

## A message from Luxaviation UK's CEO, Patrick Margetson-Rushmore and MD, George Galanopoulos:

Luxaviation UK is embedding sustainability at the core of our business.

We recognise the growing impact air travel has on the environment, and are seeking to address this as best as we can. There are many projects in place across the business to make this a reality, both in the air and on the ground.

Our recent commitment to invest in the most efficient aircraft available for our business is a move that will help us to achieve an improvement in our fuel efficiency by 2020.

We have also forged a dynamic partnership with aircraft manufacturers and Airclub to help explore sustainability opportunities.

We want our customers to feel sure that we are making every effort to become a more sustainable worldwide airline and to reduce the impacts of aviation on our environment.

Regards



**Patrick Margetson-Rushmore**  
Chief Executive, Luxaviation UK



**George Galanopoulos**  
Managing Director, Luxaviation UK

*The aim of this policy is to communicate our key environmental policies and targets. We will provide twice yearly updates on our progress against these targets, fixed on a 2014 baseline.*

*We believe that a sustainable business is one which can continue to satisfy the needs of our customers while acting responsibly toward the environment and the communities in which it operates.*

*While this policy deals solely with the environmental impacts of our business, our journey to becoming a more sustainable company is also closely linked with our social and ethical responsibilities.*

## POLICY AND COMMITMENT STATEMENT

*Concurrent and updated every 6 months*

The CEO and each employee are responsible for ensuring compliance with this policy

LEA is committed to:

- Meeting or exceeding all environmental laws and regulations.
- Identifying significant aspects and impacts of our activities on the environment.
- Maintaining procedures and systems that ensure environmental laws and regulations are met or exceeded.
- Implementing environmental management and review systems to; mitigate significant environmental risks; ensure environmental aspects are taken into account in our business decisions and commercial activities: and monitor, audit and review our performance, striving for continual improvement.
- Communicating appropriate environmental information to affected employees, customers, contractors, the public, regulatory authorities and emergency response authorities.
- Safeguarding the environment by adopting sustainable business practices, technologies and procedures that take energy use, pollution prevention, water conservation, other emissions and conservation of natural resources into account.
- Engaging with our stakeholders, including customers, suppliers and shareholders, in our effort to reduce our environmental footprint.
- Setting clearly defined objectives and targets addressing improvements in performance on environmental issues and reporting against them.
- Striving to continuously improve our environmental performance.
- Using natural resources efficiently, minimising waste and harmful releases to the environment.

The CEO will actively work to ensure that each employee remains focused on and committed to our environmental, social and economic success and will:

- Hold the Senior Management Team accountable for the environmental performance of his/her department.
- Require each department to provide the training necessary that we comply with environmental rules and regulations and that our impacts on the environment are minimised.
- Require each employee to comply with the environmental policy statement and the company's policies and procedures regarding environmental, social and economic sustainability.
- Actively encourage employees to find environmentally friendly methods of running our business.

We recognise that our first priority is to reduce the amount of waste we generate; to re-use and recycle as much as we can of what's left and to avoid the use of landfill sites where possible.

## GENERAL

We always consider full compliance with all applicable environmental laws and regulations as the minimum acceptable level of performance for our company.

We are establishing an environmental management system (EMS) modelled on the ISO14001 standard and will help us meet our compliance objectives and continuously improve our environmental performance.

The aim of the business is:

- To be efficient in the air.
- To be efficient on the ground.
- To lead in shaping a greener future for aviation.

## AIRCLUB

Luxaviation UK is a founding member of AirClub which is a leading global airline operator's alliance to create global partnership efficiencies and cost savings in procurement, technology and best practice.

Luxaviation UK are leaders in strategic industry standards for safety, security, customer service, corporate objectives and improving aviation technology. With the largest fleet of collective aircraft and staff, we will align group objectives and global aviation policies with a view to improve environmental transparency, accountability and a sustainable future.

We're also pressing for governments around the world to agree a robust climate change framework which includes aviation. With new, sustainably produced and lower carbon biofuels and step change technologies that will dramatically improve the fuel efficiency of planes, we're confident that airlines will play their part in meeting challenging carbon reduction targets.

