



**Kingston Hospital**  
NHS Foundation Trust

# Sustainable Development Management Plan (SDMP) 2018-2023

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Living our values *every day*



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## 1.0 Introduction

As an NHS organisation, and as a spender of public funds, the Trust has an obligation to work in a way that has a positive effect on the communities it serves. Sustainability means spending public money well, the smart and efficient use of natural resources and building healthy, resilient communities. By making the most of social, environmental and economic assets the Trust can improve health, both in the immediate and long term, even in the context of rising cost of natural resources. The Trust considers the social and environmental impacts of its actions ensuring that the legal requirements in the Public Services (Social Value) Act (2012) are met.

The Trust acknowledges its responsibility to patients, local communities and the environment by working hard to minimise its carbon footprint.

As a part of the NHS, public health and social care system, it is the Trust's duty to contribute towards the level of ambition set in 2014 of reducing the carbon footprint of the NHS, public health and social care system by 34% (from a 1990 baseline), equivalent to a 28% reduction from a 2013 baseline, by 2020. This is a challenging target and the Trust will continue to make best endeavours to support its delivery.

The NHS as a whole is responsible for 25% of the total public sector's carbon emissions, and 3.2% of the total carbon emissions produced in England. Figures published by the NHS Sustainable Development Unit (SDU) indicate that 59% of the emissions generated from the NHS arise from procurement, 24% from building energy and 17% from travel.

The NHS Carbon Reduction Strategy for England requires the Trust to develop a Sustainable Development Management Plan (SDMP) to identify a clear strategy for tackling these challenges. Kingston Hospital NHS Foundation Trust (the Trust) has developed this SDMP to proactively mitigate the impacts of climate change, waste to landfill, carbon emissions and uneconomical water usage.

The Trust acknowledges the importance of sustainable development and the SDMP outlines the Trust's commitment against each of the following key work streams:

- a) Energy Management
- b) Waste Management
- c) Water Management
- d) Procurement
- e) Building Design and Refurbishment
- f) Travel and Transport
- g) Workforce Development and Wellbeing
- h) Technology

Section 2 of the plan sets out the context in which the plan has been developed including the drivers for change. Section 3 provides an overview of the Trust's current performance against national targets, with section 4 setting out the key objectives under each of the work-streams and plans for 2018/19 to support improved performance against the targets. The governance for the oversight and delivery of the plan is described in section 5.

The key objectives for this plan are to:

- Demonstrate compliance with relevant legislation, national guidance and the Trust's obligations and duties as a large NHS healthcare provider.

- Present key goals and targets (e.g. carbon reduction) and how the Trust intends to achieve them.
- Set out the governance framework which will enable the Trust to lead, engage and develop people and systems to ensure the SDMP is delivered.
- Outline the Trusts vision for sustainability.

The delivery of the plan will be overseen by the Sustainability Steering Group (SSG) which reports to the Executive Management Committee. The SSG will track progress against the action plans which will be updated annually. The Trust Board will receive an update on progress via the Annual Report.

## 2.0 Context - Drivers for Change

### 2.1 Environment

Environmental issues such as waste to landfill affecting air and land quality and carbon emissions are contributing to climate change. Unsustainable practice in the past has led to a disruption of the natural cycles which maintain a stable natural environment. Among the results of this degradation are polluted air and water, loss of biodiversity, changes in climate, and increased risk of extreme weather conditions. Greater consideration of these environmental issues is required to stop and even reverse climate change.

### 2.2 Health

Degradation of the environment impacts in all areas of life. Specific impacts highlighted in recent years include; increased respiratory disease due to poor air quality, loss of property from flooding and deaths from exposure to extreme seasonal heat. This impacts on demand for health services.

### 2.3 Legislation

The UK Government introduced a range of legislation and incentives to encourage public sector organisations to reduce their environmental impact. The Climate Change Act 2008 introduced statutory targets to reduce the UK's carbon emissions (CO<sub>2</sub>e). Reduction targets in relation to a 1990 baseline are shown below:

- 34% by 2020
- 64% by 2030
- 80% by 2050

The updated NHS Carbon Reduction Strategy<sup>1</sup> established a target of reducing CO<sub>2</sub>e by 10% by 2015 against a 2007 baseline reporting level. This has since been updated to a 28% reduction by 2020/21 against a 2013/14 baseline reporting level.

The Civil Contingencies Act 2004 requires all NHS organisations to prepare for adverse events and incidents. Organisations must demonstrate they have undertaken risk assessments and that carbon reduction delivery plans, in accordance with Emergency Preparedness policies and civil contingency requirements are in place.

The Public Services (Social Value) Act 2012 defines social value as the collective gain to the community from commissioning/procurement over and above the direct purchase of goods and services. This Act requires all commissioners of public services to consider taking into

<sup>1</sup> (Sustainable Development Unit, 2010)

account economic, social and environmental value in addition to price, when buying goods and services.

## 2.4 Financial

Reducing the Trust's environmental footprint will help to mitigate financial risks associated with energy through reduced consumption. This is particularly important in the context of rising costs for natural resources. In addition, the Trust's use of utilities is subject to a variety of taxes and levies related to carbon emissions. These costs are set to increase.

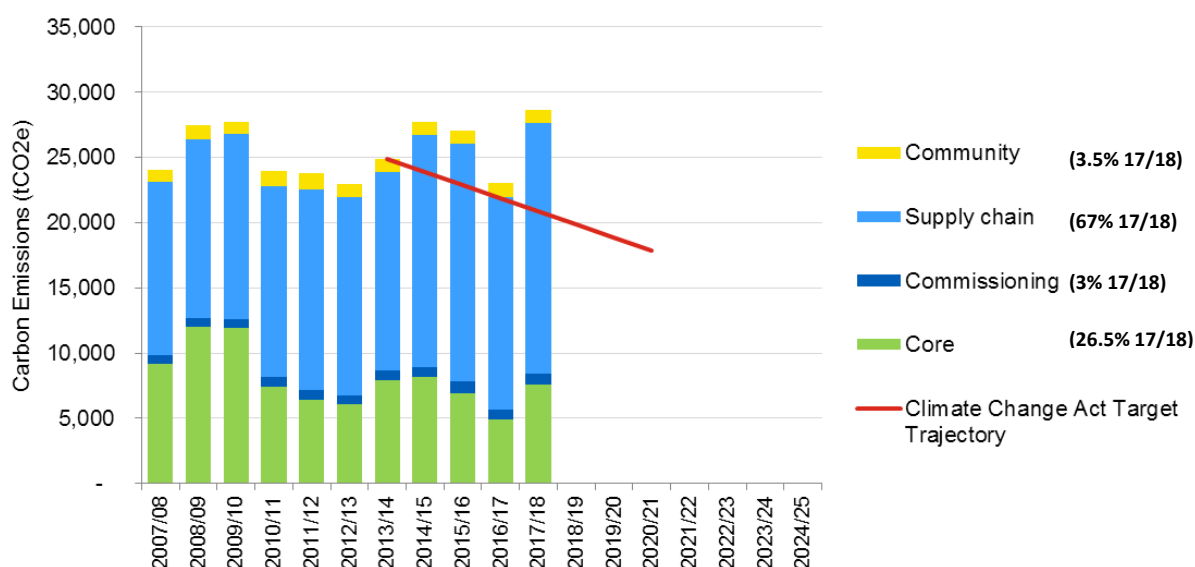
Currently the Trust is mitigating its financial risk via the introduction of Combined Heating Power (CHP), improved building efficiencies using the excellent category in BREEAM as a benchmark and the installation of LED lighting across the Trust. The Trust also disposes of its waste via partnership with Stericycle (SRCL) to incinerate waste offsite with energy recovery, which powers subsequent heating to neighbouring Trusts to the facility.

