

Green Plan

2020-2021



Foreword

The last year has been significant for North Bristol NHS Trust as we continue to pursue our ambition to be a leader in the field of sustainable healthcare. We were the one of the first NHS organisations in the country to declare a Climate Emergency and we joined our civic partners in setting an ambitious and stretching goal of being carbon neutral by 2030.

We recognise that we urgently need to take action to halt the decline in biodiversity, so we also declared an Ecological Emergency, the first NHS Trust to do this. This builds on our existing efforts to protect and enhance biodiversity on our sites.

We have further embedded our commitment to sustainable development with a clear strategic focus on being an anchor in the community which is outlined in the Trust Strategy 2019-24. We know that delivering sustainable healthcare involves working across the health system and with partners to deliver a health system that is financially sound, supports social and environmental ambitions and ensures value for money.

We are immensely proud of the part our staff play in supporting our push towards sustainability. It has been our most successful Green Impact cycle to date with 38 teams celebrating this award and the Staff Travel Survey this year showed the highest numbers of staff walking, cycling and catching the bus to work.

Finally, as we begin the 2020-21 financial year the Trust is responding to a new healthcare challenge in the form of the Covid-19 pandemic. This is already having an impact from a sustainability perspective, in terms of additional waste being generated and air quality improvements as fewer people travel. We will continue to monitor these and other impacts as they arise and develop approaches to manage them sustainably.



Evelyn Barker
Interim Chief Executive



Michele Romaine
Trust Chair

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1. Introduction

The NHS has a responsibility to provide high quality health care whilst protecting human health and minimising negative impacts on the environment. A Green Plan (previously named the Sustainable Development Management Plan) is a mechanism for organisations to take a coordinated, strategic and action-orientated approach to sustainability. Green Plans form a key part of sustainable healthcare delivery to ensure services remain fit for purpose today and for the future.

The North Bristol NHS Trust (NBT) Green Plan will help us to:

- Deliver on the NHS Long-Term plan
- Improve the health of the local community
- Achieve our financial goals
- Meet our legislative requirements

We are in the process of creating a Sustainable Development Strategy and Our Green Plan annual report in the future will be a summary of progress against this strategy and plans for the year ahead. Future Green Plans will also report on progress against the upcoming Net Zero Plan for the NHS.

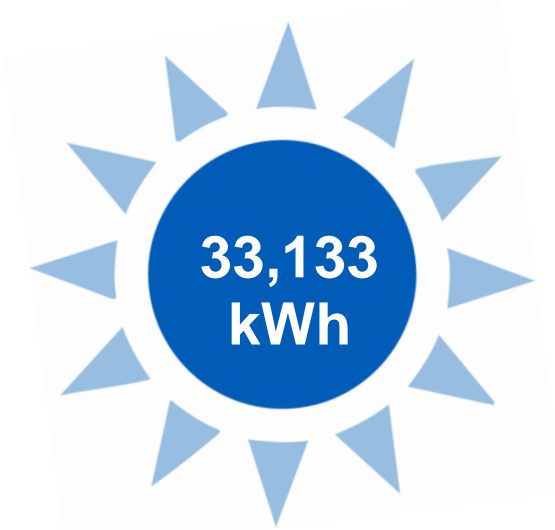
Sustainable development is based on 3 core factors:

Environmental impact; the impact NBT activities have on the environment – this means focusing on activities which reduce or eliminate any negative impact.

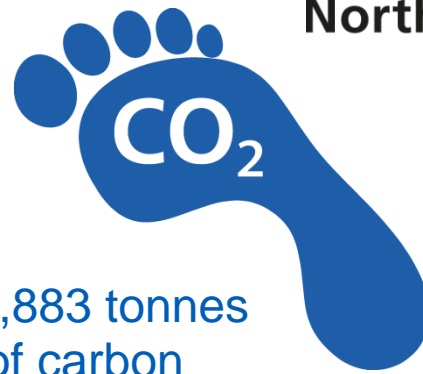
Social impact; the impact NBT activities have on our local communities, and society or more broadly, how we can positively utilise our influence to address health and social inequalities.

Financial impact; the impact NBT has on how it controls and spends its money; from the contribution sustainable development activities have on our short, medium and long term financial position, to the impact we have on actively improving the local socio-economics of our communities through the way you direct our expenditure.

This document represents a transition from our previous reporting style to a new format in 2021 that will more clearly link our longer term Sustainable Development Strategy and Carbon 2030 goals through to in-year progress.



of solar power generated



117,883 tonnes
of carbon



28 patients
referred to
Warmer Homes
Advice and
Money service

2019/2020 at a glance...



674 actions taken
by our Green
Impact Teams

6,831kg
of wasted furniture
diverted from
landfill through
using Warp It



Climate and
Sustainability
YouTube videos



28 trees planted



60% of staff commute by active or
sustainable modes of travel



2. Drivers for change

Sustainable healthcare in the NHS is predominantly driven through local and national policy, legislative and mandated requirements and healthcare specific specifications from the Department of Health and NHS England.

The NHS Long Term Plan requirements introduced in 2019 have been incorporated into the contractual obligations of the NHS Standard Contract, substantially increasing the obligations on the NHS for the year ahead (2020-21.)

These include:

- By March 2021:
 - take action to reduce air pollution from fleet vehicles, use of coal/oil, through promotion of more sustainable travel choices and restricting lease vehicle choices to ultra-low emission vehicles
 - take action on climate change by reducing greenhouse gas emissions, reducing the use of fluorinated gases used in anaesthetic gases and inhaler propellants and adapting services and premises to mitigate risks associated with climate change and severe weather
- Reduce waste and water usage through best practice and innovation, reduce the use of single-use plastics and maximize the rate of return of walking aids for reuse/recycling.
- Give due regard to the potential to secure wider social, economic and environmental benefits for the local community and population through purchase and specification of products and services.

The NHS Operational Planning and Contracting Guidance echoes the Standard Contract obligations but with additional recommendations that all NHS organisations:

- Purchase 100% renewable energy
- Replace lighting with LED alternatives during routine maintenance
- Ensure all new builds and refurbishment projects are delivered to net zero carbon standards
- Implement the Estates and Facilities Management Stretch programme (key activity's organisations can take to reduce the environmental impact of their estates.)

Other requirements on the NHS include:

- The National Adaptation Programme (2018) outlines key requirements and associated actions for the NHS to ensure climate change adaptation and mitigation measures are addressed.
- In June 2019 the UK Government committed to reduce its greenhouse gas emissions to net Zero by 2050 under the terms of a new government plan to tackle climate change, stating that cutting emissions would benefit public health and cut NHS costs.
- The Bristol One City Plan (2019-2050) plan aspires to deliver a sustainable city, with a low impact on our planet and a healthy environment for all by 2050. The plan sets out a series of objectives across the backdrop of the United Nations Global Goals for Sustainable Development with key commitments for Bristol which include carbon neutral status by 2030.

3. Our Vision

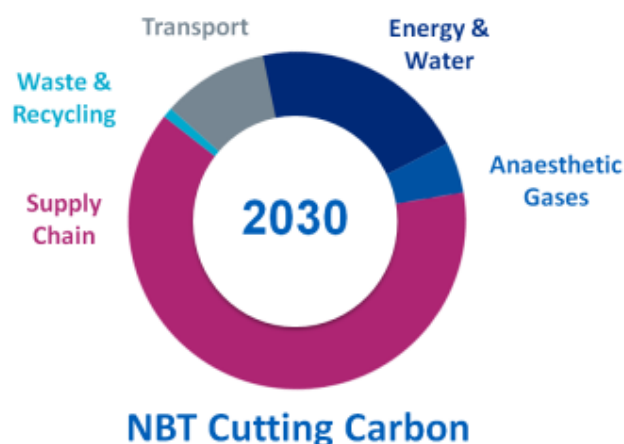
Our Sustainable Development Policy sets out our aspiration to be a leader in the field of sustainable healthcare through committed leadership, innovation, culture change and system wide engagement and development.

We are committed to embedding sustainable development across our sites and services and will deliver our Policy commitments through our Green Plan by;

- Maximising the environmental, financial and health opportunities associated with sustainable development and the co-benefits to our staff, patients and the local community.
- Valuing the importance of protecting our natural environment for the benefit of the physical and mental health and well-being of our community, now and in the future.
- Striving to improve staff and patient experience by moving towards more sustainable models of care and workplace practices.

