Sustainability Plan
2019 - 2020
1. Introduction

The Royal Liverpool and Broadgreen University Hospitals NHS Trust approved a Sustainable Development Management Plan (SDMP) in March 2014. An SDMP is a requirement of the Sustainable Development Strategy for the Health and Social Care System 2014-2020 and also part of the NHS Standard Contract.

The Trust’s SDMP sets out the national and local context of sustainability within the healthcare sector and presents a comprehensive overview of the drivers for the NHS and the Trust to make the change to become more sustainable. The SDMP also includes a sustainability vision for the Trust which was signed by the chair, chief executive and chair of the Sustainable Development Group at that time. In this sense, the SDMP remains valid and still meets our requirements.

Our sustainability vision
The Royal Liverpool and Broadgreen University Hospitals NHS Trust will distinguish itself by making sustainability a part of all that we do. We are fully committed to this aim and will support all stakeholders, both internal and external, in helping us to achieve these objectives.

This Sustainability Plan 2019-20 presents an annual update to the SDMP, following similar annual updates since 2015. The sustainability plan aims to:

- provide an overview of the sustainability work carried out in 2018 - 19
- present the results from our annual sustainability assessment
- outline actions for improvement for 2019 - 20.

The planned merger with Aintree University Hospital NHS Foundation Trust will mean that the two trusts’ sustainability reporting will need to be aligned. This will be reviewed in the forthcoming year.
1.1 Governance and Reporting

A strategic theme of the Trust:
To play a lead role in the development of a sustainable health system for the communities we serve.

Sustainability and delivering the commitments within the SDMP are overseen by the Sustainable Development Group. The Sustainable Development Group includes internal representatives covering energy, travel, procurement, pharmacy, finance, staff side and HR. It also includes partners, including two local universities, Aintree hospital and key contractors.

The Group reports into Finance and Performance Committee, which approves annual sustainability reporting on behalf of Trust Board. This group is chaired by a non-executive director and its members include the chief executive and the director of finance. In this way we can be assured that senior management has oversight of our sustainability reporting. The sustainability lead for the Trust is the head of sustainability, who sits within the Redevelopment Team and is managed through HR. In addition, an associate non-executive director was created board champion for sustainability and design (estates) in 2018.

2. Sustainable Development Management Plan Commitments

The Sustainable Development Management Plan (SDMP) set out commitments and actions for the Trust. The Sustainability Plan 2015-16 confirmed that the actions within the SDMP Action Plan had been completed. An update on the objectives and targets approved within the SDMP are set out below.

2.1 Sustainable Development Unit

The Sustainable Development Unit (SDU) is the national unit supporting the NHS, public health and the social care system to embed and promote sustainable development. The SDMP committed that we would follow SDU guidance and best practice. The SDU’s Sustainable Development Strategy for the NHS, Public Health and Social Care System encourages healthcare organisations to adopt the following measures:

1. **Board approved plan**: the Trust Board approved the SDMP in March 2014 and Finance and Performance Committee approved this 2019-20 update on behalf of the Trust Board.

2. **Measure, monitor and report**: the Trust uses the SDU template each year to include sustainability within our annual report, in line with HMRC guidance.

3. **Evaluation**: the Trust uses the SDU’s Sustainable Development Assessment Tool (SDAT)
4. **Engage staff, service users and the public**: we work towards engagement with all relevant stakeholders. This plan provides examples of work undertaken during 2018-19.

The SDU monitors the quality of sustainability reporting each year\(^1\). In 2017, 2018 and again in 2019 the Trust’s sustainability reporting within our annual report was rated ‘Excellent’. The Trust’s annual reports provide links to sustainability plans, which greatly increases the amount of information available. As in previous years, a link to this Sustainability Plan 2019-20 will be included within the Trust’s annual report.

In January 2019, the Trust’s head of sustainability hosted a workshop with colleagues from other Liverpool City Region NHS trusts to review sustainability reporting. In addition, the Trust’s sustainability plan remains a best practice example on the SDU\(^2\) website and the Trust’s head of sustainability continues to support regional improvements in sustainability reporting, as a member of the Northern Health and Sustainability Steering Group\(^3\).