## 3.0 Current Performance

The Trust publishes an Annual Sustainability Report<sup>2</sup> which is produced in accordance with the Sustainable Development Unit (SDU) reporting template<sup>3</sup> and contains a summary of the performance of the Trust over time and details of initiatives planned for the coming year. Figure 1 indicates the Trust's historical performance and progress towards national targets, based on a renewed and enhanced modelling carried out in early 2018.

### 3.1 Trust's Carbon Footprint

Figure 1 - Trust Modelled Carbon Footprint and Climate Change Trajectory



Source: SDU Model 2018

This shows the Trusts' performance relative to the amended Climate Change Act target of a 28% reduction in emissions from 2013/14 by 2020/21. The Trust is currently behind in the trajectory, with a peak in emissions in 2017/18.

<sup>2</sup><https://www.kingstonhospital.nhs.uk/our-trust/publications.aspx>

<sup>3</sup><http://www.sduhealth.org.uk/delivery/measure/reporting.aspx>

This reflects the fact that supply chain emissions make up by far the largest proportion of the Trust's carbon footprint, 67% in 2017/18, and these have increased substantially since 2013/14, primarily driven by capital spend and non-pay costs. Capital expenditure increased substantially in 2017/18 as a result of the Fire Code Compliance programme. Non-pay costs have been increasing in line with activity growth and inflation.

The Fire Code Compliance programme will continue into 2018/19 and due to growth in activity and inflation non-pay costs are not anticipated to reduce over the next few years. This will impede the Trust's ability to deliver the trajectory for reduced carbon emissions but the Trust will continue to develop procurement processes in line with best practice to reduce the impact as far as possible.

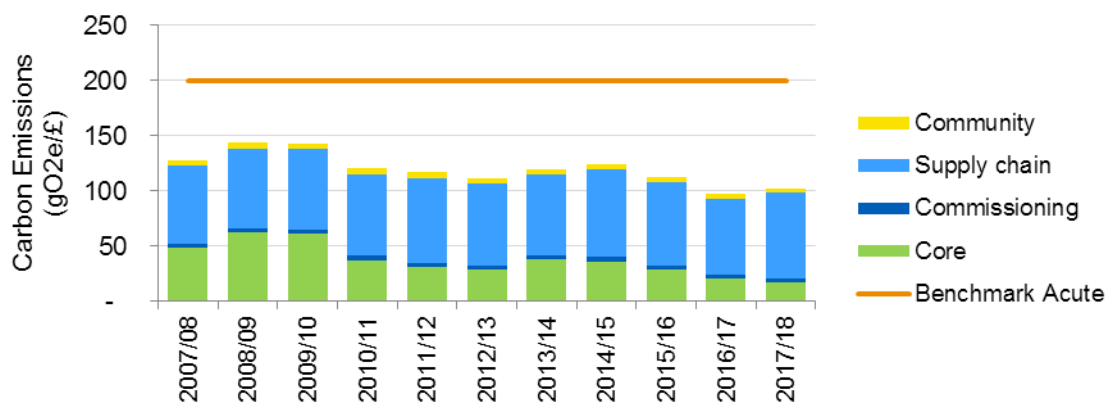
The second largest component of the Trust's carbon footprint is core emissions at 26.5% in 2017/18. These primarily include emissions from energy, waste, water and sanitation. The Trust's core emissions have reduced substantially over the period 2013/14 to 2016/17. This is primarily driven by the reduction in emissions from electricity. From 2013/14 to 2015/16 this reflects the ongoing efforts by the UK to reduce the carbon impact of the national electricity grid by introducing renewable electricity generation. From 2016/17 to 2017/18 this has been enhanced by the introduction of a green energy tariff to one of the Trust's small suppliers. To further reduce core emissions, the Trust has adopted another green energy tariff and will continue to consider these as preferable during future procurement exercises. Continued reduction in core emissions in future years will be a key focus of the Trust's SDMP.

Community emissions made up 3.5% of the Trust's total modelled emissions in 2017/18. These emissions are based on the total staff and patient transport mileage. The Trust's community emissions have remained stable over the period 2013/14 to 2017/18 and are unlikely to reduce substantially. Efforts to reduce community emissions will focus on the promotion of healthier travel and use of public transport.

Commissioning emissions made up 3% of the Trust's total modelled emissions in 2017/18. These emissions are modelled based on organisation type and non-pay spend and are intended to estimate emissions related to services the Trust commissions. The Trust's commissioning emissions have varied over the period 2013/14 to 2017/18 along with adjustments to non-pay spend. As this is a calculated value and not based on actual outputs this will not form the focus of emissions reduction plans.

Whilst the Trust is behind the climate change target trajectory, due predominantly to supply chain emissions, it continues to benchmark well against other acute trusts. Figure 2 below shows a national benchmark value for acute NHS Trusts of 200g of carbon equivalent per £1 of operating expenditure. The Trust performs significantly better than the national benchmark.

**Figure 2: Trust Benchmarked against Carbon Footprint (grams of CO2e per £ of Operating Expenditure)**



Source: SDU Model 2018

The Trust will actively seek to reduce its carbon footprint further over five years and plans to support this are set out in section 4.

A detailed breakdown of the Trust’s modelled carbon footprint and trends between 2013/14 – 2017/18 can be found at Appendix I.