3.1 Climate Emergency Declaration

In October 2019, North Bristol NHS Trust joined University Hospitals Bristol and Weston NHS Foundation Trust, alongside our civic partners, Bristol City Council, North Somerset Council, South Gloucestershire Council and the West of England Combined Authority to declare a Climate Emergency. By making such a declaration, we hope to lead the healthcare sector in collective action to ensure the future health and wellbeing of our city. As part of the declaration we committed to the ambitious Bristol One City Plan goal of Carbon Net Zero by 2030.



3.2 Trust Strategy 2019-2024

This year the Trust updated its strategy. One of the 4 areas of focus is *Being an Anchor in Our Community*. This element of the strategy includes developing in a sustainable way. The strategy also includes a commitment to: *Working with our civic partners to reduce carbon emissions as part of Bristol's One City Plan.*



4. Governance

Our Green Plan is approved by Trust Board on an annual basis, with a six monthly progress report submitted half way through the year.

Sustainable development is championed by the Trust's Chair Michele Romaine and the Director of Estates, Facilities and Capital Planning, Simon Wood.

Simon Wood chairs the Sustainable Development Steering Group which meets quarterly. The steering group consists of our Trust Chair, specialist Public Health Advisers, Senior Management, our PFI partner and representatives from the local community and Trade Unions.

The group drives forward the sustainable development agenda at the Trust by setting objectives, reviewing progress and delivering assurance on a regular basis. The group promotes collaborative working with external partners to bring external benefits to the trust and support the local community.

The Sustainable Development Unit (SDU) is a small team of specialists providing advice and support across the Trust to assist in the delivery of sustainable development.

To further support the delivery of the policy commitments, the Trust has an active network of Environmental Awareness Reps (EARs) and Green Impact teams spread throughout the organisation to raise awareness, engage and enthuse the wider workforce.

In 2020-21 we will establish a new group, comprising staff representation from across the Trust, to drive action and increase engagement on our Carbon 2030 goal.

NBT is also a member of the Bristol, North Somerset and South Gloucestershire Sustainability Transformation Partnership (STP) "Healthier Together," along with other major health and care providers in the region. The STP has developed a Climate Change and Sustainability work stream into which all organisations are expected to contribute.



5. Communications and Engagement

Our vision to be a leader in the field of sustainable healthcare requires system-wide engagement and development through simple and effective communication.

In 2019/20, we published our Communication and Engagement Plan which sets out how the Trust engages with its audience to raise awareness, understanding and bring about behaviour change to promote sustainable healthcare now and for generations to come.

We communicate with our stakeholders using various channels and means to get our messages out to our staff, patients and wider community, notably through our website and social media outlets, annual reports and numerous, innovative engagement events and opportunities throughout the year.



Engagement Activities 2019-20

- Gardens for Health Week (May)
- Staff insect hotel building (Jun 2019)
- NHS Sustainable Health and Care Week (June 2019)
- Clean Air Day (June 2019)
- 30 Days Wild (June 2019)
- Southmead Festival (July 2019)
- Cycle to Work day (Aug 2019)
- Southmead Hospital Lavender Project events (June – Dec 2019)
- Apple pressing in partnership with The National Trust (Oct 2019)
- Green Impact Awards (Dec 2019)
- Community Hedge & Tree-Planting (Dec 2019)
- Junior Doctor Wellbeing Wednesday (February 2020)
- Travel to Work Survey (Mar 2020)
- NHS Sustainability Day (Mar 2020)
- The Community Farm weekly fruit and veg stall
- Attended 24 Corporate Inductions
- 12 monthly SDUpdate e-newsletters
- 248 Tweets
- 2,170 visits to our Twitter profile

6. Sustainable Development Assessment Tool (SDAT)

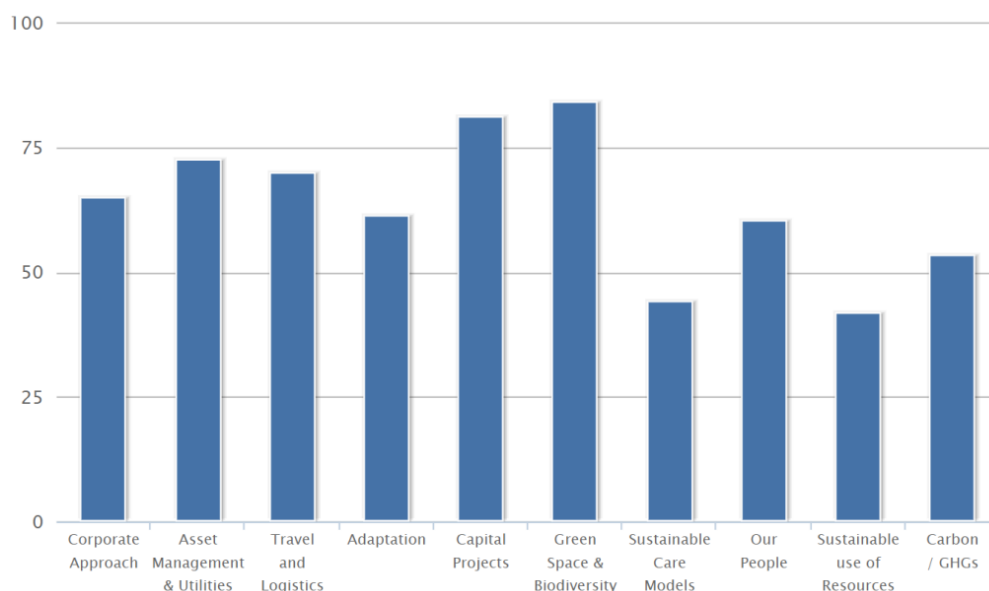
The Sustainable Development Assessment Tool (SDAT) is the national benchmark used by Public Health England and NHS England to measure improvement across the health and care system.

The assessment determines progress against the implementation and delivery of sustainable development across the health and care system and is designed to help the NHS and other healthcare organisations understand their work, measure progress and create the focus of and action plans for their Green Plans. Each benchmark undertaken reports how the Trust is contributing to the 17 UN Sustainable Development Goals.

SDAT consists of ten areas which are assessed against four cross-cutting themes; governance and policy, core responsibilities, procurement and supply chain and working with staff. During 2019-20, North Bristol NHS Trust achieved an overall score of 63%, which is a 5% improvement from 2018-19.

Figure 1: North Bristol SDAT Assessment 2019-20

**NORTH
BRISTOL
NHS TRUST**
63%



United Nations Sustainable Development Goals

The 17 Sustainable Development Goals (SDGs) were adopted by all United Nations Members States in 2015 and represent an urgent call for action by all countries in a global partnership. The Trust is starting to contribute to 16 of the 17 SDGs at a local level.