Based on this knowledge, the group is profoundly aware that its activities as a world's leading aviation alliance can have substantial ecological implications. The group has a responsibility for ensuring a constant and reliable supply of advanced and high-quality products to meet the needs of people around the world. We set our environmental long-term vision based on the rationale that, while meeting the various needs in the market, we will work to balance our operations with the earth's capacity, maintaining harmony with nature.

Luxaviation UK will strive to increase transport efficiency through improved distribution strategy, including optimum routing and fleet performance.

## CLIMATE CHANGE AND AVIATION

Aviation is currently a relatively small contributor to carbon greenhouse gas emissions, however it is growing. The current contribution is 1.6% but is expected to rise to 2.5% by 2050. The emissions are produced by the burning of fossil fuels which power our aircraft engines. There are suggestions that the release of these emissions at a high altitude during flight could have a bigger impact than being released on the ground. We take our responsibilities very seriously and have given this aspect a key priority by producing this policy. We have established programs and initiatives and made significant investments to maximise fuel efficiency, reduce greenhouse gas emissions and minimize energy use across the company.

Our aim is:

To be efficient in our use of fuel and energy and to promote an international framework to limit the contribution of aviation to climate change and work with UK, European and worldwide industry partners to limit aviations effect on climate change.

To support research involving discussions with aircraft and engine manufacturers.

Influencing the policy debate on various environmental issues including effective emissions trading and industry coordination.

## AIR OPERATIONS

Over 99% of our Scope 1 and 2 carbon emissions come from the fuel we use to power our aircraft, so super-efficiency is our ultimate challenge and goal. We take a very detailed and strategic approach to the way we manage and monitor our fuel usage, and recent developments are really helping us deliver our fuel efficiency programme – such as the arrival of our newer and younger fleet of aircraft, which are up to 15% more efficient per seat than the aircraft they replace.

Airops (Aviation management software) and Total AOC are sophisticated software packages enabling us to build on our existing fuel efficiency initiatives to accurately measure performance and identify and prioritise opportunities for further fuel and carbon savings.

The systems allow us to collect, consolidate and analyse a wealth of data from multiple parameters and trend monitoring per flight in an easy-to-use, single source to enable our operational teams to drive decision making and increase efficiencies, in areas such as: aircraft operations; how arrival delays and holding patterns are affecting fuel usage; maintenance programmes; pilot technique; fuel use on the ground; weight reduction initiatives and more.

We recognise that fuel burnt by our aircraft is the main contributor to our emissions and this is where we are giving a high priority. We are committed to flying our aircraft in the most sustainable way possible, investing in the least polluting aircraft available and ensuring that all aircraft are flown as efficiently as possible.

We are committed to utilising lighter weight alternatives and new materials for onboard

products that have a good maintenance life cycle.

We support investment in Air Traffic Control systems to guide and track air traffic more precisely and efficiently to save fuel and reduce noise and pollution.

We are currently working on Paperless cockpit concept (EFB – Electronic flight bag via iPad's) whereby all required documentation is electronic and are internally trialling with pending approvals across the fleet from the CAA.

**Standard Operating procedures to reduce the environmental impact and Carbon Footprint are through:**

- Minimising fuel carried ensuring that legal requirements are strictly observed.
- Using modern fuel efficient types of aircraft.
- Keeping aircraft clean and assuring good panel fit, minimising drag.
- Reducing unnecessary weight from our aircraft.
- Keeping aircraft weight to a minimum.
- Minimising auxiliary power unit running time. Using airfield power carts when possible.
- Single engine taxi, in and out where safe and wise.
- Minimise routing distances at a planning stage taking into account upper wind conditions on the day.
- Seek direct routing whenever possible.
- Flying at optimum level and speeds for economy.
- Flying continuous, low powered descents.
- With long runways using reduced landing flap settings (less power required on approach).
- Requesting runways that will minimise taxi time.
- Procure the cheapest worldwide fuel and ground service providers.
- Better flight logistics.
- Different braking techniques.
- Changing flap settings for landings which have both improved fuel efficiency and reduced noise levels at landing.
- Maximum take-off thrust reduction consistent with safe operation whenever allowed.

