



NATS

Responsible Business report 2019-20

nats.aero

CEO introduction

The financial year that ended back in March 2020 already feels like a long time ago, and I suspect it will be quite some time before we see another year like it.



Nevertheless, we remain very proud of the record traffic levels we handled safely in 2019-20, the challenge that presented in making ours a responsible business, and the great strides we made. We were awarded a B grade by CDP (formerly the Carbon Disclosure Project) for our management of our greenhouse gas emissions, making us one of the best environmental performers in the aviation industry. I'm very proud that as a result of buying renewable energy and low carbon gas, we have now reduced the carbon footprint of our business by over 90%.

The role we perform allows us to go beyond the boundaries of our own business when it comes to environmental responsibility. As a result we enabled fuel savings for our customers, the airlines, that in turn saved more than 30,000 tonnes of CO₂. NATS was the first air traffic service provider in the world to introduce an environment programme in 2008, and since then we have reduced

aircraft fuel burn and emissions by an average 7% per flight. We have met our financially incentivised environment regulatory target (3Di), with performance staying within the target range, which is explained within this report.

Naturally the dominating news of the last year has been the Covid-19 pandemic, with the aviation sector being one of the worst hit. However, in every challenge there is an opportunity and for us, at NATS, that opportunity is about how we build back better, identifying and embedding improvements so that as the air traffic returns, we can deliver ever more sustainable air traffic operations. We are part of an industry-wide commitment in the UK to achieve net zero by 2050 and have set ourselves goals related to our own carbon impacts by 2030. The work we have already done makes us well placed to respond to the increasing calls on aviation to elevate environmental priorities.

During the pandemic our priority has been to care for our employees, and to care for our business, with prudent cost saving measures that also protect our operation for when traffic returns, and protects jobs. Our employees have made considerable efforts to support our wider community, volunteering and turning their hand to new skills from making PPE to delivering blood supplies.

Our commitment to be a responsible business is embedded into the fabric of our company. It covers a wide breadth of activity both inside and outside the operation itself and I believe this short report on the 2019-20 year demonstrates the seriousness of our commitment now, and into the future as our industry looks to recover from the impacts of this extraordinary year.

A handwritten signature in black ink, appearing to read "Martin Rolfe".

Martin Rolfe
Chief Executive Officer

NATS in numbers

Highlights from 2019-20

¹Target based on absolute scope 1, 2 and significant scope 3 GHG emissions, against a 2018 baseline

²Based on our absolute scope 1 and 2 GHG emissions, 2019-20 vs 2018-19

³[Decarbonise aviation in the UK by 2050](#)

Scene setting

Going into 2020 we were excited to start celebrating the centenary of Air Traffic Control ([ATC100](#)); no one knew this would be such a historic year in itself, with the aviation industry changing as a result of the Covid-19 pandemic and facing a struggle for its very survival.

Air Traffic Control has played a remarkable role in the making of the modern world, supporting our airlines in connecting us to places and people in a way that we never imagined 100 years ago. In normal times aviation contributes £52bn to the UK economy, supporting nearly 1m jobs. It will be even more important to our island nation's global trading links, once we leave the EU. Airspace is critical national infrastructure which must function safely and efficiently 24 hours a day, 365 days a year. Even at the height of the first lockdown, when there was virtually no traffic, we still kept our airspace alive, to keep critical medical supply lines open, and to repatriate homecoming travellers.

While we put a spotlight on the past, the technology and the people who made it happen, we are also looking to the future challenges and opportunities we face. We know that the future must be sustainable, as we seek to build back better in line with Government ambitions. Responsible business is an essential part of this journey.

Our employees push the boundaries to improve ATC and our ambitions for our responsible business programme are no different. We want to set a standard in reducing our environmental impacts. And we want to create the right, diverse and inclusive environment within our business for our employees to use their skills, experience and innovation to ensure our business continues to operate safely and efficiently, now and into the future.

Our report describes some of the key highlights from 2019-20 and how we've been responding to Covid-19 from people across our organisation under the following Responsible Business headings:

- > [Governance](#)
- > [Supported employees](#)
- > [Strong communities](#)
- > [Good business practice](#)
- > [Healthy environment](#)
- > [Environment targets](#)
- > [Environment results](#)

Governance

Our governance ensures we set and meet responsible business ambitions.

Our Chief Executive is accountable for our responsible business policy. In addition, in accordance with their accountabilities under the UK Corporate Code, our Board takes an active interest in the policy and its implementation as part of their strategic responsibility for the culture of the company. Oversight from the NATS Executive includes our environmental performance, employee relations, anti-bribery and corruption, prevention of modern slavery and human trafficking through various strategy, risk and governance sub-committees.

A Benefit Delivery Panel is responsible for overseeing delivery of projects in support of environmental targets, while an Environment Strategy Steering Group manages environmental risks, compliance and ground-based impacts.