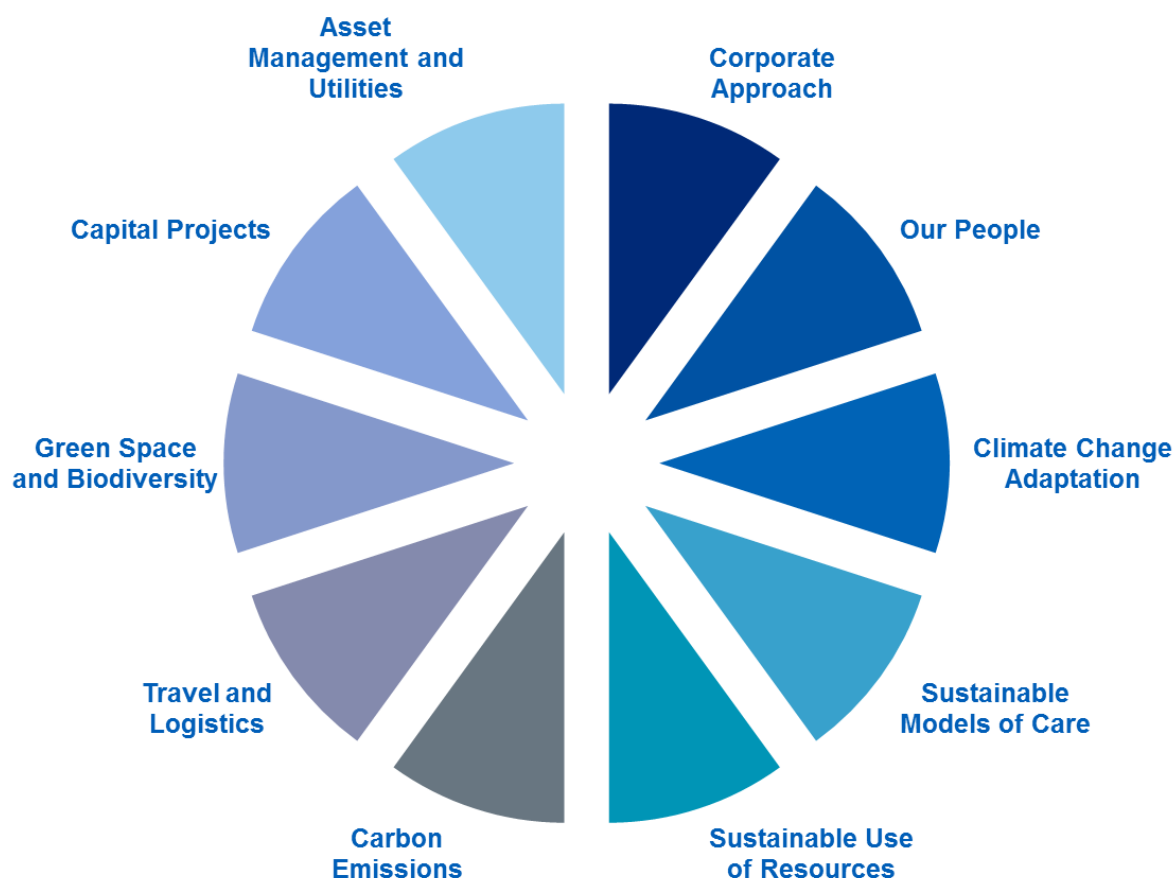
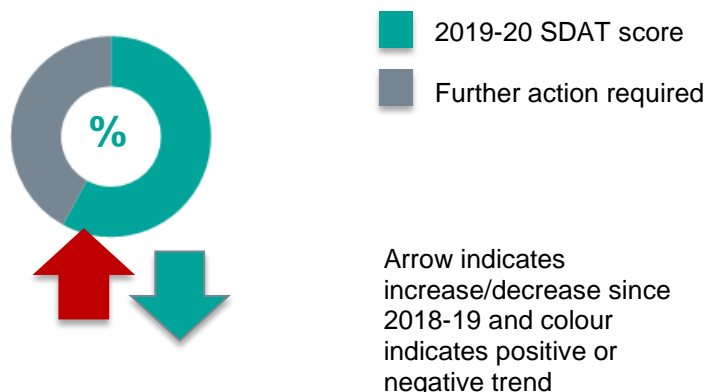
7. Corporate Objectives

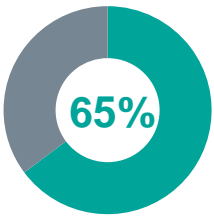
North Bristol NHS Trust has developed ten key objectives in line with the SDAT themes laid out in the diagram below.

Each objective has a set of actions set for the year ahead to drive forward sustainable development at NBT.

The following pages outline the Trust's progress against each theme undertaken in 2019-20 and our plans for the year ahead.

At the top of each page, we have reported our SDAT progress score against each theme.





7.1 Corporate Approach

The best health and care is not the work of an individual, a single team or even one organisation. Partnership and collaboration is fundamental. The Trust strategy recognises the opportunity we have to make the best use of NHS resources for patient care and to develop sustainable services for the long term. Through our position as a large and established organisation acting as an anchor in our local community we accept our responsibilities for sustainable development, local product sourcing, and population health and illness prevention.

Our Sustainable Development Policy underpins our decision making process, which now includes Sustainability Impact Assessments for all key decisions and a Carbon Assessment Tool for use during the completion of annual business plans.



We continue to work with local community organisations and wider civic partners via our Sustainable Development Steering Group, through engagement events and by collaborating at neighbourhood, city-wide and regional levels. North Bristol NHS Trust represents health on the Bristol One City Environmental Strategy Board and has contributed to the Bristol One City Climate Strategy in recognition of the many ways in which healthcare both contributes to and can provide solutions to mitigate and adapt to the impacts of climate change.

OBJECTIVE 1

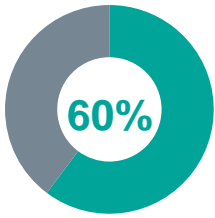
The Trust aspires to be a leader in sustainable healthcare

We have:

- Declared a Climate Emergency
- Set a goal of Carbon Net Zero by 2030
- Included the climate change emergency on our Business Assurance Framework
- Embedded sustainable development within the Trust's updated Strategy.
- Introduced a Carbon Assessment Tool to the business planning process
- Declared an Ecological Emergency with Bristol partners

We will:

- Develop a Carbon 2030 Routemap
- Continue to work collaboratively to deliver the Bristol One City obligations
- Introduce sustainability considerations for business cases under £100K.
- Engage with our suppliers, contractors and commissioned services to reduce the impacts of the goods and services we buy



7.2 Our People

The Trust recognises that a healthy, happy and resilient workforce is key to ensuring we operate sustainably, and as such, every single member of staff has an important role to play in helping us achieve this.

The updated Trust Strategy recognises the importance of providing staff with a means of engaging on sustainability whilst at work. This is achieved through the provision of a sustainability programme and our travel to work offer which supports our staff to make sustainable and active travel choices.

The Trust's Sustainable Development Policy outlines individual staff responsibilities to ensure efficient resource use through simple, everyday actions.

The Sustainable Development Unit encourages staff to get involved through regular events and the Green Impact Engagement scheme. During 2019/20 we completed our fourth year of taking part in Green Impact, with 38 teams achieving an award. The scheme provides innovative ways for staff to get involved in sustainability in the workplace and celebrates those that did, with an awards ceremony hosted in the Brunel Atrium in December.



OBJECTIVE 2

Engage our staff, patients, visitors, stakeholders and our wider community on sustainable development

We have

- Launched our staff Green Impact engagement scheme for the fifth consecutive year
- Jointly with the Fresh Arts team launched the Pathway to Well-being programme and produced the *Southmead Explorer* map for the Southmead Hospital site
- Delivered the Green Gym and Allotment
- Completed Lime Walk Park

We will

- Continue to run a staff engagement scheme
- Hold at least 6 sustainable healthcare engagement events
- Ensure greater engagement with the local community on sustainability activities at the Trust and the use of our green spaces for health and wellbeing



Our People Case Studies



Southmead Explorer Map

Working with Fresh Arts and Wellbeing teams, The Site Lines Explorer Map was launched to support and encourage staff and patients to spend time outdoors.

The map identifies various walking routes, bench locations, the Sculpture Trail and biodiversity points of interest such as our bug hotels and the new Allotment site. Part of the walking routes are known as *Routes to Recovery*; to be used by patients in their rehabilitation and help them get active again.



Green Gym Equipment Launched

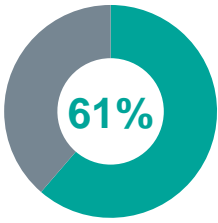
To further encourage health and wellbeing through being active and spending time outside, the Green Gym equipment installed in December provides a perfect opportunity for staff, patients and the local community to enjoy our green spaces whilst doing physical exercise.

It is conveniently located adjacent to the new staff and patient allotment, together with new seating, so that multiple forms of exercise and relaxation can take place in the same space.



Green Impact – Respiratory Medicine

The respiratory green impact team live and 'breathe' sustainability and have worked hard (despite ward moves!) to ensure lights are turned off in unused rooms, paper waste is reduced, faulty electricals changed and more of the respiratory team travel in a sustainable way. Their enthusiasm for sustainability is infectious – they have used the Green Impact programme to encourage behaviour change throughout the team and are set to achieve the silver award this year.



7.3 Climate Change Adaptation

The Trust is committed to adapting to the impacts of climate change by working to deliver a healthy, resilient and sustainable healthcare system ready for changing times and climates.

The Trust has been working across the region with Sustainability and Transformation Partnership (STP) partners to finalise the Bristol, North Somerset and South Gloucestershire (BNSSG) Climate Change Adaptation Plan. The plan identifies the shared risks and opportunities in our region, including the anticipated health impacts and serves to prioritise actions and deliver shared opportunities to achieve regional benefits going forward. The plan sits within the wider Bristol, South Gloucestershire and North Somerset STP Estates Group and aims to reduce our combined impact on the environment, reduce our organisational running costs, ensure our business continuity plans are in place and reduce health inequalities.

North Bristol NHS Trust has already implemented a number of schemes on site to promote adaptation through sustainable design and infrastructure, notably through the development of the Brunel Building which includes sustainable urban drainage and energy efficient design.

The Trust has also been working to promote patient and staff resilience through health and wellbeing via the provision of access to high quality green space and the natural environment. Consideration is also given to the secondary impacts of climate change, such as the effects of severe weather on our infrastructure, supply chain and vital resources such as medical equipment, water, energy, fuel and food to ensure continuity of service in times of scarcity.

