



Thinking Green

LSG Group Environmental Report 2017

Company Information



The LSG Group is the world's leading provider of end-to-end onboard products and services for the travel industry. It possesses a strong portfolio of independent expert brands: LSG Sky Chefs (catering and hospitality, including lounges), Retail inMotion (onboard retail), SPIRIANT (onboard equipment) and Evertaste (convenience food).

The LSG Group is headquartered in Neu-Isenburg, near Frankfurt, Germany. In 2017, its almost 35,000 employees achieved consolidated revenues of EUR 3.2 billion. Additionally, the LSG Group has a rich network of joint ventures and partnerships partners around the globe, employing more than 20,000 staff and generating non-consolidated revenues of EUR 1.3 billion.

www.lsg-group.com

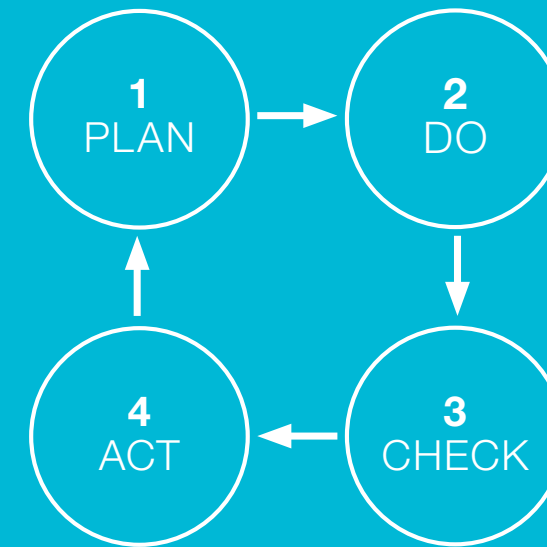
Environmental Management System

A SYSTEMATIC APPROACH FOR CONTINUOUS IMPROVEMENT

Over the past 20 years, the LSG Group has developed what is today considered the in-flight service industry's most structured and expansive approach to Environmental Care.

This approach permeates everything we do to ensure wide-scale environmental awareness and continuous improvement throughout our worldwide organization, and is designed to meet our customers' and shareholders' environmental expectations.

Systematic Approach



THE LSG GROUP'S APPROACH TO ENVIRONMENTAL RESPONSIBILITY

Our whole Environmental Management System is based on the Plan-Do-Check-Act principles of ISO 14001.*

At the LSG Group, the Plan-Do-Check-Act cycle lasts three years, after which it is evaluated and adjusted to meet any changing requirements.

*The international standard that specifies the requirements for an effective Environmental Management System (EMS).

Quality and Operational Compliance Policy

OUR POLICY

OUR POLICY IS THE BASIS OF OUR OPERATIONAL ACTIVITIES and defines the aim, backbone and focus of our Quality and Operational Compliance Management.

Signed in 2016 by the Executive Board, it clearly states our commitment to producing the highest quality in our operations and adhering to the strictest standards in our industry. Including areas such as quality, food safety, halal, security, employee safety, ramp safety and environmental management, the policy represents a truly a holistic approach for our company.

This policy is prominently displayed in all of our Customer Service Centers (CSCs) around the globe and can be easily accessed by employees, customers and visitors alike.

Environmental System Manual

OUR WHOLE SYSTEM IS DOCUMENTED in the new LSG Group Environmental System Manual that provides our operational units with the information they need to abide by our policy, such as clear definitions of the key performance indicators (KPIs) and the standard procedures for an environmental assessment.

It serves as an important tool for optimizing regional environmental activities and demonstrates our commitment to protecting natural resources.

Regional Environmental Managers and Programs

WE HAVE APPOINTED A REGIONAL ENVIRONMENTAL MANAGER (REM) within each of our five regions to take charge of the environmental program.

The REM works with his or her Regional Management Team and our Corporate Environmental Manager to set up and monitor regional environmental programs. These programs are customized according to local requirements and have the full support of the Regional Chief Operating Officer. Taken together, the five regional programs form the company's global environmental program.

Our aim is to have dedicated environmental managers across our different business areas in order to promote greater collaboration with other strategic corporate functions.

Best-Practice Examples

Key Performance Indicators

BEST-PRACTICE EXAMPLES

Learning from others always has a positive effect.

Our best-practices intranet site fosters the exchange of knowledge between the regions and promotes continuous improvement throughout the LSG Group.

KEY PERFORMANCE INDICATORS (KPIs)

Clearly defined Key Performance Indicators allow us to measure our performance over time.

The Executive Board and our Senior Leadership Team set specific targets for every business year across all our wholly owned facilities. The results are closely monitored.

Annual Review

Management Review

ANNUAL REVIEW

We communicate our progress to our customers and the market on a yearly basis.

**DOWNLOAD
OUR LATEST
ANNUAL REVIEW**

MANAGEMENT REVIEW

Our Executive Board fully supports the environmental responsibility program and carries out regular reviews to develop it further.