A people and organisation strategy is reviewed by the Board twice a year and an Oversight Group monitors our commitment to minimising the risk, and proactively addressing any suspicions of modern slavery and human trafficking in our business activities and supply chain.

We have adopted a number of management systems to mitigate business risks, many of which are certified, such as: ISO9001 (quality), ISO14001 (environment), ISO27001 (information security), ISO55001 (asset management) and ISO 45001:2018 (health and safety). Governance processes are in place to ensure oversight for these management systems.

Our most material issues have been identified taking account of the views of our customers, suppliers and employees, including key performance areas subject to regulatory targets and key responsible business issues subject to mandatory reporting. Some of these are addressed in our [Annual Report & Accounts](#) and our Customer Report.

Policies & priorities

Our [responsible business policy](#) sets out our core principles as they relate to human rights, ethics, protecting our natural world, working with communities and transparent reporting.

Given our material impacts and risks, we have set targets to improve our environmental performance, both in the airspace we manage and from running our business. We also continue to monitor and pursue social and governance initiatives, including how our business can further support the UN sustainable development goals. A new sustainability strategy sets out goals and milestones that will help us achieve our net zero emissions target, as well as support the wider UK aviation industry do the same. We also expect our regulator to continue to focus on targeting the environmental efficiency of the service we provide, using the 3Di metric. Community annoyance remains a key concern and we continue to work closely with airport operators, airlines, our regulator, the Department for Transport, ICCAN, ICAO, other bodies and community representatives to manage aircraft noise near airports.

Public disclosure and performance indicators

Public disclosure of our performance includes the following channels and metrics:

CDP

For the second consecutive year (2018-19), we have been awarded a [B grade by CDP](#) (formerly the Carbon Disclosure Project) for our management of our greenhouse gas emissions. NATS was the first air traffic service provider in the world to introduce an environment programme in 2008. We have made good progress, which this score from CDP acknowledges, but there is no doubt that much more needs to be done as we work towards our commitment as part of the Sustainable Aviation coalition to reach net zero emissions as a UK industry by 2050. Due to the impacts of Covid-19 on our business, we chose not to participate in CDP reporting for 2019-20.

Licence reporting requirements

NATS' en route licence sets out a number of reporting requirements, including an annual update to the CAA (Condition 10) on our environmental performance, but is not published. However, the environmental KPIs reported are published elsewhere e.g. in the Annual Report & Accounts and the Responsible Business reports. In addition, we report quarterly (Condition 11) on our airspace environmental performance metric 3Di on our [website](#).

Policies & priorities

Our [responsible business policy](#) sets out our core principles as they relate to human rights, ethics, protecting our natural world, working with communities and transparent reporting.

GHG report

As part of our commitment to consistent and transparent reporting we undertake external verification of our greenhouse gas emissions to the ISO 14064 standard. Achieving this requires us to prepare and publish a detailed technical report outlining how our greenhouse gas emissions have been calculated. The GHG report is updated annually to take account of any changes in our approach, methodologies, models, boundaries, etc. and is published in parallel with our [Annual Report & Accounts](#) and Responsible Business report.

Modern Slavery

NATS, and everyone within the organisation, are committed to preventing slavery and human trafficking in our corporate activities and to complying with the requirements of the Modern Slavery Act 2015. Our annual Slavery and Human Trafficking Statement is available [here](#).

Gender Pay

We aspire to be an organisation that is recognised as a truly inclusive and diverse employer; our key areas of focus for this year (20-21) are; agile working, inclusive people practices, inclusive behaviours and ensuring that gender diversity actions are owned by those who can influence change. Our annual Gender Pay Report is available [here](#).



Supported employees

Our business relies on the competencies, capabilities and experience of our employees. We are committed to providing a safe, inclusive and supported workplace to help employees thrive.

Dr Rae-Wen Chang talks about our in-house occupational health service and how it has responded to Covid-19

"As a far-sighted and people-focused organisation, NATS has for many years provided an in-house Occupational Health Service with Aeromedical expertise to all our employees across the UK and international offices.

Our people have benefited from an embedded and dedicated team who provide advice to individuals and managers, and we work closely with our Quality, Health, Safety and Well-being colleagues.

Since the beginning of the Covid-19 pandemic in 2020, our highest priority has been the health and safety of our workforce.

The challenge for the NATS Pandemic Working Group, which I co-chair, with representatives from all business areas, is to provide clear, practical advice to the Executive on reducing potential health risks to employees while maintaining a critical 24/7 operational service. Not only the immediate health concerns, but longer term as we adapt to seismic changes in the aviation industry, ways of working and daily life.

We are fortunate to have a strong network of responsible people who follow advice to look after themselves, their colleagues, families and the whole community.

To date we have had a very low case rate and we will do everything we can together to maintain this."