OBJECTIVE 3

We will adapt our sites and services ready for a changing climate

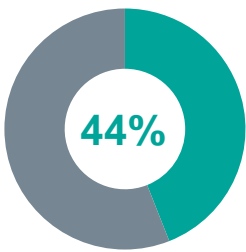
We have

- Added a Carbon Assessment Tool (which includes consideration of adaptation to climate change) within the corporate business planning process
- Included the risk from failing to meet our Carbon 2030 goal to our Board Assurance Framework
- Submitted the Healthier Together Climate Change Adaptation Plan to the Partnership Executive group for ratification and subsequently made amendments
- Contributed to the Sustainability chapter of the Healthier Together Five Year Plan

We will

- Seek adoption of the Healthier Together Climate Change Adaptation Plan across the BNSSG region together with recruiting climate change leads for each member
- We will create a Board Assurance Framework entry for Climate Change Adaptation to ensure that risks to NBT are identified and sufficiently mitigated.

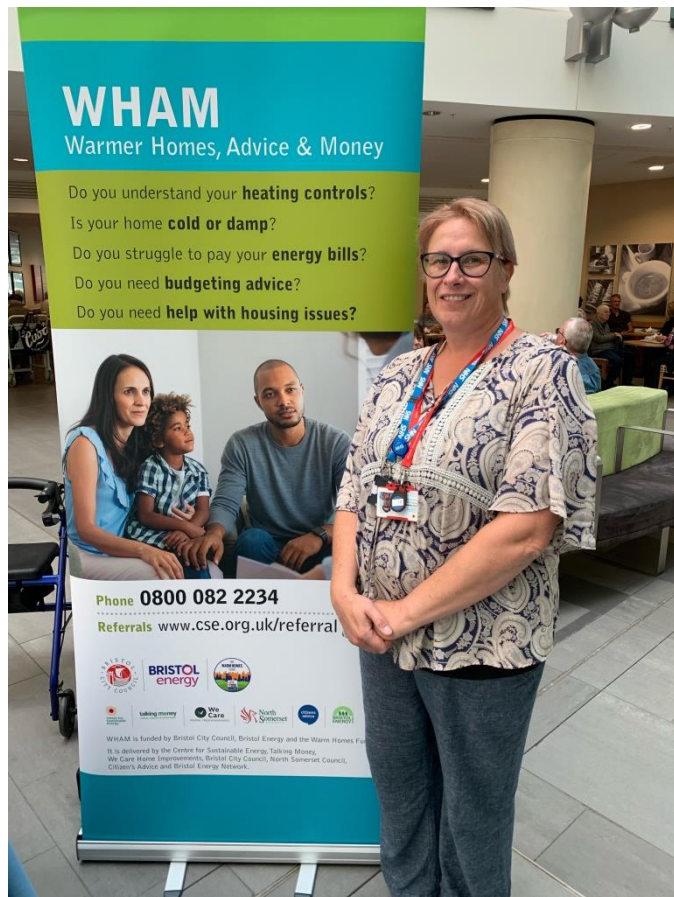




7.4 Sustainable Models of Care

The Trust seeks to make the best use of NHS resources for patient care and develop sustainable services for the long term.

During 2019-20 the Trust has been identifying good examples of where care pathways, care models and the delivery of healthcare in general have been and can be made more sustainable. One such project involved the switch to pre-filled saline syringes. This project involved replacing several items (individually purchased saline ampoules, syringes, chlorhexidine wipes) with one pre-filled saline syringe. This saved on staff time and cost and avoided emissions from multiple deliveries, packaging waste and also contributed to reduced infection risk.



OBJECTIVE 4

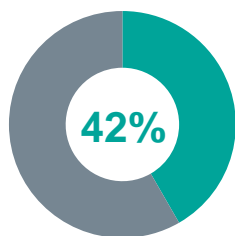
We will adopt sustainable models of care across our services

We have

- Worked with citywide partners and successfully bid to appoint a hospital-based Fuel Poverty Advisor to help identify patients being discharged to a cold home and to provide the support they need to ensure their homes are warm and to prevent readmission.
- Continued to reduce the use of volatile anaesthetic gases used in theatres.

We will

- Co-ordinate the delivery of a SusQI workshop with the Academic Health Science Network for the Bristol, South Gloucestershire and North Somerset Sustainability Transformation Partnership.
- Use the Carbon Assessment Tool in our business planning to help identify opportunities for more sustainable care pathways.



7.5 Sustainable Use of Resources

We will seek to make the best use of NHS resources for patient care and develop sustainable services for the long term.

A more sustainable use can include:

- Using a product with a smaller carbon footprint (e.g. less waste generated, energy/water used, fewer transport emissions, less packaging etc.)
- Using less of a product
- Choosing products with fewer or no hazardous chemicals
- Using locally-sourced, fresh, organic and Fair Trade ingredients
- Reducing waste
- Maximising repair and reuse
- Influencing our supply chains and partners to play their part

Over the last year we have made significant steps in improving the sustainability of our catering operations through both replacing all takeaway containers with an alternative product with a smaller carbon footprint and through signing up to the NHS Plastic Pledge and further committing to reduce single-use plastic consumables.



OBJECTIVE 5

We will manage our resources sustainably, reducing our direct environmental impacts across our healthcare services in energy, waste, water, food and anaesthetic gases

We have

- Signed up to a project with Healthcare Without Harm Europe which will look at the plastics used in healthcare and how to reduce them, find more sustainable alternatives and increase recycled content where plastics are the only option.
- We have employed an external consultant to undertake a comprehensive waste review to identify further opportunities to reduce our carbon emissions
- Launched a clinical waste campaign to raise awareness and enable staff to make informed decisions when disposing of their waste, including the production of a new suite of posters.
- Successfully reduced contamination of our dry mixed recycling stream resulting in its diversion from energy-to-waste disposal back to recycling.
- Launched Vegware as a replacement for plastic-based take-away containers.
- Signed up to the NHS Plastic Pledge

We will

- Measure the carbon emission reduction potential of waste disposal methods as part of the commissioning of the Carbon Routemap
- Create a Sustainable Use of Resources action plan
- Investigate more sustainable alternatives to metered dose inhalers

7.5.1 Energy Consumption

Total energy consumption has increased slightly since last year, by 568,966 kWh. Both electricity and gas demand have increased whilst oil usage has decreased.

Despite a rise in emissions, the carbon footprint associated with this consumption has reduced due to decarbonisation of the national electricity grid (meaning a greater percentage of renewable energy is being generated nationally and fed into the supply that NBT then uses.)

The Trust will appoint an Energy and Carbon Manager in 2020 to drive forward progress on improving our energy efficiency. The Carbon Routemap which we plan to commission will also highlight the key priorities to help us reach our Carbon 2030 net zero goal.

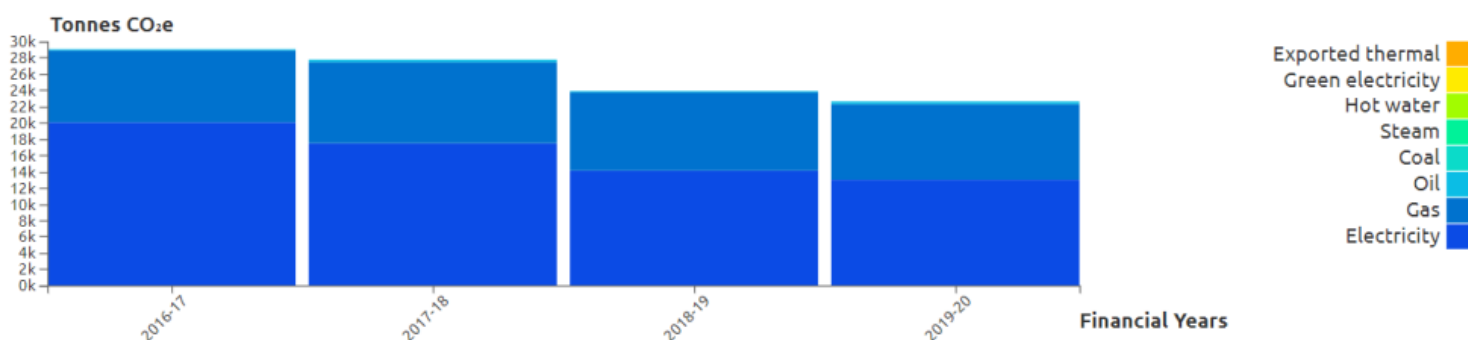
The generation of renewable energy from the solar panel arrays onsite has reduced by 11,263 kWh over the past year due to a technical problem which is being addressed.

