



North Bristol
NHS Trust

Sustainable Development Management Plan

2018/2019





Foreword

As a healthcare provider North Bristol NHS Trust (NBT) recognises how important it is for us to make sure we are committed to sustainability in everything we do. Sustainable Development is about embracing every opportunity to make a difference environmentally, socially and financially to create an organisation that is fit for the future and that support the well-being of our staff, our patients and our wider community.

To do this we know we need to reduce our impact on the environment recognising that climate change will affect all of us. We must also continue to improve our efficiency and reduce waste to ensure we are building a really sustainable organisation.

This Sustainable Development Management Plan (SDMP) outlines the progress we are making towards these goals and how we are embedding sustainable development in NBT in line with the national benchmarking tool. It showcases our achievements for 2017/2018 and sets out our aspirations for the year ahead.

The health and well-being of our staff continues to be a priority for NBT and in the past year we have seen the social and environmental benefits of a number of initiatives such as the herb garden, the lavender project, staff lunchtime walks and numerous travel smart initiatives promoting active travel (e.g. roadshows, bike maintenance sessions, and our staff bike loan scheme).

We have made much progress towards a regional climate change adaption plan and have delivered real financial benefits for the organisation from our re-use initiatives such as Warp-It ,an innovative programme to recycle wheelchairs and the decision to make sure we carry out a sustainability assessment for all capital projects over £100,000.

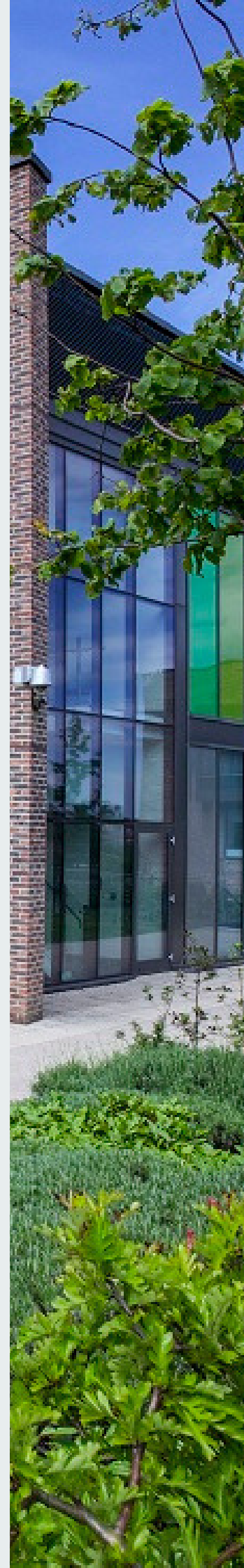
Looking forward to 2018/2019, we plan to build on this year's success, expanding our staff health and well-being programme to deliver exciting projects such as the staff and patient allotment, green gym, and pathway to well-being map. We are also taking significant steps to drive forward energy reductions through investment in our carbon abatement programme

Andrea Young
Chief Executive

Michele Romaine
Chair

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1. Introduction

North Bristol NHS Trust (NBT) is one of the largest acute hospital trusts in the UK with an annual turnover of £550 million and is a centre of excellence for health care in the South West. The Trust employs approximately 7,860 staff and serves a local population of 911,000 people in the Bristol, North Somerset and South Gloucestershire area.

The Trust consumes a significant quantity of natural resources on an annual basis, with energy costs for gas, electricity and oil exceeding £6,000,000 a year, with an additional £650,000 spent on water and £700,000 on waste. The Trust also uses substantial quantities of petrol (fuel), food, paper and numerous clinical products and pharmaceuticals. As a result, the Trust has a sizeable carbon footprint, contributing to the effects of climate change and its associated impacts, both locally and globally.

Climate change is described by the World Health Organisation (WHO) as "the biggest global threat to health facing the twenty first century". Defined as the change in climatic patterns largely attributed to the increased levels of atmospheric carbon emissions produced by the use of fossil fuels, it is predicted to increase the number of heat and cold related illness and deaths, increase the amount of food, water and vector-borne diseases (e.g. malaria), increase incidences of skin cancers and sun burn, increase the health impacts of respiratory disease from poor air quality and aero-allergens and likely bring about an increase in mental health issues as a result of local social impacts.

The Trust recognises this critical relationship between the natural environment, the impacts of climate change, the wider determinants of health and the resulting increased demand on our services. By embedding sustainable development we will mitigate our own contribution to climate change, as well as adapting to the impacts of climate change across our sites and services to deliver a truly sustainable healthcare service fit for the future.



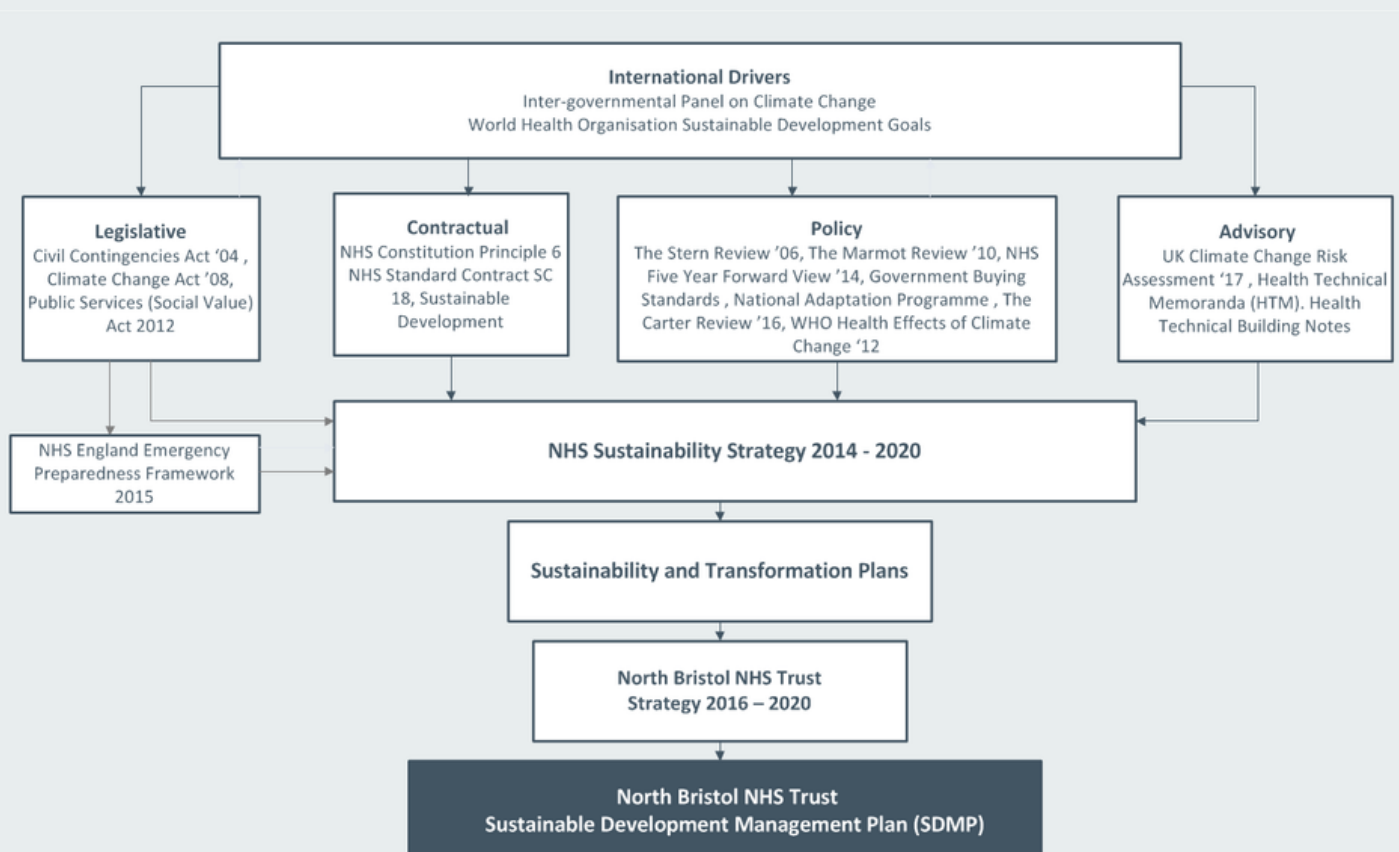
2. Drivers for Change

As a healthcare provider, the Trust is committed to protecting the natural environment for the benefit of human health and to deliver sustainable healthcare. Sustainable healthcare in the NHS is driven through national and international policy, legislative and mandated requirements and healthcare specific requirements from the Department of Health and NHS England.

The **Intergovernmental Panel on Climate Change** (IPCC) and the **World Health Organisation** (WHO) have laid forth very clear guidelines to ensure sustainable development is adopted into law, policy and practice. These guidelines set out the need to mitigate and to adapt to the impacts of climate change in order to realise the wider co-benefits for health.