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Our people have benefited from an embedded and dedicated team who provide advice to individuals and managers.

Dr Rae-Wen Chang
Chief Medical Officer



Supported employees

Sian Bunyan highlights some of the activities underway linked to employee wellbeing

"Our wellbeing has always been important to us but during this period it's been at the forefront of everyone's minds.

At the start of lockdown, since when all non-operational employees have been working from home, we have run weekly online Wellbeing Wednesday sessions giving people a chance to voice their concerns or simply say how they are feeling. Each week our Human Factors and Quality, Health, Safety and Wellbeing teams have produced informative visual guides on a wide range of topics such as video call fatigue, men's health, wearing a face covering, and provided advice and tips on the optimum desk set up and the importance of taking regular breaks.

We also compiled a Wellbeing Risk Profile at the beginning of lockdown, to help understand the various factors that could impact individuals' wellbeing and the risk mitigation measures we needed to put in place.

And at our operational sites we have been on hand for our operational colleagues who have worked throughout, assisting with their health and wellbeing and reinforcing government guidelines."

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We have run weekly online Wellbeing Wednesday sessions giving people a chance to voice their concerns or simply say how they are feeling.

Sian Bunyan
Quality Health Safety and Wellbeing Performance & Engagement Co-ordinator



Supported employees

Andrew Sivanesan reflects on what diversity and inclusion means to NATS' employees

"NATS delivers world-leading services every single day thanks to a diverse workforce – including black, Asian and minority ethnic (BAME) people, foreign nationals, religious minorities and white minorities. This year we established NATS' multicultural employee network, globeAll, which aims to elevate the esteem of multicultural employees and their allies through networking and educational activities, and seeking to attract, engage and nurture multicultural talent. This is a resource that employees of all backgrounds can seek support from on multicultural inclusivity.

In our first six months we have attracted members from across NATS' sites, business areas and seniorities; we have a programme of engagement with senior leaders on delivering practical change and supporting them with resources that increase awareness and confidence in multicultural inclusion.

Given the issues highlighted by the Black Lives Matter movement this year, diversity and inclusion has rightly risen up the corporate agenda across the world, and we are excited about the opportunities to create a multiculturally inclusive workplace."

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We are excited about the opportunities to create a multiculturally inclusive workplace.

Andrew Sivanesan
Data Science Specialist



Supported employees

Helen Fuge highlights the progress being made on diversity and inclusion

"We have continued to focus on the new and existing diversity and inclusion challenges we face and how best to tackle them in the coming months and years. We have made progress in raising awareness, reviewing processes, enhancing our employee networks and encouraging debate about inclusion and diversity. However, there is still more that can be done to change our culture and demographic.

Well before the pandemic we had committed to enabling agile working, empowering our people to work where, when and how they choose. While the pandemic has given this priority a kick start, we plan for this to be the new normal in future.

With a recruitment freeze in place, we are using this time to review and improve our recruitment and selection processes to ensure they are inclusive and fair, considering aspects such as unconscious bias, consistent assessments and scoring frameworks, how we promote people and, of course, our job adverts.

We have expanded our learning offering, including rolling out our virtual "inclusive teams" training which has been well received across the business. Our recent voluntary redundancy programme and restructuring gives us an opportunity to create more diverse management teams, and we have developed a set of principles which our business leaders are encouraged to use to help consider a more diverse group of talent for management positions".

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We have made progress in raising awareness, reviewing processes, enhancing our employee networks and encouraging debate about inclusion and diversity.

Helen Fuge

Head of Learning and Talent





Strong communities

As a large company with multiple sites across the UK and overseas, we play a positive role in the socio-economic development of the communities in which we operate, creating highly skilled and paid roles, and secondary employment, as well as supporting a range of charities and other good causes.

Nick Worricker explains how our employees exceeded charity fundraising targets

"Our employees continue to support charities and causes they care about via our Payroll Giving scheme. 12% of employees donated £210,500 via the scheme and we've maintained our Gold quality mark award first received in 2017. Our Footprint Fund, a grant scheme for which employees nominate their chosen charities, also donated £31,000 to 66 local charitable groups. This funding supported projects such as Parkinson's Disease research trials, maintenance for blood transport bikes to support the NHS, local hospices and palliative care units, a new library for a primary school, accommodation for the homeless and support for local Samaritans groups.

Charity Focus activities run by employees in our centres at Swanwick and Whiteley exceeded fundraising targets of £50,000 for Hampshire & Isle of Wight Air Ambulance and £70,000 for Cancer Research UK Southampton Research Centre respectively. We also donated £25,000 to Historic Croydon Airport to celebrate ATC100.

We continued to support [Dreamflight](#) through 2019 who offer once-in-a-lifetime trips to Disneyworld for children suffering from terminal illness. Since 2002 we've waived air traffic control fees and given them priority to low altitude routes helping the flight to avoid areas of turbulence."