In 2019, the Trust contributed an article about sustainability reporting to the British Journal of Healthcare Management. The journal has produced an issue focusing on sustainability within healthcare.
## 2.2 Sustainable Development Management Plan Targets and Objectives

The SDMP set long-term targets and objectives, aligned with our external requirements as well as our internal drivers. Updates are provided in the table below. As many of the objectives in the SDMP are on-going, these will be reviewed as the sustainability strategy of the Trust is aligned with Aintree’s during the merger.

<table>
<thead>
<tr>
<th>SDMP Objectives and Targets</th>
<th>2018-19 Update</th>
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<tbody>
<tr>
<td>To reduce CO2 emissions by 10% by 2015 from 2007 levels and to develop baselines for carbon reduction targets for all areas.</td>
<td>The 2015 target was set in the SDU’s 2009 Carbon Reduction Strategy. Progress against this target was set out in 2016-17. The current SDU target states organisations should aim to reduce their carbon emissions by 28% by 2020, from a 2013 baseline. Carbon emissions are reported in section 3.10.</td>
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<td>To continue to develop partnership working with other institutions within the Knowledge Quarter of the City and maximise impacts from community engagement.</td>
<td>In 2019, the Knowledge Quarter Sustainability Network created a Highlights Report to capture Community engagement updates are set out in section 3.</td>
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<td>To review and implement the Green Transport Plan.</td>
<td>Our updated Staff Travel Plan was reported in last year’s plan.</td>
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<td>To work with local suppliers and the Government Procurement Service to ensure and promote sustainable/green procurement, and minimise waste.</td>
<td>Procurement is a cross cutting theme in the Sustainable Development Assessment Tool, so covers all aspects of our sustainability review.</td>
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<td>To continually update the Good Corporate Citizenship Model whilst looking for further areas where we could perform better.</td>
<td>Good Corporate Citizenship Assessment was replaced by the Sustainable Development Assessment Tool. Results are set out in section 2.3</td>
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2.3 Sustainable Development Assessment Tool

The Sustainable Development Assessment Tool (SDAT) replaced the Good Corporate Citizenship Assessment in 2017, reducing the number of questions by over a third and aligning the modules against the UN Sustainable Development Goals. The Trust undertook an initial assessment in 2018 and again in 2019. Due to our early use of SDAT, in 2019 the Trust provided a best practice case study for a review of the assessment being undertaken by Nottingham Trent University, who also worked with the Sustainable Development Unit to develop SDAT.

Figure 1 shows our SDAT results for all ten modules, overall we scored 58%. Section 3 provides more information on all ten sections, including which areas we scored well or poorly on. It also shows the UN Sustainable Development Goals that we are supporting. We use the ten SDAT modules to provide guidance to what areas of sustainability we are working to; this is known as our ‘materiality’.

Figure 1: SDAT Results

2.4 UN Sustainable Development Goals

The Sustainability Plan 2017-18 referenced the UN Sustainable Development Goals (SDGs or the Goals) for the first time and last year’s plan included links identifying how we can support applicable SDG targets, selected from the 169 targets that sit below the 17 Goals. Following the alignment of the Goals within SDAT (see previous section), the Trust can easily report progress against the Goals. The assessment calculates our progress against the Goals and allows our performance to support the national healthcare picture collated by the Sustainable Development Unit.
In July 2019 the UK Government intends to make a National Voluntary Review\(^2\) to the United Nations, which will set out how the UK is working towards the Goals. The Review will highlight key Government policies and programmes that are contributing towards the Goals, but the UK Government also aim to showcase local projects and the wide range of activity going on across the UK.

The Trust made a submission to the review in January 2019, setting out how the Goals had been incorporated into our reporting and how we are supporting other organisations to consider using the Goals as a framework for sustainability reporting. The submission also included reference to the Knowledge Quarter Sustainability Network’s new Highlights Report.

The Knowledge Quarter Sustainability Network was formed in 2014 and continues to meet bi-annually, with regular attendance of 15-20 representatives of organisations from within the knowledge area of Liverpool. This includes hospitals, higher and further education organisations, cultural organisations and environmental charities.

During 2018, the Trust’s head of sustainability and the assistant environmental manager for Liverpool John Moores University developed a Highlights Report for the network. The report collates projects that have been led by or supported through the network, showcasing the benefits of collaboration.

Since producing the Highlights Report, its two authors have successfully submitted a case study for inclusion within the International Journal of Sustainability in Higher Education. The case study sets out an overview of the network and its key projects and outcomes.