The importance of sustainable development is reflected within national legislative drivers and mandated sustainability reporting within the public sector. This is the case for the NHS through the **NHS Standard Contract**, and in line with the **HM Treasury Sustainability Reporting Framework** and the **NHS Estates Return Information Collection**.

The **Carter Report** (2016) reinforced the need for action, highlighting the inefficient use of energy and natural resources as a major concern which require attention. These areas of work are identified within the **NHS Sustainability Strategy (2014-2020)** and laid out the requirements for all NHS trusts to have a Trust Board approved **Sustainable Development Management Plan** (SDMP).



3. Our Vision

We aspire 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 as laid out within our Sustainable Development Policy.

We will deliver our Sustainable Development Policy commitments through our SDMP 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.



4. Governance

The Sustainable Development Management Plan (SDMP) 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 Director of Estates, Facilities and Capital Planning, Simon Wood.

The executives chair the steering group which meets quarterly. The steering group consists of specialist Public Health Advisers, Senior Management, our PFI partner and representatives from the local community, Patient Panel 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 Sustainable Development Unit (SDU) is a small group of specialist advisors providing advice and support across the Trust to assist in the delivery of sustainable development. The SDU sits within the Sustainable Health and Capital Planning (SHCP) Service within the Facilities Division. 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.



5. Communications and Engagement

Our aspiration to be a leader in the field of sustainable healthcare requires system-wide engagement and development through simple and effective communication. This is achieved through a busy communications strategy adopting various channels to communicate with staff and patients, notably through our website and social media outlets, annual reports and numerous, innovative engagement events and opportunities throughout the year such as;

- NHS Sustainability Day
- Clean Air Day (with University Hospitals Bristol NHS Trust)
- Fairtrade Fortnight
- Green Impact Awards
- NHS Forest Conference
- TravelSmart Roadshows
- Bicycle maintenance sessions
- Travel to Work Survey 2017/18
- Cycle to work day
- Weekly fruit and veg stall from The Community Farm
- Southmead Hospital Lavender Project events
- Staff lunchtime walks (2 x a week)
- Insect hotel building with staff
- Wildflower planting with staff and volunteers

Some national events such as Clean Air Day are often celebrated in partnership with our local NHS Trusts. During 2017, NBT and University Hospital Bristol NHS Foundation Trust promoted the "Switch off when you drop off" campaign, encouraging patients and visitors to turn off their vehicle engines when idling on healthcare sites in the city.

The Trust recognises that encouraging our staff to take simple actions everyday will deliver social, environmental and economic benefits for the Trust. These simple actions and activities are promoted through the Trust's Green Impact Award Scheme which is now in its third year. Green Impact also promotes other campaigns which deliver social (health) and financial benefits such as "Operation TLC", "Get Fit Take the Stairs" and "TravelSmart".

Looking ahead, the Trust will be participating in the forthcoming Sustainable Health and Care Week which is a new, national, week-long programme of events in June promoting various themes across the sustainability agenda.



6. Sustainable Development Assessment Tool (SDAT)

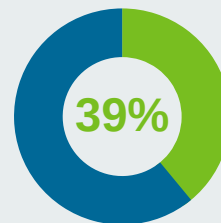
Sustainable Development Assessment Tool

The Sustainable Development Assessment Tool (SDAT) is the national benchmarking system on behalf of Public Health England and NHS England.

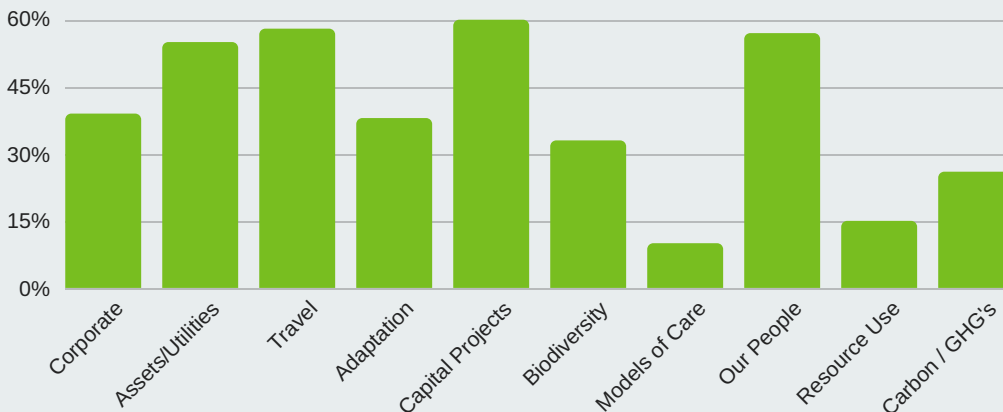
The assessment determines progress against the implementation and delivery of sustainable development across the health and care system. SDAT replaces the Good Corporate Citizen Assessment (GCCA) with a more streamlined system aligned to the UN Sustainable Development Goals.

The tool is designed to help the NHS and other health and care organisations understand their work, measure progress and help create the focus of and action plans for their management plans (SDMP).

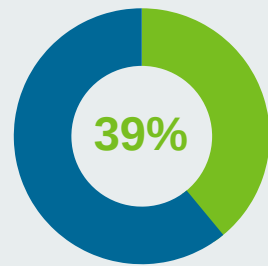
SDAT consists of ten modules which are assessed against four cross-cutting themes; governance and policy, core responsibilities, procurement and supply chain and working with staff. During 2017/18, North Bristol NHS Trust achieved an overall score of **39%**.



North Bristol NHS Trust SDAT Assessment 2017/18



7. Key Areas of Focus



This section outlines the Trust's progress against the key areas of the Sustainable Development Assessment Tool (SDAT) in more detail. Each area is allocated a percentage score which is provided in the top right hand corner of the page. See above right.

7.1 Corporate Approach

The Trust values the importance of protecting our natural environment for the benefit of the physical and mental health and well-being of our community, including our patients and staff, now and in the future.

The **Trust Vision** recognises the great potential of our organisation by empowering our skilled and caring staff to deliver high-quality, sustainable services in state-of-the-art facilities. The vision is delivered through our **Trust Strategy** throughout which sustainable development is embedded. Our Sustainable Development Policy was adopted by Trust Board in 2017 and underpins the delivery of the strategy.

The policy recognises the importance of sustainable development to ensure the efficient use and delivery of our services and the prevention of avoidable illness to achieve a healthy, resilient and sustainable healthcare service fit for the future. The policy commits NBT to promoting health and well-being through the delivery of social, economic and environmental sustainability. The policy also provides a framework to set objectives and targets to enable the Trust to manage its impact on the environment and demonstrate continual social, economic and environmental improvement. Progress against these objectives and targets are reported within the Trust's SDMP.

We have

Ensured responsibility and accountability for sustainable development is clear at NBT.

Reviewed our sustainability impacts and developed an ambitious Sustainable Development Management Plan (SDMP) to reduce negative impacts and maximise benefits (as required by the NHS Standard Contract).

Reported SDMP key performance indicators to the board 6 monthly encompassing the measurement of areas such as social value, procurement, use of resources, carbon and air pollution.

Communicated our SDMP to staff, patients, visitors and the local community.

We will

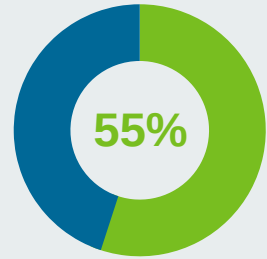
Ensure sustainable development and social value are a material consideration in all business cases through the requirement of Sustainability Impact Assessments.

Work with volunteers and other members of our local community in the delivery of our sustainable development objectives. e.g. working with the Southmead Development Trust.

TARGET: Deliver training for Environmental Awareness Reps



7.2 Asset Management and Utilities



The Trust is committed to reducing the sustainability impacts from our operational assets, buildings, critical infrastructure and equipment essential for the smooth running of the Hospital.

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.

Currently, all critical infrastructure works in excess of £100,000 require a Sustainability Impact Assessment (SIA) as part of the business case. These assessments identify both the positive and negative sustainability impacts of the planned infrastructure works (or equipment purchase) and mandate any sustainability mitigation or enhancement opportunities as part of the decision-making process. Looking ahead, we anticipate all business cases will require an SIA regardless of cost.

As a result of the implementation of the SIAs, the Trust should begin to see sustainability improvements across the Trust delivering more efficient equipment, products and services and considering the full life cycle costs of any significant asset purchase. Similarly, 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.

We have

Monitored our energy use across all sites over time.

Developed ways of generating our own onsite renewable energy through solar PV, heat pumps and biomass.

Implemented significant sub-metering for electricity within the Brunel Building to better help the management of demand.

