

# Tackling climate change and environmental challenges.

Rob Shuter  
CEO, Enterprise



We're on track to hit our ambitious carbon reduction targets, and we're using our relationships and technology to inspire and enable others to accelerate the transition to a low carbon economy. Our solutions are already helping consumers, businesses and the public sector cut carbon and we're harnessing further opportunities through 5G, the Internet of Things, artificial intelligence and our new green tech innovation platform.

We've been a leader on climate and sustainability action for almost 30 years. Now we're championing a green recovery on the road to becoming a net zero carbon emissions business by 2045.

## Our progress

**100%** renewable electricity worldwide<sup>1</sup>, achieving our goal for 2021

**£358m** saved since 2009/10 through our energy efficiency management programme

**57%** reduction in the carbon intensity<sup>2</sup> of our operations since 2016/17, on track to achieve our 87% goal by end of March 2031

**29%** cut in carbon emissions across our global operations over the last year (Greenhouse gases scopes 1 and 2)

**19%** cut in supplier carbon emissions since 2016/17, towards our expanded reduction target of 42% by end of March 2031

Expanded our 2045 net zero target to include our supply chain as well as our operations

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<sup>1</sup> 99.9% of the global electricity BT sources is renewable. The remaining 0.1% represents where markets don't allow due to non-availability of renewable electricity.  
<sup>2</sup> Scope 1 and 2 greenhouse gases per unit of gross value added calculated as EBITDA adjusted (before specific items) plus employee costs.

## Advocating for a green recovery

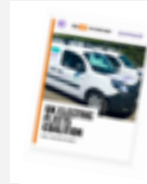
As the world looks to recover from the Covid-19 crisis, we have an opportunity to use our tech, innovation and influence to put climate action at the heart of the economic recovery. This year, we joined over 200 leading businesses in urging the UK Government to build back better by creating a fairer, more resilient and low carbon society.

Our infrastructure is powering the UK's road to net zero. We're investing in full fibre broadband and 5G networks that will pave the way for lower-carbon ways of life and work. Our products and services help consumers and businesses shrink their environmental footprint. And our new green tech innovation platform fosters breakthrough technologies to cut carbon in the public sector.

We're partnering for change with suppliers, customers, peers, government agencies and others to inspire wider climate action and solutions. This year, we championed new coalitions (see box), including the UK Electric Fleets Coalition that's driving the transition to electric vehicles (EV) (see quote).

We plan to play an active role at the COP26 UN global climate summit, which is scheduled for November 2021 in Glasgow. This year, we kept up momentum by sponsoring events like the Net Zero Festival in October 2020. Hosted by Business Green and broadcast from the BT Sport studio, the event featured policymakers and business leaders sharing their visions for a zero carbon transition.

### Advocating for transformational change in 2020



We launched The UK Electric Fleets Coalition with The Climate Group to call on the Government to transition the UK to EVs by 2030



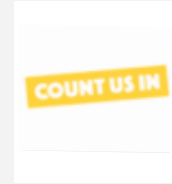
We joined Race to Zero, a global campaign to rally leadership and support to target a zero emissions world



We joined Exponential Roadmap Initiative to accelerate climate action exponentially, bringing together tech, innovation, scientists, companies and NGOs



We launched the SME Climate Hub, an initiative founded by BT and others, including the International Chamber of Commerce, to help SMEs commit to climate action



We joined the Count us in movement to get 1bn people worldwide to pledge to climate action

**Helen Clarkson**  
CEO, The Climate Group



The UK Electric Fleets Coalition's ask for increased ambition was a significant influence on the UK Government's decision to phase out petrol and diesel vehicle sales by 2030. We would not have been able to convene this group of major corporate fleets without the leadership of BT. We look forward to using this policy-influencing force to accelerate the UK's transition to electric vehicles together.

### Leading by example

We're working to become a net zero carbon emissions business by 2045 and this year we expanded this target to include our supply chain as well as our operations.

We were among the first three companies in the world to commit to a 1.5°C science-based target and many companies have now followed suit. We've already cut the carbon intensity of our operations by 57% since 2016/17 and we're on track to achieve our 87% intensity reduction target by the end of March 2031.

We continue to raise our climate ambition. This year, we increased our target to cut supply chain emissions from 29% to 42% by the end of March 2031, in line with the latest climate science to limit global warming to 1.5°C.

Our climate approach and performance made the CDP's A list again this year and we've advanced our reporting in line with the Task Force on Climate-related Financial Disclosures (TCFD) recommendations (see [page 30](#)).

Robust management systems help us mitigate risks and drive down the environmental footprint of our operations. We're also committed to supporting a circular economy and cutting down on plastic.

### Supporting business growth

Leading by example on climate positions us favourably with customers and investors, who are increasingly looking to companies' credentials and contributions towards a low carbon society. We're aiming to increase demand for our products and services by showing we're a communications provider that can enable others to decarbonise. Our carbon-reducing solutions are already contributing to around 25% of our revenue.