In order to ensure that the Trust keeps improving its reporting of the Goals, in 2019 the Trust’s Sustainable Development Group agreed that key performance indicators should be developed to show progress against the SDG targets that are most applicable to the Trust.

3. Overview of Performance for 2018 - 19

3.1 Corporate Approach

<table>
<thead>
<tr>
<th>SDAT Performance</th>
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<tr>
<td><strong>Achieved 61.01%</strong></td>
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<tr>
<td>In 2018 we scored 49.06%</td>
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<tr>
<td>Of the 53 statements, we answered 30 Yes, 7 In Progress and 16 No.</td>
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<td>We continued to score well due to having a Sustainable Development Management Plan (SDMP), which covers areas such as legislative and policy drivers for sustainability within the NHS, and for providing comprehensive updates annually. This year we increased our score due to having a named Board sustainability lead, for including SMART targets within the sustainability plan and for engaging with local strategic partners prior to developing this plan.</td>
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<td>We dropped points due to a lack of sustainability champions and a lack of engagement in sustainability delivery with our local community and other stakeholders.</td>
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<table>
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<tr>
<th>UN Sustainable Development Goals</th>
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<tr>
<td>We are clearly contributing to Goal 9.</td>
</tr>
<tr>
<td>We are starting to contribute to Goals 1, 4, 7, 8, 12 and 13.</td>
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**Action for 2018-19**

**Review how to include input from members, staff, volunteers and stakeholders.**

**Action lead:** Head of sustainability with support from Communications Dept.

**Timescale:** Prior to next sustainability plan.

**Expected Outcome:** Appropriate communications presented to key stakeholders, in order to inform next year’s sustainability reporting.

**Update:** The Trust hosted a reporting workshop with local NHS trusts in January 2019 and discussed reporting in the January 2019 Sustainable Development Group meeting, which involved key stakeholders including Aintree hospital, Liverpool John Moores University and Laing O’Rourke.

**Action for 2019-20**

**Align sustainability reporting with Aintree University Hospitals NHS Foundation Trust prior to merger.**

**Action lead:** Head of sustainability and Aintree’s Sustainability and Energy Manager.

**Timescale:** Prior to next sustainability plan.

**Outcome:** Reporting reviewed and following similar format.
Case Study - The NHS as an Anchor Institution

In 2018, the Health Foundation\(^1\) initiated a programme to understand the positive impact that the NHS can have as large employers, purchasers and capital asset holders. The concept of anchor institutions offers a way to consider how NHS organisations can address adverse social economic and environmental factors that widen inequalities and ultimately contribute to poor health.

The work is being supported by the Democracy Collaborative and the Centre for Local Economic Strategies, who have worked with Preston and other localities to support the role of anchor institutions in local economic development. The Trust has been interviewed as part of this programme and the Trust's head of sustainability sits on the Health Foundation’s Expert Advisory Group. Results are expected to be published later in 2019, but reference to the role of the NHS as an anchor institution was included in the recent NHS Long Term Plan\(^2\), with a commitment from NHS England to work in partnership with the Health Foundation to identify good practice to be adopted across England.

At a local level, the Cheshire and Merseyside Integrated Care Partnership held an event in June 2018 to discuss maximising the economic and social value of Cheshire and Merseyside NHS organisations, which was attended by the Trust's medical director and head of sustainability. In the same week, the Trust attended a scoping meeting for a Liverpool City Region Wealth and Wellbeing Programme. This programme has now received support from Public Health England and is in progress. The programme has established health as a key issue in economic productivity in the region. Two events have been held (of six planned), engaging a wide range of stakeholders investigating how the health system and public sector can support good employment and improve health. The visual minutes from the Birkenhead meeting of the Wealth and Wellbeing programme are below.

2. https://www.longtermplan.nhs.uk/
### 3.2 Asset Management and Utilities

**SDAT Performance**

**Achieved 43.48%**
In 2018 we scored 37.68%

Of the 23 statements, we answered 9 Yes, 3 In Progress and 11 No.
The small increase in this section was due to stating that we do have clear responsibility for sustainable built assets and utility management.
Our current carbon target matches the wider NHS target, which was set by the SDU.
The new Royal is expected to support longer-term carbon targets, although it will now not be complete in time to meet the 2020 carbon target. Although we lost points due to a lack of sub-metering, this should also be addressed by the new Royal which has extensive sub-metering.
We can improve our score by improving energy advice to patients and staff, and by supporting community groups to use our sites, although there remains a lack of capacity for this currently.