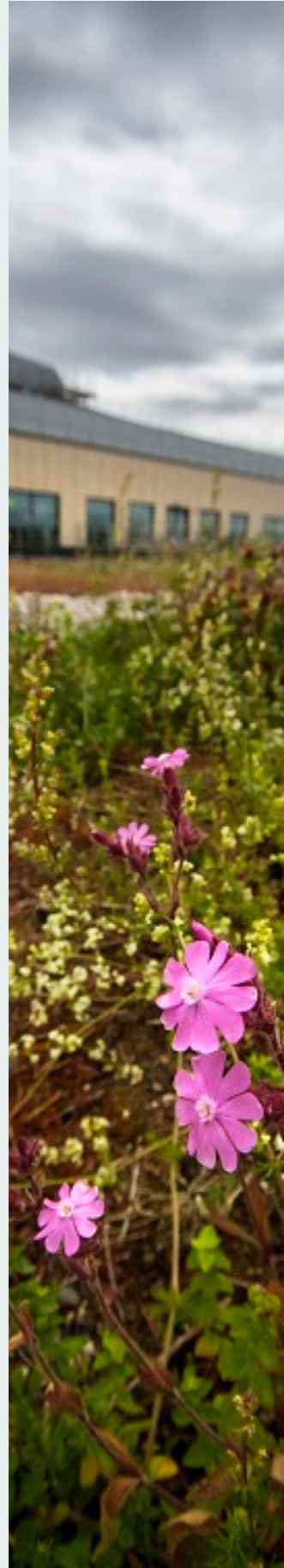
Required all new capital projects business cases undertake a Sustainability Impact Assessment.

We will

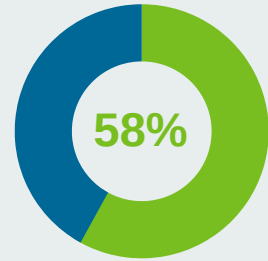
Develop plans to reduce our energy demand and to improve energy efficiency.

Require all business cases going forward undertake a Sustainability Impact Assessment regardless of cost.

TARGET: Have a clear policy and process for our estates strategy that clearly demonstrates our commitment to sustainability.



7.3 Travel and Logistics



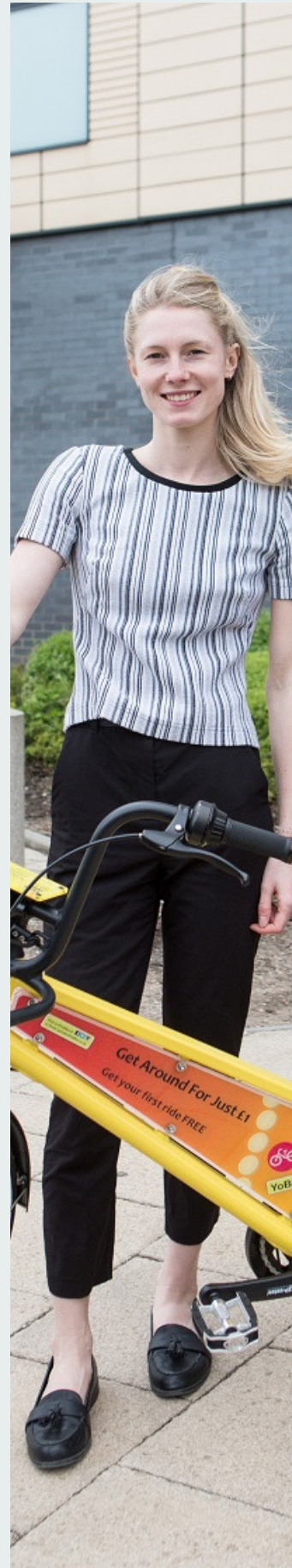
The Trust is committed to reducing the impacts of our travel and transport.

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, public transport and lift-sharing as alternative ways to travel to work.

Towards the end of 2017/2018, the Trust commissioned a scoping report from Lift Share to identify staff commuting hot spots and opportunities for cycling, walking and car-sharing. The data collected will be used to inform the Trust's Travel Plan, due to be updated during 2018/2019.

Next year will see the launch of a Trust-wide lift share campaign, to enhance the Trust's aspirations to achieve the Travel West Gold Accreditation Award. The Trust will also be installing 6 electric vehicle charging points with the capacity to charge 12 cars onsite.



We have

A Sustainable Travel Coordinator who is supported with training, access to CPD events, and local / national forums for sharing best practice.

Delivered 6 TravelWest Roadshows promoting sustainable travel options in the region.

Provided 24 Dr Bike maintenance sessions, for staff.

Undertaken 190 staff travel plans to help staff get to work more sustainably.

Carried out a patient and visitors travel survey.

Run a sustainable travel photography competition.

Participated in the TravelWest travel to work survey 2018.

Published a "Let's Walk North Bristol" map to promote walking from the surrounding areas to and within our site.

We will

Install 12 electric vehicle charging points at Southmead Hospital.

Extend the provision of personal travel plans to patients and visitors.

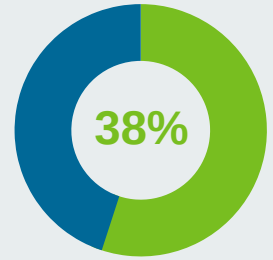
Deliver 24 Dr Bike maintenance sessions throughout the year.

Promote lift sharing as part of national lift share week.

Expand "Let's Walk North Bristol" to the wider Southmead area.

TARGET: Review and update our Travel Plan to include targets for electric vehicle infrastructure and charging, public transport monitoring and use, centralisation and electrification of NBT fleet.

7.4 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.

During 2017/18, the Trust has been working with regional Sustainability and Transformation Programme healthcare partners to develop a joint 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.

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.

We have

Developed local protocols aligned to national heat wave plans and cold weather plans in relation to the Civil Contingencies Act, Climate Change Risk Assessment and National Adaptation Plan.

Developed a draft Climate Change Risk Assessment (CCRA) to highlight risks to continuity and resilience of supply, which is reviewed annually.

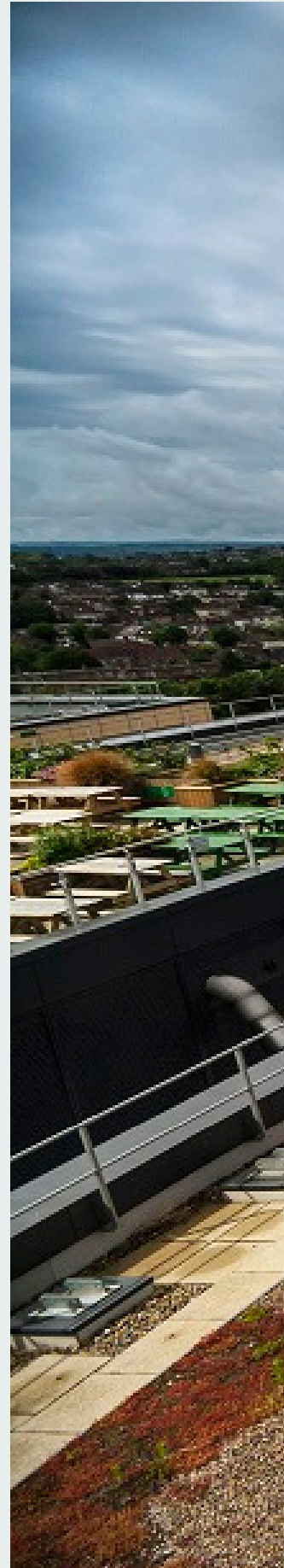
Prepared and trained our workforce to deal with different extreme weather scenarios such as staff know how to keep clinical and ward areas cool in the event of hot weather and how to report high indoor temperatures.

We will

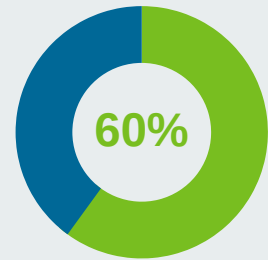
Complete our Climate Change Adaptation Plan (informed by our Climate Change Risk Assessment) which is linked to the SDMP and resilience planning.

Ensure the outcomes of the adaptation plan are fed into the wider Bristol, North Somerset and South Gloucestershire regional Estates Strategy,

TARGET: Embed the effects of climate change into our organisation's risk register.



7.5 Capital Projects



The Trust is committed to reducing the sustainability 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.

Sustainable development is considered as part of the business case for all capital projects in excess of £100,000. The Sustainability Impact Assessment identifies the sustainability risks and opportunities for each project and outlines how we will mitigate or enhance these impacts going forward. One such example is the Bath Renal Unit refurbishment, which has adopted a centralised dialysis system that will significantly reduce the quantity of plastic waste and transport emissions from the dialysis process in the future.

Over the past year, the Trust's Brunel Building has been recognised for its sustainable design credentials;

- **European Healthcare Design Awards (Winner), 2017**
- **Building Better Healthcare Awards (Winner), 2017**
- **Healthcare Estates Awards (Winner), 2017**

Looking ahead to 2018-2019, sustainable development will be embedded within the Estates Strategy which will be further supported by a sustainable development design brief for all major new builds and refurbishments at the Trust.

We have

Designed new buildings and access routes to buildings with embedded green space and used green space constructively (green roofs and planting).

Successfully implemented and undertaken eight Sustainability Impact Assessments for all new capital projects over £100,000.