Energy used

Energy consumption in kWh

	2016-17	2017-18	2018-19	2019-20
Electricity Consumed	38,828,428	39,295,816	40,147,116	40,860,494
Gas Consumed	42,115,642	46,759,825	45,390,730	45,472,381
Oil Consumed	543,381	892,324	765,375	583,708
Coal Consumed	0	0	0	0
Steam Consumed	0	0	0	0
Hot Water Consumed	0	0	0	0
Green electricity	39,717	36,057	44,396	33,133
Total	81,527,168	86,984,022	86,347,617	86,949,716

Carbon emissions resulting



7.5.2 Waste and Recycling

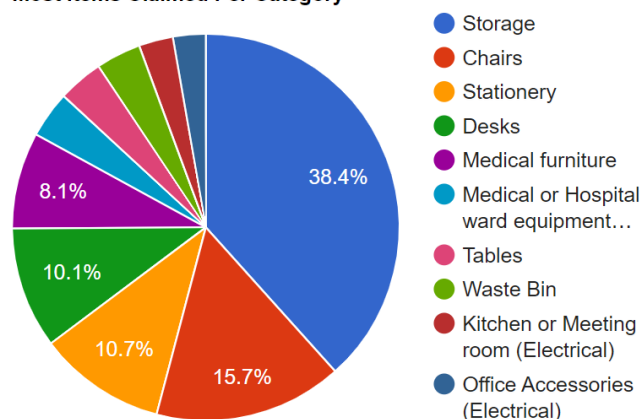
This year we are pleased to report that the contamination issues experienced in 2018-19 have been resolved and all our dry mixed recycling has been diverted back to this route instead of being disposed via the energy-to-waste route.

All waste streams are showing positive trends with recycling increasing and recovery streams (incineration with energy recovery and autoclaving) decreasing. Waste which had been going to landfill (offensive hygiene waste) is now being incinerated with energy recovery so NBT is no longer sending any waste to landfill. Our carbon footprint is reduced as a result of this and greater levels of recycling.

Overall the Trust generated 23 more tonnes of waste than last year so more effort is required to identify areas where waste can be reduced.

The Trust saved £58K over the past year through our internal reuse scheme Warp-It. Through avoiding disposal of usable furniture and the purchase of new, we have also saved 30 tonnes of CO₂. The table below shows the most common items our staff seek to reuse.

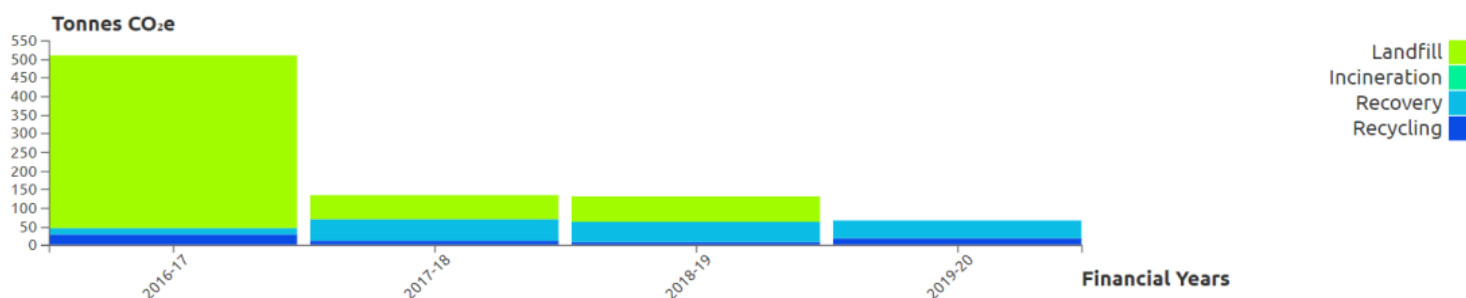
Most Items Claimed Per Category



Waste in tonnes

	2016-17	2017-18	2018-19	2019-20
Waste recycling weight	1,266	518	386	883
Other recovery weight	952	2,672	2,441	2,171
Incineration disposal weight	0	0	0	0
Landfill disposal weight	1,487	191	204	0
Total	3,705	3,381	3,031	3,054

Carbon emissions resulting



7.5.3 Anaesthetic Gases, Pharmaceuticals and Medical Devices

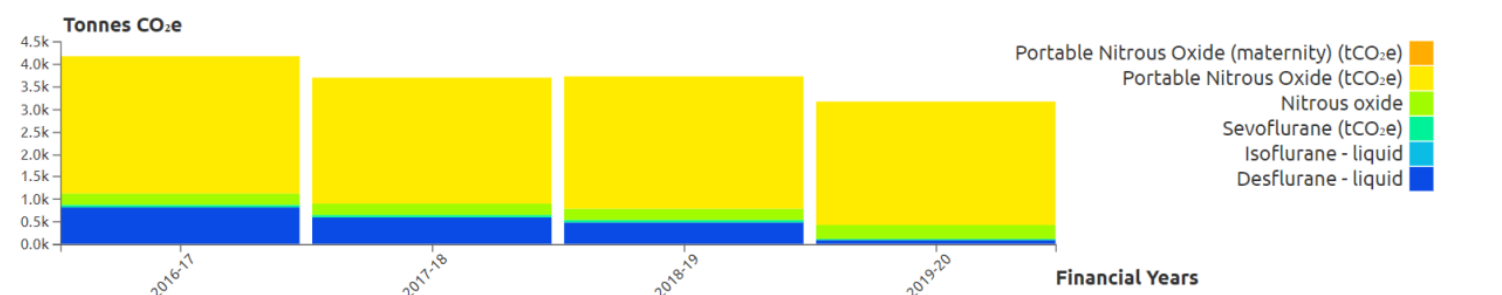
The consumption of anaesthetic gases, pharmaceuticals and medical devices varies in line with patient contact, the more patients we treat the more products we use.

During 2019-20 the good practice started in the previous year has continued with ongoing movement away from using volatile anaesthetic gas such as sevoflurane and desflurane to using intravenous anaesthesia as an alternative for some patients. Intravenous anaesthetic has a considerably lower carbon footprint.

As a result of the work undertaken by staff, we have seen a continued reduction in the use of these gases. Future work includes awareness-raising with patients in certain areas so informed decisions about the optional use of gases such as nitrous oxide can be made. The Trust can only influence these areas as the decision rests with the patient.

The Trust's spend on both pharmaceutical and medical devices have increased by 2.6% and 3.4% respectively. The greenhouse gases (measured as carbon dioxide equivalent or CO₂e) associated with the production and distribution of both these product areas are one of the most intensive in the NHS. At NBT the footprint of pharmaceuticals last year was 6,095 tonnes CO₂e with medical equipment and instrumentation contributing 18,801 tonnes CO₂e. Anaesthetic gases contribute 3,151 tonnes CO₂e as seen in the table below.

Much of the work to reduce the impact in these areas lies with the manufacturers and suppliers whom we will seek to influence however our biggest opportunity to reduce the carbon footprint lies in reducing use and wastage within the Trust.



CO₂ Emissions (tCO₂e)

	2016-17	2017-18	2018-19	2019-20
Desflurane - liquid	804	592	473	78.1
Isoflurane - liquid	9.16	8.39	5.34	1.53
Sevoflurane (tCO ₂ e)	54	58.2	54	51.2
Nitrous oxide	267	241	250	302
Portable Nitrous Oxide (tCO ₂ e)	3,024	2,802	2,944	2,718
Portable Nitrous Oxide (maternity) (tCO ₂ e)	0	0	0	0
Total	4,158	3,701	3,725	3,151



7.5.4 Water consumption

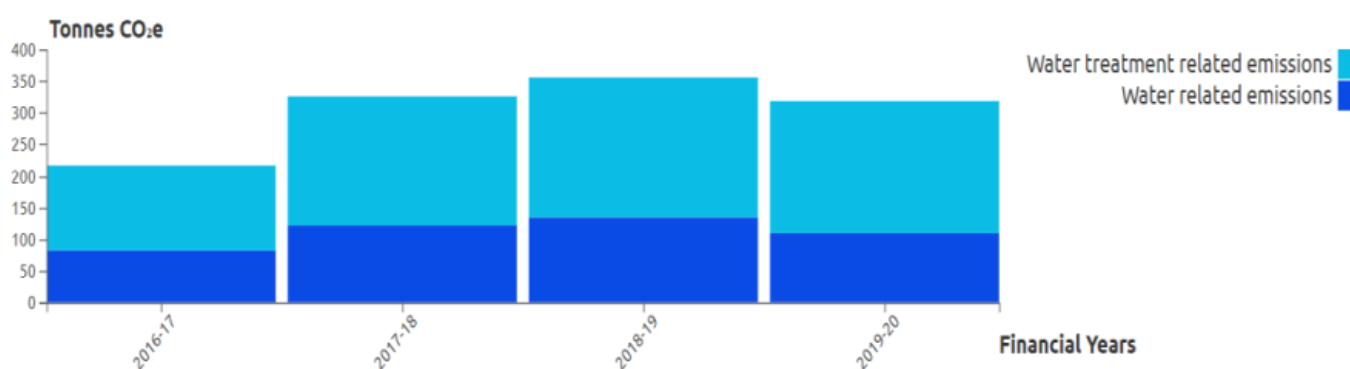
During 2019-20 our water use has decreased. Some of this reduction will be due to having had no major water leaks (e.g. burst pipes) over the past year. Work has also taken place to identify continually flushing toilets within our main building Brunel which is believed to have successfully reduced consumption.