## **GROUND OPERATIONS – LOCALISING ENVIRONMENTAL IMPACTS**

One of our key priorities is to reduce noise around our airports and to improve local air quality.

There have been major advances to make aircraft quieter and through the sustainable aviation strategy the industry has committed to a further 50% reduction in total noise energy for aircraft entering service in 2020 compared with 2000 equivalents.

The landing and take-off cycle (LTO) has the immediate impact on communities who live near airports and this is when the most fuel is consumed proportionate to the distances travelled.

Luxaviation UK has seen a continuing downward trend in CO2 emissions and unburned hydrocarbons in the LTO cycle, which is a result of our pilots operating to industry best practice, including idle power descents, minimising fuel used and the strain on the engine.

Luxaviation UK complies with local rules that govern noise at airports, such as curfews and routings to avoid built up areas.

We are active in developing community relations to ensure the environmental impact to areas around airports is kept to as low as possible i.e. low aircraft noise, avoiding built up areas, climbing as quickly as possible.

Concentrations of ground and low level emissions of the oxides of nitrogen (Nox) continue to be a subject of great interest within local communities and amongst airport employees. We continue to optimise our procedures to reduce our Nox emissions, by maximum take off thrust reduction consistent with safe operation whenever we are allowed.

## GROUND OPERATIONS – ENERGY

We actively work to reduce the carbon footprint of the day to day activities in our offices, aircraft maintenance facilities, Fixed Base operators and airports and to help identify opportunities to reduce it.

On the ground 99.5% of the electricity we currently buy in the UK (where our major ground operations are) is generated from a mixture of renewable sources, such as wind, hydro-electric and biomass power. We're also working hard to reduce our energy consumption by installing new lighting systems, using more efficient IT systems, and encouraging our staff to reduce their energy use at work – just as we all do at home.

Luxaviation UK is sharing best practices and implementing initiatives to minimize resource use and identify cost savings throughout the organisation.

Our commitment to reduce usage is through the following:

- Staff education on energy saving initiatives.
- Investing in cost effective energy saving devices and appliances.
- Investing in energy saving light bulbs.
- Identifying opportunities for efficiency gains in key areas such as heating, cooling, lighting and engineering processes.
- Turning off electrics when not required.
- Introduction of computers which help to reduce electricity consumption and associate emissions.
- Improvement of Air Quality.
- Innovative design of electrical and mechanical systems.

## GROUND OPERATIONS – NATURAL RESOURCES

We have reduced the amount of water used through:

- Identification and implementation of cost effective solutions including the addition of water saving devices to taps and toilet cisterns.
- Staff education programmes to help save water.
- Low flow water fixtures.
- Only use water when required.
- Prevention of leakages.
- Minimise uplifts from water trucks on turn around and toilet services.

We are reducing the amount of paper used through:

- Staff education.
- Using recycled paper.
- Re-using waste paper etc.
- Majority of communications to be electronic i.e. email.
- Reviewing marketing materials to ensure we are using the most environmentally friendly method and moving towards more electronic means of communication.
- No Christmas cards.
- Use of recycled and/or sustainably sourced paper.
- Minimum printing of paper.
- Creation of electronic document control systems i.e. EFOS.
- Electronic flight bag's reduce the weekly consumption of updates for each aircraft's set of Jeppesson's.

## GROUND OPERATIONS – WASTE

Our operations inflight and on the ground generate significant amounts of waste. Through source minimisation, reuse, recycling, reclamation and managing resources i.e. aluminium cans, plastic bottles, inflight magazines on board our aircraft, copy paper in our offices or used parts in our maintenance facilities, we are dramatically cutting the amounts of materials that end as waste.

We are committed to the following:

- Reduction of waste we generate.
- Internal campaigns and initiatives to secure staff buy in.
- Taking a close look at the materials we use.
- Sourcing products which use fewer materials or which can be reused or recycled.
- Recyclable and re-usable materials.
- Biodegradable or renewable materials.
- All Office waste is recycled.
- Reduce waste sent to landfill sites.

