 <sup>8</sup>				
Natural Gas												
<b>Scope 2 (indirect emissions)</b>					12,459	13,668	16,815	15,912	15,386	16,049	16,510	16,408
Electricity					12,459	13,668	16,815	15,912 <sup>9</sup>	15,386	16,049	16,510	16,408 <sup>9</sup>
Natural Gas												
District Heating												
Combined Heat and Power												
<b>Scope 3 (indirect emissions)</b>								48				46
Electricity								48 <sup>10</sup>				46 <sup>10</sup>

Carbon Emissions (CO <sub>2</sub> t)	Dhiafatina Hotels		EU Outstations	Hamad International Airport (directly managed)			
	2016-17	2017-18	2017-18	2014-15	2015-16	2016-17	2017-18
<b>Total - Scope 1 and 2</b>	14,643	13,530	1,513 <sup>18</sup>	150,186	178,408	185,056	181,411
<b>Total - Scope 1, 2 and 3</b>							204,779
<b>Scope 1 (direct emissions)</b>	1,744	4,071	28 <sup>19</sup>	1,154	1,243	2,033	4,101
Diesel	1,649	1,332 <sup>15</sup>	15	500	563	1,188	3,133 <sup>21</sup>
Petrol			6	654	680	844	968
Liquid Petroleum Gas	95	99 <sup>15</sup>					
Natural Gas		2,641 <sup>16</sup>	7				
<b>Scope 2 (indirect emissions)</b>	12,899	9,458	1,485 <sup>20</sup>	149,032	177,165	183,023	177,310
Electricity	10,328	9,458 <sup>17</sup>	163	149,032	177,165	183,023	177,310
Natural Gas	2,572 <sup>16</sup>		8				
District Heating			8				
Combined Heat and Power			1,305				
<b>Scope 3 (indirect emissions)</b>							23,368
Electricity							23,368 <sup>22</sup>



## Footnotes

1	Includes electricity consumption from certain company provided accommodation.
2	Calculated using fuel data from ACARS (Aircraft Communications Addressing and Reporting System) and, if not available, from techlogs (aircraft technical logs). Excludes fuel burn of wet-leased out aircraft, but includes wet-leased in aircraft. Includes Auxiliary Power Unit (APU) fuel consumption, based on the total APU operating hours and average fuel burn per hour by aircraft type.
3	Fuel consumption relates to vehicles being monitored only. This represents over a quarter of the total Qatar Airways vehicle fleet. Calculated from fuel invoices for each vehicle.
4	Excludes electricity consumption from all accommodation. All electricity consumption data from accommodation are now classed as Scope 3. Includes on-airport consumption (taken from meter readings) and off-airport commercial buildings consumption (taken from a mix of meter readings and utility bills).
5	Includes all Qatar Airways residential electricity consumption for which data is available. The junior flats consumption (subset of this figure) includes consumption from other business units, since a detailed breakdown is not available.
6	Calculated using the fuel burn (in kilograms) taken from the fuel report generated by FOS (Fuel Operating System). Data accuracy of the fuel report is approximately 98%.
7	Calculated in the same way as Qatar Airways vehicles (see footnote 3).
8	Calculated using invoices provided by the fuel supplier.
9	Relates to operations at the airport. Calculated using meter readings from substations.
10	Relates to electricity consumption for accommodation for which data is available. Excludes electricity consumption in junior staff flats.
11	Calculated using fuel invoices (provided by the fuel supplier), plus the amount spent on fuel cards for uplifts at fuelling stations. The latter is an estimation on fuel consumption.
12	Includes electricity consumption from Qatar Duty Free operations at the airport and from the boutique located in Oryx Rotana.
13	Includes residential electricity consumption for which data is available.
14	Excludes company residential electricity consumption, since this is counted as Scope 3 emissions.
15	Relates to Oryx Rotana hotel only. Calculated from invoices received from fuel supplier.
16	Consumption of natural gas has been re-classified from Scope 2 in 2016-17 to Scope 1 in 2017-18. This is because natural gas is supplied to the hotel directly and burned onsite using boilers for heating or used in the kitchens.
17	Includes electricity consumption from Oryx Rotana, Sheraton Skyline and Novotel Park. Calculated from meter readings. Excludes the Qatar Duty Free boutique at Oryx Rotana.
18	Includes the data from all airport operations within the European Union for which data was available.
19	Relates to fuel consumption of vehicles for which there is data. Fuel consumption is a mix of monthly averages and actual consumption.
20	Relates to emissions from electricity and heating for which there was data for. Calculated from a mix of average monthly/quarterly consumption and actual consumption from meter readings.
21	Includes the emissions from diesel consumption of the new waste incinerator plant as well as the emissions from vehicles and the emergency generator.
22	Includes emissions from the consumption of electricity by non-Qatar Airways Group tenants at the airport, including Ministry of Interior, Qatar Civil Aviation Authority, Q-Jet, Qatar Amiri Flight.



