Economic and Social Benefits
Aviation continues to play a vital role in the UK economy, supporting 200,000 direct jobs and 500,000 indirectly. The industry contributes £11.4 billion to the UK's GDP. SA members actively support a variety of community investment and local regeneration projects, both within the UK and internationally, in consultation with their stakeholders. SA members are committed to ensuring that the industry continues to make a positive contribution to the UK economy, ranging from local regeneration projects to supporting airlinks and regional development.

Reporting Our Progress
Member companies have made significant progress since 2006 against SA's goals and commitments; and they continue to support and resource considerable effort to achieve further progress.

The Way Ahead
Since SA's last report in 2006 a panel of independent external stakeholders has been established and meets regularly with the SA Council. The panel challenges SA to ensure that stakeholders' views and priorities are taken into account by SA members. Our stakeholder panel includes representation from the Aviation Environment Federation, University of Leeds, the Department for Transport and OMEGA (a publicly funded partnership that offers impartial, innovative and topical insights into the environmental effects of the air transport industry and sustainability solutions).

SA has already identified 13 areas of priority for the next reporting period 2009-10. The Stakeholder Panel will help refine this list to form a work programme with key requirements to be delivered. SA has also made 13 recommendations to Government on how it can support and extend sustainability issues through international co-operations, through research projects on environmental, social and economic impacts, and through more effective infrastructure planning.

SA's collaborative approach, which drives forward an ambitious environmental agenda across the whole industry, challenging one another in the process, has never been more important. We are pleased that all the SA signatory members remain committed to the work in hand.
Executive Summary

The period covered by Sustainable Aviation’s second Progress Report (2007 and 2008) has seen a number of key developments in the area of aviation and the environment, not least of which is tackling the industry’s growing contribution to climate change.

**CO₂ Roadmap**

The most significant development since the last report has been the publication of SA’s roadmap for UK aviation, projecting that CO₂ emissions will rise until 2020 but then level off and fall to below 2000 levels by 2050. This projection is based on the Government’s forecast of a threefold growth in passenger numbers over the same period. The roadmap is based on efficiencies expected from new airframe and engine technology, improved air traffic management and operations and the development of sustainable fuels. Importantly the roadmap does not take into account the wider CO₂ reductions in other sectors that will be achieved through airlines’ participation in Emissions Trading. The Sustainable Aviation roadmap relies critically on the current and forward investments by both industry and government, on the success of the various technology programmes and their incorporation into aircraft fleets.

**Emissions Trading**

Since SA last reported in 2006 the EU institutions have approved the Directive through which aviation will be included in the EU Emissions Trading Scheme from 2012. The industry has lobbied for aviation’s inclusion in the scheme for a number of years as we believe that a pragmatic approach to carbon cap and trade can offer the most environmentally effective and economically efficient mechanism for all sectors, including aviation, to meet the challenge of climate change. In addition, several SA signatories have called for a global sectoral approach to carbon emissions from international aviation in a new global climate agreement to be negotiated at the UN climate summit in Copenhagen in December 2009. Measures to tackle emissions from the international aviation sector, which contributes about 2 per cent of global man-made CO₂ (2006), were excluded from the Kyoto Protocol and these emissions are not currently capped under international law.

**Other climate change work**

**Air traffic management**

NATS has become the first air navigation services provider in the world to benchmark its environmental performance and set targets to reduce air traffic management-related CO₂.

**Non-CO₂ emissions**

Good progress has been made towards ACARE 2020 targets for an 80 per cent reduction in NOx emissions, although a full understanding of non-CO₂ impacts is still some years away and our conclusion is that they should be considered separately from the impact of CO₂.

**Sustainable biofuels**

There has been substantial progress in the assessment and trial of alternatives to oil-based kerosene fuels. Work by SA member manufacturers and airlines has demonstrated the potential of sustainable, lower life-cycle carbon biofuels, which are likely to be available in the medium to long term future. Strict criteria for alternative fuels are being developed to avoid adverse impact on food-production, water-scarcity and competition for land.

**Fuel efficiency**

SA member airlines are setting fuel efficiency targets. While aggregate fuel efficiency has been reasonably consistent since 2000, SA believes that future investment in new aircraft and operational practices will deliver fuel efficiency improvements.

**Carbon Offsetting**

Passengers have become increasingly environmentally aware and SA member airlines have responded by establishing carbon offset schemes. In 2007, 84% of SA airline passengers had the opportunity to offset their carbon emissions via their airline’s website.

Whilst addressing climate change is and will remain a SA priority, we recognise that sustainability is also about wider environmental issues, as well as economic and social impacts.

**Noise**

Noise is one of the most sensitive issues for airports and airlines, and the industry is working together to minimise where possible the impacts of noise on communities living close to airports or under flight paths. SA members have contributed to better performance through improved technology and operational practices. Good progress has been made towards the ACARE noise goals. The A380, which achieves the lowest noise levels in the very large aircraft category, is much quieter than the aircraft it is replacing, enabling further reductions in perceived noise levels.

The use of Continuous Descent Approaches (CDA), rather than a stepped approach to landing, now consistently averages 80% of landings at Heathrow, Gatwick and Stansted airports and is a major contributor to reducing noise as well as fuel burn and emissions.

**Air Quality & Surface Access**

Work by SA members at Heathrow and Manchester airports has helped to build our understanding of the local air quality emissions and their sources around airports. We are building on that work, continuing to develop tools to allow detailed measurement and reporting of air quality. Cleaner vehicles and ground power programmes are now in place at a number of airports to reduce NOx and particulate emissions. Surface access strategies are in place which work towards improving local air quality, and encourage passengers and staff to use public transport where possible.