Finite resource use - Water

	2016-17	2017-18	2018-19	2019-20
Water volume (m ³)	237,418	357,389	389,225	316,732 
Waste water volume (m ³)	189,934	285,911	311,380	294,135 
Water and sewage cost (£)	493,081	665,091	751,408	681,179

Carbon emissions resulting



7.5.5 Fuel Consumption

Data for 2019-20 shows a decrease in grey fleet mileage (staff using their own vehicles for business use). Efforts have been made over the last year to encourage greater use of public transport, our pool cars or the Trust’s pool bicycles to reach business destinations. Bicycle mileage has increased by 793 miles in the last year. Mileage undertaken by Trust fleet vehicles has also decreased however the overall ‘business travel and fleet’ miles have increased due to a significant increase in business miles undertaken by rail and air. This is likely due to a lift on travel restrictions following the Trust no longer being in special financial measures.



We have also seen decreases in staff commuting mileage and those undertaken by patients and visitors. We discovered an error in calculating the mileage associated with staff commuting in previous years and have been able to rectify this for last years’ data but not earlier years, which explains the sudden increase in mileage between 2017-18 and 2018-19.

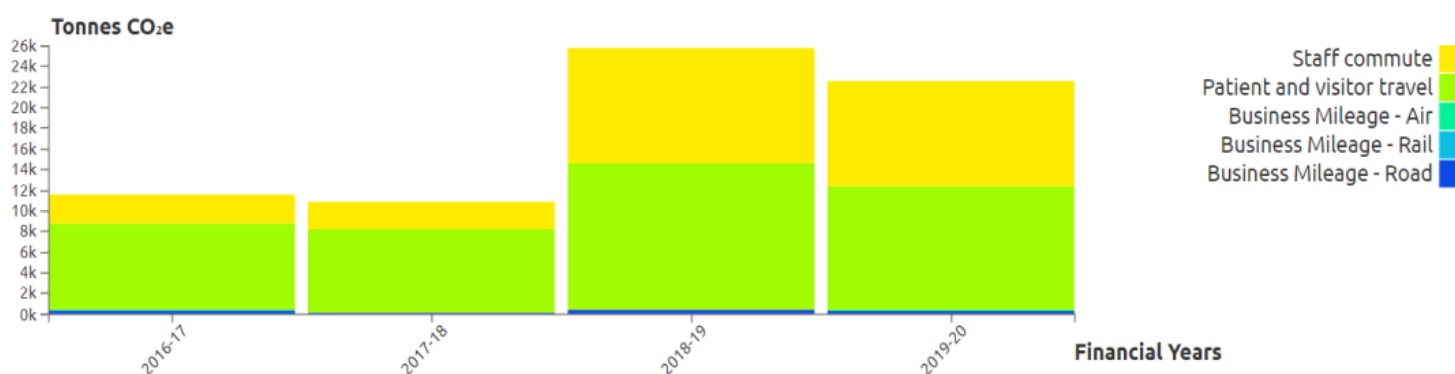
Travel undertaken

All travel is shown in miles.

	2016-17	2017-18	2018-19	2019-20
Patient and visitor travel	22,926,176	22,570,481	38,615,782	34,562,091
Business travel and fleet	1,253,299	490,140	1,208,090	1,396,767
Staff commute	7,589,017	7,557,304	30,054,300	29,267,018
Total	31,768,492	30,617,925	69,878,172	65,225,876

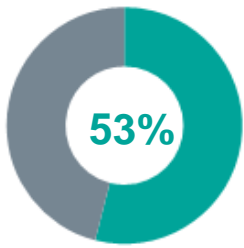


Carbon emissions resulting



7.5.6. Paper Consumption

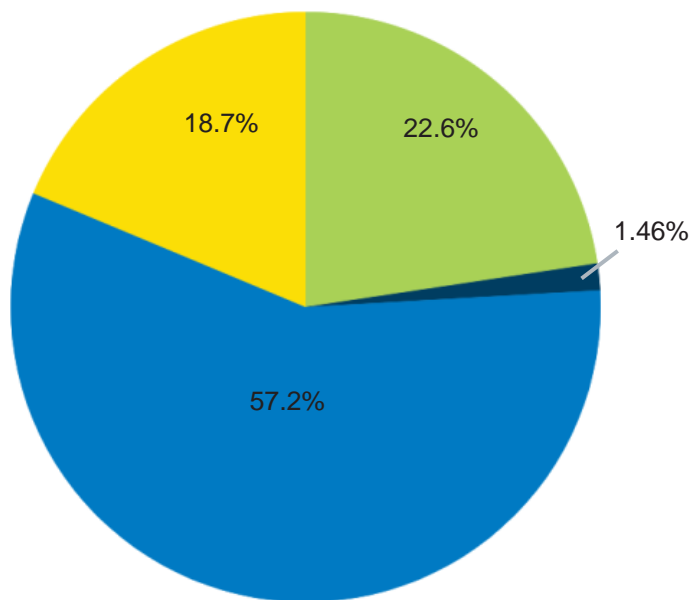
Following the further roll-out of digital solutions the Trust’s spend on paper reduced by £27k in 2019-20.



7.6 Carbon and Greenhouse Gases

The Trust is committed to reducing our carbon emissions.

During 2019, NBT declared a Climate Emergency with University Hospitals Bristol NHS Foundation Trust and signed up to the Bristol One City goal to be zero carbon by 2030.



OBJECTIVE 6

We will manage our carbon emissions in line with the NHS Long Term Plan

We have

- Declared a Climate Emergency and signed up to be carbon net zero by 2030 across all 3 scopes.
- Written to all our suppliers to ask for their support in our journey to carbon net zero.

We will

- Commission the production of a plan to identify the route we need to take to reach our 2030 goal, the priorities, opportunities and risks.
- Appoint an Energy and Carbon manager to address emissions from this significant area.

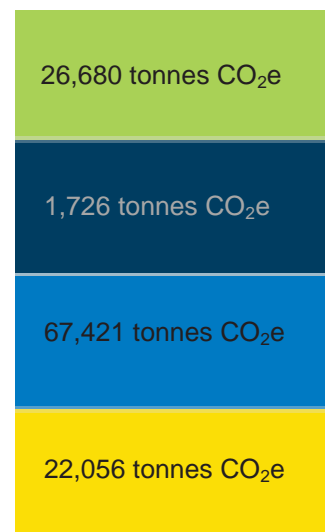
NBT Total Carbon Footprint 2019-20

Core emissions: Scope 1, 2, 3 and emissions from energy, waste, water, business travel and transport and anaesthetic gases

Commissioning: Scope 3 emissions

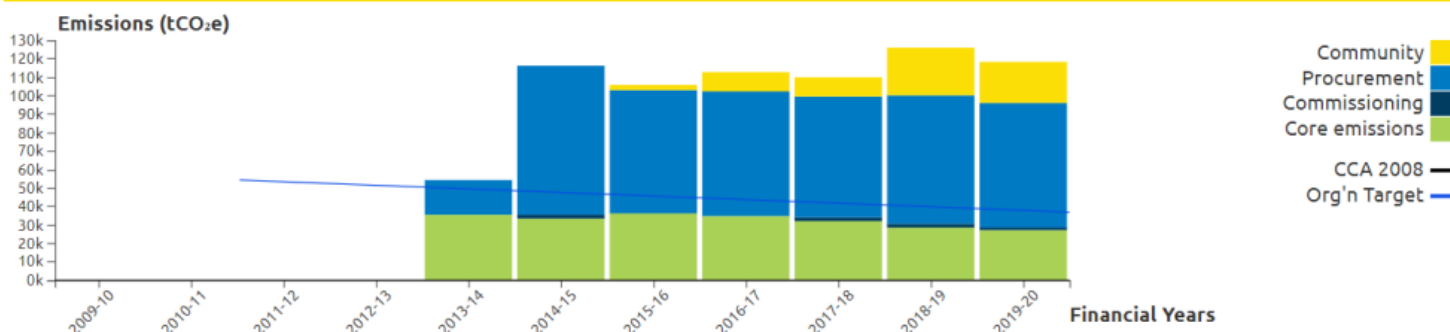
Supply chain: All scope 3 emissions (goods, services and buildings procured)

Community: All emissions (Scope 1, 2, 3 from staff commute, patient and visitor travel).