**UN Sustainable Development Goals**

We are starting to contribute to Goals 6, 7 and 8.

**Action for 2018-19**

**Review the support that we can provide to staff and patients to help them to reduce their energy use and address fuel poverty.**

**Action lead:** Head of sustainability with support from environmental services manager and patient engagement manager.

**Timescale:** For winter 2018.

**Expected Outcome:** Communications prepared for staff regarding energy efficiency and guidance in place for staff to refer patients to fuel poverty support, when appropriate.

**Update:** Guidance has been added to the intranet, which is available for staff. Further work needs to be done to provide guidance to patients.

**Action for 2019-20**

**Identify existing guidance that can be shared with patients.**

**Action lead:** Head of sustainability with support from environmental services manager and patient engagement manager.

**Timescale:** For winter 2019.

**Outcome:** Guidance provided to support patients with fuel poverty advice.
Case Study - WARP it

Warp-it is an online resource reuse system that supports organisations to save money, through reduced waste disposal and purchasing costs. It allows members to search online for available items and provides a way for staff to find a new owner for their surplus kit or furniture. The Trust has used Warp-it since 2016 and has over 400 members of staff registered on the site.

In February 2019 there were two departmental clearances that led to major savings as members of staff claimed the un-needed items. Julia Jones from the Redevelopment Department was responsible for finding new homes for furniture and items that were not needed in the new Clinical Sterile Services Department. This included ten chairs, some desks and trolleys. This diverted over 400kg of waste from disposal, saved more than a tonne of carbon dioxide emissions and led to a financial savings of £2,368; these savings are made up from the averted disposal costs, in addition to the costs saved from departments not having to purchase new items.

In the same month, Jacqui Pirmohamed and Dr Chris Smith from the Clinical Research Network contacted Warp-it as they needed to dispose of desks, chairs and storage units. The Network was reducing the size of their office and the large desks would not fit into their newer space. The items were in very good condition and the majority of them had been claimed internally within a few days. The savings from these transfers totalled more than four tonnes of carbon dioxide emissions, 2,700kg of waste diverted from disposal and an impressive £9,770 in financial savings.

During this period there was an increase in staff signing up to use Warp-it and we received positive comments from staff about the ease of using the system. Warp-it also allows us to claim items from other organisations that have signed up and in 2019 a number of departments claimed twenty patient chairs from a hospital in Chesterfield, leading to further savings.
3.3 Travel and Logistics

**SDAT Performance**

**Achieved 64.58%**

Last year scored 47.92%

Of the 32 statements, we answered 19 Yes, 5 In Progress and 8 No. We increased our score in this section due to our use of the SDU’s Health Outcomes Travel Tool (HOTT). This has provided evidence of our contribution to improving local air quality. In addition, we included patient transport in our carbon footprint for the first time last year. We have supported staff with lower carbon travel options; Sustrans and Merseyrail hosted a staff engagement event in 2018 and we received funding to produce staff travel guidance through Merseytravel.

In 2018 we worked with the Energy Saving Trust and Liverpool City Council’s Public Health team to promote a city-wide NHS Green Travel Review. Unfortunately this did not progress, but we have recently been working with Aintree and Liverpool Women’s hospitals to review areas of travel that could be consolidated or delivered in partnership. In the SDAT assessment, we scored well for having an approved travel plan, a lead for sustainable travel, for having electric vehicle charging points at our hospitals and for having facilities to encourage active travel.

We could have scored higher if we had recent evidence of work with logistics and deliveries, although we have worked with NHS Supply Chain in the past looking at the carbon impacts of consolidated deliveries. This might be addressed by the recent review of NHS Supply Chain.

**UN Sustainable Development Goals**

We are starting to contribute to Goals 7, 11, 12, 13 and 17.