Our commitment to tackling climate change and environmental challenges can also help us attract and retain talent as more people want to work for a business that champions sustainability.

## Our climate strategy

Climate change is the most material environmental issue for our stakeholders and business. Our ambition is to become a net zero carbon emissions business in our operations and supply chain by 2045.

Our climate change strategy aims to reduce our end-to-end emissions, improve the resilience of our assets and support a low carbon economy by:

- investing in energy-efficient and climate-resilient networks
- reducing our energy needs and decarbonising the energy we buy and use, including through the purchase of renewable electricity
- working with suppliers to design products and packaging that minimise energy and materials use, and support reuse and recycling, as well as encouraging them to reduce their own greenhouse gas emissions
- developing low carbon products and solutions that enable our customers to reduce their carbon footprints
- engaging our colleagues to help them reduce their personal carbon footprints
- collaborating with others to accelerate the transition to a low carbon economy.

## Road to net zero

We're reinventing the way we run our business to get to net zero. We've switched to renewable electricity, we're transitioning to a low carbon fleet and we're decarbonising our buildings.

### Completing the switch to renewable electricity

This year, we hit a huge milestone by completing the switch to 100% renewable electricity worldwide<sup>1</sup>, meeting our target for 2021.

We were already at 92% renewable electricity last year and completing the switch has cut our carbon emissions for this year by a further 57,108 tonnes<sup>2</sup>. That's the equivalent of taking around 36,000 combustion engine cars off the road for a year.

We got to 100% by supporting the development of local renewable electricity markets. Power purchase agreements met 12.2% of our global electricity demand this year. The rest came from local green tariffs and, in some cases, renewable certificates.



In the few markets that don't yet have local solutions (accounting for around 0.1% of our global electricity use), we'll purchase from neighbouring markets for the time being.

We consumed over 2.5 terawatts of electricity this year. Using 100% renewable electricity underpins our commitment to build back better and greener. It supports the UK's net zero carbon goal, encourages global markets towards renewable power, and sets a strong example for others.

We're engaging with members of the RE100 ([there100.org](https://www.there100.org)) campaign, our customers and suppliers to promote further uptake of renewables. As reported to CDP in 2020, 198 of our suppliers are now making use of renewable electricity (up from 181 last year).



**Cyril Pourrat**  
Chief Procurement Officer

It is important for BT to demonstrate its commitment to a green recovery. Our team has worked hard to secure renewable electricity contracts for our sites globally, a crucial step towards the Paris Agreement's 1.5°C target.

### Transitioning to a low carbon fleet

BT and Openreach together operate the UK's second largest commercial fleet. We have around 33,000 vehicles on the road (the majority of which are in Openreach), to keep homes and businesses connected. Over two-thirds of our direct emissions (GHG scope 1) come from our fleet.

We aim to transition our fleet to electric or zero emissions models by 2030, where it is the best technical and economic solution, and will pursue other ultra-low emission solutions where EVs are not viable. Openreach is aiming to switch a third of their fleet to electric or zero emissions by the middle of this decade and want to be all-electric or zero emissions by 2030. To do so, we need suitable electric vans, currently in short supply, and a reliable nationwide charging infrastructure that's not yet in place.

We're working with others to help tackle these challenges. We're a member of the EV100 ([theclimategroup.org/ev100](https://www.theclimategroup.org/ev100)) group and this year we joined forces with The Climate Group and 29 organisations to launch the UK Electric Fleets Coalition. At launch, our fleets had around half a million vehicles. The Coalition has successfully campaigned to end the sale of new conventional petrol and diesel vehicles by 2030, reflected in the recent announcement by the UK Government, with exceptions made for specific vehicles where it isn't feasible. The Government has also pledged £1.3bn to roll out charging points nationwide.

Following a trial last year, we've now secured 351 electric vans for our fleet. We've installed 122 charging points at our sites and Openreach has provided over 300 units for engineers to charge their vehicles at home.

It will take time to fully electrify our fleet. In the meantime, we're making our existing fleet more efficient. This year, we started introducing battery packs for engineers to power lifts used to fix overhead cables without running their vans' diesel engines. The packs help us cut fuel use, emissions and noise.

<sup>1</sup> 99.9% of the global electricity BT sources is renewable. The remaining 0.1% represents where markets don't allow due to non-availability of renewable electricity.  
<sup>2</sup> GHG scopes 1 and 2.

### Decarbonising our buildings

We're reducing carbon emissions and improving energy efficiency across our buildings estate of over 6,000 sites. We completed the switch to 100% renewable electricity which reduced our carbon footprint. But we're still looking for ways to reduce energy use and find alternatives for carbon-intensive heating (see box) and cooling.

This year, our global energy consumption reduced by 123 GWh<sup>1</sup>, mainly as a result of energy efficiency measures, including the reduction of our legacy network and our investment of nearly £21m in cooling projects, but also to a lesser extent the impact of Covid-19. Overall, our investments have helped us save £358m since 2009/10.