## 4.0 Plans to support sustainability

The Trust has developed plans to support sustainability through improvements in the following areas:




- a) Energy Management
- b) Waste Management
- c) Water Management
- d) Procurement
- e) Building Design and Refurbishment
- f) Travel and Transport
- g) Workforce Development and Wellbeing
- h) Technology

High level objectives in each of the areas have been identified and are outlined in this section. Supporting action plans for 2018/19 are attached at Appendix II. Action plans will be refreshed annually.

## 4.1 Energy Management

The Trusts aim is to use energy wisely and productively. Equipment upgrades, controls and behavioural change form the three major strands of Energy Management. For these to be successfully deployed, the Trust needs a robust system to measure how and where it uses energy. The Accountable Officer for this workstream is the Director of Estates, Facilities & Capital Development.

Table 1 sets out the key objectives of the energy management plan highlighting the expected benefits across the three sustainability environments:

Energy		Benefits		
When	Key Objectives	Natural 	Social 	Economic 
2018 - 2019	<ul style="list-style-type: none"> <li>Understand how much energy we use and where using an Energy Management System.</li> <li>Plan long term site energy strategy including proposal for new Energy Generation Centre.</li> <li>Implement smart LED lighting across Esher. Wing, as part of the Fire Code Compliance work</li> <li>Raise awareness of energy consumption to all Trust staff.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Improved monitoring of energy usage and identification of improvement opportunities</li> <li>✓ More accurate measurement of CO<sub>2</sub> emissions from fossil fuel consumption.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Key staff informed.</li> <li>✓ Improved reporting.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Better billing validation.</li> <li>✓ Controlled / reduced costs.</li> </ul>
2019 -2022	<ul style="list-style-type: none"> <li>Develop a short term energy efficiency strategy based on information from the Energy Management System.</li> <li>Procure new Energy Centre development partner.(Subject to business case - OBC Q2 19/20 &amp; FBC Q4 19/20)</li> <li>Implement smart LED lighting across main Trust buildings, as part of the Fire Code Compliance work</li> <li>Raise awareness of energy saving measures staff can take.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Reduction in wasted energy.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Informed staff empowered to act.</li> <li>✓ Supporting 'green' initiatives.</li> <li>✓ Improved comfort in patient spaces.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Controlled / reduced costs.</li> <li>✓ Good value for money Energy Centre</li> </ul>
From 2023	<ul style="list-style-type: none"> <li>Develop renewed energy saving strategy based on lessons learned from 2019-22.</li> <li>Implement new Energy Centre including district heating to local housing.</li> <li>Implement new energy saving technologies in main Trust buildings.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Reduced CO<sub>2</sub> (compared to grid mix)</li> <li>✓ Reduced dependence on fossil fuels.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Sharing long-term benefits with neighbours.</li> <li>✓ Increased resilience.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Income opportunities from heating provided to tenants / nearby properties.</li> </ul>




The Energy Management Action Plan for 2018/19 is attached in Appendix II.



## 4.2 Waste Management

The Trust wants to provide legal, safe, convenient waste disposal systems which minimise the damage caused to the environment. All staff will be encouraged to reduce waste at all levels within the Trust. The Accountable Officer for this workstream is the Director of Estates, Facilities & Capital Development.

Table 2 sets out the key objectives of the waste management plan highlighting the expected benefits across the three sustainability environments:




Waste		Benefits		
When	Key Objectives	Natural 	Social 	Economic 
2018 - 2019	<ul style="list-style-type: none"> <li>Implement internal furniture re-use scheme.</li> <li>Expand recycling opportunities by increasing the number of bins around Trust grounds and in office areas.</li> <li>Raise awareness of waste streams and recycling routes to all Trust staff.</li> <li>Develop new easy to use Trust Waste Manual.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Fewer materials extracted from the natural environment to make new items.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Staff aware of the good work on recycling the Trust is doing.</li> <li>✓ Staff enabled to share redundant items rather than throwing away.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Reduced cost of wastes.</li> <li>✓ Reduced new furniture purchases.</li> </ul>
2019 -2022	<ul style="list-style-type: none"> <li>Expand furniture re-use scheme to include other organisations and charities.</li> <li>Explore potential to increase re-usable waste containers (e.g. for sharps).</li> <li>Develop training and awareness opportunities for managers to reduce waste production and increase recycling.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Reduced CO<sub>2</sub> from incineration of single use plastic containers.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Reduction in staff injuries from sharps.</li> <li>✓ Staff empowered to deal with wastes appropriately.</li> <li>✓ Links with community organisations.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Reduced cost of wastes.</li> </ul>
From 2023	<ul style="list-style-type: none"> <li>Work with partners to implement new technology solutions for reducing waste sent for incineration.</li> <li>Achieve 'Zero to Landfill' (99% of all waste diverted, currently achieving 98%)</li> </ul>	<ul style="list-style-type: none"> <li>✓ Reduced incineration of waste materials.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Staff pride in Trust's 'green' credentials.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Reduced cost of wastes.</li> </ul>

The Waste Management Action Plan for 2018/19 is attached at Appendix II.

### 4.3 Water Management

The Trust recognises that water is a precious natural resource and so plans to use the minimum water to the maximum effect within Trust buildings. To achieve this, the Trust will maximise opportunities to reduce demand, enhance storage and recycling infrastructure, and communicate good practice with staff, patients and visitors. The Accountable Officer for this workstream is the Director of Estates, Facilities & Capital Development.

Table 3 sets out the key objectives of the water management plan highlighting the expected benefits across the three sustainability environments:




Water		Benefits		
When	Key Objectives	Natural 	Social 	Economic 
2018 - 2019	<ul style="list-style-type: none"> <li>Procure Water Supply company.</li> <li>Increase monitoring of water supplies.</li> <li>Raise awareness of water safety and conservation to all Trust staff.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Identify water leaks on site.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Staff informed about water conservation.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Reduced losses.</li> <li>✓ Reduced water bills.</li> </ul>
2019 -2022	<ul style="list-style-type: none"> <li>Work with supplier to reduce water leaks.</li> <li>Understand the opportunities to use the latest measuring technology to understand the volume of water used by location.</li> <li>Raise awareness of how much water the Trust uses and where to all Trust staff and simple things they can do to contribute to safe reduction of wastage.</li> <li>Improve the quality of water pipework to key buildings.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Reduce water requirement for the Trust.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Less risk of water shortages in the community.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Reduced water bills.</li> </ul>
From 2023	<ul style="list-style-type: none"> <li>Include Water Management in the next energy saving strategy.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Raised profile of water.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Understanding of the water the Trust uses and consumes.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Reduced water bills.</li> </ul>

The Water Management Action Plan for 2018/19 is attached in Appendix II.