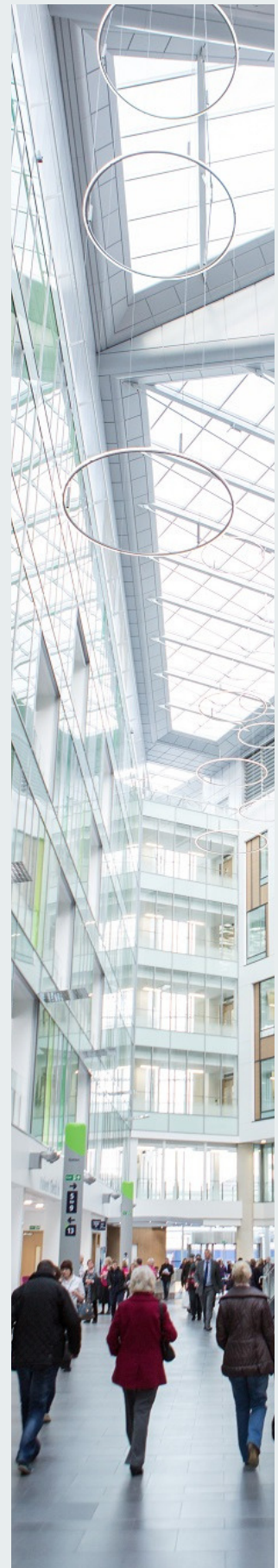
Achieved three major sustainable design awards for the Brunel Building.

We will

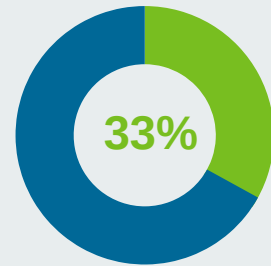
Expand the Sustainability Impact Assessments to include all capital projects regardless of cost.

Ensure contractors are assessed against sustainability as part of the tender process for capital projects.

TARGET: Complete 15 Sustainability Impact Assessments for capital projects over the next 12 months



7.6 Green Space and Biodiversity



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

The Kings Fund report in 2016 found “Increasing people’s exposure to, and use of green spaces has been linked to long-term reductions in overall reported health problems (including heart disease, cancer and musculo-skeletal conditions); it has also been linked to reduced levels of obesity and high physical activity, and higher self-rated mental health”.

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 March 2018, the Urban Buzz project, along with volunteers from local medical delivery company Bunzl, helped sow wildflower meadows in the Women’s and Children’s Quarter of Southmead Hospital. The volunteers also planted numerous native primroses, cowslips and birds-foot trefoil to provide additional food sources for local pollinators.

During 2018/19, the Trust will be developing a Biodiversity Management Plan, identifying the priority areas and opportunities for improvement across the estate.

We have

Promoted the health benefits of our green spaces to our staff, patients and the wider local community through various health and well-being activities e.g. Lunchtime walks, the Herb Garden and the Lavender Project.

Worked with Avon Wildlife Trust and Urban Buzz to improve biodiversity on the estate in line with local strategic plans.

Hosted the annual NHS Forest Conference, at Southmead Hospital showcasing the green space onsite.

Planted fruit trees as part of the Southmead Hospital Community Orchard.

We will

Provide space for the cultivation of food through the planned allotment, providing opportunities for staff and volunteers to get involved with growing onsite, before extending the project to patients and the local community.

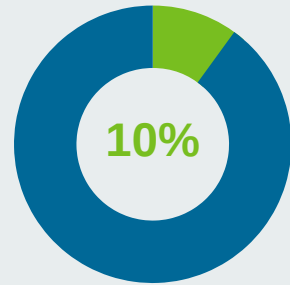
Provide staff with opportunities in the maintenance of green spaces and biodiversity such as building insect hotels, bird and bat boxes etc.

Undertake an ecological survey to the rear of the Brunel Building.

TARGET: Prepare a Biodiversity Management Plan for the Southmead site



7.7 Sustainable Models of Care



The Trust is committed to improve staff and patient experience by moving towards more sustainable models of care and workplace practices.

It is increasingly important to consider the environmental and social impact of how our services are delivered to ensure long term financial, social and environmental sustainability is achieved as part of the Five Year Forward View and local STP.

Transforming the way we deliver our healthcare services provides an opportunity to take a whole systems approach to sustainability and the long term health co-benefits which sustainable models of care can deliver.

By enabling patient and clinician-led service redesign, we hope to encourage our patients to live well through self-management and by providing the right support, prevention, early intervention and acute and specialist rehabilitation. We can further promote patient health and reduce the pressures on our services and their associated environmental impacts in the longer term.

Over the last year, we have launched our Hospital at Home service, which provides a team of specialist nurses giving personalised care for surgical patients in their own home as an alternative to being treated in one of our hospital beds. Benefits include faster patient recovery time in a familiar comfortable setting and reduced associated environmental impacts such as resource use, energy, waste, etc.

In the coming year, we aspire to further embed innovative sustainable models of care through the One NBT change programme finding more efficient, smart and joined-up ways of working and through specific projects such as EDMS, My Pregnancy App and the E-referral system.



We have

Embedded sustainable models of care within the Sustainability Impact Assessments for all new capital projects. This enables the Trust to identify new models of care which have sustainability benefits, as well as raising awareness amongst staff about what sustainable models of care should deliver.

Launched the Arts on Referral programme for patients suffering with cancer, chronic pain and dementia.

Worked with the Cardiologist's Kitchen to promote healthy eating and adopted meals in the staff restaurant.

Identified 7 new sustainable models of care through the capital planning group.

We will

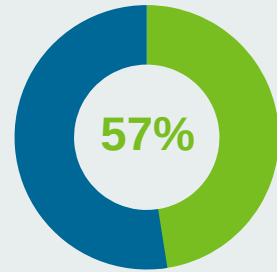
Embed sustainable models of care through the One NBT Change programme, which promotes smarter, more efficient ways of delivering our clinical services and improving patient flow.

Launch "My Pregnancy" App.

Launch the E-Referral system.

TARGET: Identify 15 new sustainable models of care over the next 12 months.

7.8 Our People



The Trust aspires to be a leader in the field of sustainable healthcare through system wide engagement and development.

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

The Sustainable Health and Capital Planning Service guides the Trust to embed sustainability across our sites and services. From supporting sustainable development governance through to policy development, planning and audit processes, the service also engages with staff to encourage them to adopt sustainable habits such as energy conservation, sustainable commuting and behaviour change.

To further support staff development and understanding, the Trust has developed an on-line sustainable healthcare training package to provide a good introduction to sustainable development in a healthcare setting and inform staff about what they can do to embed sustainable practices in the workplace.

Towards the end of 2017/18, a full time Sustainable Healthcare and Engagement role was agreed to build on the environmental and health and wellbeing improvements and financial savings achieved through the previous 2 years of the Trust's staff award scheme Green Impact. A significant number of new clinical teams have been recruited which is evidence of a growing awareness of how staff working in these areas can use small sustainability actions to improve their own health and well-being, improve the patient environment and therefore experience, and avoid unnecessary resource consumption.

We have

Launched a Trust wide staff wellbeing programme to promote personal resilience through the provision of;

- Health and well-being workshops
- Personal resilience courses
- Schwartz Round workshops
- Fast access to Physio Direct
- Launched the Happy App

Secured funding for the Pathway to Wellbeing programme;

- The Green Gym
- Map
- App
- Distance way-markers

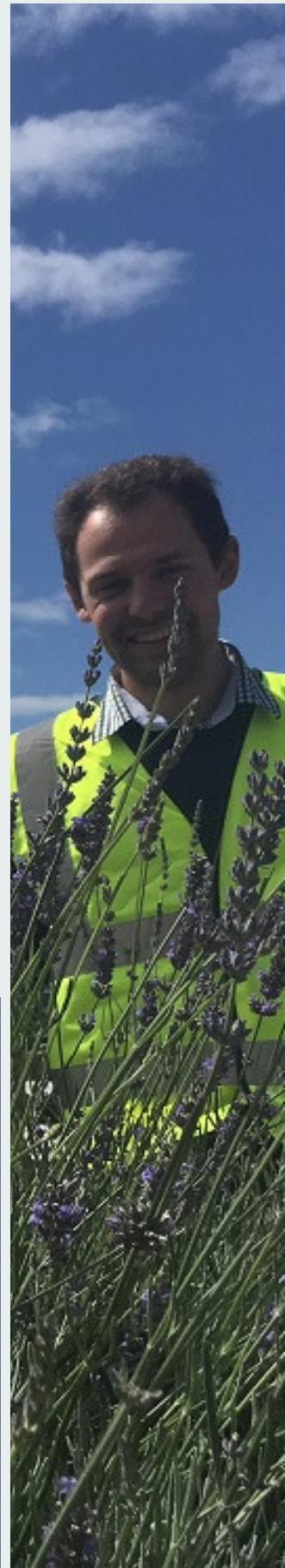
We will

Deliver the Pathway to Well-being programme

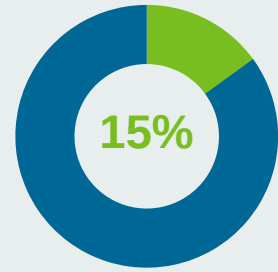
- The Green Gym
- Map
- App
- Distance way-markers

Secure funding and establish the staff and patient allotment at Southmead Hospital.