We have an ongoing programme to install adiabatic cooling systems that use water and fresh air instead of greenhouse gases; we added a further 932 this year. We're continuing work to make our core infrastructure more efficient so we can process more data with less energy.

As part of our Better Workplace Programme, we're consolidating some of our offices and including environmental considerations in plans for new buildings, including BREEAM Excellent certification at our new buildings in Birmingham, Bristol, London and Manchester.

<sup>1</sup> Excludes commercial fleet and travel.

### Our Doncaster contact centre goes 100% renewable

Our Doncaster contact centre had a low carbon makeover this year. Conventional chillers and gas-fired boilers are out. New electric cooling and heating is in. The building now runs on 100% renewable energy, reducing bills and carbon emissions.

### Our performance

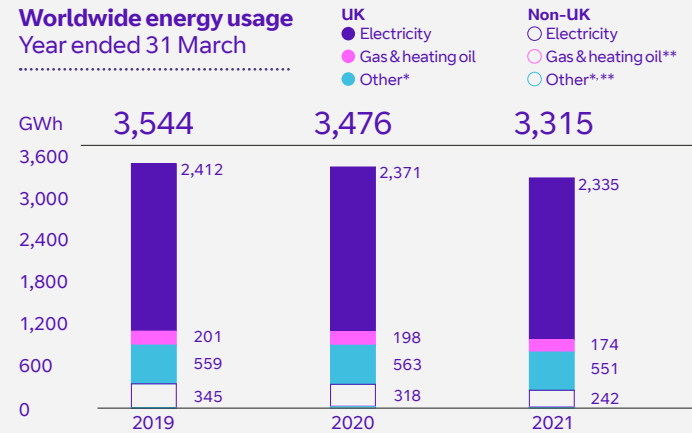
Overall, we cut emissions from our global operations (GHG scopes 1 and 2) by 29% this year to 0.17m tonnes of CO<sub>2</sub>e. Since 2016/17, we've reduced our carbon intensity by 57% to 13.7 tonnes of CO<sub>2</sub>e per £m value added. We've also reduced our global energy use by 4.7% this year. See supporting [environmental data](#) for more on our performance.

**-87%**  
2030 Intensity Target

**Net Zero**  
2045 Absolute Target

### Worldwide energy usage

Year ended 31 March



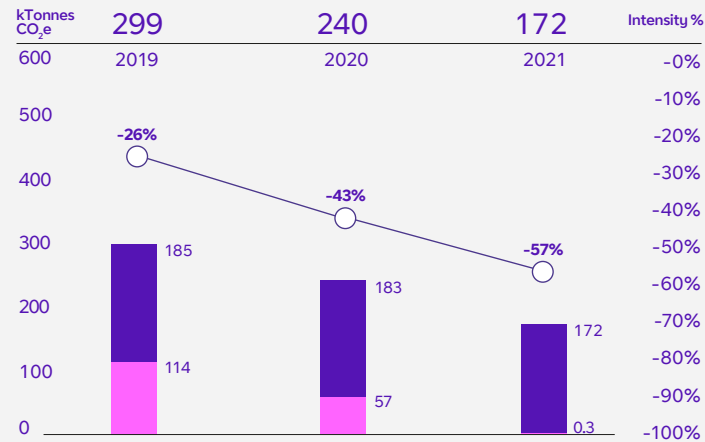
\* Other constitutes Gas and Oil – Generators, Commercial Fleet, Commercial Travel.  
\*\* Non-UK Gas and heating oil and other usage in GWh are as follows:

2019	2020	2021
Gas and heating oil: 3	Gas and heating oil: 2	Gas and heating oil: 2
Other: 24	Other: 24	Other: 11

### Our worldwide greenhouse gas emissions (scopes 1 and 2)

Year ended 31 March (CO<sub>2</sub>e kTonnes)

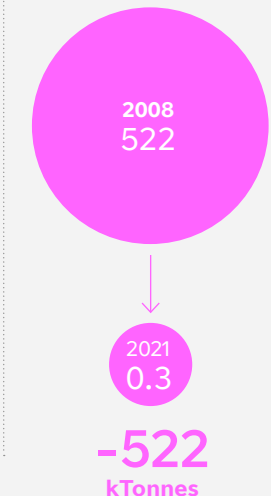
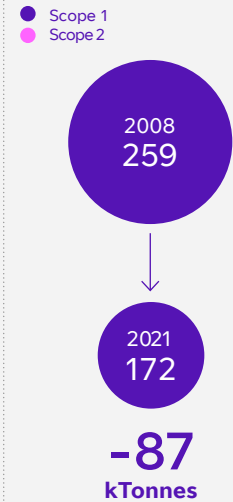
● Scope 1: Direct emissions from our own operations (eg fuel combustion).  
● Scope 2: Indirect emissions from the generation of our purchased energy (mainly electricity).  
— Carbon intensity reduction since 2016/17.