Carbon emissions progress

Goal: Carbon Net Zero by 2030



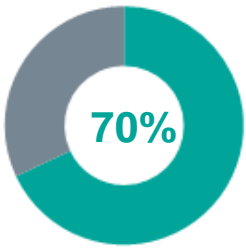
Our scope 1 emissions have reduced in the past year thanks to reduced gas and oil consumption. A reduction in anaesthetic gas use has also been a strong contributor to this decrease in emissions, contributing a 589 tonne CO₂e reduction.

Our scope 2 emissions have also reduced, primarily due to the decarbonisation of the grid which means that each unit of electricity we consume has less inherent carbon associated with it (through increased efficiencies and generation via renewable sources). So even though our consumption has increased, this has been offset by a more sustainable national energy generation picture.

The Trust's scope 3 emissions have also reduced in 2019-20. This is due to a reduction in emissions across multiple areas including: patient, visitor and staff travel, capital spend, water and electricity, waste and manufactured goods.

Trends in emissions across all these areas can be seen in the adjacent table.

Carbon emissions (tonnes CO ₂ e)	2016-17	2017-18	2018-19	2019-20
Patient & visitor travel	8,286	8,042	14,238	11,943
Staff commute	2,743	2,693	11,081	10,113
Business services	7,653	8,100	7,895	8,011
Capital spending	6,325	4,946	5,640	2,954
Construction	229	244	193	216
Food and catering	157	175	201	204
Freight transport	418	268	17.6	19
Information & communication technologies	1,064	1,304	1,419	1,447
Manufactured fuels, chemicals & gases	12,989	12,856	15,329	15,945
Medical instruments / equipment	14,221	14,727	17,911	18,801
Other manufactured goods	15,532	16,452	15,094	13,695
Paper products	2,579	46.6	50.8	34.5
Pharmaceuticals	6,340	6,152	5,954	6,095
Coal	0	0	0	0
Electricity (net of any exports)	20,067	17,515	14,162	12,911
Gas	8,802	9,914	9,511	9,447
Oil	172	292	244	186
Thermal energy (net of any exports)	0	0	0	0
Leased Assets Energy Use (Upstream - Gas, Coal & Electricity)	0	0	0	0
Business travel & fleet	435	158	595	602
Anaesthetic Gases	4,158	3,701	3,725	3,151
Waste & Water	724	461	485	382
Commissioning	0	2,030	1,853	1,726
Total	112,893	110,076	125,598	117,883



7.7 Travel and Logistics

The Trust is committed to reducing the impacts of our travel and transport.

Active travel plays a significant part in both reducing traffic on the roads whilst also promoting health and wellbeing through exercise and improving local air quality.

The Trust runs the TravelSmart scheme aimed at encouraging staff, patients and visitors to travel sustainably where they can. TravelSmart promotes cycling, walking, running, public transport and lift-sharing as alternative ways to travel to work and ensure facilities are fit for these choices to be made.

During 2019-2020, the Trust raised the cap on the Cyclescheme to allow the purchase of e-bikes, introduced Motorcycle and Bike Buddy schemes to pair new and experienced riders together, signed the Lifecycle Women Cycling in Bristol Charter and contributed to the Sustrans Bike Life Report 2019 report.

At the TravelWest Sustainable Business Awards 2019, the Trust was highly commended in both the Long Term Commitment and Innovative Measure categories alongside being awarded Gold Accreditation for the Travel Plan 2019-2023.



OBJECTIVE 7

We will reduce the impacts from our travel and transport services

We have

- Received Gold Accreditation for our Travel Plan
- Offered 98 staff free bike safety checks
- Loaned 71 bicycles to staff
- Commenced a scoping study for fleet and business rationalisation
- Responded to local transport consultations to ensure the journeys of our staff and patients are considered.
- Hosted two bike register events

We will

- Continue to implement our travel plan action plan
- Assess progress using the national Sustainable Development Unit's HOTT Tool
- Commit to embedding the Clean Air Hospital Framework to reduce air pollution from our services
- Present a Fleet and Business Travel Report suggesting actions for consideration and implementation

Travel Smart Case Studies



Car share competition

To encourage registrations to our care share matching website, a monthly prize draw was organised in which staff could be in with the chance of winning an Argos voucher if they signed up to the NBT Liftshare website.

Throughout the six months of running the competition, the number of members signing up increased by an average of 120% each month.



Motorbike and Bike Buddy Scheme

In 2019, we launched two 'Buddy Schemes'; one for staff who ride motorbikes and one for those cycling to work. The purpose of the schemes is to match new riders, with experienced staff travelling to work from a similar area.

The schemes allow those who don't feel confident with their route to work, to gather first-hand information and advice from a member of staff who undertakes the route regularly.

Over 50 staff members have volunteered to be a Motorbike or Bike Buddy.

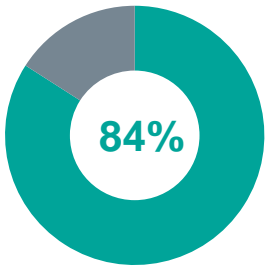


Discount on Day Tickets

In February, the Trust partnered with First Bus West of England to trial a new discount for bus tickets.

The trial was successful and staff can now receive 10% discount on packs of 10 Day mTickets alongside the original 10% discount on Monthly mTickets.

This is a great opportunity for making public transport viable and more attractive for part-time staff members.



7.8 Green Space and Biodiversity

The Trust is committed to protecting and enhancing the natural environment, including the prevention of pollution.

The Trust recognises the value of the natural environment which plays a key role in our health, improving patient recovery rates and patient experience. As a result, the inclusion of green infrastructure across the hospital estate is vital as a resource going forward. These green spaces also provide an important habitat for wildlife which contributes to Bristol’s wider biodiversity network.

Managing our green spaces effectively can lead to improved biodiversity, improved air quality, noise reduction, provide essential shading during times of extreme heat and also reduce local surface water flooding.

During 2019/2020, we finalised our Biodiversity Management Plan and Action Plan which gives us direction for protecting and enhancing the green spaces on site. In July, we opened Lime Tree Park which later in the year was planted with trees as part of a city-wide 1000 Trees campaign.



OBJECTIVE 8

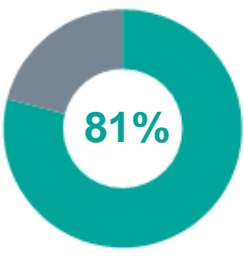
We will protect and enhance the environment and prevent pollution

We have

- We finalised the Biodiversity Management Plan which was approved by Trust Board.
- Officially opened Lime Tree Park
- Installed bird boxes created by students at SGS college using wood donated by Robins Timber
- Ran a fruit pressing event in partnership with the National Trust; using site-grown and donated apples and pears
- Installed a Bee Hotel by the staff and patient allotment
- Planted 28 trees and 70m of native hedging in partnership with Plastic Pollution Awareness & Actions Projects, One Tree Per Child and the Woodland Trust.
- Declared an Ecological Emergency

We will

- Implement actions in our Biodiversity Management Action Plan
- Undertake an ecological survey across the whole Southmead Site
- Plant drought tolerant plants with an additional interpretation panel to educate the public on the impacts of a warmer climate.



7.9 Capital Projects

The Trust is committed to reducing the environmental impacts from our buildings, critical infrastructure and equipment essential for the smooth running of the hospital.

The Trust's Capital Programme ensures the delivery of services and enables resources to be managed more effectively through critical infrastructure and material improvement works across our Estates.

The programme ranges from major demolition and construction works through to refurbishment projects as well as energy efficiency projects and the purchase of critical medical equipment.

