

NATS

Corporate responsibility report 2012





NATS is defined by its continuing ability to deliver Performance through Innovation across our business, including our approach to corporate responsibility. Our ongoing programme Acting Responsibly shapes our focus on minimising the environmental impact of air traffic management (ATM) so as to enable the sustainable growth of the aviation industry.

Our 2012 Corporate Responsibility report is our third since 2008, when we embedded environmental performance as one of our core business values. That included establishing meaningful and credible ways of measuring actual performance, to give our airline customers proper insight into the level of efficiencies we are delivering to them.

We are making real and tangible improvements in CO₂ emissions, creating 26 specific changes in 2011 alone, which delivered savings of 60,000 tonnes of CO₂. Since 2009, we have reduced CO₂ by 115,000 tonnes. Our calculations indicate this is saving our airline customers some £22m in fuel at current prices.

This year also saw delivery of an entirely new environmental performance metric – another world first which has taken NATS three years to develop. We are now financially incentivised on our delivery of fuel burn and emissions performance. If we meet our targets it could save the airlines up to £120m in fuel costs over the next three years. My aspiration is to see this new way of measuring and delivering environmental benefit adopted as a basis for a pan-European drive to improve performance.

Our report in 2010, set out some of the longer term challenges that we face as a world leader in environmental performance management in air traffic control (ATC). One of these is noise, which requires a complex mix of airspace design, ATC procedures, aircraft and ATC equipment and Government guidance and we are working closely with airlines and airports to develop innovative solutions.

NATS is a 24/7 safety critical piece of transport infrastructure which uses a lot of energy. As a key consumer of natural resources, we must ensure we concentrate on making our offices, air traffic control units and supporting infrastructure as efficient as possible. It is a significant achievement that we have reduced our carbon footprint by around a quarter since 2008.

NATS was the first ATM organisation in the world to set environmental targets. We were the first to develop ways of measuring our performance and the first to include a metric in our regulatory framework. We are demonstrating our progress towards becoming a truly low carbon business and also taking on a fundraising challenge with the introduction of my charity of the year. This year at NATS we are supporting Aerobility who provide once in a life time opportunities for terminally ill and disabled people to fly, stimulating achievement, challenging perceptions and boosting self-esteem by taking to the air.

Richard Deakin,
Chief Executive Officer





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It's four years since we first established clear targets for improving our environmental performance. This, our third report, charts a truly **inspiring journey**, showing how we have accelerated progress and raised awareness right across the business.

Introduction

IN 2008...

We became the first air traffic management (ATM) company in the world to calculate the CO₂ emissions in its airspace. Our target is to reduce air traffic related CO₂ by an average 10% per flight by 2020.

Since then we have led the ATM industry's drive towards sustainability and social responsibility, recognising that the environment and local communities are central to our business.

THIS YEAR...

We achieved another world first, becoming the first ATM company in the world to be financially incentivised on our environmental performance. We've now built this into our regulations so our customers can judge us for themselves.

Environmental performance matters more and more, not only to people concerned about how much fuel their aircraft burn, but for the quality of life for people living near airports and beneath flight paths. Our long-term success depends upon us achieving environmental improvements, just as much as it does for the safety of our aircraft.

In March 2009, we published our Environment Plan explaining how we would achieve our 2020 target. We also set out our aims to reduce our carbon footprint and improve dealings with the communities we live and work in. In 2010 we published our first report on the progress we'd made.

This report provides the latest update on our performance and shows how NATS is helping build a sustainable future.



OUR APPROACH TO CORPORATE RESPONSIBILITY

NATS is a major player in a global industry, and our activities are based in local communities.

We appreciate that our business has an impact on our neighbours and communities as well as on the wider environment. We recognise how important it is for the concept of responsibility to be part of our business, whilst encouraging all our employees to share that responsibility.

We are meeting our targets by Acting Responsibly, one of seven business values we adhere to and want people to automatically associate with us.

Acting Responsibly shows we intend to develop our business sustainably, in a world which is becoming ever more aware of aviation's contribution to global warming.

Our programme has four streams

○ AIR TRAFFIC MANAGEMENT ENVIRONMENT

The key issue facing NATS and the aviation industry is the need to reduce global greenhouse gas emissions. Our customers' top priority is for flights that reduce emissions and fuel burn. This is a completely practical demand; fuel costs money so there is genuine motivation to achieve improvement.

Our strategy is to ensure we consider the environmental impact of how we control aircraft every day. This includes how we improve the efficiency of our airspace, route network and in the investment decisions we make regarding new technology.

▮ ESTATE

Our operation is wide and diverse. We operate from three main sites as well as at control towers at many major airports and we have a nationwide network of communications, navigation and radar facilities at more than 100 remote sites. Powering our systems and technology makes us a significant consumer of energy.

Our strategy is to use the expertise of our colleagues across the company to find ways of making better use of resources. Reducing energy consumption, reducing waste and increasing reuse and recycling will all help save money, reduce our carbon footprint and preserve natural resources.

✿ OUR PEOPLE + COMMUNITIES

We are sensitive to the needs of people who live and work at, or alongside our operations. Our strategy is to develop strong community partnerships, support local projects and charities and support our colleagues in their volunteering, fundraising and environmental endeavours.

▮ MARKETS

Environmental issues and ethical considerations are increasingly important in making decisions about our supply chain. We will work with companies in our supply chain to build a more sustainable business.

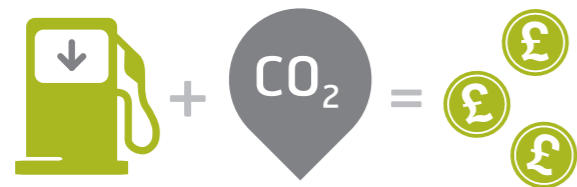


HIGHLIGHTS + ACHIEVEMENTS

We achieved some exciting results during 2011...

Air Traffic Management Environment

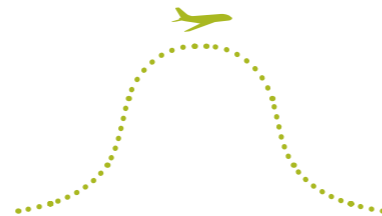
REDUCING AVIATION'S CO₂ EMISSIONS



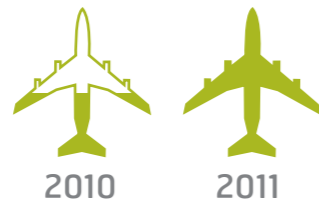
- Delivered more efficient flight profiles – in 2011 alone we delivered over 26 changes at Swanwick and Prestwick, enabling a reduction of 60,000 tonnes of CO₂ emissions, from fuel savings of over 19,000 tonnes, worth £13m.

- iFACTS tools fully operational – improving flight efficiency and reducing CO₂ emissions by facilitating better climb and descent profiles as well as reducing distances flown.

- Introduced an incentivised flight efficiency measure for our en-route services – known as the '3D inefficiency score' (3Di) – to help improve our environmental performance.



- Targets for 2011 set c. 60% higher than the savings achieved in 2010, to accelerate progress.



- Major airspace development programmes planned from 2015 – aimed at saving fuel significantly and mitigating environmental impacts.