We now include all scope 3 emissions in our reporting. See next page for details on scope 3 breakdowns. Figures exclude third-party consumption. Scope 2 data uses market-based calculations.

### Scopes 1 and 2 Improvement 2008 to 2021

How the carbon footprint of our business has improved since we set our first science-based target in 2008 to today.





## Driving supplier climate action

Over two-thirds of our end-to-end carbon emissions come from our supply chain. We're partnering with suppliers to curb their emissions and ours. This year, we expanded our target to reduce supply chain emissions in line with the latest 1.5°C climate science. We were originally aiming for a 29% reduction from 2016/17 by end of March 2031 and now we're going for 42% within the same timeframe.



**Steve Whitford**

Customer delivery manager, Fixed Networks, Nokia

In partnership with BT, we have been working to reduce supply chain emissions from the production of components that go into our network equipment. Our focus is on the components with the highest climate impact, such as printed circuit boards. Suppliers of these circuit boards have now committed to implement best-in-class energy efficiency measures and reduce their carbon impact by over 100 tonnes of CO<sub>2</sub> during the course of our contract with BT.

### Pioneering climate contracts

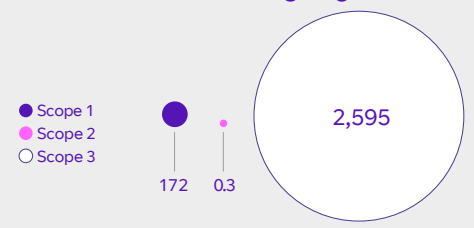
We have 12 of our key suppliers with a clause in their commercial contracts with BT or Openreach that commits them to make measurable carbon savings.

Nokia was one of the first to sign up and is working with its own suppliers to reduce the impact of high-carbon components that go into our network equipment (see quote).

Openreach suppliers MJ Quinn and KN Group have committed to significant carbon savings across their operations. Meanwhile, Telent are developing their plans for setting science-based climate targets and plan to cut emissions from supporting our network. These three suppliers alone are expected to save over 6,000 tonnes of carbon during their five-year contracts with Openreach.

This year, we offered some suppliers free energy audits of their premises and carbon-saving guidance from experts at The Carbon Trust. So far, nearly every supplier audited has taken steps to reduce their energy use. We also invited suppliers to share innovations to support a circular economy through our yearly Game Changing Challenge (see [page 32](#)).

**Scope 3 (supply chain) makes up the majority of our carbon emissions; illustrated in the following diagram:**



### Partnering for change

We teamed up with other climate leaders to launch two major partnerships through the Exponential Roadmap Initiative this year.

The 1.5°C Supply Chain Leaders programme is designed to inspire and drive climate action across global supply chains. We're supporting its ambition to hit net zero before 2050 through our own 2045 net zero ambition.

The SME Climate Hub provides tips, tools and best practices to help small and medium-sized enterprises (SMEs) curb their emissions and gain competitive advantage by supporting a green recovery.

### Setting high standards

All our suppliers must meet our requirements on climate and environmental management among other standards ([groupertranet.bt.com/selling2bt](http://groupertranet.bt.com/selling2bt)). We track compliance through supplier assessments (see [page 22](#)).

We also encourage suppliers to join us in reporting climate-related data to CDP to enhance transparency and accountability. In 2020, 310 suppliers did so, up from 304 last year. Together, they make up 56% of our total spend.

Of these, 73% have set targets to cut emissions and 44% cut their scope 1 and 2 emissions this year. CDP disclosures also showed that 64% of our reporting suppliers buy renewable electricity (up from 60% last year) and 69% work with their own suppliers on climate change.

This year, we were included in the top 7% of companies assessed for supplier engagement on climate change, based on our 2020 CDP disclosure. Suppliers engaged by participating in the CDP Supply Chain programme. We also retained our position in the CDP's Supplier Engagement Leaderboard for the fifth year in a row.

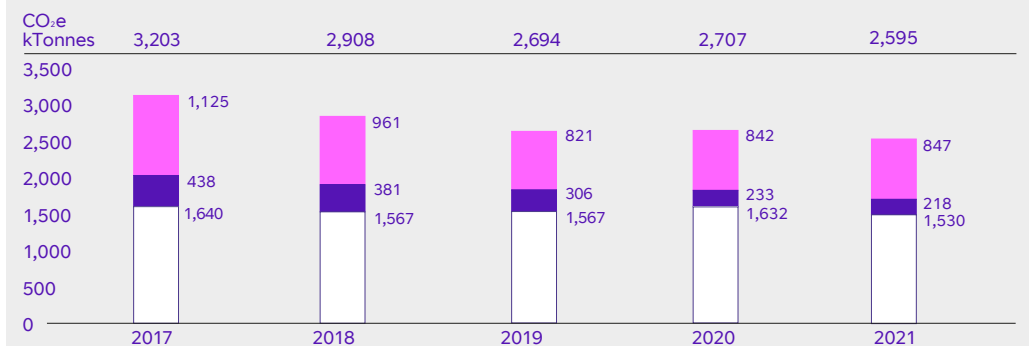
### Performance

We've cut supply chain emissions to 2.6m tonnes this year – and by 19% since 2016/17 towards our 42% reduction target by the end of March 2031 (see chart).