TARGET: Launch Green Impact year 4, with the aim of recruiting at least 2 teams in each division across the Trust.



7.9 Sustainable Use of Resources



We are committed to working with our key suppliers and contractors to reduce the environmental impact of the goods and services we use.

The NHS spends in excess of £40 billion each year on critical natural resources to deliver services.

Our demand for resources is not something the Trust can control directly given resource use increases with patient contact, however using our influence through the procurement processes we can embed social value (environmental improvements, local social capital and economic value) to encourage our suppliers to adopt sustainable practices for the products and services they provide.

Looking ahead, our capital business planning process requires all projects over £100,000 to consider sustainable resource use for any key decision. The Trust needs to work with the Bristol and Weston Purchasing Consortium and suppliers to address the use of single-use items and encourage more suppliers to provide recyclable packaging.



We have

Monitored our resource consumption (see overleaf).

Maintained our Silver Food for Life (patient meals and Bronze Food for Life (staff meals).

Continued to work with Bristol and Weston Purchasing Consortium (BWPC) to embed sustainability into the procurement process.

Recycled 155 wheelchairs through the Wheelchair Recycling Project which achieved savings of £82,024 during 2017/2018.

Reused unwanted items of furniture and equipment through the Warp-It programme, achieving total savings of £81,162, avoided 11,317kg of waste and saved 35,977 CO₂e (kg) since the project commenced.

We will

Ensure FM product and service contracts include sustainability within the specification and as part of the tender process to reduce consumption and promote efficiency of use.

Address the increasing energy consumption issue through a complete review of all energy systems across our sites.

Launch a recycling campaign for clinical areas to raise awareness and promote good waste segregation to improve recycling rates.

i) Energy Consumption

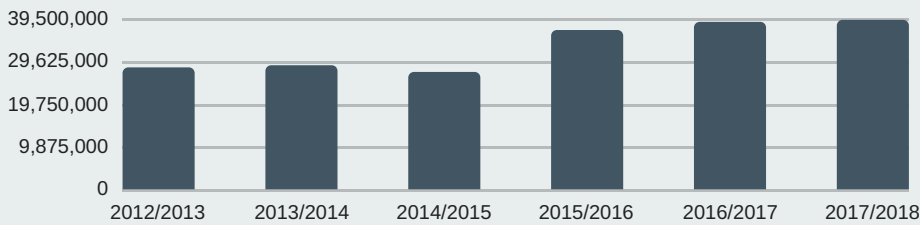
The Trust is committed to reduce the environmental impacts of energy.

During the last year we have seen an increase in gas consumption due to the extended cold weather experienced in early 2018. A similar trend was experienced with both electricity and heating oil, due to increased electrical load within our buildings. The reduction in solar power generation has been due to issues with some of the panels.

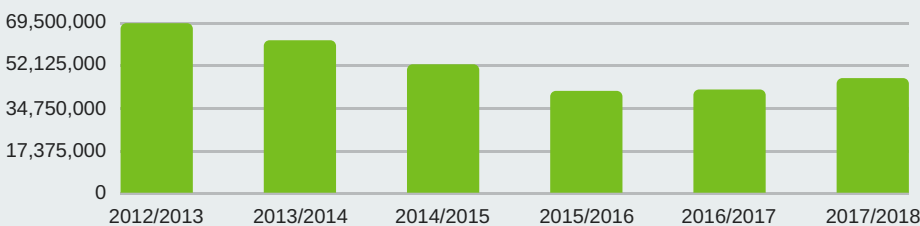
Denotes progress against corporate targets (2% year on year)



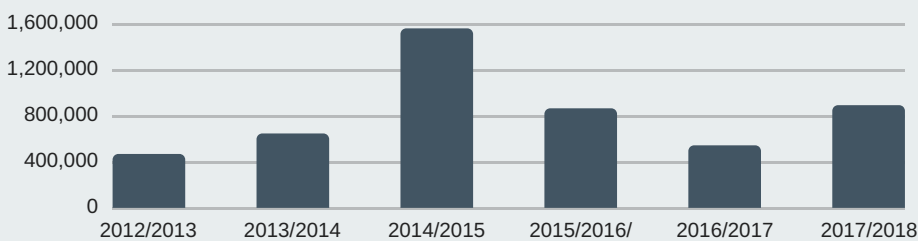
Electricity consumption (kWh) 2012-2018



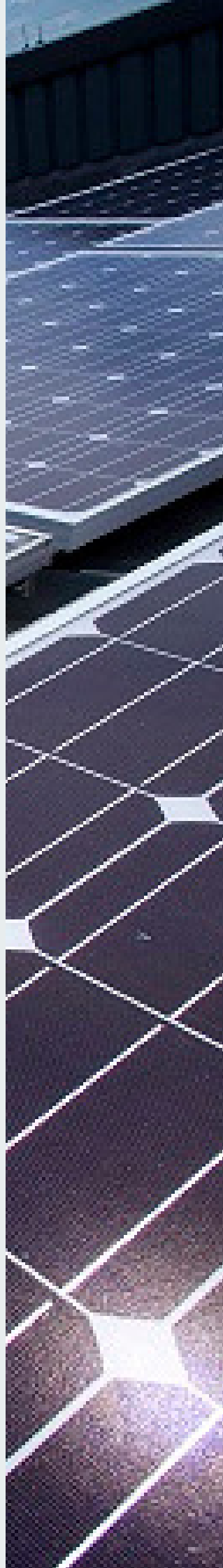
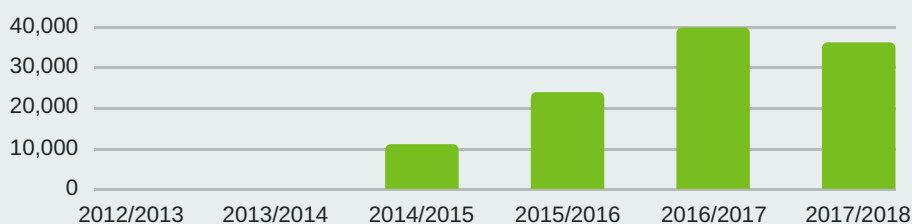
Gas consumption (kWh) 2012-2018



Oil consumption (kWh) 2012-2018



Owned onsite renewable energy generation (solar) (kWh) 2014-2018



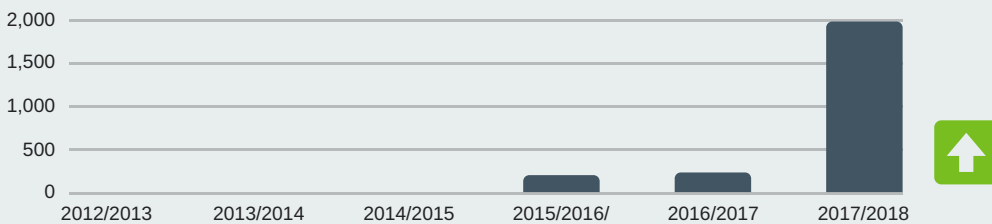
ii) Waste and Recycling

The Trust is committed to reducing the environmental impacts of waste.

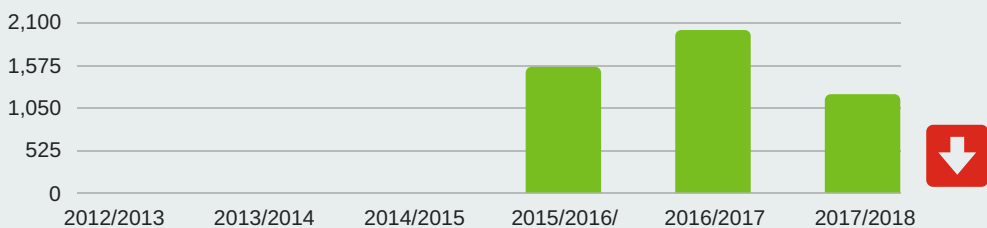
Waste and recycling has seen some big changes over the last year, with the majority of the Trust's waste now being recovered to energy rather than going to landfill. The remaining waste to deep landfill is primarily offensive waste. Recycling rates have fallen due to low quality recyclates and mixed media waste such as medical packaging and coffee cups no longer being accepted following changes in the global market for plastic recycling. As a result, the Trust has implemented a recycling campaign to ensure staff are aware of the changes going forward.

The switch from landfill to energy recovery has achieved significant carbon savings for the Trust (please refer to section 7.9).