#### 4.4 Procurement and Supply Chain

Supply chain accounts for 67% of the Trust's carbon footprint and therefore improving the sustainability of the Trust's procurement processes is key to reaching its carbon reduction goals. The Trust is committed to minimising waste and to consider whole life cost in its procurement of goods, works and services, with suppliers and service providers to ensure that sustainability aims are translated into their practices. By procuring responsibly, the Trust can reduce its environmental impact and deliver local, social and economic improvements. The Accountable Officer for this workstream is the Director of Finance.

Table 4 sets out the key objectives of the procurement and supply chain plan highlighting the expected benefits across the three sustainability environments:

Procurement & Supply Chain		Benefits		
When	Key Objectives	Natural 	Social 	Economic 
2018 - 2019	<ul style="list-style-type: none"> <li>Begin to quantify, where possible, the carbon impact of the Trust's suppliers and supply chains.</li> <li>Embed sustainability and other corporate social responsibility (CSR) considerations within key procurement projects.</li> <li>Achieve a level 1 rating for CSR in the NHS Standards of Procurement.</li> <li>Raise awareness of how much Ward procurements cost and encourage reduced wastage.</li> </ul>	<ul style="list-style-type: none"> <li>✓ A better understanding of the carbon footprint.</li> <li>✓ Influencing our procurement decision making based on environment considerations</li> </ul>	<ul style="list-style-type: none"> <li>✓ Improved staff and contractor engagement.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Improved corporate social responsibility.</li> </ul>
2019 -2022	<ul style="list-style-type: none"> <li>Implement new inventory management process to reduce quantity of goods ordered and reduce risk of product waste.</li> <li>Implement cost awareness programme for clinical staff in ward areas (led by Green Champions)</li> <li>Develop and implement the Procuring for Carbon Reduction (P4CR) framework, for the organisation to reduce the impact of buying activities (<a href="http://www.gov.uk/government/news/procuring-for-carbon-reduction-p4cr">http://www.gov.uk/government/news/procuring-for-carbon-reduction-p4cr</a>).</li> <li>The Trust will work in partnership with suppliers to take into account the whole carbon lifecycle of its products and services, and considers carbon as part of the tender as well as the decision-making process (where legally permitted).</li> <li>Achieve a level 2 rating for procurement sustainability in the NHS Standards of Procurement.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Reductions in carbon emissions.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Improved services.</li> <li>✓ Better staff training.</li> <li>✓ Opportunity to ensure whole supply chain is fair.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Reduced costs related to carbon.</li> </ul>




From 2023	<ul style="list-style-type: none"> <li>• Work with suppliers and national distributors to reduce packaging and single use plastic use.</li> <li>• Develop and implement a programme for auditing key suppliers and their sustainability policies.</li> <li>• Work with partners in our STP and local geographic area to reduce the transportation of goods between sites.</li> </ul>	✓ Ongoing improvement to the environment.	<ul style="list-style-type: none"> <li>✓ Consistent and fair procurement processes.</li> <li>✓ Sharing good practice.</li> </ul>	✓ Cost reductions.

The Procurement and Supply Chain Action Plan for 2018/19 is attached at Appendix II.

## 4.5 Building Design & Refurbishment

The Trust wants to provide buildings which are clean, safe and fit for purpose. The Trust is committed to continually improving its estate to achieve first-rate quality standards. The Accountable Officer for this workstream is the Director of Estates, Facilities & Capital Development.

Table 5 sets out the key objectives of the building design and refurbishment plan highlighting the expected benefits across the three sustainability environments:

Building Design & Refurbishment		Benefits		
When	Key Objectives	 Natural	 Social	 Economic
2018 - 2019	<ul style="list-style-type: none"> <li>Delivery of updated Development Control Plan to reflect the Estates Masterplan.</li> <li>Review the Capital Projects standard specification to include sustainable technologies and outcome requirements.</li> <li>Improve the energy efficiency of the Trust's current buildings through the 2018-19 capital programme (e.g. upgrading of pipework and electrical infrastructure renewal)</li> <li>Include energy efficiency as a key requirement in future building project tenders.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Reduced impact on wider environment from CO<sub>2</sub>.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Partner creativity harnessed.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Building use costs reduced.</li> <li>✓ Local procurement opportunities to positively impact employment and the local economy.</li> </ul>
2019 -2022	<ul style="list-style-type: none"> <li>Implement the Estates Masterplan to improve space optimisation</li> <li>All new builds and refurbishments over £2million (capital costs) comply with BREEAM<sup>4</sup> excellent standards.</li> <li>Carry out ongoing refurbishments to plant and building insulation.</li> <li>Improve green spaces in line with Estates Masterplan.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Pollution minimised.</li> <li>✓ Resources used appropriately.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Assurance that the buildings are sustainable.</li> <li>✓ Staff health and wellbeing taken into account.</li> <li>✓ Improved local health due to green spaces.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Building use costs reduced.</li> </ul>
From 2023	<ul style="list-style-type: none"> <li>Implement the Estates Masterplan to improve space optimisation</li> <li>Significant proportion of Trust buildings to reach energy performance rating E or above, through implementation of the Estates Masterplan enabling works e.g. demolition of the Command Centre and Regent Wing</li> </ul>	<ul style="list-style-type: none"> <li>✓ Waste heat reduced to atmosphere.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Improved staff and patient comfort.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Reduced heating costs.</li> </ul>




The Building Design and Refurbishment Action Plan for 2018/19 is attached in Appendix II.

<sup>4</sup> BREEAM - Building Research Establishment Environmental Assessment Method is the longest established method of assessing, rating, and certifying the sustainability of buildings.

## 4.6 Travel and Transport

The Trust's Healthy Transport Plan details the Trusts continuing strategy to reduce the reliance of its staff and users on car travel and reduce the impact of its transport needs for the benefit of the environment and the local community. The Accountable Officer for this workstream is the Director of Estates, Facilities & Capital Development.