### Supply chain emissions (breakdown of scope 3 emissions)

Year ended 31 March

- Embodied emissions of network, IT and retail electrical equipment.
- Interconnect (termination of calls on other telco's networks).
- Other supply chain emissions (materials, cable, fuels and services).



## Helping customers cut carbon

More and more, our products, services and infrastructure are helping homes, businesses and public sector organisations cut their energy, fuel use and emissions.

This year alone, around £5.3bn (25%) of our revenue came from carbon-cutting solutions – from teleconferencing and cloud storage to smart manufacturing and Internet of Things (IoT) technology.

And we're going further. Our ambitious plans to bring full fibre broadband to 25m premises and boost 5G mobile will support more homeworking, smart cities and next-generation carbon-reducing technologies.

### Expanding technology frontiers

We're already testing new smart and remote technology solutions with a range of customers.

Telemedicine offers big benefits for patients, medical staff and the climate. Remote consultations save time and emissions from travel – and help to avoid contact during Covid-19. We're testing solutions with University Hospitals Birmingham, the UK's biggest NHS Trust. This year, doctors trialled our remote diagnostic station technology using digital stethoscopes and heart monitors over a converged 4G/5G and wi-fi network. The Trust is now considering the technology for GP surgeries, care homes and community clinics.

Our new green tech innovation platform will offer breakthrough solutions for the NHS, local councils and other public sector customers (see box).

IoT is one of the most promising next-generation technologies. It enables customers to get real-time information from machines and objects like sensors to help them make their operations more efficient. Engineers at our IoT centre of excellence are inventing solutions for sectors like logistics, housing and transport. Climate is not the only focus. We're also supporting air quality monitoring (see [page 33](#)).

### Challenging consumers to try living smarter

We see enormous untapped potential for our customers to use tech to save energy, money and carbon at home. Research by the environmental charity Hubbub found that two-thirds of UK households do not use any smart tech to help manage their homes. And four in ten (43%) think it would be expensive<sup>1</sup>.

To bust this myth, we launched a pioneering experiment with Hubbub to show how smart tech and savings can go hand in hand. We asked c.60 households – including 30 of our colleagues and their families, the majority of the others are BT customers – to experiment with digital technology. 55 took part, and the aim was to see which gadgets work best for them to reduce their energy use and bills from heating, hot water and lighting.

Each household received a £50 voucher to spend on products like smart thermostats, lights or plugs. And we also offered tips and practical support. We'll share the results to encourage more of our consumer customers to give smart home tech a try.

<sup>1</sup> Data from poll of 3,000 people conducted by Censurwide.

## Powering breakthrough carbon-cutting technology for the public sector

The UK aims to be a net zero emissions economy by 2050 and the public sector has a big role to play. Hundreds of local councils and NHS Trusts already use our services. We're looking for new ways to support their journey to net zero through our green tech innovation platform.

We've teamed up with Silicon Valley's Plug and Play to find businesses with breakthrough carbon-reducing solutions. Plug and Play is a platform that connects entrepreneurs, companies and investors to promote innovation worldwide. Together, we'll help them scale up to drive progress towards a green economy.

In January 2021, we announced our first two scale-up partners: Glasgow-based iOpt and Paris-based Everimpact.

iOpt uses sensors connected by the Internet of Things to provide remote, real-time information and alerts on things like energy use and moisture levels in buildings. Their technology can help councils take steps to improve energy efficiency, cut maintenance costs and eliminate damp or mould. This in turn makes homes healthier and helps to prevent fuel poverty by reducing energy costs for tenants.

Everimpact uses a combination of on-the-ground sensors, satellite data and artificial intelligence to monitor air quality and carbon emissions. The results, transmitted via a smart city dashboard, enable local councils to target measures effectively to reduce air pollution and climate impacts.

We'll help both businesses grow and expand positive impacts by offering their services to interested customers. For iOpt, we'll provide network connectivity and manage the sensor installations. Everimpact will install their tech in our Street Hub units, payphone kiosks and CCTV sites to provide insights for local councils.

Using our reach to commercialise emerging green tech is a win-win for our company, our customers and the environment. We'll welcome more innovation partners soon, including those with solutions for the health sector. The Carbon Trust will help us measure the carbon savings from each partnership.



**Seena Amedi**

Managing director,  
Plug and Play Tech Center

Plug and Play are proud to work with BT alongside some of Europe's most promising high growth tech companies, searching for innovative solutions and business models to support the transition to net zero. We look forward to working together to explore, test and scale technologies from the world's brightest start-ups that can propel us into a more sustainable society.