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12% of employees donated £210,500 via our Payroll Giving scheme.

Nick Worricker
Environmental Manager



Strong communities

James Deeley recounts the voluntary support employees have provided this year

"Our employees have done some amazing volunteering over the last year, especially during the Covid-19 pandemic. Our staff have helped the NHS with volunteering such as an emergency medical technician working alongside paramedics, delivering blood and other urgent medical consignments as part of [SERV Wessex](#) and using our peer support training to help NHS staff, as well as numerous local community groups.

Others have put their sewing talents to work by making kit bags and scrubs for the NHS and making masks to raise money for Naomi's House Hospice. There has also been more unusual but equally important volunteering in the form of offering socially distanced beekeeping to help schools that remained open for key workers and vulnerable children, and providing extra fostering and training for Canine Partners, which transforms the lives of people with physical disabilities."

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Others have put their sewing talents to work by making kit bags and scrubs for the NHS and making masks to raise money for Naomi's House Hospice.

James Deeley

Deputy Head of Sustainable Operations



Strong communities

Martin Smith describes our support for the Jon Egging Trust

"The very week before lockdown began, NATS [Jon Egging Trust \(JET\)](#) volunteers held a 'Blue-Skies 2' session with young people from Robert May's School, Odiham. Introducing some new leadership tasks to the group in their second year of the Trust really did test them and although some struggled with some of the tasks, they all enjoyed themselves and managed to create some amazing machines from the tools we gave them. Although our activities are paused currently, we are actively planning to resume just as soon as we are safely able to.

The pandemic has disrupted the life of every child in the UK, and for many who were already struggling at school before the pandemic, going back to school is a huge challenge. To help support students during this time, JET has launched a new online resource area on its website, with activities to inspire students and give them some light-hearted food for thought focused on life skills of the JET Blue Skies youth programme; Communication, Teamwork, Goal setting and Resilience."

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Although our activities are paused currently, we are actively planning to resume just as soon as we are safely able to.

Martin Smith
Safety Manager





Good business practice

Our business is built on partnerships with our customers, suppliers, peers and other stakeholders. These relationships are built on trust and our high standards of ethical behaviour and integrity.

Stephen Rose discusses the importance of supply chain relationships

"Since March, our major suppliers have played a significant role in helping support our actions to manage our finances and protect our business as we respond to the coronavirus pandemic. Their response has been a real testimony to the emphasis we put on building strong relationships and we have worked closely with suppliers, particularly small and medium enterprises, to ensure that our changing requirements don't jeopardise their businesses. Our value 'we work together' extends to our supply base and we have worked hard to put in place a Supplier

Relationship Management programme and collaborative supply chain capability that is certified to the international standard for business collaboration (ISO 44001). In the coming months we will also be hosting a Q&A session with our major suppliers, as well as a series of workshop sessions for groups of suppliers that work across similar areas of our business".

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We will be hosting a Q&A session with our major suppliers.

Stephen Rose
Head of Supply Chain Services



Good business practice

Louise Tomicic describes our engagement with airline customers

"At the start of 2020, our customers were anticipating record summer traffic figures. The impact of the pandemic is now continually changing the landscape for our customers. The decline in traffic from March had a devastating impact on airline revenues and fleet sizes, and consequently the need for job losses. The optimism of a small summer recovery in traffic was quickly suppressed by quarantine rules and the impending second wave in Autumn. In June, we met with our customers to discuss our interim Service and Investment Plan for 2020. We presented our response to the pandemic and this was well received by our customers. As the uncertainty of traffic recovery over the next few years

continues, we are ensuring continued engagement on our future technology and airspace programmes. We conducted another engagement session with customers in late September to set-out our plans for consultation. Two further engagement workshops were held in October and November, which provided customers with options on our airspace and technology programmes, feedback from which will contribute to our next Service and Investment Plan submission to the CAA."

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We are ensuring continued engagement on our future technology and airspace programmes.

Louise Tomicic
General Manager Customer Affairs



Good business practice

Dr Jarlath Molloy notes the sustainability benchmarking undertaken this year

"Building on our activities across the UN Sustainable Development Goals (SDGs), we undertook the Business in the Community (BitC) Responsible Business tracker this year, focusing on three categories:

- Net zero carbon
- Diversity and inclusion
- UN Sustainable Development Goals

BitC recognised the work we have done through our Responsible Business programme and helped us identify further opportunities to exceed our benchmark group average. Highlighted strengths from the tracker report included:

- Our commitment to reducing our own direct CO₂ and working with other aviation stakeholders to reduce airspace CO₂ emissions
- Engaging with colleagues across the business training and, in partnership with Trades Unions, agreeing a respect at work policy which shows our commitment to creating an inclusive and welcoming work environment
- Our awareness of the SDGs throughout our submission and supporting documentation was commended"

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BitC recognised the work we have done through our Responsible Business programme.