Table 6 sets out the key objectives of the travel and transport plan highlighting the expected benefits across the three sustainability environments:




Travel and Transport		Benefits		
When	Key Objectives	Natural 	Social 	Economic 
2018 - 2019	<ul style="list-style-type: none"> <li>Participate in events designed to highlight the benefits to staff of walking to work.</li> <li>Promote the Cycle Scheme, provide cycle information and hold an annual Bike Week.</li> <li>Promote public transport information to staff, patients and visitors.</li> <li>Encourage 'green' travel initiatives, such as car sharing</li> </ul>	<ul style="list-style-type: none"> <li>✓ Fewer car journeys leading to reduced damaging emissions.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Healthier staff.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Less staff sick days (increased productivity).</li> </ul>
2019 -2022	<ul style="list-style-type: none"> <li>Review cycle strategy and assess demand for cycle parking across the site and identify appropriate locations for additional cycle parking.</li> <li>Work with RBK to identify and implement any highlighted improvements to off-site pedestrian facilities.</li> <li>Develop the Wayfinding strategy including wayfinding from Norbiton Station and local Bus Stops.</li> <li>Work with London Buses/TFL to seek improvements to existing services and provision of additional services particularly from the Richmond area.</li> <li>Include showers in new builds and refurbishments (investigate the viability of a central shower area).</li> </ul>	<ul style="list-style-type: none"> <li>✓ Improved air quality.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Reduced air-quality related health conditions.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Less cost to run car parks.</li> </ul>
From 2023	<ul style="list-style-type: none"> <li>Improve signage and surfacing.</li> <li>Consider the bus stops and turning facilities in future site development and improve these where possible.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Improved local air quality positively impacting community health</li> <li>✓ More public/active transport available for local community use as well as hospital</li> </ul>	<ul style="list-style-type: none"> <li>✓ Less injuries from sub-standard ground surfaces.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Reduced staff sick days</li> </ul>

The Travel and Transport Action Plan for 2018/19 is attached in Appendix II.

## 4.7 Engaging the workforce

The Trust is committed to demonstrating Sustainable Development leadership and enabling all levels of management and staff to understand and help to deliver the sustainability agenda. The Accountable Officers for this workstream are the Director of Workforce and Director of Strategic Development.

Table 7 sets out the key objectives for engaging the workforce highlighting the expected benefits across the three sustainability environments:




Workforce		Benefits		
When	Key Objectives	Natural 	Social 	Economic 
2018 - 2019	<ul style="list-style-type: none"> <li>Develop a Communications Plan</li> <li>Create a dedicated intranet page</li> <li>Re-energise Green Champions network across the organisation and engage staff and managers in leading sustainable behaviour.</li> <li>Ensure all staff members are provided with information and opportunities to use low carbon travel options.</li> <li>Promote holistic health across the organisation and initiatives to increase engagement.</li> <li>Pilot agile working and develop recommendations based on evaluation.</li> </ul>	<ul style="list-style-type: none"> <li>Staff considers the environmental, economic and social impacts of daily routines and decision making.</li> </ul>	<ul style="list-style-type: none"> <li>Staff encouraged to use active travel</li> <li>Staff health improved as a result of increased active travel</li> </ul>	<ul style="list-style-type: none"> <li>Fewer sick days.</li> </ul>
2019 -2022	<ul style="list-style-type: none"> <li>Implement recommendations from agile working pilot.</li> <li>Develop a Sustainability Impact Assessment Template to apply to all policies.</li> <li>Develop Green Leaders within Trust Senior Management.</li> <li>Future leadership development will take account of the competencies required to deliver carbon reduction.</li> <li>Include sustainability and carbon governance as a responsibility within all job descriptions.</li> <li>Introduce behaviour change programmes (led by Green Champions).</li> <li>Develop ways Trust staff can support a happy, healthy and resilient community.</li> </ul>	<ul style="list-style-type: none"> <li>Reduced CO<sub>2</sub> emissions.</li> </ul>	<ul style="list-style-type: none"> <li>Staff feel responsible and able to make change happen.</li> </ul>	<ul style="list-style-type: none"> <li>Reduced costs associated with carbon emissions.</li> </ul>
From 2023	<ul style="list-style-type: none"> <li>Availability of audio, video and web conferencing technology will be communicated and fully supported.</li> <li>Staff will be trained in these technologies to support a cultural shift away from routine care and other high carbon travel and to encourage more Agile working.</li> </ul>	<ul style="list-style-type: none"> <li>Fewer car journeys for meetings.</li> </ul>	<ul style="list-style-type: none"> <li>Patients better able to park.</li> <li>Staff given control of their hours / working environment.</li> </ul>	<ul style="list-style-type: none"> <li>Reduced staff parking requirement (increased patient spaces income).</li> </ul>

The Engaging the Workforce Action Plan for 2018/19 is attached in Appendix II.

## 4.8 Technology

The Trusts aim is to use available and upcoming technology to enable sustainable equipment and working practices. Information Technology offers unique opportunities to achieve sustainable development. The Accountable Officer for this workstream is the Director of Information Management and Technology.

Table 8 sets out the key objectives for Information Technology:

Information Technology		Benefits		
When	Key Objectives	 Natural	 Social	 Economic
2018 - 2019	<ul style="list-style-type: none"> <li>Finalise business case for Electronic Document Management (EDM) and Board approval to proceed</li> <li>Roll out e-referrals for first consultant outpatient appointment</li> <li>Deliver advanced cooling for main computer room</li> <li>Implement out-patient e-Prescribing</li> <li>Pilot virtual out-patient clinics</li> <li>Implement Wi-Fi for staff and patients</li> </ul>	<ul style="list-style-type: none"> <li>✓ Reduced CO<sub>2</sub> emissions.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Reducing patient travel time</li> <li>✓ Patient record available across setting</li> <li>✓ Information available 'on the move'</li> </ul>	<ul style="list-style-type: none"> <li>✓ Cash-releasing (paper)</li> <li>✓ Reduced cooling cost</li> </ul>
2019 -2022	<ul style="list-style-type: none"> <li>Deploy EDM across the organisation</li> <li>Implement e-referrals for diagnostic services</li> <li>Implement paediatric e-Prescribing</li> <li>Investigate 'cloud hosting' opportunities and develop business case</li> <li>Migrate appropriate services to 'cloud'</li> <li>Support flexible/agile solution for remote users (and across care settings)</li> <li>Deploy Windows 10</li> <li>Implement fully mobile solution for staff</li> <li>Standardise clinical pathways across acute Trusts</li> </ul>	<ul style="list-style-type: none"> <li>✓ Reduced CO<sub>2</sub> emissions.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Information always available 'at point of care'</li> <li>✓ Clinician mobility</li> </ul>	<ul style="list-style-type: none"> <li>✓ Cash-releasing benefits (space, paper))</li> <li>✓ Staff efficiencies</li> </ul>
From 2023	<ul style="list-style-type: none"> <li>Implement full 'cloud' subject to business case</li> <li>Implement SW London standardised clinical pathway</li> <li>Implement SW London 'across site' seamless working</li> <li>Implement SW London EDM subject to business case</li> </ul>	<ul style="list-style-type: none"> <li>✓ Reduced CO<sub>2</sub> emissions.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Information always available 'at point of care'</li> <li>✓ Clinician mobility</li> <li>✓ Reducing patient travel time</li> <li>✓ Patient record available across setting</li> </ul>	<ul style="list-style-type: none"> <li>✓ Cash-releasing benefits (space, paper)</li> <li>✓ Staff efficiencies</li> <li>✓ Reduced cooling cost</li> </ul>

The Technology Action Plan for 2018/19 is attached in Appendix II.