## Measuring how we help customers cut carbon

Last year, we achieved our 3:1 target a year early by helping customers save three times as much carbon as our own end-to-end emissions.

To track progress against this goal, we've previously calculated and reported the emissions our customers save from using products and services that we've identified as carbon-reducing. Last year, this totalled around 13m tonnes of CO<sub>2</sub> emissions avoided, compared with our own end-to-end emissions of 3.7m tonnes.

The way people live and organisations work online has changed significantly over the last few years – and even more so during the pandemic. We have commissioned research that will provide information on the role some of our solutions can have in a net zero emissions world.

**13m tonnes**  
of CO<sub>2</sub> emissions  
avoided in 2019/20

**3:1**  
goal met one year early

**£5.3bn**  
of our revenue came from  
carbon-cutting solutions  
this year

## Mitigating and adapting to climate risk

The impacts of climate change are worsening. We're working hard to reduce our emissions and prevent further global warming. But we also need to adapt to the reality of a changing climate.

We've explored the risks and opportunities to our business across a range of future climate scenarios and we report these in line with TCFD recommendations (see box). Making sure we're prepared for the effects of more extreme weather is essential to avoid disruption to our networks and our customers.

### Climate-related financial disclosures

We're committed to fully implementing the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). This is our second TCFD disclosure.

This year, we conducted a climate governance review based on the World Economic Forum's Principles for effective climate governance on corporate boards. We also continued our climate change scenario analysis work to understand the potential financial impacts of climate change to BT in 2030 and 2050.

➔ Read our TCFD disclosure in our [Annual Report and Appendix](#).

## Understanding physical risks

Our strategic weather resilience programme aims to futureproof our UK estate by monitoring and mitigating risks from extreme weather events like heatwaves, storms and heavy rainfall. This year, we considered our vulnerability to heat, flooding and lightning strikes as part of our TCFD scenario planning.

We share details on potential threats to our UK assets through daily risk reports and we've launched an online dashboard to keep relevant parts of the business informed. Alert warnings enable our teams to protect vital equipment and prepare for potential outages. During the summer heatwave in 2020, we pinpointed over 700 rooms at risk of overheating to enable targeted mitigation measures. This year we have continued to invest in cooling system upgrades designed to prevent damage to our network sites, including a further £21m in adiabatic systems. We're also trialling improvements to our flood risk alert service at 5,000 of our assets.

Our telecoms networks are critical to the UK's national infrastructure. We are working with the Environment Agency to better understand where our network sites across England may benefit from its National Flood Risk Capital Programme activities. We're also working with Waterscan, our wholesale water partner for England, to develop an asset risk register from utility water sources, another essential national service.

## Fortifying our operations

We focus climate adaptation measures on high priority assets that serve larger volumes of customers. This year, we continued flood protection works and cooling systems upgrades at key sites. And following a successful trial last year, we're using drones to inspect roofs and gutters for signs of deterioration where needed.

### Rapid emergency response

Extreme weather is on the rise. This year saw a summer heatwave, floods and several significant storms across the UK.

When the weather threatens our colleagues, property or services, we deploy emergency response teams and resources to help protect those most at risk. Pumps, flood barriers and other emergency equipment are ready and waiting at our network of flood hubs across the country.

This year, our emergency response teams responded to over 30 incidents related to severe weather events. We train them on a wide range of scenarios, from accessing flooded sites by boat to setting up temporary satellite communications. We ran more frequent but smaller scale training exercises this year in line with Covid-19 guidance.

We also work with others to enhance national emergency response measures through the Electronic Communications Resilience and Response Group that we chair. This year, we focused on keeping vital communications infrastructure running throughout the Covid-19 pandemic.

## Flash flooding, fast response

When summer flash flooding threatened an exchange in Edinburgh, our local emergency response team was quick to mobilise. Colleagues deployed pumps, a generator and an emergency communications centre to manage the immediate impact and get our network back up and running.

Since then, we've conducted surveys of underground drains and identified specific building improvements – at this site and at others in similar situations – to reduce the risk of flooding causing problems in the future.



## Supporting a circular economy

We support the transition to a circular economy to reduce waste and preserve valuable natural resources. We're targeting zero waste to landfill, encouraging customers to return equipment for reuse and recycling, and cutting down on plastics.

### Eliminating waste to landfill

Our internal waste management policy promotes a culture of continuous improvement as we work towards zero waste to landfill. We're now developing a waste action plan to translate that policy into practical measures to help us get there.

We produced nearly 33,000 tonnes of waste worldwide this year, 19% less than last year. This reduction is mainly as a result of less office and catering waste, as many of our colleagues worked from home due to Covid-19, and our divestments. We recovered or recycled 98.9% of this waste – 99.6% in the UK – and we're continually looking for ways to recycle more; for example, Openreach is exploring ways to recycle blue plastic rope, which is used to draw cables through ducts.