Dr Jarlath Molloy
Senior Environmental Affairs Manager





Healthy environment

We are committed to protect our natural world, biodiversity and ecosystems. For over a decade we have reported on how we impact on the environment, including our progress on managing airspace efficiently and our reductions in greenhouse gas emissions and other resource use associated with running our buildings and infrastructure.

Juliet Kennedy points to the opportunities a green restart brings to how we manage air traffic

"This is a once-in-a-generation opportunity – we will never have another chance like this to use our innovation, our expertise and our flexibility to change and adapt to deliver lasting improvement. The pressures of our normal operation always constrain our ability to try out new things, but we have the chance to do that now. So, we're looking at how to make the most of the opportunity of uniquely low traffic levels to investigate efficiency improvements and try out

different procedures safely. This is a truly exciting opportunity to see what we can do differently. The Government is clear on environmental priorities and that the aviation industry must start doing things differently, rather than just talking about it. NATS has made its own commitment through Sustainable Aviation to achieving net zero CO₂ emissions for the industry and we are committed to building back better."

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This is a truly exciting opportunity to see what we can do differently.

Juliet Kennedy
Operations Director



Healthy environment

Ian Jopson outlines our new net zero ambitions

"We announced in December 2019 our ambitions as a business to align with the UK's net zero emissions target by 2050, with proximate goals for 2030 including a 35% reduction in emissions. Our strategy also includes applying the principles of sustainable consumption to our purchasing and use of natural resources, as well as ensuring our business practices contribute to the protection and enhancement of our natural world.

These goals cover aspects of our operations that are within our control. Our fourth goal addresses the collaborative challenge of playing our part in contributing to the net zero future for aviation through our influence on airspace CO₂ emissions. The work undertaken in our contribution to the Sustainable Aviation Carbon Roadmap, as well as ongoing work within the coalition, is a key part of achieving this goal.

The roadmap concludes that together, air traffic management and operational improvements could equate to a saving of over 7% of UK aviation CO₂ emissions by 2050, against a 2010 baseline.

However, this is only for UK departing international and all domestic flights, whereas we at NATS look at CO₂ emissions from all flights within our airspace boundaries and have seen significant savings regarding how we manage arrivals. Since 2008, we have made a saving of 7% in CO₂ emissions on average per aircraft. We had originally set a commitment of 10% reduction by March 2020. However, this was revised when some of our airspace modernisation plans were delayed due to uncertainty around airspace change policy and increased concerns about the negative environmental and social impact from aircraft noise. While we missed our very challenging 10% target, I still think we can be really proud of this achievement, a huge amount of work was undertaken to try and help fill this gap".

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Air traffic management and operational improvements could equate to a saving of over 7% of UK aviation CO₂ emissions by 2050.

Ian Jopson
Head of Sustainable Operations



Healthy environment

Paul Turner reviews our airspace environmental performance

"Airspace efficiency is an essential part of our service delivery. As a responsible business, providing the most direct routes at the best flight levels is not only a priority for our customers, but also one of the ways we play our part in addressing aviation's contribution to climate change. Since 2012, we have measured our airspace efficiency performance with our own 3Di metric. This allows us to measure both the horizontal and vertical efficiency of every commercial flight in UK airspace. We have annual targets set by the CAA on our average score, which become

more challenging year on year – see [environmental targets](#) section for more.

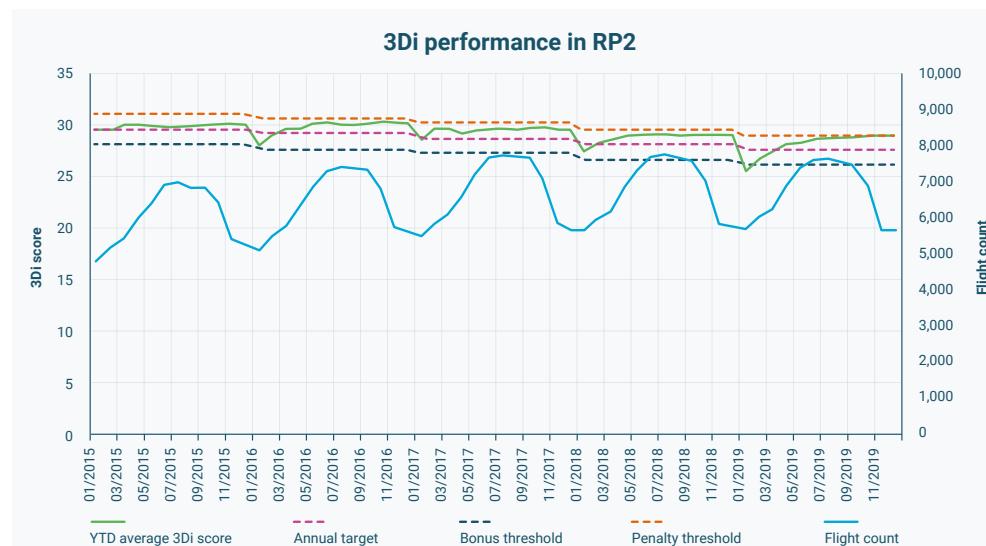
At the end of 2019 our average score was 29.0 meaning we fell within the target range set by our regulator (26.3 - 29.1). It also represented the best annual performance to date, which is a significant achievement considering the ever-increasing traffic levels over that period. Reflecting on the 5-year regulatory period, i.e. 2015-2019, our 3Di performance improved by nearly 4% highlighting the outcome of the improvements to