Estate

REDUCING OUR USE OF RESOURCES

- Launched 'small steps towards a lighter footprint' internal communication campaign to generate tangible savings from small everyday changes.



20% REDUCTION

- Carbon-neutral target replaced by a 'low carbon' objective – with further capital investment in energy efficiency to achieve an additional 20% reduction in energy consumption by 2014.

- Exceeded our 3-year targets for reducing energy consumption, water consumption, waste to landfill, business travel footprint – though commuting target narrowly missed.





HIGHLIGHTS + ACHIEVEMENTS

We achieved some exciting results during 2011...

Our People + Communities

SUPPORTING COMMUNITIES IN WHICH WE WORK

- More than 400 NATS people took part in community projects since 2008, benefiting a wide range of local organisations.



- Our 'Footprint Fund' for charitable giving and support has donated over £100,000 to more than 120 local causes over the past 3 years.



- In the last year 3.7% of our staff donated to charity through the Give As you Earn scheme – raising over £70,000.

Markets

ENCOURAGING OUR SUPPLIERS TO ACT RESPONSIBLY

- Launched a new Supplier Policy to ensure our suppliers are environmentally and socially sustainable.
- Introduced best practice sustainable procurement skills and processes to our supply chain management team through increased training and development.
- Committed to ambitious new measures to encourage our key suppliers to improve their corporate responsibility credentials through incentives and joint business plans.



AIR TRAFFIC MANAGEMENT ENVIRONMENT

Reducing aviation's environmental impact and saving fuel is important to our customers. We are proving we are **smarter and more responsive** than ever before in doing this.



OVERVIEW

Our 2010 Environment Report noted how ‘quick wins’ in improving the efficiency of our airspace and route network had saved fuel. We highlighted how environmental considerations had been part of our decision making.

We recognise the important role our controllers play in flight efficiency. They now have an extensive training and awareness programme to ensure they consider the environment. We continue to achieve savings in fuel and emissions.

We have increased our efforts to improve the efficiency of our airspace and route network. In particular, we are working with airlines and airports to identify operations best practice and have already put this into practice in airspace design and daily ATC operations.

Having developed techniques to monitor NATS’ environmental performance daily, monthly and annually, we can now also track progress towards the CO₂ target in fine detail.

Our Operational Centres and Airport Units have Environment Action Plans and annual environmental targets, to improve fuel and emissions savings.

We are the first air traffic service provider in the world to have developed an environmental measurement, now part of our regulatory performance targets.

Chris Woodland,
Flight Dispatch
Manager,
Thomas Cook

“There has been a **greatly appreciated collaboration between NATS and airlines** over a period of time now in creating efficient routings saving the airlines fuel, creating opportunities for more efficient planning of flights. NATS’ environment team have been very amenable towards airlines’ requests, ideas for savings and change of routes, always responding to these requests even if they cannot be accomplished or may be part of a future airspace design. The work that has been achieved has been driven by excellent collaboration that works.”

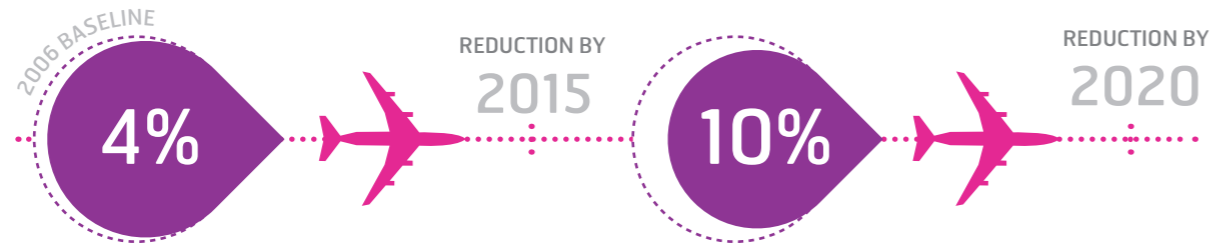




OUR TARGETS

Strategic target

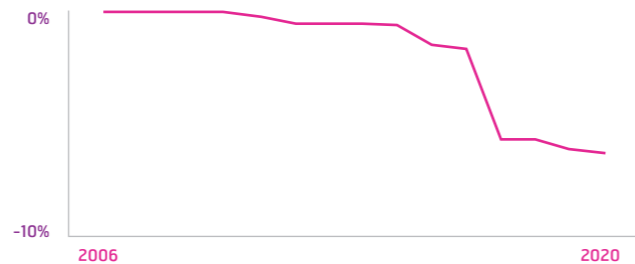
Our strategic environmental target is to reduce ATM CO₂ emissions by an average 10% per flight by 2020, from a 2006 baseline. Our interim target is to achieve an average 4% per flight reduction by 2015.



We estimate that c. 2% of this will come from short-term operational and procedural changes at our centres; up to 2% from airport related ATC improvements (such as continuous climb and descent operations); and 6% from adopting new technologies and making major changes to the airspace network.

This chart shows our progress towards the target, with c. 1% reduction per flight achieved to date. For the forward forecast, we can consider c. 5% of the reduction 'firm', with plans and investment already in place.

2006 adjusted CO₂ percentage change



Central to this are two major airspace development programmes

1 LONDON AIRSPACE MANAGEMENT PROGRAMME (LAMP)

2 NORTHERN TERMINAL CONTROL AREA (NTCA) REDESIGN

These two programmes (key to the CAA's Future Airspace Strategy) will modernise airspace around London and major cities in northern England, where traffic levels are highest, route interactions most complex and the impact on flight efficiency is greatest. Successful modernisation of this critical airspace can significantly save fuel burn and so CO₂ emissions, equivalent to c. 5% of our target.

We continue to look for specific operational improvements to achieve the remaining 4%.

We are under no illusion that it's a tough target, both in size and time. Nevertheless, we are confident we have the people, skills and determination to achieve it.



OUR TARGETS

Regulatory Performance Measure

Our strategic target is now supported by an incentivised flight efficiency measurement for our en-route services – known as the ‘3D inefficiency score’ (3Di). There is no equivalent measurement for environmental performance anywhere in the world.

We have developed it in collaboration with airlines (including British Airways, Virgin, BMI, Aer Lingus, Ryanair, EasyJet, Flybe and IATA) and the UK Civil Aviation Authority (CAA). It has taken nearly three years of painstaking research and development, analysing radar tracks from every flight

since January 2010 and further large samples of operations every year going back to 2006, to establish an average efficiency rating for vertical and horizontal trajectories – how smooth a climb and descent, and how direct a route we can provide for each flight.

We first deployed 3Di on 1 January 2012, making us the world’s first air traffic management company to be incentivised on its environmental performance. It felt entirely appropriate that it should go live on the same day airlines entered the EU emissions trading scheme.

Initial analysis shows we could save around 600,000 tonnes of CO₂ over the next three years, saving our customers £120m in fuel costs.

In 2011, our team’s efforts were recognised by the award of the UK Operational Research Society’s President’s Medal for the best practical application of operational research in industry. The Society was particularly impressed with the way that NATS had managed to demonstrate the ATM contribution to a flight’s overall environmental performance by stripping out inefficiencies that were being caused by others.

“NATS should be congratulated for the work done on 3Di Flight Efficiency Metric through which it leads its European peers. This is an innovative, industry leading piece of work.”