## Carbon Equivalent Emissions

Carbon Equivalent Emissions (CO <sub>2</sub> e t)	Qatar Airways Group	Qatar Airways	Qatar Executive	Qatar Aircraft Catering Company	Qatar Aviation Services
	2017-18	2017-18	2017-18	2017-18	2017-18
<b>Scope 1 (direct emissions)</b>	<b>19,815,892</b>	<b>19,685,343</b>	<b>79,474</b>	<b>14,754</b>	<b>27,496</b>
Aviation Fuel	19,764,211	19,684,744	79,467		
Diesel	35,946			5,842	25,497
Petrol	4,003	600	8	398	1,999
Liquid Petroleum Gas	8,613			8,514	
Natural Gas	3,120				

Carbon Equivalent Emissions (CO <sub>2</sub> e t)	Qatar Duty Free	Qatar Distribution Company	Dhiafatina Hotels	EU Outstations	Hamad International Airport (directly managed)
	2017-18	2017-18	2017-18	2017-18	2017-18
<b>Scope 1 (direct emissions)</b>	<b>115</b>	<b>3</b>	<b>4,552</b>	<b>28</b>	<b>4,126</b>
Diesel	100		1,340	15	3,152
Petrol	15	3		6	974
Liquid Petroleum Gas			99		
Natural Gas			3,113	7	



# Assurance Statement

## Context

We have been engaged by the Qatar Airways Group to perform an independent verification with reasonable assurance of the scope 1, 2 and select scope 3 carbon inventory data of the following business entities for fiscal year 2018 (April 1, 2017 – March 31, 2018) as presented in the Qatar Airways Group's Carbon Footprint report. Scope 3 purchased electricity emissions have been included for electricity consumption of staff accommodation buildings and tenants at Hamad International Airport that are not part of the QR Group.

QR-Group structure		Business Unit		
Airline	Qatar Airways	Qatar Executive		
		EU outstations		
Subsidiaries	Airline Business	Qatar Airways Company W.L.L		
		Qatar Airways (Proprietary) LTD		
		Qatar Airways Oman W.L.L		
		Qatar Airways Q.C.S.C		
	Other Business	Qatar Aviation Services (QAS)		
		Qatar Distribution Company (QDC)		
		Qatar Aircraft Catering Company (QACC)		
		Qatar Duty Free Company (QDFC)		
		Internal Media Services Company (IMS)		
		Qatar Duty Free Food & Beverage (QDF F&B)		
	Hotel Business	Dhifatina for Hotels S.P.C	Oryx Rotana	
			The Airport Hotel	
			Edinburgh Park Hotel Ltd.	
			Dhifatina Holdings Ltd. (Sheraton Skyline London)	
	Management	Hamad International Airport		

All other information in the Qatar Airways Group's Carbon Footprint report is not subject to our assurance engagement and we do not report and do not opine on this information.

The Aeropolitical and Corporate Affairs department of the Qatar Airways Group is responsible for the preparation and presentation of the Qatar Airways Group's Carbon Footprint report, including the reported annual environmental data and information presented therein. We are responsible for providing an Assurance Statement on the reported annual environmental data presented in the Report. Verifavia S.A.R.L. and Verifavia (UK) Ltd. disclaim any liability or responsibility to a third party for decisions, whether investment or otherwise, based on this Assurance Statement.

## Criteria

The criteria used by the Qatar Airways Group to report the carbon inventory data is the Greenhouse Gas Protocol – "A Corporate Accounting and Reporting Standard" (Revised Edition).

For Hamad International Airport Qatar, the carbon inventory data is also based on the requirements of the Airport Carbon Accreditation programme (Airport Carbon Accreditation Guidance Document Issue 10, September 2016).

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

- ISO14065:2013 - Greenhouse gases – requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition
- ISO14064-3:2012 - Greenhouse Gases – Specification with guidance for the validation and verification of greenhouse gas emissions and removals
- Chapter 10 of the Greenhouse Gas Protocol – "A Corporate Accounting and Reporting Standard" (Revised Edition)
- Section 10 of the Airport Carbon Accreditation Guidance Document Issue 10, September 2016

## Responsibilities

The Qatar Airways Group is solely responsible for the preparation and reporting of their carbon inventory data, for any information and assessments that support the reported data, for determining the group's objectives in relation to carbon information and management, and for establishing and maintaining appropriate performance management and internal control systems from which reported information is derived.



In accordance with the verification contract, it is the responsibility of Verifavia to form an independent opinion, based on the examination of information and data presented in the Carbon Footprint report, and to report that opinion to the Qatar Airways Group. We also report if, in our opinion:

- the carbon inventory data is or may be associated with misstatements (omissions, misrepresentations or errors) or non-conformities; or
- the verification team/verifier has not received all the information and explanations that it requires to conduct its examination; (omissions, misrepresentations or errors) or non-conformities; or
- improvements can be made to the operator's performance in monitoring and reporting of carbon inventory data.

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 requirements of the Greenhouse Gas Protocol in terms of relevance, completeness, consistency, transparency and accuracy. This also involved assessing where necessary estimates and judgements made by the Qatar Airways Group in preparing the data and considering the overall adequacy of the presentation of the data in the Carbon Footprint report.

#### Independence Statement

We confirm that Verifavia and the verification team are independent of the Qatar Airways Group and have not assisted in any way with the development of the carbon inventory or in the preparation of any text or data provided in the Carbon Footprint report, with the exception of this Assurance Statement.

#### Opinion

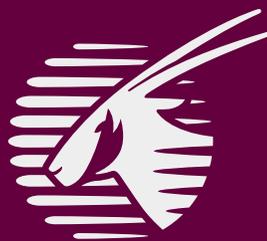
We conducted a verification of the carbon inventory data reported by the Qatar Airways Group in its Carbon Footprint report and presented above. On the basis of the verification work undertaken to reasonable assurance, these data are fairly stated and contain no material misstatements or material non-conformities.

#### Recommendations

- build upon ongoing development and continue to enhance improvements in the Qatar Airways Group Carbon Footprint documentation relating to the data accounting and management control system, including risk assessment and additional control activities.

Paris & London, 23 September 2018

Julien Dufour, CEO, VERIFAVIA SARL & VERIFAVIA (UK) LTD



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