## GROUND OPERATIONS – AIRCRAFT CATERING

Aircraft Catering is sourced from a recognised and known supplier and we offer Fairtrade tea and coffee.

Luxaviation UK locally sources produce, preferably organic subject to client's wishes.

Luxaviation UK Chooses UK suppliers whenever possible.

Luxaviation UK ensures that Raw materials are obtained from safe sources/known suppliers.

European waste regulations make it impossible to recycle items arriving in the UK from outside the EU, which have been in contact with food. But our cabin crew collect recyclables such as cans and bottles, and our Inflight and Product teams robustly ensure that new products are lighter-weight, easier to re-use or recycle, and more sustainable than what they replace.

## SUSTAINABLE PROCUREMENT

Luxaviation UK buys everything from aircraft to buttons. The price has to be right, but so do their environmental credentials.

We are communicating our environment policies and sustainable procurement practices with our supply chain and plan to audit our key suppliers on these principles. This will ensure all of our new on board products are more sustainable than those they replace.

We will be requesting:

- Re-usable, recyclable or biodegradable materials and products.
- Minimise their use of natural resources and where they do use them they are from sustainable or renewable sources.
- Use materials and products which use minimal energy to produce and have minimal impact on the environment on their extraction.
- Provide us with products, which are durable and long lasting, so they will not need to be replaced as often.
- Minimise the transportation of our products to us.
- Reduce the amount of packaging on our products.



## STAFF

At Luxaviation UK we're always keen to involve our staff and we recognise they are pivotal in achieving our environmental targets. So to engage and inspire them about all things environmental, we've been undertaking a number of key initiatives.

We currently provide regular staff communications on the activities outlined in this policy and on key environmental issues which are re-affirmed at staff training events. We also direct employees to lots of information about how they can actively reduce their own footprint both at home and in the office.

## GROUND OPERATIONS – MANAGEMENT PRACTICES

Luxaviation UK ensures that its Management organisation and practices includes environmental aspects in its reporting chains and Duties and Responsibilities.

All employees' duties and responsibilities include their environmental responsibilities and what is required of them.

All Health and Safety requirements have been accepted by Luxaviation UK and are actively promoted.

Crew Duty limitations ensure that the Flight Crews fly within prescribed limits. The Crews are fully aware of how to reduce the environmental impact particular relative to how the aircraft is operated.

Luxaviation UK is always keen to involve our staff and they are recognised as pivotal in achieving our environmental targets.

## EMISSIONS TRADING SCHEME(ETS)

Luxaviation UK supports the overall objectives of ETS. These are to use a market based mechanism to achieve cost effective carbon emission reductions and encourage businesses to invest in newer, cleaner technologies.

Luxaviation UK has an Annual Emissions Monitoring Plan, and submits on a yearly basis a verified annual emissions monitoring (AEM) Report.

Luxaviation UK is utilising the EU ETS Union Registry, which holds, trades and surrenders for compliance purposes all.

## SUMMARY OF TARGETS AND AIMS:

The aim of this policy is to communicate our key environmental policies and targets. We will provide twice yearly updates on our progress against these targets, fixed on a 2014 baseline.

We believe that a sustainable business is one which can continue to satisfy the needs of our customers while acting responsibly toward the environment and the communities in which it operates. With the support of passengers and staff, we're confident that the ambitious targets we've set can be met.

We have set ourselves the ambitious targets between 2014 and 2020 of:

- Reducing our combined water and paper consumption and wastage by 25%.
- Reducing commercial related energy consumption and emissions by 25%.
- Reducing commercial waste, increase recycling and reusing materials all by 25%.
- Committed to a further 50% reduction in total noise energy for newer aircraft entering service.
- To be more efficient in our use of fuel and energy and to promote an international framework to limit the contribution of aviation to climate change.
- To support research involving discussions with aircraft and engine manufacturers.
- We are committed to utilising lighter weight alternatives and new materials for on board products that have a good maintenance life cycle.