**Dave Wood, Manager ATC Services
£ Punctuality, British Airways**

3Di

The 3Di score is a flight efficiency measure which extends the European horizontal flight efficiency one to include vertical elements. It applies to domestic airspace, for the airborne portion of flight only.

In the horizontal plane, it compares the actual radar groundtrack against the (most direct) great circle track – between first and last radar point. Inefficiency in the horizontal plane is defined by the difference between these two distances.

It compares the actual vertical profile (from radar data) against a modelled ideal flight, defined as a continuous climb to the aircraft’s Requested Flight Level (for cruise), followed by a continuous descent approach. Inefficiency is the difference between the ‘actual’ and ‘ideal’ flight profile.

We then combine these factors to give an inefficiency score for each flight in our airspace.

By analysing historic performance, we have determined our ‘par’, or average performance. Based on this analysis, the CAA has set a ‘par’ for 2012, 2013 and 2014.

3 year estimated CO₂ saving (tonnes)

600,000

3 year estimated customer fuel cost saving

£120_M



OUR TARGETS

Local targets

To speed the progress towards our 2011 environmental targets, we set them c. 60% higher than the fuel and emissions we saved in 2010. We also included specific targets for our en-route centres and major projects to help save fuel and emissions.

AIRPORT UNIT ENVIRONMENT ACTION PLANS

In 2011 we established local environment action plans for the 16 airport ATC units where NATS provides the air traffic control service.

These include targets to improve the efficiency of aircraft arrivals and departures by increasing achievement of continuous climb departures (CCDs) and continuous descent approaches (CDAs). Many also include ways to improve ground taxiing efficiency or to influence arrival and departure routes and profiles to further improve fuel efficiency and reduce emissions.

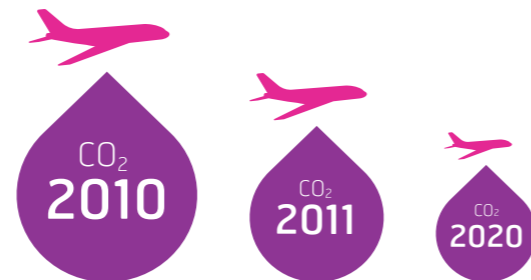
During 2012 we will complete the work to create a baseline figure for environmental performance at each airport unit and quantify, for the first time, the contribution the airport units collectively can make to NATS' overall 10% CO₂ reduction target.

2011 environmental targets

c.60% HIGHER THAN FUEL + EMISSIONS WE SAVED IN 2010

2012 CO₂ reduction target

10% REDUCTION FOR 2020



Simon Hocquard,
Operations Director,
Swanwick

“Swanwick manages one of the most complex pieces of airspace in the world. Flowing traffic better into our airspace can offer big fuel burn and emissions savings for our customers, that’s why queue management is firmly in my top 5 improvement projects for this coming year.”





PROGRESS



Our plan is based on the following themes:

1 REDUCING CO₂ EMISSIONS THROUGH AIRSPACE AND PROCEDURE CHANGES

NEAR-TERM MEASURES

We continue to look for 'quick wins' across our airspace network to improve emissions in the short term.

We now have more than 150 potential improvements suggested by airline and airport customers and our colleagues and since we formed our airspace efficiency group in 2009, we have made more than 100 operational and procedural changes in air traffic flows in the Swanwick, Prestwick and Oceanic regions. These have saved an estimated 115,000 tonnes of CO₂ emissions – a fuel saving worth £22m. In 2011 alone we have delivered over 26 changes at Swanwick and Prestwick, enabling fuel savings of over 19,000 tonnes fuel, worth almost £13m and saving 60,000 tonnes of CO₂ emissions.

Savings since 2009



Most of the changes take the form of more direct routes or changes to procedures. Examples from 2011 include:

- Increased access to military airspace in Wales providing more fuel efficient routes for aircraft flying to and from Ireland and North America – bringing savings of 300 tonnes of fuel (1,000 tonnes of CO₂) a year.
- A new route through military airspace in south-west England for weekend and night-time flights to and from Ireland – saving around 150 tonnes of fuel (480 tonnes of CO₂) a year.

UK-IRELAND FUNCTIONAL AIRSPACE BLOCK

The UK-Ireland FAB – the first to be established under the Single European Sky initiative – has now been operational since July 2008 and is creating substantial improvements. From 2008 to 2011 it is estimated to have enabled 48,000 tonnes fuel savings, that's 152,000 tonnes CO₂. The centrepiece of the FAB Plan 2011-14 is a set of projects to optimise domestic, North Atlantic and European traffic (ODNET) which focus on ways to reduce emissions and fuel burn, including:

- En Route Shannon Upper Airspace Redesign (ENSURE) – the continuing benefits derived from the removal of fixed routes in Shannon Upper Airspace since 2009 to allow direct routing and flight planning from entry point to exit – with estimated annual savings of 2.2 million kms flown, 14,800 tonnes fuel and 46,800 tonnes CO₂.
- Fuel Saving Routes – the continuing introduction of flight-plannable direct routes, especially at night which reduce distance flown and fuel burn – with estimated annual savings of 5,700 tonnes fuel and 18,100 tonnes CO₂.



LONGER-TERM AIRSPACE DEVELOPMENTS

Airspace above the UK has developed piece by piece over the past 50 years and now needs fundamental reshaping so modern aircraft can perform efficiently and we can manage the airspace better. The LAMP and NTCA programmes will do just that.

Time airspace above the UK has been developing

50 YEARS

Planned for phased implementation between 2015 - 2020, the aim is to:

- Exploit aircraft abilities to fly precise trajectories, enabling greater flexibility in airspace design through closely spaced arrival and departure routes independent of ground-based navigation aids.
- Locate routes where they best meet the needs of airports and flight profiles, making far better use of finite terminal airspace and providing greater opportunities to mitigate environmental impacts.
- Enable continuous descent approaches and continuous climb departures to be flown from and to significantly higher altitudes than available today.
- Prepare for widespread deployment of advanced technologies such as queue management tools (arrival and departure management), to achieve efficient sequencing on busy runways and eliminate holding in normal operations.

In parallel, we are supporting a joint project with the CAA to raise the Transition Altitude (TA) across the UK/Irish FAB. This will bring environmental benefits, mainly through more efficient standard departure and arrival routes.

Our plan is based on the following themes

2 TECHNOLOGY AND INNOVATION

The speed of technological development in the ATM industry is faster than ever. Tools and precision navigation techniques now allow aircraft to fly closer to their optimum route, profile and speed.

iFACTS CONTROLLER TOOLS

A new generation of advanced controller support tools became fully operational at Swanwick in November 2011. iFACTS, based on Trajectory Prediction and Medium Term Conflict Detection, provides decision-making support and helps controllers manage their routine workload, increasing the amount of traffic they can comfortably handle.