We use specialist contractors to deal with hazardous waste responsibly. This year, we introduced an app to help our engineers identify hazardous waste and simplify regulatory reporting.

Through our partnership with N2S, a technology lifecycle management company, we recovered 257.5 tonnes of legacy equipment and cable from our exchanges this year, avoiding landfill. From this, 257.3 tonnes was recycled and 0.2 tonnes reused, avoiding an estimated 414 tonnes of CO<sub>2</sub>e emissions. We also used N2S's newly developed refining process which uses bacterial bioleaching technology to recover gold from printed circuit boards.

### Encouraging customers to return electronics for reuse and recycling

Electronic waste is the world's fastest growing domestic waste stream. We aim to minimise the amount of materials used in our products and make them easy to return, reuse or recycle.

We encourage and incentivise customers to return products for recycling or refurbishment. EE offers a [Trade In](#) scheme, and BT customers must return home hubs and set-top boxes at the end of their contract to avoid incurring a fee. In 2020, we refurbished or recycled around 700,000 home hubs and set-top boxes, and worked with The Carbon Trust to calculate the environmental benefit (see case study).

To help customers get the most out of their devices, we now offer a same-day or next-day repair service at selected EE stores, and we've also launched a wireless diagnostic tool [Fix My Device](#) to identify and resolve issues with mobile devices or software.

## Router returns reap environmental benefits

We want to show customers the difference they can make by returning unwanted equipment to motivate them to return more. We've been working with The Carbon Trust to calculate the environmental benefit of product returns. In 2020, refurbishment of home hubs and set-top boxes avoided 11,400 tonnes of CO<sub>2</sub>e, 168 tonnes of waste electronic equipment and 160 tonnes of plastic.





## Getting drastic on plastic

Our [plastics policy](#) includes our goal to ensure that 100% of the plastic packaging we procure and send to customers can be reused, recycled or composted by the end of March 2025. It also commits us to recycling more of the plastics we use in our own operations.

This year we have been working to baseline our plastics footprint. In 2020 we used 547 tonnes of plastic packaging to deliver products to our customers. We identified areas of plastic use where data is not currently available – we will refine our model as more data becomes available over time.

A further 113 tonnes of plastic was avoided through engaging suppliers, engineers and operations teams in plastic reduction initiatives.

We've developed packaging principles for BT and EE consumer devices in line with our environment policy. These include moving to plastic-free packaging. Alternatives include cardboard packaging printed with soy-based inks and compostable bags made from materials like potato starch.

Our suppliers play a big role in the amount and type of plastic used in our products, packaging and operations. To help guide our procurement choices, we ask suppliers about their use of single-use plastics in a questionnaire related to our [environmental impact standard](#).

We also ask colleagues to help us cut down on the amount of single-use plastics we use, particularly in areas such as catering. We'll promote this further as more colleagues return to the workplace.

## Game Changing Challenge

Our Game Changing Challenge invites suppliers to come up with innovative solutions to environmental questions. This year, we focused on the circular economy – asking for innovation on anything from plastic-free packaging to new business models or radical product redesign. This year's winner was Thales, who proposed an eco SIM card made from 100% recycled plastics which is both highly sustainable, being made from recycled plastic, and delivers a 30% reduction in the SIM card carbon footprint. This meets a number of BT's key sustainability objectives around the circular economy, reduction in single-use plastics and carbon footprint reduction.



**Emmanuel Unguran**  
Senior vice president of mobile connectivity solutions at Thales

The Game Changing Challenge process run by BT perfectly fitted Thales' responsible approach and its determined action in terms of sustainable development and eco-designed solutions. We were delighted to take part and collaborate with BT and honoured that BT chose our eco-SIM card as its 2020 winner. This innovation, less plastic, even for something as small as a SIM card, is a plus for the planet and responds to strong demand from consumers for products with a controlled carbon footprint.

## Managing environmental impacts

We aim to lead by example in the way we manage environmental risks and minimise our impacts. We can make the biggest difference by tackling climate change and supporting a circular economy. But we also pay close attention to our impacts on air pollution, biodiversity and water use.

Our Group-wide [policy](#) and environmental management systems (EMS) guide our approach to risks and impacts, support continual improvements and help us comply with relevant regulations.

Our EMS in Belgium, France, Germany, Ireland, Italy, the Netherlands, Spain and the UK are certified to ISO 14001:2015<sup>1</sup>. The EMS in Spain is also certified to the EU Eco-Management and Audit Scheme. Our energy management systems in Germany and the UK are certified to ISO 50001. We publish UK certifications on our [website](#).

We include environmental and sustainability considerations in our plans for new buildings as part of our Better Workplace Programme. Examples include providing electrical charging stations and recycling points, or using district heating. We're also working towards BREEAM Excellent certification for our new buildings in Birmingham, Bristol, London and Manchester.

