

Greener skies: KLM's ISO 14001-certified environmental programme takes off

The Dutch airline KLM believes itself to have been the first airline to achieve ISO 14001 certification of its environmental management system, leading to measures that have reduced noise, in-flight water consumption, and use of toxic dry cleaning chemicals, led to 40 % cabin paper recycling, improved wastewater quality, and saved 1,6 million kilograms of fuel last year.



BY **UDEKE HUISKAMP**

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In 1999, KLM¹⁾ became the first airline in the world to achieve ISO 14001 certification of its environmental management system (EMS). Environmental care had been a concern within the company for over 20 years due to the use of chemicals in aircraft maintenance, coupled with a growing sense of responsibility over noise reduction and the disposal of haz-

ardous waste.

KLM recognized that a pro-active environmental policy was required to anticipate the changing business and political climate. Increasing pressure from environmental groups, and the importance of maintaining the support of decision makers and the public to ensure the growth of the airline industry in the Netherlands, convinced the KLM Board that a systematic and pro-active approach was essential.

Environmental issues such as fuel and energy saving, reduction in noise, emissions and wastewater, and waste separation, are just a few that arise from the daily operation of an airline. Decisions taken in one part of the process influence ultimate environmental performance. For example, the fuel efficiency of air transport is determined by such factors as the specification of the aircraft, the optimal design of the timetable, the route, altitude and flight speed, optimal loading, the on-board service and measures to reduce noise pollution. Hence, a coordinated and systematic approach is required to achieve the environmental objectives effectively and efficiently.

Logical steps include goal formulation, planning and prioritization, determining employee roles and responsibilities, ensuring availability of resources and monitoring of EMS implementation. ISO 14001 gave KLM a sound template around which to structure its environmental care programme. And the certification process and the internal and external audits helped influence line management attitudes in favour of environmental care, and gained their commitment.

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Steeper take-offs reduce noise pollution



Highly regulated

The industry is highly regulated. Airlines operate according to strict safety procedures and within many different licensing and certification requirements. Thus ISO 14001 implementation was seen as a natural step in applying general management principles to harmonize and integrate processes, to involve employees and to set up a system for continuous improvement through measurement and evaluation. In several KLM divisions, ISO 14001 is integrated with other systems such as European Joint Aviation Authorities (JAA) flight safety management.

Nevertheless, EMS implementation and maintenance demanded a substantial staff effort. Since each business unit has its own environmental conditions, the decision was made to work with subsystems. However, all subsystems relate to the central KLM Environmental Manual. This gives business units the flexibility of providing a bottom-up approach while maintaining the coherence of the overall system.

Key implementation activities included environmental training for



all personnel working in environment-related functions, and environmental orientation courses for strategic management. A motivational campaign stimulated employee ideas for environmental improvement and

helped establish the system. Responsibility for environmental performance lies with the line organization, but success results from the commitment

of all employees.

KLM invited registration body KPMG Certification²⁾ to carry out a test audit in Spring 1999, which was followed by the successful certification audit at the end of the year. The test audit was useful in identifying gaps and imperfections and also served to increase the awareness of line management.

KLM became the first airline in the world to achieve ISO 14001 certification

From left: Cees van Woudenberg, Director of KLM and Chief of HRM and Environment, receives the ISO 14001 certificate, reportedly the first in the airline industry, from Jan Laan, Director of KPMG Certification.

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A happy milestone

Earning the certificate was a happy milestone, but we all realized that this was more of a start than a finish. Our agenda for the future is focused on continuous improvement of our EMS, such as the extension of environmental care to KLM's outstations, or the development of key performance indicators to monitor progress. However, our biggest challenge is to direct the environmental policy towards sustainable development and achieve an optimal balance between economic progress, social benefits and environmental responsibility.

Responsibility for environmental performance lies with the line organization, but success results from the commitment of all employees

A question for ISO

There is no "ready to use" system for the integration of social and environmental management, however the ISO 14000 standards provide flexibility. Our first step is to communicate with our key stakeholders – customers, employees, shareholders and nongovernmental organizations – and listen to their expectations about KLM's sustainable policy. The next phase is to establish such a policy and translate it into practical steps.

During implementation, KLM may look for a suitable new management system. Will ISO provide a new management system for sustainable development that addresses environmental, social and economic issues in harmony? ■



As a result of KLM's ISO 14001-certified environmental programme, 40 % of paper is now recycled from its aircraft.

Sustainable development will broaden the issue and hopefully lead to environmental policy being considered at the same level as economic and social factors.

Quality of water from KLM's wastewater treatment plant is closely monitored as part of the airline's ISO 14001-certified EMS.





Intensive engine maintenance at KLM helps improve environmental performance through reduced emissions and greater fuel efficiency.

Thinking green

(The following excerpt has been condensed from "Green Skies", an article which appeared in KLM's in-flight magazine, World of Flight.)

Looking around the cabin during a KLM flight, passengers may find it difficult to see how thinking green has affected the nature of KLM's service. "That's as it should be," says Corporate Environmental manager Udeke Huiskamp. "We can't push for environmental efficiency at the expense of service. The quality of service remains paramount."

Nevertheless, if you look very carefully the signs are there. In the duty-free selection on board, for example, low-turnover goods have been eliminated in order to reduce weight and increase fuel efficiency. Our research showed that a single bottle of whisky was travelling the equivalent of three times round the world before being sold!

Discarded newspapers are now recycled rather than being bundled with other cabin refuse and flight-crew uniforms are now made from fabric which no longer requires dry cleaning – a simple detail which significantly reduces the amount of toxic dry cleaning chemicals released into the environment.

After closely monitoring water consumption on flights, we now have a much better idea of actual water requirements and can avoid loading planes with excess barrels. This alone led to a saving of about 1,6 million kilograms of fuel last year, helping us achieve a fuel efficiency some 20 % higher than the average European airline.

For KLM, as for any other airline, the major environmental impact lies in the efficient use of fuel. Given there is no immediate prospect of "greening" aviation fuel, airlines must make the most of what they use. Jet aircraft may be seen as gas guzzlers, but on long distances they're more economical than the average car.

Environmental issues like fuel and energy saving, reduction in noise, emissions and wastewater... arise from the daily operation of an airline