It improves our environmental capability in various ways

- Allowing the controller to check better climb profiles so an aircraft reaches cruising levels sooner and with fewer step climbs.
 - Greater accuracy of aircraft separations over 18-minute periods, so controllers can allocate flights more closely to their fuel optimum levels.
 - Fewer heading or route changes so aircraft can climb, descend or pass at the same flight level, reducing excess mileage.
 - More efficient traffic streaming with supplementary vectors greatly reduced, enabling sequencing with reduced track miles. A longer look ahead means we can keep aircraft higher for longer, generating more fuel and emissions savings.
- During 2012, we are monitoring iFACTS' effect on flight efficiency. As controllers become more familiar with the tool, we expect the potential environmental benefits will become part of routine ATC operations.



Juliet Kennedy,
Director of
Operations Airports

“This year’s environmental action planning has really focused us on the possibilities at our airports – and their delivery. Edinburgh is running a trial of our new Flight Profile Monitor with the airport operator and airlines and Cardiff are pursuing an airspace change. Next year we’ll be looking at the environmental footprint of each unit and considering how best to manage environmental impacts as we work to grow operations.”

FLIGHT PROFILE MONITORING TOOL

Adding to our string of world firsts, we have developed a Flight Profile Monitor (FPM) tool to track aircraft performance at any phase of flight from ground to cruise, to determine where and why there is inefficiency.

By tracking performance we provide the basis for our airport units to drive improvements. This way we can help save fuel, reduce emissions and potentially reduce noise exposure.

Airports and airlines are very interested in how FPM data might be useful to them and we have begun a trial at Edinburgh. The trial will tell us about the accuracy and value of the data, we will use this to identify more opportunities to improve flight efficiency.

OTHER TECHNOLOGIES

Airport Collaborative Decision Making (A-CDM)

We are providing A-CDM services so we can share accurate information in real-time. This helps make best use of runways, stands and slots, increasing the efficiency of the airport’s handling of aircraft, reducing emissions in the air and on the ground.

New Common Workstation (NCW)

This will be introduced at our Operational Centres from 2014/15 so we can add advanced technologies such as advanced flight data processing, and multi-sector planning, to facilitate optimum routes and profiles across several airspace sectors.

Arrival Management (AMAN) and Departure Management (DMAN)

These have already been used in London Terminal Control to assist traffic sequencing into some of London’s airports. With NCW, we will use them to support reduced airborne holding and improved flight profiles.

Oceanic System

We will continue to use our Oceanic system at Prestwick (jointly with NAVCANADA) in line with developments in North Atlantic airspace. In March 2011 we implemented reduced time-based longitudinal separation, enabling mid-ocean altitude changes to generate greater fuel efficiency.

Our plan is based on the following themes

3 MITIGATING AIRCRAFT NOISE

The impact of noise is a vital part of the environmental assessment we undertake for every NATS airspace design, and our major airspace projects have noise objectives as well as emissions reduction targets.

We are improving how we communicate with the public on the predicted noise impacts of airspace changes.

We are helping airports and airlines identify potential changes to arrivals or departures procedures. We know that continuous climb and descent operations can reduce noise and are working to increase these. We are also looking into how we can offer predictable periods of respite from noise.





Our plan is based on the following themes

4 WORKING IN PARTNERSHIP

We talk to airline and airport customers and industry partners to find new and quicker ways of implementing environmental solutions. The following are some of our key partnerships.

SUSTAINABLE AVIATION (SA)

We are a founding member of this unique industry coalition and devote significant effort to it. It was launched in 2005 bringing together UK airlines, airports, manufacturers and ATM to solve the challenges of aviation sustainability. There is no similar initiative in road, rail or shipping.

SA is examining the ways aircraft are flown, to try to reduce the industry's environmental footprint. This includes techniques such as steeper approach angles to reduce noise and minimising fuel use and emissions for departing aircraft. We are leading the newly-formed SA Noise Group which will help establish a common industry approach to noise improvement and management in the UK.

OPERATIONAL PARTNERSHIP AGREEMENT (OPA)

The OPA was established in 2003 for us to work with our airline customers towards operational improvements, agreeing priorities and targets, which for next year include an annual fuel saving target and several flight efficiency actions.

This partnership has greatly improved our understanding of the principal components of optimum flight profiles and is helping us plan the steps towards our 2020 CO₂ reduction target. We also work with airports and their users to improve the local airport environment and reduce CO₂ emissions on the ground and in the air.

"2012 will see challenging CO₂ and energy efficiency targets being set right across the NATS engineering estate. It's good for our business and for the environment."



Mike Stoller, Engineering and Programmes Director

FLEXIBLE USE OF AIRSPACE (FUA)

We have a close partnership with the Ministry of Defence and Royal Air Force to develop the concept of flexible use of airspace, which has operated in the UK for more than a decade. Although civil and military aircraft operate in very different ways, FUA gives us an integrated approach that ensures we use UK airspace efficiently as a whole, using military airspace whenever possible to enable optimum routes for commercial flights.

A major development this year has been the start of a phased introduction of Eurocontrol's Local and Regional Airspace (LARA) planning tool into the joint civil/military UK Airspace Management Cell in autumn 2011. LARA provides real-time exchange of data on civil and military airspace demands to help make decision-making more efficient and increase the potential for fuel burn/CO₂ emissions savings for commercial flights.

UK FUTURE AIRSPACE STRATEGY INDUSTRY IMPLEMENTATION GROUP (FASIIG)

FASIIG is a joint undertaking between NATS, IAA, CAA, airlines, airports, MOD, business aviation and other aviation industry bodies across the UK/Ireland FAB. It is developing a plan for the CAA's Future Airspace Strategy (FAS), to include the technology, procedures and airspace changes necessary to improve environmental performance. The work links closely to the Single European Sky ATM Masterplan to ensure its high-level objectives are at the heart of UK airspace design and environmental performance. Our LAMP and NTCA airspace development programmes will form a key part of the work.



INTERNATIONAL PARTNERSHIPS

We use our experience from the last four years of Acting Responsibly to lead a number of projects in the Single European Sky research programme (SESAR). This includes the environmental research programme.

We share knowledge and best practice with the International Civil Aviation Organisation (ICAO) as it looks to set global standards for environmental performance.

We also play a leading role in the Civil Air Navigation Services Organisation (CANSO), the global trade association for ANSPs. We have previously chaired the Environmental Work Group, which discusses cross-airspace border collaboration, local noise management and operational CO₂ improvement activities.

Pauline Lamb, Operations Director, Prestwick



“Despite having EFD, datalink and future system prototyping work underway at Prestwick, we consider the environmental work to be of equal importance and continue to build it into our daily work programmes. We continue working with our customers to secure both short term fuel efficiencies and longer term sustainable benefits through environmentally designed routes and procedures in our terminal airspace change plans to deliver real results.”

Our plan is based on the following themes

5 BUILDING AWARENESS

We believe our people are amongst the best in ATC in the world.

The environment is already part of their everyday work as they offer access to fuel efficient cruise levels, manage speeds, provide direct routes and assist with continuous climbs and descents, all helping to reduce aircraft fuel use and CO₂ emissions.

We have had an environmental awareness programme in place for the past four years, including groups with customers. Improved awareness means that discussion in almost any forum now includes environment and many of our ‘quick win’ operational improvements have come from our workforce.

We have seen a fundamental cultural shift and will continue to build on this so people can make safe and informed choices to improve environmental performance. This is especially important as we provide new technology and optimum airspace designs to help them create fuel-efficient flight profiles.