**GET TO KNOW
OUR EXECUTIVE
BOARD**

Sustainability

SUSTAINABILITY IS NOT SIMPLY EFFICIENCY

The common perception regarding sustainability is that if you want to act in a sustainable way, you simply have to do more with less. But this perception is too simplistic when it comes to managing sustainable enterprises.

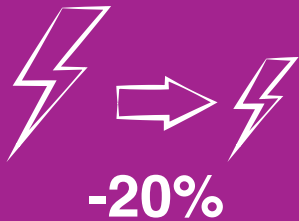
Sustainability is not just about efficiency – it is about developing mechanisms to encourage competition, diversity, innovation and long-term planning while considering environmental issues.

**“SUSTAINABILITY IS WHEN WHAT IS GOOD
FOR A COMPANY IS ALSO GOOD
FOR THE PLANET AND VICE-VERSA.”**

Toby Heaps, editor-in-chief of Corporate Knights

The LSG Group considers itself part of the communities where it operates and cares for its 34,000 employees around the globe, more than 300 valued customers, neighbors, society at large and, of course, the environment. We promote diversity within a safe and fair workplace and emphasize ethics and transparency in all of our business activities.

Measuring Performance



IN ORDER TO MEASURE OUR PROGRESS, we have defined a set of stringent Key Performance Indicators for energy, water and waste.

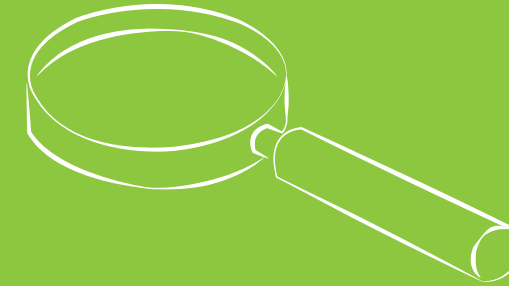
All wholly owned LSG Sky Chefs Customer Service Centers (CSCs) worldwide collate this information on an annual basis. Our Corporate Environmental Manager, who is responsible for steering this global initiative, works closely with these KPIs to design and implement the measures necessary to meet the targets.

Over the past five years, our water consumption per meal has decreased by more than 42 percent (liters/meal), and our energy consumption per meal has fallen by 11 percent (kWh/meal), despite the fact that the total number of meals produced went up by 31 percent.

Location-related data	2011	2012	2013	2014	2015	2016
Locations included	122	121	104	107	107	94
Meals prepared	293 m	381 m	409 m	432 m	459 m	383 m
Energy per meal (kWh/meal)	1.8	1.7	1.4	1.5	1.5	1.6
Water per meal (liters/meal)	8.9	7.9	5.9	5.2	4.6	5.2 -42%*
Waste per meal (grams/meal)	554.7	519.3	430.9	411	462	443 -20%*

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Auditing



AUDITING IS PART OF OUR DNA

In the airline-catering business, audits are a part of the day-to-day business.

Every year since 2010, selected Customer Service Centers (CSCs) from each management region are inspected annually for compliance with local environmental legislation and good management practices for resource management, water quality, atmospheric emissions and noise pollution.

We share the observations and findings of these audits on our global e-platform as examples of best practices and to educate our other locations around the world.

Auditing

EXTERNAL LOCAL EXPERTS AUDIT OUR COMPLIANCE WITH LOCAL REGULATIONS

Taking legal regulations into account is crucial.

The LSG Group is present in 56 countries. Therefore, it needs a partner with international experience in order to ensure that all requested measures are fulfilled.

Our environmental audits are conducted with the support of Environmental Resources Management (ERM), one of the world's leading sustainability consultancies. ERM is tasked with auditing our facilities for compliance with local regulations. The inspections are initiated by the Corporate Environmental Manager together with the General Manager of the selected facility and the Regional Environmental Manager.

Caring about the Environment

OUR COMMITMENT

We were the first in-flight services provider to publish a comprehensive environmental policy, and our commitment remains as strong and focused as ever.



Caring about the Environment at a Global and Local level



BASED ON OUR ENVIRONMENTAL POLICY, we have implemented a structured methodology that allows us to continuously measure our performance and exchange best practices around the globe.

These cover a wide array of areas, including energy, water and waste reduction, as well as product innovation.

At a local level, our top 30 CSCs have appointed dedicated CSC Environmental Managers (CEMs) in order to help drive performance in this area. In close collaboration with our Regional Environmental Managers, the CEMs will also oversee the creation of their CSC's environmental vision, the implementation of related projects and exchange of best practices within their region.

Caring about the Environment our way

The company’s vast geographical reach gives it an advantage when it comes to finding different ways of protecting natural resources and the environment as a whole. Its widespread best practices are shared in order to foster the exchange of knowledge between the regions and promote constant improvement throughout the LSG Group. Here are a few examples.

PROJECT GREEN

In cooperation with customer Air New Zealand and the New Zealand Ministry for Primary Industries, the company’s Auckland CSC launched an initiative designed to tackle the in-flight waste arriving on Air New Zealand’s international flights.