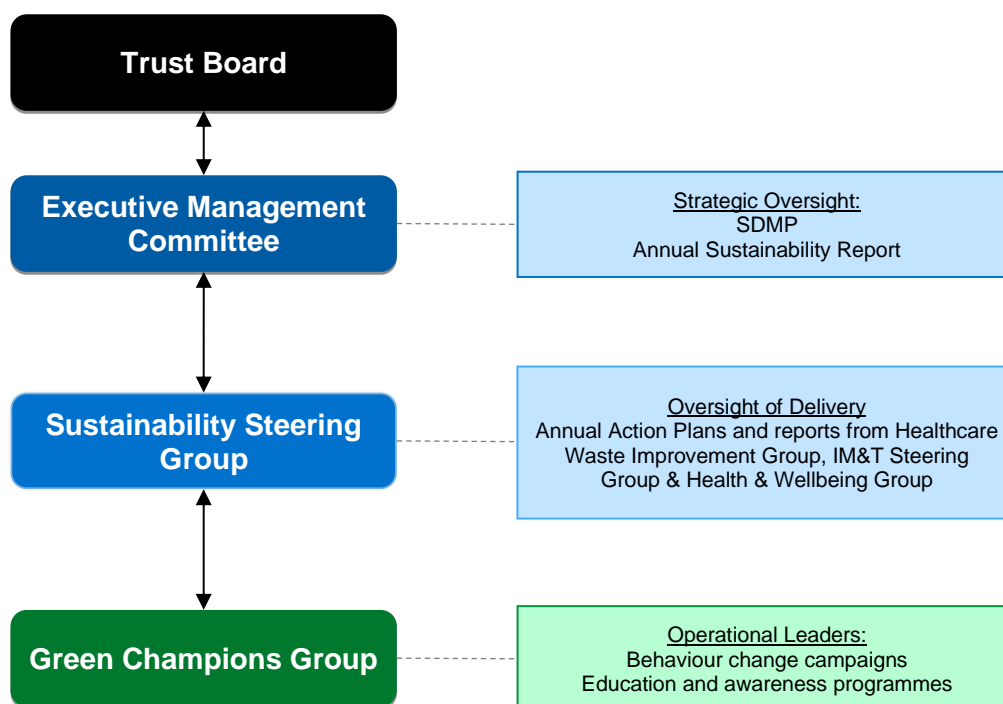
## 5.0 Governance

### 5.1 Sustainability Steering Group

The delivery of the plan will be overseen by the Sustainability Steering Group (SSG) which reports to the Executive Management Committee, and is chaired by the Director of Strategic Development with the Director of Estates and Facilities as deputy Chair. The SSG will convene quarterly to monitor delivery of the action plans detailed in Appendix II. This group will also focus on communications and engagement with the Green Champions to support adoption of good practice across the Trust.

The Trust Board will receive an annual report on the Trust's progress in working towards the achievement of agreed targets.

Figure 1 below shows the governance structure for sustainability in the Trust.



### 5.2 Green Champions Group

The Green Champions Group (GCG) will convene monthly to maintain staff engagement with sustainability. The group has three objectives:

- To provide effective and efficient communications between the SSG and Green Champions.
- To enable Green Champions to plan and act in increasingly sustainable ways in their roles and lives.
- To enable Green Champions to influence other staff and contractors to plan and act in increasingly sustainable ways.

## 6.0 Appendices

### Appendix I – Breakdown of the Trust’s Modelled Carbon Footprint

Table A shows the detailed breakdown of the Trust’s modelled carbon footprint for 2017/18 across the source emission groups.

**Table A: Trust’s modelled carbon footprint for 2017/18**

Emissions Source Group	Emissions Source	2017/18	%	% Total
<b>Core</b> (Energy, Travel, Waste, Water Building & Design)	Water and sanitation	47	0.2%	<b>26.5%</b>
	Waste products and recycling	34	0.1%	
	Business mileage - grey fleet	69	0.2%	
	Fleet / pool cars		0.0%	
	Business mileage public transport		0.0%	
	Fuels (Fossil and Non Fossil)	8,094	28.3%	
	Electricity	-3,967	-13.8%	
	Anaesthetic gas - other	52	0.2%	
	Anaesthetic gas - Nitrous oxide (and mixes)	3,268	11.4%	
	Other Core	-	0.0%	
<b>Commissioning</b>	Commissioned health and social care services	805	2.8%	<b>3%</b>
<b>Supply chain</b> (Procurement, pharmaceuticals, & capital spend)	Pharmaceuticals	3,443	12.0%	<b>67%</b>
	Paper products	25	0.1%	
	Other procurement	-	0.0%	
	Other manufactured products	1,253	4.4%	
	Medical Instruments /equipment	1,046	3.7%	
	Manufactured fuels chemicals and gases	1,464	5.1%	
	Information and communication technologies	534	1.9%	
	Freight transport	1,356	4.7%	
	Food and catering	82	0.3%	
	Business services	3,523	12.3%	
Capital spend / Construction	6,522	22.8%		
<b>Community</b> (Staff commuting & patient travel)	Patient & Visitor travel	31	0.1%	<b>3.5%</b>
	Staff commuting	970	3.4%	
	Other Community	-	0.0%	
<b>Total</b>		<b>28,650</b>		<b>100%</b>

Source: SDU Model 2018

The Trust has made best endeavours to populate this model accurately. Table B below shows that almost a third of this model is reliant on calculations based on the Trust’s non-pay spend. More than a quarter of the Trust’s modelled carbon footprint is based on capital expenditure.

**Table B: Calculation basis for carbon footprint modelling**

Calculation Basis	% of Total Emissions
Total non-pay cost	31.19%
Actual Consumption	26.16%
Actual Capital Investment	22.77%
Actual Cost	16.04%

Total number of Staff	3.39%
Actual Travel Distance	0.35%
Actual Weight Disposed	0.12%
<b>Grand Total</b>	<b>100.00%</b>

Source: SDU Model 2018

The Trust will make improvements to this model as data becomes available and will control emissions where this is possible.