airspace, controller tools and actions over the period. Even though the impact of the pandemic means our scores are much lower this year, we have been using this as an opportunity to deliver additional improvements and highlight new ways to embed sustainability into our operations as traffic levels return".

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Our 3Di performance improved by nearly 4%.

Paul Turner
Manager 3Di Performance



Healthy environment

Mark Balsdon explains how we're enabling renewable energy

"Our relationship with the renewables industry is very positive, but that's not always been the case. Back in 2000, wind farm developers and their plans were a big risk to our operation, as ours were to theirs. Turbines show up on radar and can be mistaken for aircraft, and they can also mask the presence of aircraft, with the obvious potential impact on safety. It was standard for us to object to windfarm applications to give us time to consider how - or if - we could deal with them. Developers were frustrated by our reluctance to agree to conditions that would secure planning permission.

As developments increased, spurred on by the government's drive for green energy, we realised we needed to put more work into finding ways to mitigate the impact and that's how we've worked together with the industry in recent years.

We've been working with radar manufacturers on systems that can almost eliminate false tracks and increase detection of aircraft where there are large concentrations of wind turbines, bringing successful co-existence a step closer to reality. We're now seeing those being adopted and installed, such as at Edinburgh Airport where its new Terma radar can mitigate against the impact of the Tormywheel Wind Farm, allowing for the release of 34MW of clean energy. Similar radars are now in use at seven other UK airports for windfarm mitigation and NATS is now looking to install a new 3D Indra radar to release further MWs of renewable energy.

Over the last 10 years NATS has assisted and helped find solutions to enable over 5GW of Onshore power and over 8GW of Offshore power, more than enough to power greater London. This innovation and collaboration is key to working with the Renewable sector given the Government targets to have 40GW of offshore power by 2030 and 1 GW of floating offshore power by 2030."

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NATS is now looking to install a new 3D Indra radar to release further MWs of renewable energy.

Mark Balsdon

Head of Airspace Users Solution & Customer Management



Environment targets

Airspace

Regulatory performance targets on UK airspace efficiency are set by the Civil Aviation Authority (CAA) as part of our licence to provide en-route air traffic services. Since 2012, these have included financial incentives measured using our [three-dimensional inefficiency score metric \(3Di\)](#). We believe we are the only air traffic organisation in the world to have financial targets focused on improving the overall network performance of airspace.

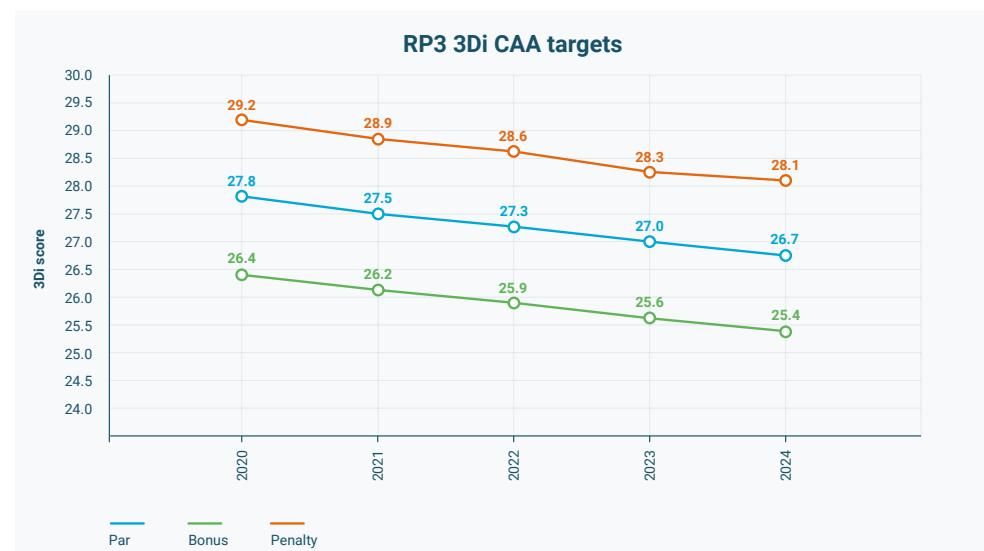
3Di targets for the current Regulatory Period 3 (RP3), which runs from 2020 to 2024 are outlined in the figure below,

although these may be subject to further review by the CAA who will redetermine the price control by the start of 2023 following Covid-19 impacts.