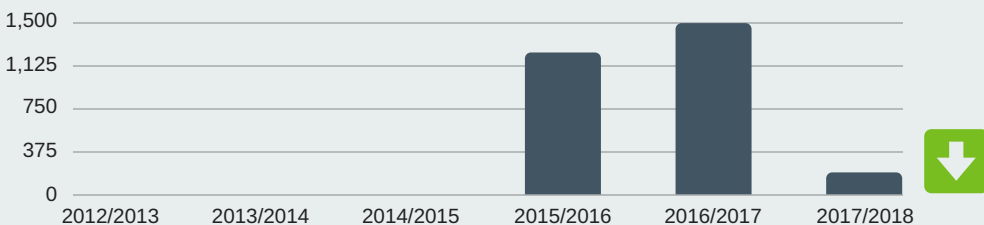
Waste recovery (energy from waste through incineration) tonnes 2014-2018



Waste recycling (IT WEEE, scrap metal, dry mixed recycling) tonnes 2014-2018



Landfill tonnes 2014-2018

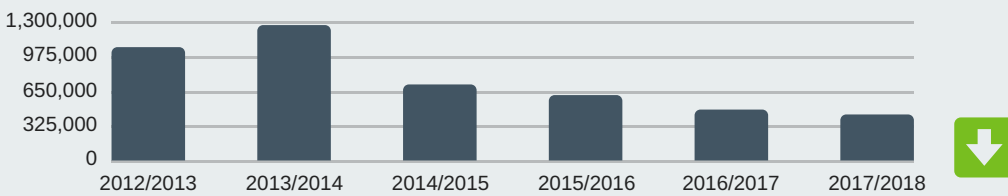


iii) Anaesthetic Gases, Pharmaceuticals and Medical Devices

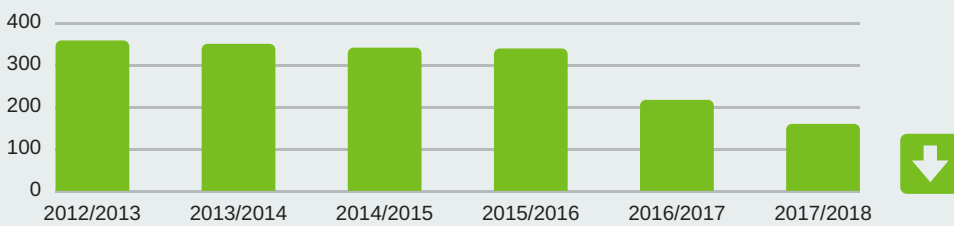
The Trust has a target to reduce the use of anaesthetic gases by 2% year on year. The consumption of anaesthetic gases, pharmaceuticals and medical devices varies with the numbers of patients the Trust treats throughout the year, however since 2009/10, our carbon footprint has significantly reduced from 6,474 tCO₂e to 3,702 tCO₂e compared to 2017/18, which amounts to a reduction of 2,772 tonnes.

Anaesthesia using desflurane and nitrous oxide gases causes the most global warming and sevoflurane the least. At NBT, we have seen a steady decline in both desflurane and nitrous oxide since 2013/14. Going forward, intravenous anaesthesia is an alternative for some patients and has a lower life cycle carbon footprint.

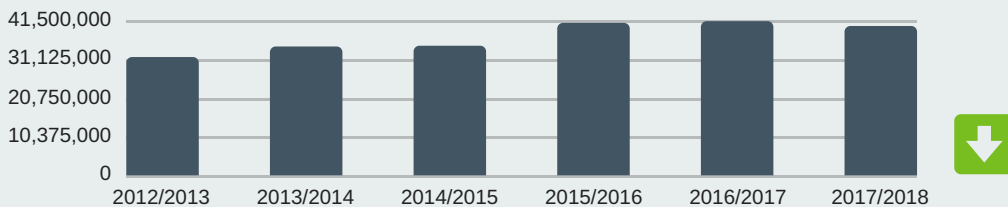
Anaesthetic Gas: Nitrous Oxide (Litres) 2012-2018



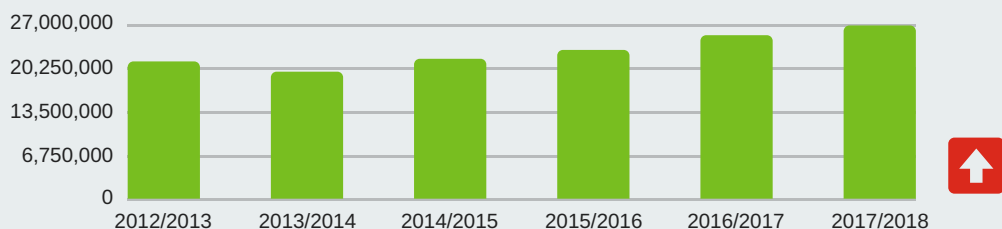
Anaesthetic Gas: Desflurane (Litres) 2012-2018



Pharmaceuticals (£) 2012-2018



Medical Devices (£) 2012-2018



iv) Water Consumption

The Trust is committed to reducing the environmental impacts of water consumption.

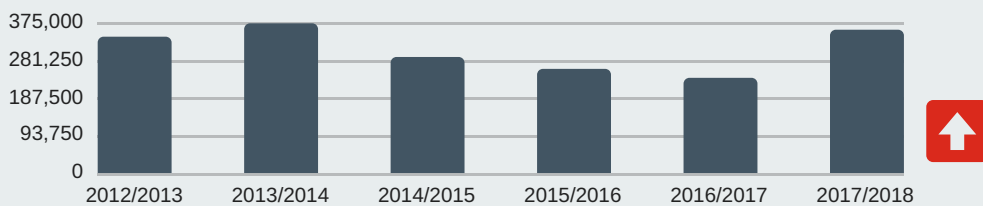
Water consumption has been slowly reducing in line with the Trust's target of 2% reduction year on year since 2014, however, the last year has seen an increased spike due to the opening and operation of the onsite sterilisation service at Southmead Hospital and the installation of humidification within specialist clinical areas in the Brunel Building.

The increased daily flushing regime in clinical areas within the Brunel Building, specifically those within areas of augmented care (e.g. intensive care), together with the onsite sterilisation service which is processing a greater volume of reusable medical equipment for theatres are responsible for the increase in water consumption.

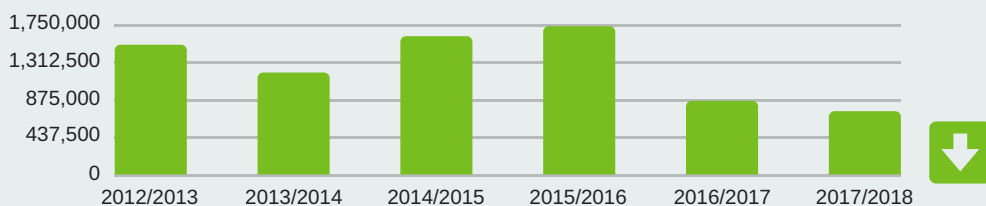
v) Fuel Consumption

Grey fleet (Business mileage) is monitored through the staff expenses scheme. Data for 2017/18 shows an ongoing reduction in staff using their own vehicles for business use. To reduce the impact of emissions from vehicles used for business mileage the Trust provides 3 hybrid pool cars, which travelled 11,243 miles in 2017/18.

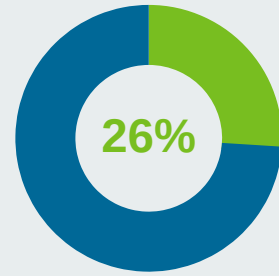
Water Consumption (m3) 2012-2018



Grey Fleet Mileage (km) 2012-2018



7.10 Carbon Emissions



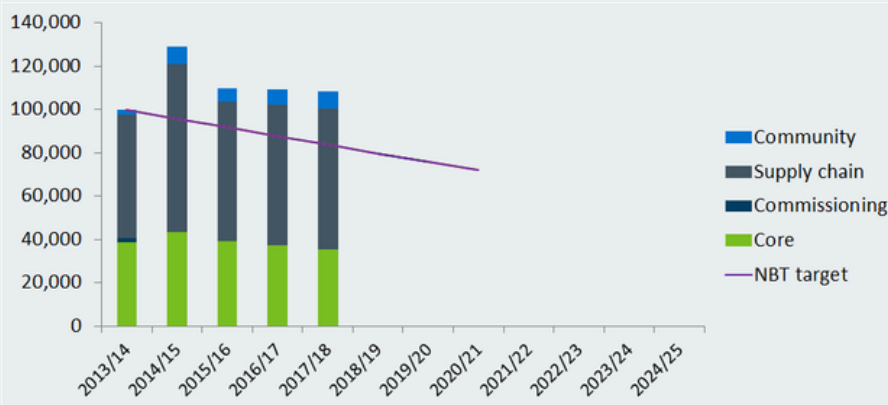
The Trust is committed to reduce our carbon emissions.

NHS England has set an ambitious goal to reduce carbon dioxide equivalent emissions across building energy use, travel and the procurement of goods and services by 28% by 2020. North Bristol NHS Trust has adopted this target and progress is documented in the chart below.