In 2011 we added to our extensive environmental awareness programme with an environmental best practice campaign, an online environmental awareness module that was completed by over 600 people and we ran more of our bespoke two-day environmental awareness courses at both Swanwick and Prestwick.

LUNCHTIME LECTURE ON CLIMATE CHANGE

In February 2012 we gave our first ‘Lunchtime Lecture’ for staff who may not normally be involved directly in NATS’ environmental activity. This ‘Challenge the Expert’ session gave NATS staff the chance to ask questions of a world-renowned climate scientist. The excellent debate prompted some of our staff to try to reduce their own environmental footprint.

The session was filmed, and we’ll be using the DVD at team briefings during 2012/13.



ESTATE

When we established Acting Responsibly as one of our values in 2008, we signalled a shift in culture, **putting environment at the heart of our operation** for the first time, alongside safety and efficiency, and setting the expectation for our employees to act responsibly.



OVERVIEW

Alongside our demanding targets for improving airspace efficiency, we set a challenging goal of creating a carbon-neutral estate by 2011.

The target focused on carbon efficiency but our comprehensive approach also took in other environmental impacts; energy, water, waste management and recycling, our use of natural resources and the impact of our employees' business and commuting travel. If we get these basics right, our employees and industry partners are more likely to work with us on taking the big steps to improve energy efficiency.

We have now reduced our carbon footprint, defined as carbon from our energy consumption,

business and commuting footprint, by 26% from our 2006 baseline. However, we chose not to become a carbon-neutral company. This was due partly to changes in government policy which made carbon offsetting less financially viable than straightforward cost savings from being more environmentally efficient.

The improvements we have made have led directly to savings, with the reductions in energy consumption alone reclaiming over £2m a year.

Carbon footprint



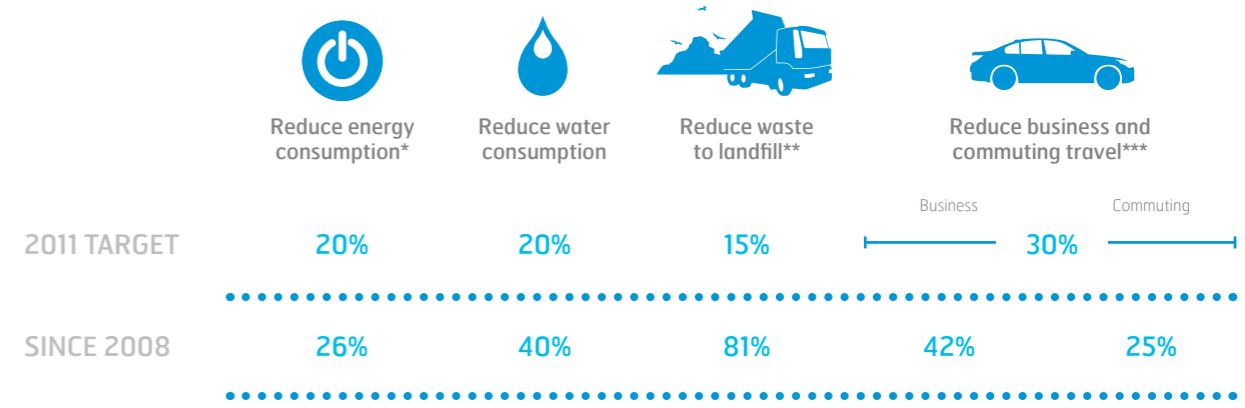
We continue to evaluate options for carbon-neutrality in the future; our current focus is on creating a truly low carbon estate through a programme of continuous improvement. We have set aside capital investment for energy efficiency projects which will help achieve a further 20% reduction (from a March 2011 baseline) in energy consumption by the end of 2014.



OUR TARGETS

On these environmental measures we have exceeded our targets by a significant margin.

Figures based on 2011 calendar year data, and all UK sites unless stated otherwise.



We will follow a strategy of continuous improvement with the following targets for our UK operations

Compared to March 2011 baseline.



* Consistent carbon factors applied across periods.
 ** Applies to four main sites: Prestwick, Swanwick, CTC, and Hurn. Comprises 57% recycling, 24% waste to energy, only 19% waste to landfill.
 *** Consistent carbon factors applied across periods. Commuting data based on four main sites.

During 2012 we will:

- Conduct an ISO14001:2004 gap analysis of our UK operations
- Introduce schemes that will encourage reduced carbon emissions in employee travel to and from work
- Investigate new targets for waste and travel minimisation



PROGRESS

Our plan is based on the following themes

1 REDUCING OUR CARBON FOOTPRINT

We began by benchmarking the environmental impacts of our estate, which covers 170 sites including two major air traffic control centres, airport towers, offices, storage facilities and an extensive infrastructure of remote communications and navigation equipment throughout the UK.

The process was an important first step in helping us understand the scale of our environmental impacts, establishing a way to monitor progress and set local goals for action.

Our strategy to operate from fewer air traffic control centres and more efficient buildings has significantly reduced our footprint.

We also developed 'opportunity registers' for each of our sites with initiatives ranked by cost, benefit and ease of implementation. Having delivered immediate 'quick wins' we prioritised other initiatives according to business benefit and payback timescales.

Our estate

170 SITES



Our paramount need to ensure safety occasionally places restrictions on our ability to improve carbon and energy efficiency. We achieve change by working closely with our Facilities Management team, Engineering and our contracting partner EMCOR.

Our Facilities Management team has undertaken a programme of modifications to make sure our offices are appropriately heated, lit and cooled appropriate to our 24 hour needs and delivered measures to save

water, or improve waste management. For 2011 alone energy consumption reduced by 5% across all sites, and since 2008, by 26% to exceed our target significantly. Water consumption has reduced by an impressive 40%. Recycling has increased to 57% across our four main sites, helping to reduce our waste to landfill to below 20%.

The NATS Supply Chain has also contributed to improvements with an environmental and social responsibility policy ensuring our suppliers and procurements are aligned with our environmental targets. We awarded our caterers, EMCOR/ Baxter Storey, their contract partly as a result of their environmental credentials – their use of locally-sourced foods and recyclable packaging being a key differentiator.

Our waste services provider for our south coast sites has helped

streamline our recycling and their waste-to-energy plants, which generate energy by incinerating waste cleanly, means that only 11% of our waste from these sites goes to landfill.

We are using the business planning cycle to set annual environmental targets and all major investments now specify environmental improvements in their requirements, for example, incorporating carbon costings, understanding their potential environmental impact and where appropriate, setting improvement targets.

These changes are particularly relevant for our engineers, who as operators of our air traffic control equipment, communications and navigation infrastructure, play a key role in our environmental performance, with full lifecycle impacts factored into replacement policies.





Our plan is based on the following themes

2 ENGAGING OUR STAFF

Winning the hearts and minds of our employees makes a crucial difference and can create big savings.

We've made training and awareness a continuous feature of our environmental programme. Our recent campaign '**small steps towards a lighter footprint**' received an industry award as runner up for best internal communication. The campaign was based on the premise that small everyday changes can add up to big savings; recycling, turning off lights and computers, not printing documents, making informed travel choices. Instead of sustainability being the responsibility of a few, this campaign was about inspiring a shared sense of responsibility for environmental performance.