**Action for 2018-19**

**Review the Health Outcomes Travel Tool (HOTT).**

**Action lead:** Transport manager with support from head of sustainability.

**Timescale:** December 2018.

**Expected Outcome:** The data input in Part B of the HOTT tool will be complete and we will have reviewed the outputs.

**Update:** See the following case study for data.

**Action for 2019-20**

**Support work with Liverpool hospitals regarding travel consolidation.**

**Action lead:** Transport manager with support from head of sustainability.

**Timescale:** To be determined by Aintree project lead.

**Outcome:** Areas for travel collaboration identified and progressing.
Case Study - Travel and Logistics

As per the action agreed in last year’s sustainability plan, in 2018 the Trust reviewed the Health Outcomes Travel Tool (HOTT), which has been developed by the Sustainable Development Unit. HOTT helps NHS organisations measure the impact their travel has in environmental, financial and health terms.

The Trust used HOTT to evaluate the benefits of increased use of sustainable travel options by staff. Last year we reported that our 2017 staff travel survey showed a 5% increase in staff walking to work, a 8% increase in staff using the bus and a 12% decrease in those using a car (against the previous staff travel survey figures from 2013). This obviously has environmental and health benefits. HOTT enables us to enter the staff travel modes for both 2013 and 2017, in order to estimate what the benefits might be. HOTT calculated a reduction in nitrous oxide (NOx) and particulate matter, with a reduced economic cost to the local community through the health impacts of air pollution. In addition, there was a considerable economic benefit from the increased physical activity of people walking to work. HOTT can be used in future to identify impacts of changes to travel mileage and modes of transport, prior to implementing any large projects.

In January 2019 we received Sustainable Travel Information Packs that have been produced for both hospital sites. The packs were developed by the travel consultant, WSP, supported by the Liverpool City Region Combined Authority and funded by the Cycling and Walking to Work Fund, which is provided by the Department for Transport and administered by Merseytravel. The packs provide details of walking routes, cycle routes, bus services, rail connections and car sharing options and have been developed specifically for the Broadgreen hospital and Royal Liverpool University hospital sites.
### SDAT Performance

**Achieved 75.64%**

Last year we scored 52.56%

Of the 26 statements, we answered 19 Yes, 2 In Progress and 5 No.

We have traditionally scored well in Adaptation, due to having strong business continuity procedures and working well with local partners.

We increased our score in this section due to our continued work with the Local Resilience Forum. We held a major incident plan in June 2018 and work with the Local Resilience Forum to assess risks from weather events.

Our climate change adaptation training is complete and ready to be made available to staff. It has been shared with Manchester University NHS Foundation Trust which has, in turn, shared their climate change adaptation risk assessment. The Trust will continue this collaborative work to progress our preparedness for a changing climate and its impact on healthcare.

### UN Sustainable Development Goals

We are clearly contributing to Goal 17.

We are starting to contribute to Goals 3, 12 and 13.

### Action for 2018-19

**Collate the adaptive capacity within the Liverpool Knowledge Quarter (KQ).**

**Action lead:** Head of sustainability.

**Timescale:** October 2018 (second KQ Sustainability Network meeting).

**Expected Outcome:** Short report compiled which includes key KQ partners.

**Update:** The Knowledge Quarter Sustainability Network Highlights Report has been produced and collates best practice from across the area. Due to prioritising existing collaboration and projects, it was decided not to include a section on adaptation.

### Action for 2019-20

**Work with Manchester and Aintree hospitals on adaptation risk assessment.**

**Action lead:** Head of sustainability.

**Timescale:** To support a merged sustainability strategy with Aintree.

**Outcome:** A completed climate change adaptation risk assessment.
Case Study - Staff Adaptation Training

Our newly created Adaptation training for staff provides an overview of the impacts of changing climate and indicates some of the areas that the Trust can work towards to address this.

Covers predicted changes:
- Warmer, drier summers
- Milder, wetter winters
- Increase in extreme weather events, including heavy rainfall, droughts and heat waves
- Lists that climate change can negatively impact upon:
  - Patients, staff, buildings and energy supply, transport, supply chain and deliveries.

Patients at risk include the elderly, those with chronic and severe illnesses and those unable to adapt their behaviour or environment, including some people with disabilities and the homeless.

Public Health England (PHE) Heatwave Plan for England
Climate change adaptation is the adjustment in economic, social or natural systems in response to actual or expected climatic change, to limit harmful consequences and exploit beneficial opportunities.

What is adaptation?