OBJECTIVE 9

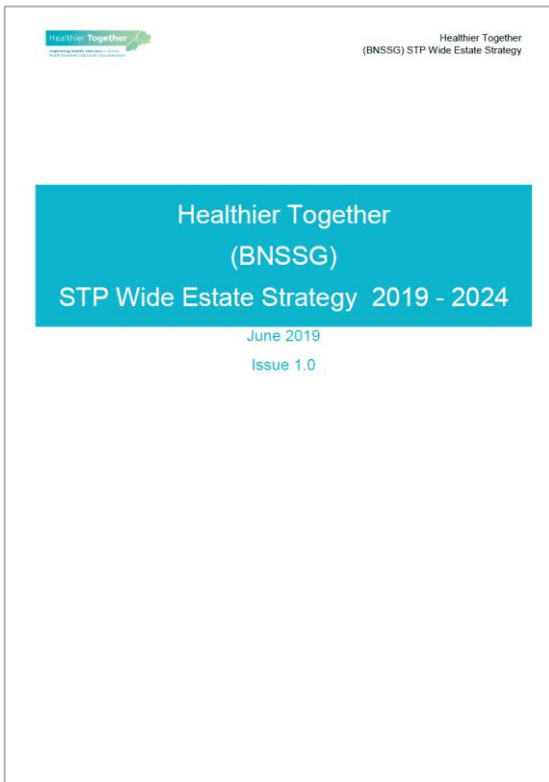
We will embed sustainable design and construction within our capital projects

We have

- Included sustainable development requirements in all capital project tenders for construction works
- Continued to require Sustainability Impact assessments for all projects over £100K
- Together with others across the region our sustainability team have written the sustainability chapter and prepared sustainable development objectives for the STP Estates Strategy

We will

- Include sustainable development in all new tenancy leases
- Continue to require that the sustainability impacts of our capital projects are assessed and mitigated





7.10 Asset Management and Utilities

The Trust is committed to reducing the sustainability impacts from our operational assets and buildings.

The Trust's Critical Retained Infrastructure Scheme Programme (CRISP) oversees the replacement of these assets and equipment. Once installed, these assets are maintained through the Planned Preventive Maintenance schedule (PPM). This is a cyclic schedule used to manage maintenance activity with the objective of maintaining safety, efficiency and keeping loss of service through break-downs or emergency maintenance activity to a minimum.

The Planned Preventive Maintenance schedule should be able to focus on maintaining new energy efficient equipment, rather than trying to maintain ageing assets which are no longer sustainable to run and at higher risk of failure.

OBJECTIVE 10

We will manage our operational assets and critical infrastructure to promote longevity and efficiency of use

We have

- Delivered 94% of the Planned Preventive Maintenance (PPM) works within the Retained Estate and PFI
- Ensured the PFI Building is maintained to the NHS Estates Code B Condition
- Ensured the replacement of equipment in the PFI considers whole lifecycle costs

We will

- Develop a clear policy and process for our Estates Strategy that demonstrates our commitment to sustainability.
- Undertake a contractor compliance review, ensuring all our contractors are vetted against environmental compliance as part of the tender process.
- Appoint an Energy and Carbon manager to address emissions from energy use and buildings.
- Investigate the BMS and determine opportunities for savings through improved control.
- Produce a zero carbon plan for each building
- Run pilot projects upgrading gas boilers to electric heat pumps
- Continue roll out of LED
- Investigate opportunities for PV
- Carry out an infrastructure review to determine requirements for electrical service upgrade

8. Finance

This table below highlights some of the costs relating to key areas of resource use during 2019-20 and the trend over recent years. We have seen an increase in energy and waste spend but a reduction in water and business mileage costs.

Our internal re-use scheme Warp-It has also delivered the highest annual amount of savings to date through the repair and internal re-distribution of unwanted equipment and furniture.

Financial Data (Spend)	2016/17	2017/18	2018/19	2019/20
Total Energy Cost	£5,472,343	£6,192,969	£7,201,048	£7,839,267
Water & Sewage Cost	£493,081	£665,091	£751,408	£681,179
Waste Cost	£746,916	£735,185	£758,181	£808,343
Business Mileage - Grey Fleet	£298,337	£239,417	£242,576	£188,764
Internal re-use of equipment	£39,892	£43,539	£43,000	£57,831

8.1 Charitable Funds

To further support innovative sustainable healthcare projects, Southmead Hospital Charity's Sustainable Healthcare fund delivers a range of sustainability and health and wellbeing projects for the benefit of patients, visitors and staff.

The fund aims to promote social cohesion and personal resilience through the prevention of avoidable illness through access to green space.

This year we have used the fund to finalise the staff and patient allotment. We have raised funds through lavender bag and cake sales and through external donations.



9. Reporting

North Bristol NHS Trust has an obligation to report progress on sustainable development in line with national reporting requirements.

The NHS Standard Contract requires the Trust to take all reasonable steps to minimise adverse impacts on the environment. The contract specifies that North Bristol NHS Trust must demonstrate progress on climate change adaptation, mitigation and sustainable development and must provide a summary of that progress in the annual report.

In addition to the Standard Contract requirements, NHS Trusts have an obligation to complete the HM Treasury sustainability reporting template on behalf of NHS England and Public Health England.

The Department of Health requires Trusts to report ERIC (Estates Return Information Collection) data. ERIC data comprises essential statistics on waste, energy and water from Estates and Facilities.

The national Sustainability Strategy also requires Trusts to report on progress against sustainable development in a Trust Board approved SDMP. Progress against the SDMP is reported to the Steering Group quarterly and Trust Board 6 monthly, before final approval and publication in September each year. North Bristol NHS Trust's annual SDMP report is available on the Trust website:

www.nbt.nhu.uk/sustainablehealthcare

10. Risks and Opportunities

Risks and opportunities related to sustainable development are managed by the Sustainable Health and Capital Planning service through the Environmental Management System within the Directorate of Estates, Facilities and Capital Planning.

Significant risks and opportunities associated with compliance obligations, objectives, targets and project delivery are reported directly to the Director of Estates Facilities and Capital Planning and FM Board through the management review process.

These risks and opportunities are also communicated to the Sustainable Development Steering Group and to Trust Board twice a year. Significant sustainability risks are recorded on the Trust's risk register and managed accordingly.

11. Sustainable Development Indicators

Theme	Indicator	Metric	2015/16	2016/17	2017/18	2018/19	2019/20	Trend
Carbon Emissions	Scope 1 (gas, oil, fleet, anaesthetic gases)	(tCO2e)	13,820	13,132	13,907	13,724	12,844	
	Scope 2 (electricity)	(tCO2e)	21,236	20,067	17,515	14,162	12,911	
	Scope 3 (procurement, waste, staff/public travel etc.)	(tCO2e)	70,665	79,694	81,207	100,277	92,187	
	Total Carbon Emissions	(tCO2e)	105,721	112,893	112,628	128,163	117,942	
Energy	Electricity Consumed - Utility	kWh	36,937,547	38,828,428	39,295,816	40,147,116	40,860,494	
	Gas Consumed - Utility	kWh	42,548,780	42,115,642	46,759,825	45,390,730	45,472,381	
	Oil Consumed - Utility	kWh	865,098	543,381	892,324	765,375	583,708	
Onsite Renewable Energy Generation	Solar	kWh	23,813	39,717	36,057	44,396	33,133	
Water	Water Volume	m ³	261,961	241,944	351,561	389,225	316,732	
Waste	Internal re-use of equipment	£	-	39,892	43,539	43,000	57,831	
	Other Recovery	tonnes	196	227	1,972	1,779	1,585	
	Autoclave	tonnes	710	725	700	662	586	
	Landfill (Offensive waste)	tonnes	1,231	1,487	191	204	0	
	Total Recycling	tonnes	1,561	1,266	518	386	883	
Travel	Business Mileage - Grey Fleet	miles	1,072,470	532,744	409,137	461,973	348,182	
	NBT Fleet	miles				540,792	508,437	
	NBT electric/hybrid vehicles	miles	-	14,473	18,094	16,163	22,545	
	Staff choosing sustainable travel modes	%	55	56	63	57	60	
Anaesthetic Gas	Desflurane - anaesthetic liquid	litres	338	216	159	131	21	
	Isoflurane - anaesthetic liquid	litres	53	12	11	8	2	
	Sevoflurane - anaesthetic liquid	litres	214	273	294	279	259	
	Nitrous oxide - anaesthetic gas	litres	613,800	477,900	432,000	442,800	540,000	
	Nitrous oxide with oxygen 50/50 split	litres	10,629,500	10,877,700	10,078,200	10,588,800	9,777,300	

Contact Us

We welcome your views....

We are continually striving to improve sustainable development here at North Bristol NHS Trust and would welcome your views on how we can do this.

Please send any comments, ideas, suggestions or feedback you may have to:

Sustainable Development Unit
Strategic Estate Development & Sustainable Health
Princess Campbell Office
North Bristol NHS Trust
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Find out more...

Visit our website below or Intranet page to find out more.



www.nbt.nhs.uk/sustainablehealthcare