The campaign also provided guidance on the changes staff could make at home, helping them reduce their impact on the environment and save money at the same time. Helping our staff lead low carbon lifestyles goes beyond the usual remit of a company's environmental programme, but is an important feature of NATS Acting Responsibly.

→ LEADING A LOW CARBON LIFESTYLE

Everyday changes



Our plan is based on the following themes

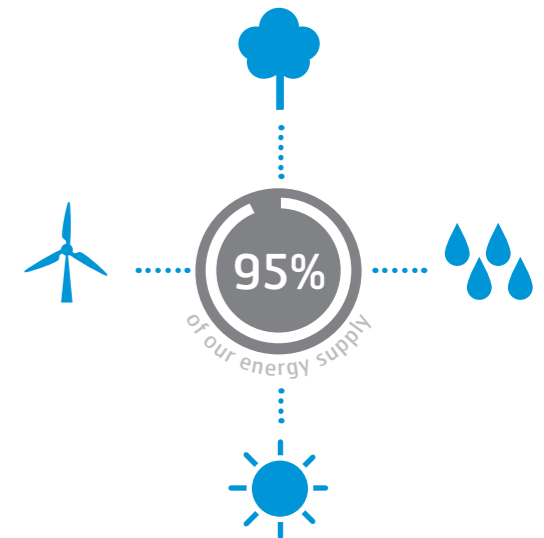
3 RENEWABLE ENERGY TECHNOLOGIES

Given our high energy use, we have been exploring whether renewable energy sources could help lower the carbon intensity of our operations, while providing energy security for NATS. We have been buying renewable energy from the national grid since 2008, and today, over 95% of our energy supply comes from renewable sources.

But could we generate renewable power at our sites?

During 2011 we reviewed all available renewable technologies and their potential for use across the NATS estate, including our remote communications and navigations sites. The results showed that while there are many feasible renewable projects, the return on investment was borderline compared to conventional low carbon technologies which offered larger carbon savings potential. These projects now feature in our investment plans.

We will continue to monitor the options and the business case for installing renewable energy technology. The technology in the micro-renewable sector is evolving so quickly, we are optimistic about future opportunities.





Our plan is based on the following themes

4 UK CARBON EFFICIENCY SCHEME

The UK's Carbon Reduction Commitment (CRC) energy efficiency scheme came into effect in 2010. It requires large organisation (like NATS) to enter an emissions trading system and purchase carbon allowances to cover emissions from the previous year.

This additional financial burden will cost us approximately £500,000 a year, despite going above and beyond CRC obligations by voluntarily using tough targets to measure, manage and reduce carbon emissions.

In November 2011 NATS successfully placed in the top quartile of companies in the CRC league table, which for the first year was determined on whether companies had installed automatic meter reading equipment across their estates and certification to the Carbon Trust Standard. While NATS had successfully achieved the Carbon Trust Standard late in 2010 it had been difficult for us to install automatic meter reading equipment meters across our vast estate. From 2013 more weight is given to carbon reduction, and so we expect to be placed even higher next time around.

Cost of carbon allowances to cover emissions

£500,000



“Reducing the carbon footprint of our business by 26% was a great result and testament to the commitment of the teams that manage our buildings, now we’re aiming for another 20% on top of that. To deliver this we will need real innovation from the facilities management team in NATS.”

Sean Allen, Head of Facilities Management

Our plan is based on the following themes

5 REDUCING NATS' COMMUTING IMPACT

Employees' commuting habits are often considered 'out of scope' of company environmental plans. At NATS, we have reduced our commuting footprint by 25% since 2008 by implementing a raft of sustainable travel initiatives. As well as reducing emissions, saving fuel, and improving health, these have helped reduce congestion and free up valuable parking space.

Quarterly traffic surveys provide useful information on travel habits and transport user groups mean employees have a say in NATS' travel plan. We have provided some attractive incentives:

- **A Cycle to Work Salary Sacrifice Scheme:** Over the last four years 10% of employees have taken part in this scheme.
- **Car Sharing:** Employees at major sites who share cars at least three

days a week are allocated a parking space. If someone's companion has to leave early, we pay the taxi fare home.

- **Cycle and walk to work days:** We encourage these, incentivised by raffles or a free breakfast.
- **Salary Sacrifice Bus Scheme:** We provide a shuttle bus service between our Hampshire and neighbouring train stations, and this scheme reduces the cost significantly.

In addition, we provide loans for rail season tickets and motorbike purchase and promote connectivity away from the office.

As well as promoting these initiatives internally NATS sit on the National Business Travel Network steering group, helping to encourage other businesses to adopt sustainable travel practices.

Commuting



James Deeley, Environmental & Community Affairs Specialist

"We've delivered impressive reductions to our travel and estate footprint, using fewer natural resources, protecting the environment and saving money for the business at the same time."





Our plan is based on the following themes

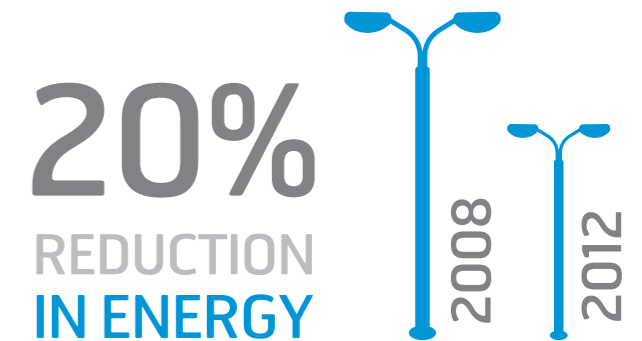
6 INNOVATIVE TECHNOLOGY

NATS is making impressive savings by installing new energy efficient technologies. For example, the car park lighting at Prestwick pulses instead of using a continuous supply, not noticeable by the human eye, but saving electricity.

At Fareham, we have installed 'power perfector' technology to optimise the energy supply from the national grid, which has reduced consumption by more than 5%.

At remote sites upgrades of communication and navigation equipment are leading to further energy savings, and reducing the need for maintenance visits. A simple yet effective change was encasing the rotating radar head at Perwinnes, to reduce air resistance. Along with other simple improvements this has reduced energy consumption at the site by over 60%.

Energy consumption





OUR PEOPLE + COMMUNITIES

Building sustainable links
in and around the workplace.

NATS employs 4,520 employees in roles including air traffic controllers, engineers, scientists and support staff, throughout the UK and overseas.



OVERVIEW

We never lose sight of the fact that our people are our most valuable asset. We support and educate our people to act responsibly and take great pride in the way we look after them. Our Diversity and Equality Committee promotes a culture of equality and diversity and seeks to raise awareness of these issues.

To build relationships with the people living around our workplaces we launched our community programme in 2008. It's based on three activities:

- 1 EMPLOYEE VOLUNTEERING
- 2 EMPLOYEE CHARITABLE GIVING
- 3 CORPORATE GIVING

Since then we have supported our staff in many community-related activities and so far more than 400 have taken part. Our website features a community volunteering portal to help connect volunteers to community projects.