As a result of some small changes to how the 3Di score is calculated and other minor improvements linked to each 5-year regulatory period, performance cannot be directly compared between RP3 and our last regulatory period (2015-2019). However, the scale of our ambition to improve airspace efficiency and the targets set by the Civil Aviation Authority that underpin it remains unchanged.

Our 3Di targets are stretching and since their inception have been incrementally more challenging. We have managed to achieve this for the past eight years, despite the additional challenge of significantly increased traffic levels.

We seek to deliver a service that is as close to the CAA 'par' target as possible, while continuously reviewing opportunities to go beyond this and achieve a bonus score. All of our airspace projects under development are monitored to ensure we don't unintentionally drift into penalty as a result of delivering a safety, capacity or other improvement.



Environment targets

Airspace (continued)

A small 3Di tolerance band is set by the CAA, as the regulator recognises the 3Di score also influenced by variables and factors outside of our control, including the actions of our airline customers, airports, neighbouring air traffic organisations, the military and other airspace users. As well as focusing on what we control and how we can improve the resilience of our operations to influences such as the weather, we are incentivised to work collaboratively across the industry to deliver efficiency gains.

We also have non-incentivised [airspace performance indicators](#) adopted as part of the EC performance regulation. This includes '[KEA](#)' which measures average horizontal en-route flight efficiency (based on the actual trajectory of flight). With the endorsement from our airline customers and our regulator, our primary focus remains on the 3Di metric which not only includes KEA within its construct, but goes beyond it in scope; to include additional areas of horizontal flight efficiency excluded by KEA, as well as all elements of vertical flight inefficiency, also not in KEA scope.

Separately, it is common for our airport towers, relating to the provision of airfield air traffic services, to include performance indicators, both financial and non-financial. These typically focus on improvements to continuous descent arrivals, which reduce both noise and emissions.

Our adoption of the UK aviation industry's goal to reach net zero emissions by 2050 replaces our previous 10% commitment to reduce average CO₂ per flight. As part of the [Sustainable Aviation's decarbonisation roadmap](#) we have set out our expected contribution to reducing airspace CO₂ emissions as a result of planned airspace modernisation, new controller tools and other initiatives in RP3 and beyond. We have also contributed to similar European and [Global](#) 2050 CO₂ reduction roadmaps for aviation.

We recognise the external calls to 'build back better' following Covid-19, globally, nationally and within the aviation industry itself, and we have been re-constructing our RP3 plan to focus on customer benefits, as well as focusing on nearer term performance initiatives. These include reviewing airspace procedures and other small-scale improvements which can be implemented relatively quickly. We are also in the process of adopting more granular internal performance measures across our operations which we will set out in due course. We have now embedded our environmental team into our operational structure to support the priority to further elevate environmental improvements into day-to-day decision making.

Environment targets

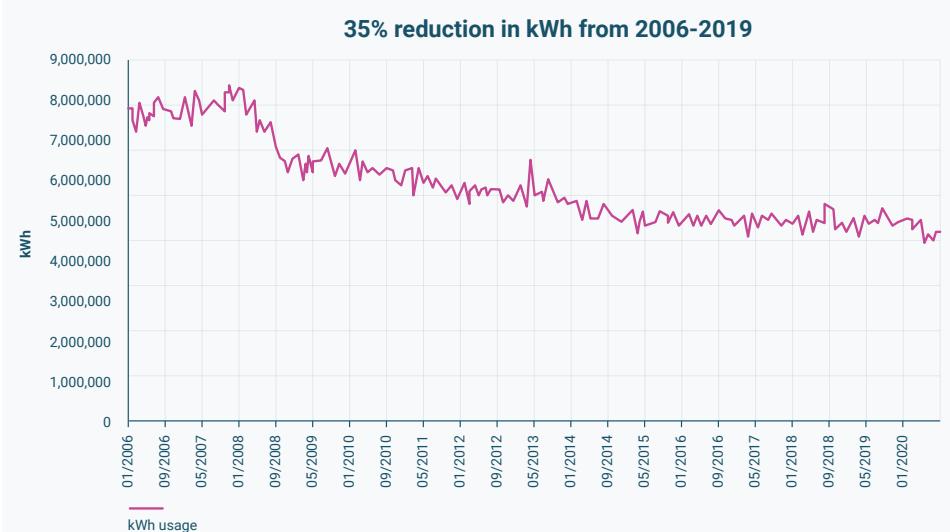
Running our business

As a responsible business, we have committed to a trajectory that reduces the CO₂ emissions from running our business to zero by 2050, achieving a 35% reduction in each emissions source (direct, indirect and those we influence) by 2030. We have also established a nearer term proximate target to 2025.