Over the last year, the Trust has seen a decrease in the organisational carbon footprint. This is primarily due to the switch in waste disposal from landfill to energy recovery. Carbon emissions from waste are expected to fall further next year as part of the Trust's planned recycling campaign.

The Trust's Carbon Abatement Plan has been included within the annual Critical Retained Infrastructure Scheme Programme (CRISP) and energy efficiency works prioritised across the site within the next twelve months. The improvement works are being led by the Sustainable Health and Capital Planning Team, with further improvement works due to be undertaken during 2019/2020.

Organisation Carbon Footprint (tCO2e) 2013 - 2020



We have

Measured our carbon impact core emissions such as energy, water, waste and anaesthetic gases and we analyse trends over time to help validate performance and ensure lessons are learnt.

Reported key performance indicators to the Board on a regular basis (at least 6 monthly) encompassing the measurement of areas such as social value, procurement, use of resources, carbon and air pollution.

We will

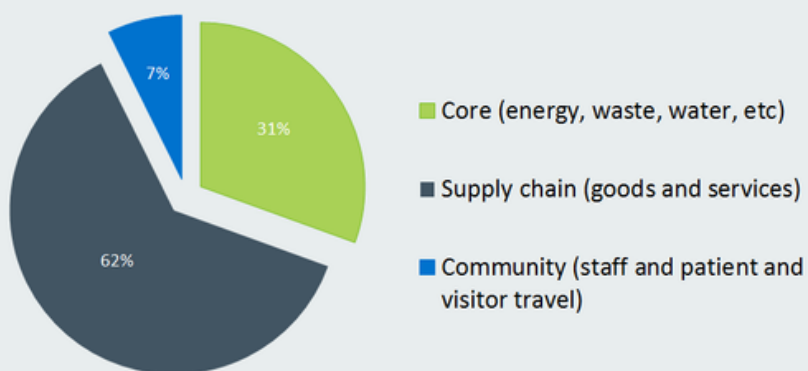
TARGET: Develop plans to reduce our carbon emissions in line with the NHS Sustainable Development Strategy and the Climate Change Act (2008).



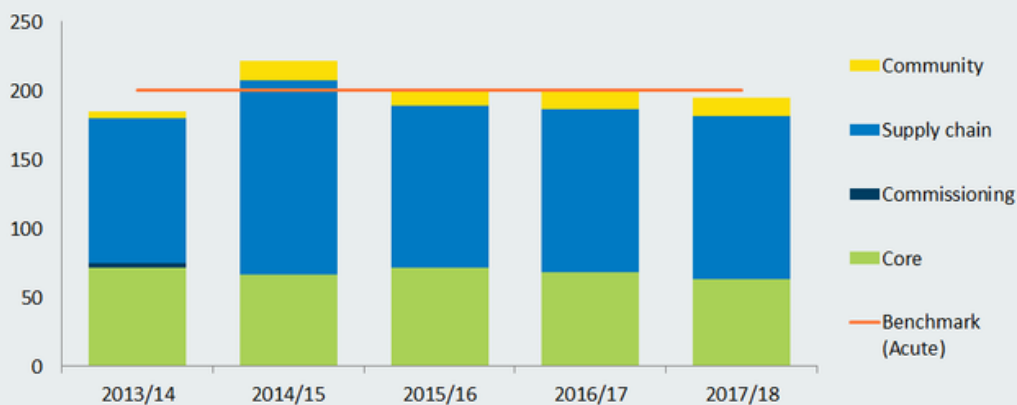
The Trust's carbon footprint is divided into core emissions (energy, waste, water, etc), supply chain emissions (through the procurement of goods and services) and community emissions (those emissions resulting from our staff, patient and visitor travel).

The Trust's supply chain represents the most significant proportion of the carbon emissions, with emissions increasing inline with patient demand (contact).

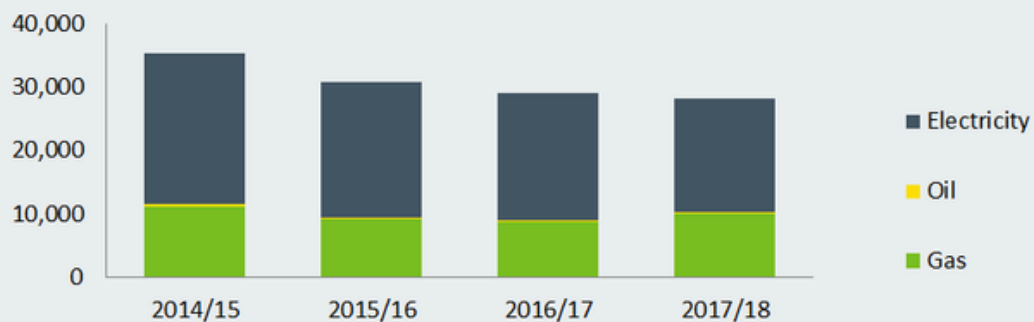
Organisation Carbon Emission Proportions (tCO2e) 2017/2018



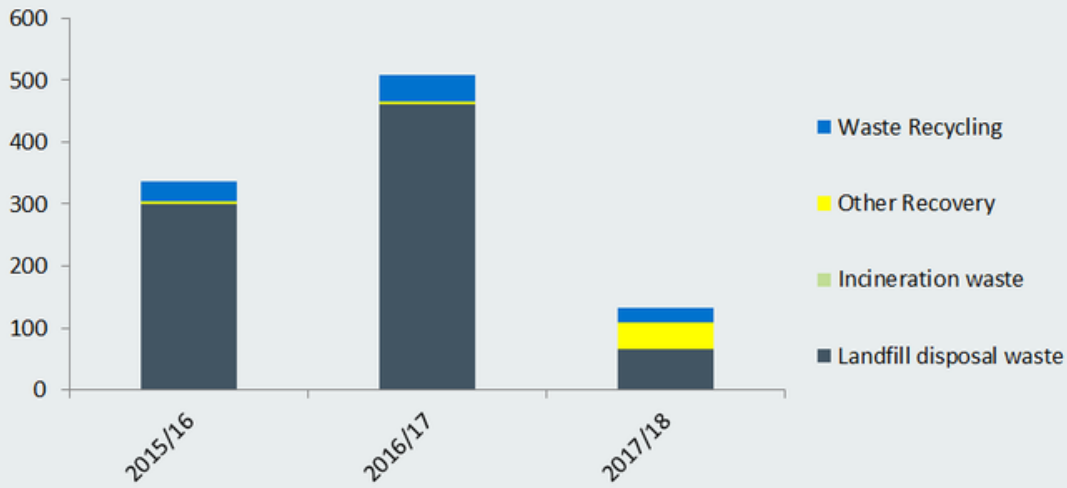
Organisation Carbon Footprint by Patient Contact (tCO2e) 2017/2018



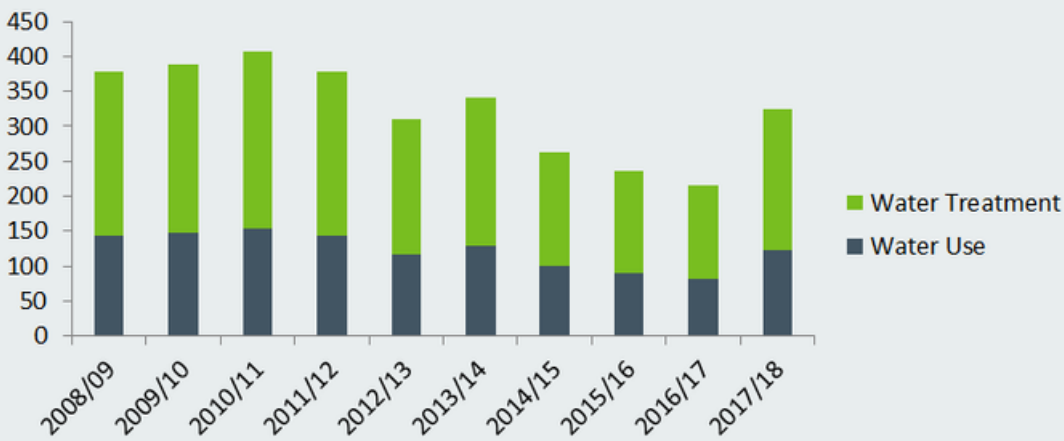
Energy Carbon Emissions (tCO2e) 2014 - 2018