**Table C: Breakdown of Core Emissions**

Core Emissions Source	2013/14	2014/15	2015/16	2016/17	2017/18
Fuels (Fossil and Non Fossil)	9,483	8,609	7,894	8,279	8,094
Business mileage - grey fleet					69
Water and sanitation	46	46	35	33	47
Waste products and recycling	29	36	29	33	34
Electricity	-1,625	-543	-1,003	-3,456	-3,967
Anaesthetic gas - other	<i>No data available</i>				52
Anaesthetic gas - Nitrous oxide (and mixes)					3,268
Fleet / pool cars					No data
Business mileage public transport					
Other Core					
<b>Total</b>	<b>7,933</b>	<b>8,148</b>	<b>6,954</b>	<b>4,889</b>	<b>4,324</b>

Source: SDU Model 2018

The core emissions modelled above omit fleet and business mileage. To improve the model, the Trust will seek to implement monitoring of these items. In 2017/18, anaesthetic gases have been included for the first time. The Trust will attempt to obtain data for these going back to the base date of 2013/14.

**Table D: Breakdown of Commissioning Emissions**

Commissioning Emissions Source	2013/14	2014/15	2015/16	2016/17	2017/18
Commissioned health and social care services	753	806	870	755	805

Source: SDU Model 2018

**Table E: Breakdown of Supply Chain Emissions**

Supply Emissions Source	2013/14	2014/15	2015/16	2016/17	2017/18
Capital spend / Construction	3,326	5,040	4,456	4,404	6,522
Business services	3,293	3,527	3,806	3,303	3,523
Pharmaceuticals	3,219	3,447	3,720	3,228	3,443
Manufactured fuels chemicals and gases	1,369	1,465	1,581	1,372	1,464
Freight transport	1,267	1,357	1,464	1,271	1,356
Other manufactured products	1,171	1,254	1,353	1,174	1,253
Medical Instruments /equipment	978	1,047	1,130	980	1,046

Information and communication technologies	499	534	577	500	534
Food and catering	77	82	89	77	82
Paper products	23	25	27	23	25
Other procurement					
<b>Total</b>	<b>15,222</b>	<b>17,778</b>	<b>18,202</b>	<b>16,334</b>	<b>19,247</b>

Source: SDU Model 2018

In 2017/18, the Trust implemented some additional monitoring which means 24% of these emissions are now linked to actual spend on those items. These include pharmaceuticals, medical instruments, food and catering and paper products. To improve the model, the Trust will seek to implement monitoring on the remaining calculated items.

**Table F: Breakdown of Community Emissions**

<b>Emissions Source</b>	<b>2013/14</b>	<b>2014/15</b>	<b>2015/16</b>	<b>2016/17</b>	<b>2017/18</b>
Staff commuting	910	977	990	1,034	970
Patient & Visitor travel	49	35	34	30	31
Other Community					
<b>Total</b>	<b>959</b>	<b>1,012</b>	<b>1,024</b>	<b>1,064</b>	<b>1,000</b>

Source: SDU Model 2018

## Appendix II - 2018/19 Sustainability Action Plans

### 2018/19 - Energy Management Action Plan

Accountable Officer: Director of Estates and Facilities



No	Action	Lead	Support	Target	Date
EM1	Implement the Energy Management System (EMS).	Estates Utilities, Waste and Sustainability Manager	Consultancy Support	100% site coverage [Evidenced through output report from EMS]	January 2019
EM2	Develop proposed site Energy Strategy for 2022 onwards including a new Energy Centre.	Estates Utilities, Waste and Sustainability Manager	Consultancy support, Estates Engineering Manager, Capital Projects	Complete Energy Centre specification ready to tender. [Evidenced through specification document]	March 2019
EM3	Install smart LED lighting across Esher Wing.	Associate Director of Capital Development	Contractor, Estates Utilities, Waste and Sustainability Manager	80% of all lighting in Esher Wing replaced with smart LED lighting. [Evidenced through completed work programme document and asset survey report]	March 2019
EM4	Carry out energy awareness campaign for all staff.	Estates Utilities, Waste and Sustainability Manager	Communications Team	Include energy consumption awareness promotion in Sustainable Health & Care Week. [Evidenced through communications materials sent]	July 2018



**2018/19 - Waste Management Action Plan**  
**Accountable Officer: Director of Estates and Facilities**

No	Action	Lead	Support	Target	Date
WM1	Implement furniture re-use scheme.	Estates Utilities, Waste and Sustainability Manager	Procurement, Facilities, Health & Safety, Infection Prevention and Control Team	Zero furniture to landfill. [Evidenced through report on final destination of furniture items]	March 2019
WM2	Install additional recycling bins around the Trust grounds.	Estates Utilities, Waste and Sustainability Manager	Grounds & gardens contractor	20 additional bins deployed. [Evidenced through report of external bin locations]	March 2019
WM3	Encourage additional administration areas to switch to recycling.	Estates Utilities, Waste and Sustainability Manager	Facilities	2 new administration areas start recycling. [Evidenced through report on new areas]	March 2019
WM4	Carry out waste awareness campaign for all staff.	Estates Utilities, Waste and Sustainability Manager	Communications Team	Increased clinical waste segregation compliance. [Evidenced through wastes mix detail in annual Waste Management Report]	March 2019
WM5	Develop new Trust Waste Policy & separate Waste Manual.	Estates Utilities, Waste and Sustainability Manager	Infection Control, Health & Safety, Dangerous Goods Safety Advisor	Ratified Policy, Approved Manual [Evidenced through both documents being available to all staff via PIMs]	February 2019



**2018/19 - Water Management Action Plan**  
**Accountable Officer: Director of Estates and Facilities**

No	Action	Lead	Support	Target	Date
WAM1	Complete water supply procurement.	Estates Utilities, Waste and Sustainability Manager	Procurement	Appoint new water supply and billing supplier. [Evidenced through service contract]	March 2019
WAM2	Achieve monthly recording of all water supply meters.	Estates Utilities, Waste and Sustainability Manager	Engineering	Monthly meter readings for all supplies. [Evidence through monthly meter readings record]	January 2018
WAM3	Carry out water safety and conservation awareness campaign.	Head of Estates	Estates Utilities, Waste and Sustainability Manager, Press & Communications	Completed communications exercise [Evidenced through global emails]	March 2019