Adaptation means responding to both the projected and current impacts of climate change and adverse weather events. Adaptation for the health and care system is two-fold.

1. Climate change could negatively impact the physical and mental health and wellbeing of the UK population. The health and care system needs to be prepared for different volumes and patterns of demand.
2. Climate change could impact the operational delivery of the health and care system. The system infrastructure (e.g. buildings, communications, emergency service vehicles, models of care) and supply chain (e.g. fuel, food, care supplies) need to be prepared for and resilient to weather events and other crises.

The main causes of illness and death during a heatwave are respiratory and cardiovascular diseases. Additionally, there are specific heat-related illnesses including:

**Heat exhaustion**
- Nausea or irritability
- Dizziness
- Muscle cramps or weakness
- Feeling faint
- Headache
- Fatigue
- Heavy sweating
- High body temperature

**Heatstroke**
- Hot, dry skin or profuse sweating
- Confusion
- Loss of consciousness
- Seizures
- Very high body temperature

Excessive sweating can deplete fluid and salts.

When blood temperature rises, the body stimulates sweat glands, dilates blood vessels and increases the heart rate.

Heat cramps - caused by dehydration and loss of electrolytes, often following exercise.

Increased blood flow to the skin cools the body by radiating heat, leading to heat rash (small, red itchy papules).

Heat odema - mainly in the ankles, due to vasodilation and retention of fluid.

**Health effects of heat**

From Adaptation to Climate Change Planning Guidance for Health and Social Care organisations by SDU 2014.
3.5 Capital Projects

### SDAT Performance

**Achieved 82.54%**
In 2018 we scored 49.21%

Of the 21 statements, we answered 17 Yes, 1 In Progress and 3 No. The score for this section increased yes answers from 9 to 17. This is informed around the work for the new Royal, but also the recent development of a new Clinical Sterile Services Department at Broadgreen and the Life Sciences Accelerator on the Royal site. New positive answers include designing buildings more flexibly, with green space and resource efficiency embedded within, and also including soft landings with commissioning and ensuring staff are successfully inducted to new buildings, to ensure they understand how our new buildings are designed to support energy efficiency.

With Laing O’Rourke confirmed as the contractor chosen to complete the new Royal construction programme, we will be working with them to deliver a social sustainability programme and review the statements in this section again next year once work has started.

### UN Sustainable Development Goals

We are clearly contributing to Goals 7, 13 and 15.
We are starting to contribute to Goals 12 and 17.

### Action for 2018-19

**Review the sustainability aspects of post-Occupancy Evaluation (POE) required for the new Royal, to ensure we will meet requirements and can learn from the project.**

- **Action lead:** Head of sustainability.
- **Timescale:** Dependent on completion of new hospital.
- **Expected Outcome:** Plan developed to monitor the sustainability aspects of the new Royal.
- **Update:** Ongoing confirmation from DHSC that POE still required.

### Action for 2019-20

**Work with new Royal contractor to deliver successful social sustainability programme.**

- **Action lead:** Head of sustainability.
- **Timescale:** Social outcomes indicators expected to be approved shortly after Laing O’Rourke provide a schedule for the project.
- **Outcome:** Report on the start at the programme in the next sustainability plan.
Case Study - Working in partnership with Liverpool City Council

In 2018, the Trust celebrated the development of its new Central Sterile Services Department (CSSD), located on the Broadgreen Hospital site.

The CSSD sterilises reusable surgical instruments in readiness for further procedures. The department processes approximately 157,000 trays of instruments, including power tools and rigid endoscopes, and 199,000 single instruments, including 50,000 dental instruments.

The development was handed over on time from contractors, Willmott Dixon, to the Trust before Christmas. After an opening tour in December 2018, the facility became completely operational and was manned by trained staff from February 2019.

On the tour, guests were walked through the process by decontamination manager, Lynn Brooks, and project engineering manager, Peter Leadbetter. They even had the opportunity to visit the nerve centre of the facility, the plant room. Water is provided for final rinse of instruments after washing and steam raised for sterilization of instruments via a reverse osmosis (ROO) plant. This provides pyrogen free water in order to ensure that there is not external contamination transferred to instruments from the potable water supply.