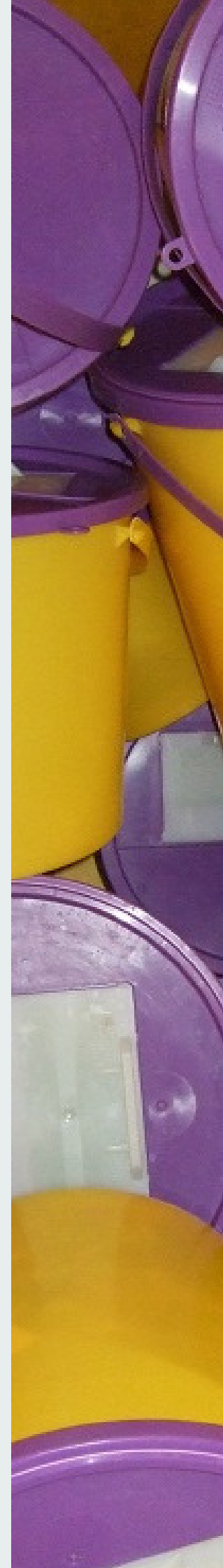
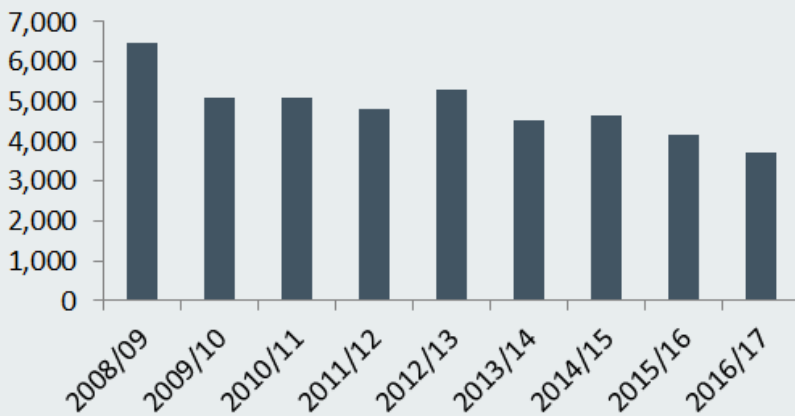
Waste and Recycling Carbon Emissions (tCO2e) 2015-2018



Water and Sewerage Carbon Emissions (tCO2e) 2008 - 2018



Anaesthetic Gas Carbon Emissions (tCO2e) 2014 - 2018



8. 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.

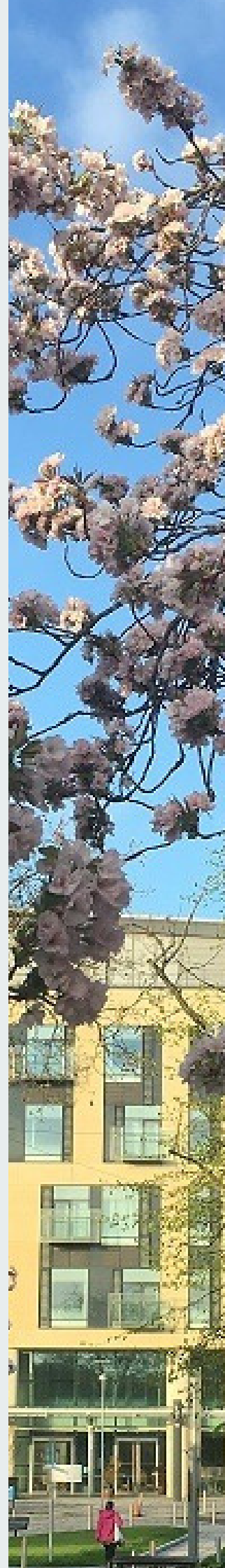
In addition to the Standard Contract requirements, NHS Trusts have an obligation to complete the HM Treasury sustainability reporting template on behalf of NHS England and Public Health England.

During 2016/17, the Trust received a Certificate of Excellence for its sustainability report in 2016/17 and was ranked 7th out of 441 NHS organisations nationwide.

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 2017/18 return requires more detailed data collection in relation to fleet mileage and electric vehicle usage than in previous years.

The national Sustainability Strategy 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



9. 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 and 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. Going forward, a number of significant risks identified through the Climate Change Adaptation Plan will be added to the Risk Register to ensure they are mitigated as part of the Trust Estate Strategy. There is also an opportunity as part of the Sustainability Transformation Programme (STP) Estates group to explore joint work across the region to reduce combined costs.

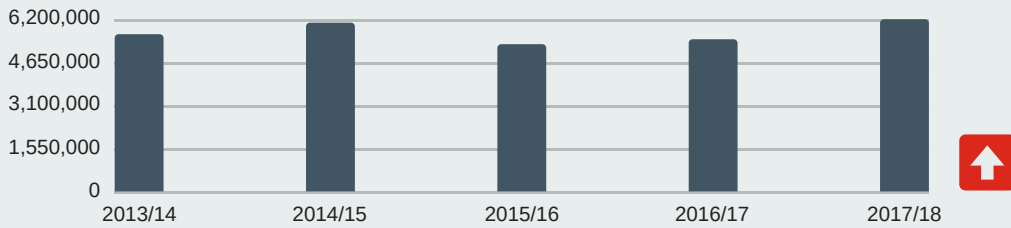
10. Finance

The Trust strives to adopt innovative ways to embed sustainable development within our services to deliver environmental, social and financial benefit. The current financial impact of each key area (energy, waste and water) is documented overleaf. Data for fleet transport is not currently available.

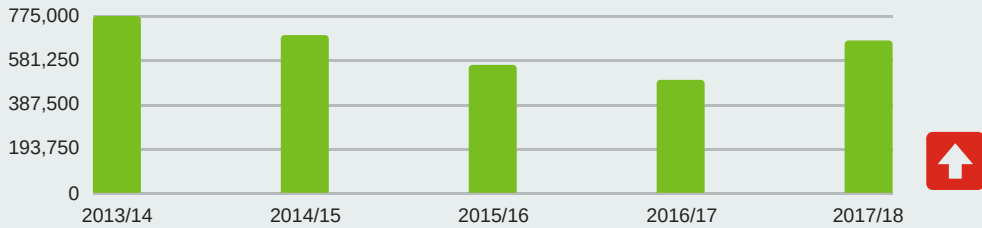
Over the coming years, the Trust aims to significantly reduce its carbon emissions and improve energy efficiency across the estate. During 2018/19, the Trust will invest £315,000 in the carbon abatement programme.



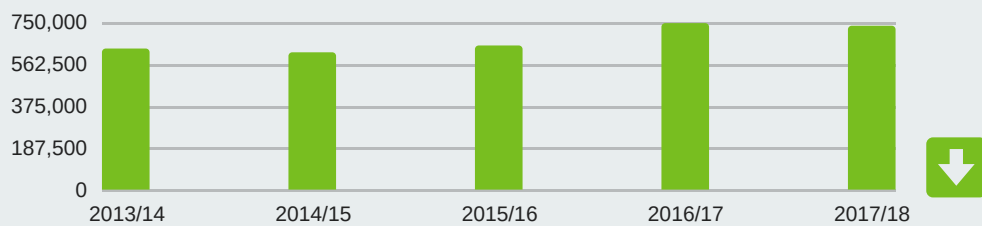
Total Energy Costs (£) 2013 - 2018



Total Water and Sewerage Costs (£) 2013 - 2018



Total Waste Cost (£) 2013 - 2018



10.1 Charitable Funds

To further support innovative sustainable healthcare projects, the Southmead Hospital Charity has established a charitable fund to deliver 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. Innovative engagement projects such as the Lavender Project, the Green Gym, and other engagement activities such as a staff and patient allotment and improving green spaces on our sites will promote health and wellbeing.



**YOUR
SUPPORT**



11 . Key Performance Indicators

INDICATOR	KPI	Metric	14/15	15/16	16/17	17/18	TREND
Carbon	Footprint	Tonnes (CO2e)	121,804	109,535	109,157	107,757	
Energy	Electricity	KW/h	27,218,767	36,937,547	38,828,428	39,295,816	
	Gas	KW/h	52,399,499	42,548,780	42,115,642	46,759,825	
	Heating Oil	KW/h	1,559,671	865,098	543,381	892,324	
Renewable Energy	Solar PV	KWh	11,000	23,813	39,717	36,057	
	Biomass	KWh	2,186,794	1,548,610	2,722,499	463,088	
Water	Volume	M3	289,418	259,753	237,418	357,389	
Transport	Business Travel	Mileage	-	-	-	-	
	Grey Fleet	Km	1,609,097	1,725,973	857,369	658,443	
Staff Commute	SOV (single occupancy vehicle)	%	45.5	-	43	-	
	Cycling	%	20	-	21	-	
	Public Transport	%	12	-	9	-	
	Walking	%	10.5	-	13	-	
	Lift Share	%	8	-	7	-	
Recycling	Dry Mixed Recycling, WEEE, food waste, scrap metal, gypsum, green waste, batteries, aerosols etc	Tonnes	-	1,550	2,004	1,212	
Waste	Recovery	Tonnes	-	196	227	1,972	
	Landfill	Tonnes	-	1,231	1,487	191	
	Incineration	Tonnes	-	0	0	0	
Food	Local (50miles)	%	20.6	23.7	35	35	
	Organic	%	2.3	3.7	2.5	2.5	
	Fairtrade	%	3.5	4.8	1.5	0.9	

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 Sustainable Health and Capital Planning

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Trust Head Quarters
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