Over the last 3 years our social responsibility fund, the 'Footprint Fund', has donated over £100,000 to more than 120 causes. Staff donated over £70,000 to their chosen charities in 2011 through the 'Give As You Earn' scheme. In 2011 we launched our Chief Executive's Charity of the Year, the first of which is Aerobility, offering disabled and seriously ill individuals the opportunity to learn to fly.

2012 TARGETS

Corporate giving – to raise by September 2012, for Chief Executive's Charity of the Year, Aerobility

£100,000

Charitable giving - to increase the number of employees donating through 'Give As Your Earn'

5% by the end of 2012

During 2012 we will:

- Investigate gaining the Biodiversity Benchmark Award for Swanwick Lakes Reserve.
- Investigate joining a Corporate Social Responsibility Index, for example BITC's CSR Index, by 2014.
- Work together with our employees to capture the number of NATS employees taking part in community volunteering.

Cara Roberts, Environmental Assistant

"We have been working hard in strengthening ties within the local communities and for the first time, supporting our charity of the year. It has been overwhelming and inspiring to see the level of commitment and passion that NATS employees have for the worthy causes they care about."





PROGRESS

NATS SOCIAL RESPONSIBILITY FUND

NATS established the Footprint Fund in 2008 to support community activities and communication.

It aims to encourage employees individually, or in teams, to give something back to the communities in which we live and work. Our focus is not on presenting large cheques, more on practical, active involvement with local charities and communities.

The Footprint Fund has supported over 120 good causes including youth, recreation and disabled groups, conservation projects, homeless schemes, day centres and hospices. Schools have also benefited from new learning materials, or upgrades to school facilities. Many organisations, such as the RNLI and Mountain Rescue have attracted volunteering support from employees as well as funding.

“The Community Affairs Support Team kindly donated almost £600 for a replacement fridge. Our new fridge is a commercial fridge with a glass door, which has increased our sales as temptation is proving to be too much for some now the snacks are visible!”

Paul Donaghey, Air Traffic Controller, Belfast Airport

INNOVATION: BELFAST AIRPORT CHARITY FRIDGE

The fizzy pop and confectionery-laden charity fridge at Belfast Airport has raised over £5,000 since 2008, from donations left in return for snacks.

Number of causes supported by the Footprint Fund 2008

OVER **120** SINCE 2008 

CEO CHARITY OF THE YEAR

Last year a group of controllers from Prospect ATCOs' Branch approached Richard Deakin about a charity called Aerobility, formerly the British Disabled Flying Association.

After visiting the charity and feeling overwhelmed by the charity's work in providing people with disabilities the opportunity to fly, Richard decided to nominate Aerobility as his charity of the year.

We have challenged our employees to do something big to raise money towards our goal of £100,000. This will allow Aerobility to buy a specially-adapted aircraft and be able to extend the gift of flight to more people. Employees have planned fundraising events including fayres, raffles, quizzes, abseiling, cycle challenges and a 'Big Pull' in June 2012 when teams from around NATS will pull an aircraft down the race track at Goodwood.

In addition to fundraising we launched 'The BIG Surf', creating a 'Surf for charity' search box within our internet browser. A percentage of the referral fees generated from searches goes straight to Aerobility.

CHARITABLE GIVING

We launched our 'Give As You Earn' scheme in 2008 so employees could make tax free donations to the charities they care about.

We've now made this even easier with a web portal, during the last year employees donated over £70,000 to charity. We have also launched a 'Gift a Shift' scheme so air traffic controllers can donate overtime shift earnings directly to Aerobility.

Our Community Affairs team provides the link between charities looking for support and employees keen to help. On our web portal, 'NATS Gives', employees can advertise their activities and local charities can ask for our help, whether fundraising or volunteering.

We have also established annual fundraisers for charities such as CLIC Sargent and Hampshire Autistic Society. And we support the Dream Flight charity, for seriously sick and disabled children, through recycling mobile phones, which has raised almost £1000 over the last 18 months.



EMPLOYEE VOLUNTEERING

More than 400 of our employees have taken part in projects with schools, charities, day centres and youth centres.

Departments have connected with local communities by offering their experience and expertise. Since 2008, members of the Infrastructure and Communications Systems team at CTC have been mentoring at King Richard School, Portsmouth, helping youngsters prepare for their maths GCSEs. Their success has shown in the results as the pass rate of pupils attaining an A*-C grade has improved from 21% to more than 50%.

Human Resources have also worked with local communities and schools to share knowledge of areas such as CV writing and interview skills.

Other successful projects include conservation projects, tree felling at Swanwick Lakes, cleaning Prestwick beach, ship maintenance and various allotment projects with local youth groups.

Swanwick Lakes Nature Reserve

The jewel in NATS' crown must be the Swanwick Lakes Nature Reserve next to the Swanwick Centre. NATS owns and funds the 86 acre Nature Reserve which is managed through a partnership with Hampshire and Isle of Wight Wildlife Trust.

The Study Centre at Swanwick Lakes is run by two full-time members of staff and over 20 volunteers, who help with everything from conservation work to assisting with school groups. Hampshire and Isle of Wight Trust staff manage the reserve with two main objectives; protecting wildlife and inspiring people. The reserve hosts more than 30 public events a year, while the Study Centre and footpaths host thousands of visitors every year.



SUPPORTING SUSTAINABILITY THROUGH PAY

Our Occupational Health Services (OHS) provides comprehensive services to all employees to promote the health and productivity of the overall workforce.

Employees are encouraged to adopt a healthier lifestyle through Wellness@Work roadshows, the Wellness@work intranet site, and employee health checks. OHS created the Wellness@Work Survey last year to provide a valuable resource to anyone keen to improve their health and wellbeing. It identifies areas for employees to focus on and makes resources available to improve each aspect of wellness.

Our benefits strategy now highlights green initiatives, with benefits such as our Cycle to Work scheme, car sharing incentives and a low emission car scheme featuring in our benefits programme. (See Estate section.)

“We are really excited to have NATS on board. Working with NATS is going to give us the ability to support more disabled people around the UK and to grow the Aerobility family into an even more effective social project. It’s wonderful to get this kind of support from inside the aviation community, working with both the employer and employees that manage the skies above us. It would be hard to find a more fitting partnership.”



Mike Miller-Smith, Chief Executive, Aerobility

The NATS Defined Contribution Pension Scheme, introduced in April 2009, features ethical funds in the investment choices open to members. The fund invests mainly in UK equities, avoiding companies deemed to cause unacceptable harm to people, animals or the environment.

We launched a new scheme in 2011 which provides employees with shopping discounts, prompting them to consider donating some of the savings they have made to Aerobility.



MARKET

We use **over 1,000 suppliers** in our business and our supply chain plays an important role in supporting ATC services.



OVERVIEW

Sustainable purchasing decisions have two dimensions – carbon reduction and ethical behaviour. We need our supply chain to adapt to sustainable procurement, while we need to adapt our processes so we can balance managing our environment and social impacts with our drive for cost efficiency.

We have a new supplier policy to select suppliers that are environmentally and socially sustainable and able to support our sustainability commitments. It's also our policy to maintain professional and mutually beneficial relationships where we work together to find new, more sustainable solutions to our needs.

We are also developing appropriate skills and processes in our supply chain

management team, based on the best sustainable procurement practices.