The previous CSSD was located on the lower ground floor of the Royal and was becoming increasingly unfit for purpose. This is a stark contrast to the new CSSD, a state of the art facility valued at approximately £6.3 million, which has been funded by Liverpool City Council. The Trust has then procured £1.5 million worth of equipment, much of which has been tailor-made for the building due to its size. After welcoming the VIP guests, the Trust’s former chief executive, Aidan Kehoe, thanked the council and contractors for their role in the development:

“I want to thank Liverpool City Council for their support in funding this new multi-million pound facility.

We are the only Liverpool Trust that continues to have its own in-house sterile services department, as opposed to outsourcing the service externally.”
3.6 Green Space and Biodiversity

SDAT Performance

**Achieved 17.39%**
Last year we scored 7.25%

Of the 23 statements, we answered 2 Yes, 6 In Progress and 15 No. This section continues to score very lowly, with only one additional ‘yes’ answer and an increase of ‘in progress’ responses. We answered yes to statements that highlighted the benefits of asking catering contractors to exceed the requirements set out in the Government Buying Standards and because we have actions to mitigate environmental impacts to biodiversity, including bunding for fuel stores. We answered In Progress for working closely with local partners to promote green space and for engaging staff and patients in food growing, in part due to our project to develop a Therapies Garden at Broadgreen Hospital. In addition to progress on the Therapies Garden, we have also liaised with NHS Forest about a proposed project to improve green space across a number of Liverpool hospitals.

UN Sustainable Development Goals

We are starting to contribute towards Goal 14.

**Action for 2018-19**

**Produce a biodiversity strategy for the Trust.**
**Action lead:** Head of sustainability.
**Timescale:** December 2018.
**Expected Outcome:** Strategy drafted in accordance with the details set out above.
**Update:** The University of Liverpool provides Masters students for work-based projects. In late 2018 the Trust requested a student to produce a biodiversity strategy for Broadgreen hospital, including an audit of current biodiversity and engagement with patients, staff and visitors to understand how they think we should be using our green space. We await a student to become available, so this action continues to be live.

**Action for 2019-20**

**Review first summer's use of Therapies Garden.**
**Action lead:** Ward 5 Therapies leads and head of sustainability.
**Timescale:** September 2019.
**Outcome:** Arrange meeting with users of the Therapies Garden to agree future plans.
Case Study - Broadgreen Therapies Garden

Following the successful £4,000 Tesco Bags of Help funding in late 2017, the project to develop a therapies garden at Broadgreen hospital secured a further £4,000 from the Trust’s charitable funds.

Work has now started to transform an unused lawn into an area that will be used by patients from Broadgreen’s Complex Rehabilitation ward and by Macmillan Cancer Support.

In addition to working with Macmillan, we received support from contractors. Three members of staff from Veolia used their volunteering time to construct the cabin and Avrenim staff helped to install the glass, finish the roof and paint the cabin. Veolia have also offered further support and therapies staff from Complex Rehabilitation are working with them and to ensure the space develops into an excellent facility for patients.

The idea behind the garden was promotion of patient’s health and wellbeing.

Many of our patients remain in hospital for long periods (up to 16 weeks) which can have a negative impact on mood and overall mental health. Having an outside therapeutic space enables patients to have a ‘break away’ from the ward whilst continuing to engage in their rehabilitation programme, and allows space/time for active relaxation.

The garden space enables patients to engage in mindfulness away from the clinical ward and spend valuable time with family and therapists in a safe space.

Engaging in garden based activities reintroduces a sense of normality into patient’s daily routine. Patients having an active role in maintaining the flowers and fruit trees also provide an additional focus outside of day to day therapy with a sense of purpose, responsibility and accomplishment. It provides something from which patients can have individual and collective ownership.

The gardening activities can be graded to meet patient’s different physical and cognitive levels to ensure that all patients can make use of the space. Gardening not only promotes mental health and well-being but also encourages low-moderate physical activity, which is important in progressing towards goals of becoming more independent in everyday tasks.

Spending time outdoors in the fresh air and working as a team to get tasks done can also help the development of social skills / confidence and social inclusion being outside of the hospital again, which some patients can struggle with following a long period of stay. Having scheduled groups / time spent in the garden will also help patients re-introduce structure and routine into their day.
Patients have already taken an active role in painting the inside of the cabin in preparation for artwork and decorating plant pots to place alongside the cabin ready for planting bulbs in the new year. This has been well received with lots of positive feedback so far. From a staff perspective, it widens the scope for treatment. The team plans to facilitate groups in the garden area such as mindfulness, relaxation and yoga, as well as horticulture based groups.