<sup>1</sup> Brazil and Colombia were certified until October 2020, when these operations were divested.

We also encourage colleagues to help us manage environmental impacts by changing their behaviour. This could be cutting use of single-use plastics, recycling more or collaborating virtually to avoid unnecessary business travel – a trend that has increased as a result of Covid-19.

## BT Sport reduces production impacts

BT Sport uses remote broadcasting to limit the number of people sent to outside broadcasts and reduce related environmental impacts. Our football Premier League 12:30hr kick-off games have achieved the albert certification for sustainable production, which recognises actions taken to reduce production carbon footprints – and we're working towards certification for our other programming. BT Sport's directorate membership of the albert initiative helps fund sustainability training and resources for the film and television industry.

## Managing environmental risk

Our environmental management and governance group (EMGG) oversees our approach to environmental risk management. It's chaired by our chief technology officer and made up of senior leaders from across the business. The EMGG reports regularly to our *Executive Committee* and receives quarterly updates from our environmental management compliance steering group.

Climate change poses the most significant environmental risk to our business and we align our reporting with TCFD recommendations (see [page 30](#)). We also monitor and manage a range of other operational environmental risks through our EMS, including the potential for leaks of fuel or fluorinated greenhouse gases.

### Tackling air pollution

Maintaining good air quality is vital to the health of our colleagues, customers and communities. We're transitioning to electric vehicles that help cut carbon emissions and reduce pollutants from combustion engines (see [page 26](#)).

We've also continued working with our customers to use IoT solutions to improve air quality and wider environmental management. Our sensors are helping local authorities in Suffolk to monitor air pollution and target action to improve air quality and reduce flood risk. We're partnering with Belfast Harbour on a 5G project to make the harbour estate more sustainable, including placing air quality sensors around the harbour to monitor nitrogen dioxide and particulate matter. And we're redesigning our next-generation payphones, or Street Hubs, to include air quality monitoring capabilities.

Our green tech innovation platform (see [page 29](#)) partners are also tackling air pollution. iOpt's smart buildings IoT platform enables real-time information on issues such as damp and mould that can affect internal air quality, while Everimpact's street-level environmental monitoring systems include air quality as well as CO<sub>2</sub> sensors.

### Minimising water use

Our water use decreased by 25% this year to 1.4m m<sup>3</sup>. This reduction is, in part, due to lesser demand, as colleagues worked from home due to Covid-19, alongside our work to reduce leakages across our operational sites.

Switching to Water Self-Supply ([waterselfsupply.com](http://waterselfsupply.com)) enables BT to achieve complete control over water consumption and cost by dealing directly with wholesalers, ensures accuracy in billing, and gives BT the opportunity to engage in the market. Making this switch had saved us over £0.6m and contributed to over 473,000 m<sup>3</sup> reduction in consumption this year, through price and water savings.

And we're partnering with the University of Stirling on a state-of-the-art system to monitor water quality and flood risks across the Forth Valley.

**473,000m<sup>3</sup>**  
water saving this year

**£0.6m saved**  
through moving to  
Water Self-Supply

### Nurturing biodiversity

Supporting a healthy natural environment is essential to prevent biodiversity loss, a significant global issue with strong links to climate change, water use and pandemics. We use our EMS to help us manage biodiversity impacts and we monitor wildlife-related incidents or risks at our sites.

Our internal natural environment policy captures our long-term vision to enhance biodiversity across all our sites. This year, the pair of peregrine falcons at our Adastral Park site bred successfully again. And we began planting trees at our Henbury exchange to support Bristol City Council's target to double tree canopy coverage.

### Managing fuel storage risks

We use diesel generators to keep our customers connected in remote locations and as back up during power cuts. To fuel these generators, we have more than 6,500 fuel storage tanks across the UK. We monitor, maintain and upgrade these tanks, and train colleagues and suppliers, to minimise risk of spills or leaks.

If there's a spill, we use specialist contractors to make sure it's cleaned up carefully. We report any major leaks to the regulator, but no incidents at BT sites have been subject to investigation or legal proceedings from any of the UK regulators for several years.

### Ensuring environmental compliance

We always aim to comply with relevant environmental legislation for our operations and products. This includes making sure our products and any electrical or electronic equipment sold to our UK business comply with regulations on waste electrical equipment, hazardous substances, chemicals and packaging.

If any issues occur, we work with the relevant authorities to resolve them.

We aim to meet our commitments under the Environmental Protection Act 1990 and the Clean Neighbourhoods and Environment Act 2005. In one case this year, we failed to react in a timely manner and received a community protection notice, relating to complaints about unkempt grounds at one of our telephone exchanges. We've liaised with the respective council to address the issue and comply with the notice served.

This year has seen an increase in littering and fly tipping across the UK. We received a number of complaints about littering at our roadside cabinets and we've worked with our engineers and contractors to reinforce the need to remove all waste created by their activities.