“Project Green” is expected to divert 150 tons of waste from landfill annually. It has enabled 40 Air New Zealand in-flight products that were previously sent to landfill (due to biosecurity controls) to be reclassified so that they can be reused on future flights if removed from aircraft sealed and untouched. Moving forward, the organizations will look at how they can further expand the range of unused products that can safely be recovered and develop a more precise approach to analyzing collection data in order to ensure aircraft are catered more accurately.

After one month, **13 tons of waste** were diverted, including:



266,000 plastic cups



480kg of sugar packets

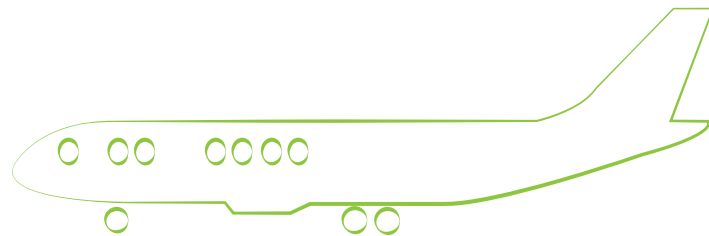


3.5 tons of water bottles

PAPERLESS ONBOARD

It is hard to imagine just how many different places there are for stowing items onboard a large aircraft. Crew members usually have to trawl through paper-based lists to find out where a particular item is located.

The LSG Group Galley Guide is an app for airline crews that shows all goods loaded onboard an aircraft, including their location in the galleys. Installed on the crew's work tablets, it offers a quick-search function and provides additional information on the products stored. This systematic process digitalization results in a quicker and smoother service workflow that is beneficial for both the crew and passengers onboard. Additionally, it saves huge amounts of paper.



Savings of 104 sheets of paper on one Boeing 747 flight



ELECTRIC CATERING

The first electric catering truck (eLift) was introduced at Frankfurt Airport. The fully electric truck, which was developed through a joint project with external partners, reduces noise and CO₂ emissions in a sustainable manner.

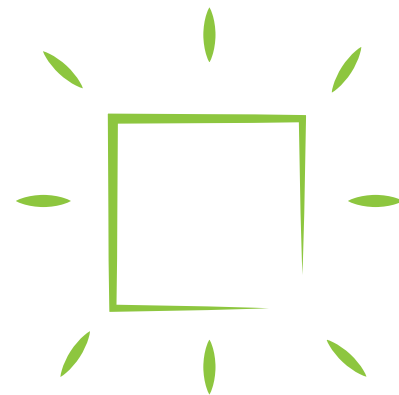
The purpose of creating the eLift was to develop separate concepts for making more electronic individual vehicle components. The truck chassis and the box body are separated both mechanically and in terms of power in order to be able to supply the lifting system independently. Another special feature of the eLift is its fully electronic bridge mechanism for shifting the front platform. The lifting drive and the support of the lift truck have been converted to electro-hydraulic drives. This means that all the drives are 100% electronic.

The truck's battery has a capacity of 113 kWh, which means a running time of about six hours.

A “SMART” BOX

A newly designed meal box has a number of “smart” features: Because of its efficient dimensions, LSG Sky Chefs can load up to eight one-way trips with one single aircraft approach, which saves time, energy and money.

Currently, Eurowings passengers can buy these boxes containing a sandwich, drink and sweet treat. Waste reduction is ensured by the fact that the box was designed in conjunction with a quality institute to be reusable.



RECYCLING IN TANZANIA

Since the end of 2017, our Tanzania facility, in addition to recycling plastic, paper, tin cans and glass, has been recycling food waste (fruit and vegetable offcuts and egg shells) in order to manufacture liquid compost with the aim of supporting the growth of herbs and vegetables in the unit’s own greenhouse.

This has not only improved the crop output of fruit and vegetables but has also aided in reducing the number of flies in and around the facility, which is an ongoing concern in sub-tropical climates. The composting also nitrifies the soil. Furthermore, "The Recycler Limited," a Tanzanian company that focusses on waste management and recycling, has started separating and recycling the balance of our food waste by using insects to recycle the nutrients in the food waste and then selling them as a high-protein chicken or fish feed.



WORLD ENVIRONMENT WEEK IN SÃO PAULO

The “World Environment Day” is celebrated on June 5. But our LSG Sky Chefs facility in São Paulo took advantage of this occasion to inform employees throughout the whole week about environmental issues and climate change.

Over several booths, visitors could gather information about topics such as pest control and bad practices regarding the discarding of vegetable oil. But the booth and seminar that caught the most attention was the one set up by the State Civil Defense of Guarulhos in which a multidisciplinary rescue team went over the causes of natural disasters, how to avoid them and what to do if you are involved in one. Employees also had the chance to contribute to an herb garden where they will grow parsley, coriander, mint and salvia for later use in the staff’s canteen. At the end of the activity, everyone went home with seeds, which they were encouraged to cultivate on their own. More than 1,000 employees participated in the week-long event.

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**LEARN MORE
ON OUR BLOG**

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