To achieve this, we have established a series of milestones within our 2030 business strategy, including:

- The establishment of rolling regulatory period targets to ensure we remain on track to deliver the trajectory of reduction out to 2050, which are aligned to keeping global temperatures 1.5 degrees below pre-industrial levels.
- Calculating a baseline for other non-direct emissions (such as business travel and other scope 3 emissions related to delivering our services) and establishing comparable reduction goals.

- Working with our suppliers, customers, partners and other stakeholders to assess how they can support us in reducing emissions.
- This year, 2020-21, we have committed to consume or self-generate renewable electricity and low carbon gas.
- Since the launch of our environmental programme in 2008, we have delivered considerable savings in energy consumption. To help us meet our 35% target, and for further resource and cost efficiency reasons we are in the process of establishing near-term energy (kWh) targets.
- Our internal strategy focuses on embedding responsibility for environmental improvement locally across our operations.





Environment results

Summary of 2019-20 environmental performance

Description	FY 2019/20 (or CY 2019)	FY 2018/19 (or CY 2018)
Service performance and resilience		
3Di (calendar year)	29.0	29.2
Environmental performance		
Direct / scope 1 emissions (location-based tonnes CO ₂ e)	3,477	4,094
Direct / scope 1 emissions (market-based tonnes CO ₂ e)	1,306	-
Indirect / scope 2 (location-based tonnes CO ₂ e)	15,301	16,561
Indirect / scope 2 (market-based tonnes CO ₂ e)	1,064	21,024
Total direct and indirect / scope 1 + 2 emissions (location-based tonnes CO ₂ e)	18,779	20,654
Total direct and indirect / scope 1 + 2 emissions (market-based tonnes CO ₂ e)	2,370	25,118
Total direct and indirect / scope 1 + 2 emissions intensity metric (location-based tonnes CO ₂ e per £m of revenue)	21.0	23.3
Total direct and indirect / scope 1 + 2 emissions intensity metric (market-based tonnes CO ₂ e per £m of revenue)	2.7	28.4
Progress against 10% enabled ATM-related CO ₂ emissions reduction target	7.0%	6.9%
Avoided / scope 4 emissions (modelled enabled ATM-related CO ₂ reduction in tonnes)	30,737	121,788 [^]
Water consumption (m ³)	54,500	75,750 [^]
Energy consumption (gas + electricity) MWh	71,686	71,262

[^] restated due to inclusion of additional information, improvements to modelling accuracy and data quality.

Modelled enabled ATM-related CO₂ reductions represent the saving in CO₂ emissions from improvements to the ATM network, such as technical changes which enable us to provide more fuel-efficient flight profiles, based on projections of the volume of flights likely to take advantage of the improvements. The enabled reduction in emissions is reported in full in the year in which the improvement is made. This is modelled based on industry best practice and is outlined in detail in our GHG report, available at [here](#).

Environment results

Summary of 2019-20 environmental performance

We delivered a number of airspace changes with CO₂ savings in 2019-20, including small scale changes to the design of airspace and improvements to the tactical delivery of flight trajectories, which delivered over 30,000 tonnes of CO₂ savings to users. A summary of the projects carried out last year, and the associated savings, are expanded on in our annual [GHG report](#).

At the end of the financial year we had reduced ATM CO₂ emissions by 7% per flight; this was short of our voluntary target, set in 2008, to reduce emissions by 10% per flight by 2020, primarily due to the delay to airspace modernisation, particularly in the south east of England. Alternative options were considered, with

priority given to small scale initiatives that did not affect noise and leaving more complex opportunities to feed into our 2020-2025 plan, which is also now under review. Details of the voluntary target can be found in NATS' 2009 '[NATS and the Environment](#)' report.

We did not meet our 2019 KEA target, but neither did we expect to at the outset of RP2 (in 2015) as we did not believe the top down targets were achievable at the UK or EU-wide level, and this proved to be the case. Our focus continues to be on both horizontal and vertical flight efficiency in both the en-route and approach phases of flight, using the 3Di metric (see our [environmental targets](#)). Controller interventions, ATC

tools and airspace modernisation can improve efficiency in terminal airspace, including reducing airborne holding and increasing continuous descent arrivals, which tangibly reduces fuel burn and CO₂ emissions for our airline customers and noise which impacts airport communities, but these vertical improvements are not captured by the KEA metric as discussed in an earlier section.

While our energy consumption remained broadly stable between financial years, the purchase of renewable electricity and low carbon gas for the full year reduced our carbon footprint related to these sources of emissions by 91%. Our water and waste impacts, while not material from a carbon perspective, have continued to reduce.

Contact

Your views matter to us, please let us know if you have any feedback.

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