We have developed a questionnaire to obtain information on suppliers' corporate responsibility credentials. We have also revised our supplier management process to include measuring environment and social sustainability performance. We will use this data to decide which suppliers we use.

OUR TARGETS

2012 targets

- We require all key suppliers, existing and new to complete a profile questionnaire.
- All supply chain professionals to complete a minimum of 4 hours Continuous Professional Development to increase knowledge and awareness of sustainable impacts within the supply chain.

During 2012 we will:

- Implement contract incentives to encourage suppliers to find ways to reduce our and their environmental impacts.
- Develop joint business plans with key suppliers to incorporate joint sustainability targets by end 2013.

Christine Hyde, Supply Chain Manager



“Corporate Social Responsibility is entirely consistent with best purchasing practice, reduced consumption, less waste, sustainable sourcing and collaborative supplier relationships, which combine to deliver great value to NATS and its customers.”



WHAT WE DO

COMMUNICATION

NATS uses over 1,000 suppliers and recognises the importance they play in our service.

Our supplier policy helps communicate our requirements to our suppliers so they can help us create a culture of environmental and ethical excellence. Our key suppliers account for more than 80% of our expenditure so it is very important they share our values and goals. We were one of the first organisations to achieve BS11000 for collaborative business relationships.

QUESTIONNAIRE

We rate all key suppliers against a fixed set of criteria, covering cost, quality and technical capability and develop an improvement plan for each supplier.

Corporate Responsibility and environmental impact is part of this and we require suppliers to submit their environmental policy. Measurement of our suppliers' performance includes environmental scoring; allowing NATS to discuss these matters and look for improvements. We ask our suppliers to confirm whether they procure their materials and energy from environmentally-friendly sources, ask them to reduce the environmental impact of the services they provide and encourage new ideas for doing so.

Number of suppliers

1,000

Our key suppliers account for:

MORE THAN 80% OF OUR EXPENDITURE

DEVELOPMENT

We also aim to develop the skills of the team to adopt sustainable procurement practices and measure and review our progress. We also ensured the role of the supply chain was incorporated into NATS' response to the Climate Change Adaptation report for DEFRA, concerning issues facing industry.

SUSTAINABLE PURCHASING

- Our recently appointed catering supplier uses local food from ethical sources and prepares most food on site to reduce transport and waste.
- All wood we use in communications masts is sustainably sourced as certified by the Forestry Stewardship Council (FSC).
- We reuse, recycle or dispose of redundant and surplus equipment in a way that minimises or eliminates the use of landfill.

Sustainable procurement

Minimising impact of the supply chain:

- Social
- Environment

Minimising impact of products and services:

- Minimising waste
- Renewable energy

Buying products which use the least resources:

- Recycled content products
- Energy-efficient appliances
- Fuel-efficient vehicles



THE ENVIRONMENT TEAM

“Since the launch of the Acting Responsibly programme in 2008, NATS has been able to set stretching targets on our environmental performance, highlighting our ability to innovate. Now we are showing the results of that innovation in the air traffic services we provide. More recently our customers have asked us to find a way of being financially incentivised on our environmental performance; this was a tough challenge, but succeeding clearly demonstrates the commitment of the environmental team as well as the focus NATS has put on environmental improvement and the sustainable development of the aviation industry.”

Ian Jopson,
Head of Environmental &
Community Affairs NATS



Ian Jopson



Tim Gill



Carrie Harris



James Deeley



Cara Roberts



Kate English



Hellen Foster

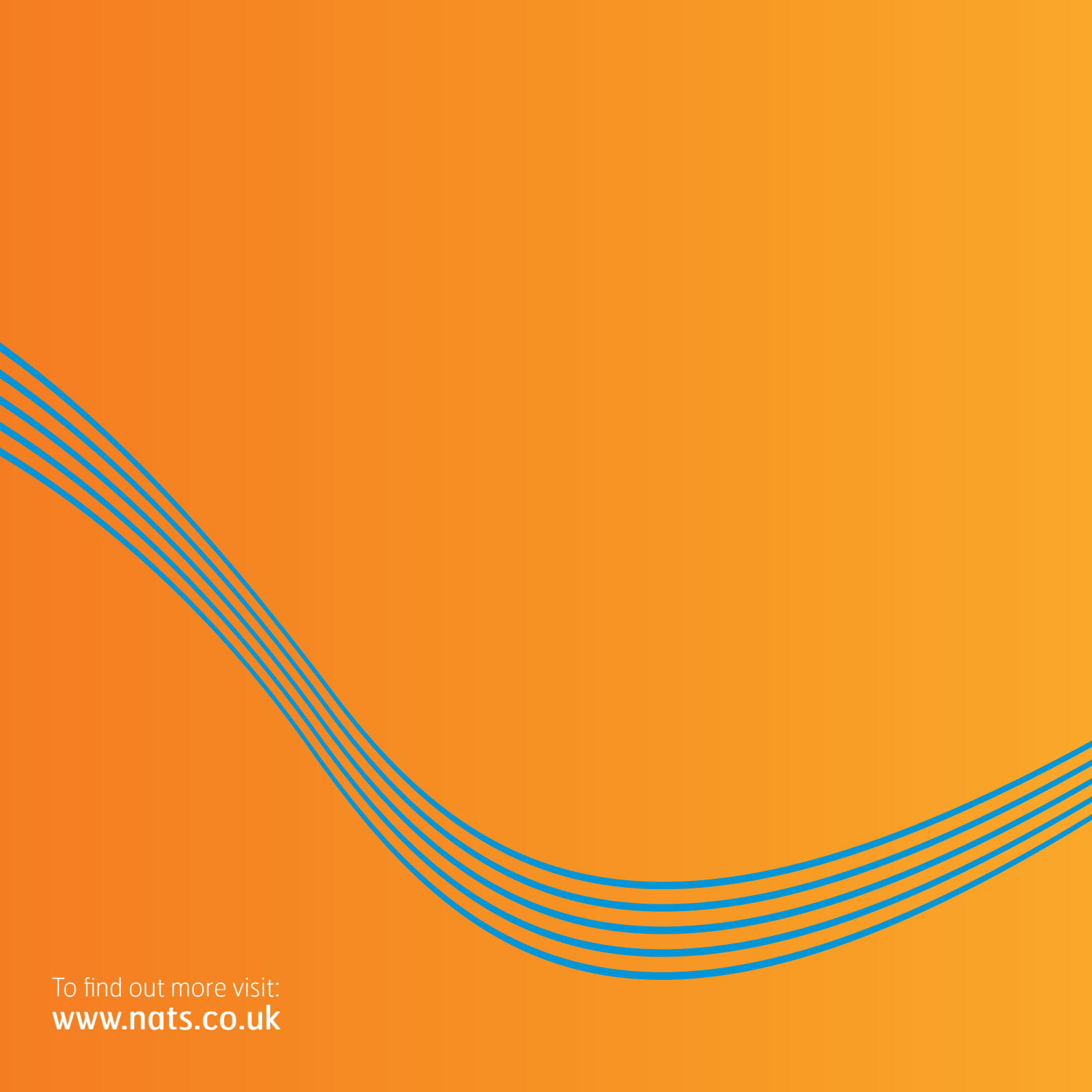


Chris Nutt



Amanda Hardie

To find out more visit:
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