**2018/19 - Procurement and Supply Chain Action Plan**  
**Accountable Officer: Director of Finance**

No	Action	Lead	Support	Target	Date
PSC1	Develop the Trust's carbon footprint model to include the impact of supplies and supply chain.	Estates Utilities, Waste and Sustainability Manager	Head of Procurement, Finance Department	Reduce the percentage of emissions modelled from total non-pay expenditure so that 100% is based on actuals. [Evidenced through updated carbon footprint model]	March 2019
PSC2	Run cost awareness programme for ward environments aimed at reducing wastage	Head of Procurement	Head of Supply Chain and Ward Matrons	Staff awareness improved by 20% on baseline. [Evidenced through sustainability staff survey]	July 2019
PSC3	Ensure environmental and sustainability considerations are included in standard procurement documentation when appropriate	Head of Procurement	Procurement Category Managers	100% compliance for all procurement documentation. [Evidenced through annual audit of documentation]	October 2018
PSC4	Procurement policy, addressing sustainability opportunities and risks, approved by Trust Board	Head of Procurement	Director of Finance	Publish new guidance. [Evidenced through ratified policy available on PIMs]	March 2019
PSC5	Achieve level one of NHS Standards of Procurement (covers sustainability)	Head of Procurement	NHS Improvement	Standard achieved	March 2019





**2018/19 - Building Design and Refurbishment Action Plan**  
**Accountable Officer: Director of Estates and Facilities**

No	Action	Lead	Support	Target	Date
BDR1	Review Capital Projects standard specification with Sustainability Leads.	Associate Director of Capital Development	Estates Utilities, Waste and Sustainability Manager, Engineering Maintenance Manager	Approved specification sent to 100% of contractors appointed to work on Trust projects. [Evidenced through signed final document and review of project files]	March 2019
BDR2	Improve the energy efficiency of the Trusts current buildings.	Associate Director of Capital Development	Estates Utilities, Waste and Sustainability Manager, Engineering Maintenance Manager	To make measurable energy savings as part of 2018-19 capital works. Examples include: pipework replacements, plate heat exchangers replacing calorifiers, enhanced building management system connectivity, lighting and sensors. [Evidence through commissioning papers for appropriate projects]	March 2019
BDR3	Include energy efficiency as a key requirement in future building project tenders.	Associate Director of Capital Development	Estates Utilities, Waste and Sustainability Manager, Engineering Maintenance Manager	Amended standard tender specification agreed by all parties. [Evidenced through completed and approved standard tender specification]	March 2019



**2018/19 - Travel and Transport Action Plan**  
**Accountable Officer: Director of Estates and Facilities**

No	Action	Lead	Support	Target	Date
T1	Promote public transport information to staff, patients & visitors	Facilities Operations Manager	Facilities Admin, Reception Staff, Communications Team	Continued supply of leaflets to main reception area, information updated on website/patient letter [Evidenced through updated information availability on website and sample patient letter]	March 2019
T2	Promote Cyclescheme, provide cycle information and hold an annual Bike Week	Facilities Operations Manager	Facilities Admin, Kingston Council	Continued delivery of "Cycleweek", including liaison with police, RBK, providing of maintenance courses etc [Evidenced through log of staff attending courses]	July 2018
T3	Develop and promote a car sharing scheme	Facilities Operations Manager	Facilities Admin, Communications Team	Identify a suitable system (e.g. liftshare) and promote this to staff [Evidenced through live demonstration of system and report of users taking part]	March 2019
T4	Audit and increase cycle storage capacity on site	Facilities Operations Manager	Capital Projects Team	Delivery of additional cycle storage following demolition [Evidenced through brief report to Sustainability Steering Group on completion of works]	October 2018
T5	Working with TfL/London Buses to improve facilities and routes serving the hospital	Facilities Operations Manager	Facilities Admin, Transport for London	Continued annual meetings with TfL/RBK to discuss the Trust's needs and support any installation/alterations [Evidenced through minutes of meetings]	March 2019



**2018/19 - Engaging the Workforce Action Plan**  
**Accountable Officer: Director of Workforce**

No	Action	Lead	Support	Target	Date
WF1	Re-launch Green Champions Network across the organisation and engage staff and managers in leading sustainable behaviour.	Director of Strategic Development & Director of Estates & Facilities	Estates Utilities, Waste and Sustainability Manager,	Recruit a cohort of 10 members of staff and establish monthly meetings [Evidenced through meeting notes and attendance records]	March 2019
WF2	Encourage staff to cycle or walk to work where appropriate by making healthy travel easier	Health & Wellbeing Lead	Facilities Operations Manager	Increase in the number of staff cycling/walking to work, thereby reducing reliance on public/private transport and reduction in the number of parked vehicles on trust premises. [Evidenced through staff travel survey]	March 2019
WF3	Consider alternative working arrangements to help reduce carbon footprint on trust premises. (Agile Working pilot)	Director of Workforce	Health & Wellbeing Lead, Director of IM&T	To increase awareness around different types of working arrangements and to consider more widely whether certain roles require full presence on Trust premises. [Evidenced through increase in number of staff working off site]	March 2019
WF4	To promote and encourage staff to be physically active.	Health & Wellbeing Lead	Communications team	Reduction in sickness absence rates, Increase in individual fitness levels and engagement; Staff feeling fit and well to carry out their job. [Evidenced through annual occupational health report and staff surveys]	March 2019
WF5	Develop a Staff Engagement Communications Plan	Director of Strategic Development & Director of Estates & Facilities	Communications team	Increase awareness of sustainability initiatives and how staff can support these	December 2018

No	Action	Lead	Support	Target	Date
WF6	Create a dedicated intranet page	Estates Utilities, Waste and Sustainability Manager	Communications team	Increase awareness of sustainability initiatives and how staff can support these	December 2018



## 2018/19 - Technology Action Plan

Accountable Officer: Director of Information Management & Technology

No	Action	Lead	Support	Target	Date
IT1	Finalise business case for Electronic Document Management and Board approval to proceed	Director of Information Management & Technology	External Consultancy	Secure Trust Board approval to proceed [Evidenced through Trust board minutes]	October 2018
IT2	Implement e-referrals for first consultant outpatient appointment	Director of Information Management & Technology	NHS England	Full paper switch off including 2 week referrals [Evidenced through report from the new e-referral system and changed procedure for receiving referrals]	November 2018
IT3	Deliver advanced cooling for main computer room	Deputy Director of IM&T (infrastructure)	External Consultancy	Equipment replaced and optimised, [Evidenced through energy management system and equipment commissioning documentation]	November 2018
IT4	Implement out-patient e-Prescribing	Deputy Director of IM&T (Programme)	Pharmacy	Staff have access to information 'at the point of care' Staff competencies increased [Evidenced through staff training records]	March 2019
IT5	Pilot virtual out-patient clinics	Deputy Director of IM&T (Programme)	Out-Patients	Patients feel they have choice and an alternative. [Evidenced through patient satisfaction survey]	March 2019
IT6	Implement Wi-Fi for staff and patients	Deputy Director of IM&T (Infrastructure)	Procurement	Staff and patients satisfaction with Wi-Fi availability and speed [Evidenced through staff and patient satisfaction survey]	December 2018