The funds have paid for a cabin and patio area, plus planters, fruit trees and a table and chairs. A plan for the garden is being developed, which will allow further targeted funding bids in future.
3.7 Sustainable Care Models

SDAT Performance

**Achieved 62.67%**
In 2018 we scored 54.67%

Of the 26 statements, we answered 15 Yes, 2 In Progress and 8 No. In this section, we also answered N/A to one statement; this was in regards to using population needs assessment to improve local systems of care.

The small increase in this section is due to answering two more statements ‘yes’. This was that we now have a Board level lead on sustainable care models and that the Sustainability Impact Assessment has been reviewed, which will support sustainable use of resources as part of the decision criteria for care models.

We didn’t score for quantifying the direct financial, wider economic, environmental or social co-benefits of our care models. This is something that recent projects may be able to deliver.

UN Sustainable Development Goals

We are clearly contributing to Goal 16.
We are starting to contribute to Goals 3, 4, 10 and 12.

Action for 2018-19

Review existing practice of quantifying sustainability benefits of new care models.

**Action lead:** Head of Sustainability.

**Timescale:** December 2018.

**Expected Outcome:** Case study of wider NHS work reviewed with operational director of RD&I.

**Update:** Two requests were put to the Northern Sustainability and Health Network and the SDU were also contacted for details of projects that have fully reviewed benefits from new models of care. No responses were received, although some recent projects within the Trust may identify some of the benefits stated above.

Action for 2019-20

Ensure that models of care are included within UN Sustainable Development Goals indicators.

**Action lead:** Head of Sustainability.

**Timescale:** When indicators are developed for the Goals.

**Outcome:** At least two indicators developed relate specifically to care.
The Bluecoat Display Centre pilot hospital artist residency project was developed in 2015, with funding from an Arts Council England Grants for the Arts award and financial contributions from hospital trusts, to offer artist in residence projects based on acute wards in Liverpool hospitals. The selected artists developed bespoke craft activity sessions for patients from NHS priority areas including stroke rehabilitation and patients living with dementia.

After further Arts Council England funding and a contribution from the Trust, residencies were further developed in 2017. At the Royal elderly patients living with dementia are from a variety of backgrounds, many of whom have not engaged in any arts activity since they were children. At Broadgreen, many patients on the stroke rehabilitation and transitional wards have overcome manual dexterity and fine motor skill issues. Over the two 2017 residency projects four artists engaged with over 238 patients.

The artists visited the wards for short, 2-hour, session twice a week over eight weeks. For each session the artist was supported by a member of Bluecoat Display Centre core staff to support and sensitively evaluate and record each session alongside student nurses who attended a couple of sessions.

Residencies have resulted in the artists commissioning work to be displayed within the Trust and in 2018 art by Ruth ball was installed at the Royal, which was informed by Ruth’s time with patients living with dementia. The video below explains more about Ruth’s work:
In 2018, further funding was received from the Foyle Foundation and the Trust agreed to provide charitable funds to deliver two more artists residency projects.

Christine Toh completed a ten-week residency at the Royal in early 2019, working across wards with the support of the Trust’s dementia team and evaluators from the Bluecoat Display. A further residency had also been funded for Broadgreen with patients on the stroke rehabilitation and transitional wards.

Christine also proposed that patients “donate” some of the art they have produced, which will then be commissioned into a final artwork. This allows patients to directly contribute to the artwork.

The benefit of these programmes is in the engagement and therapeutic support for the patients and not the commissioning of a final artwork, which is often done by the artist, informed by patients but without hands-on input from them.
The Trust recently received more than £1 million for the first pancreatitis study in more than forty years. The research is being led by Professor Robert Sutton and involves identified patients being offered anti-inflammatories if they present at Accident & Emergency with specific symptoms. These are the first clinical trials of this type of treatment in the world. Initially the trials were planned to involve a RD&I nurse tracking applicable patients through A&E, waiting to receive their test results and then contacting staff. In order for the trial to take place, patients have to have access to the treatment within twelve hours of presenting at A&E.

Following a discussion between the lead RD&I nurse, Fran Westwell, lead research nurse, Lorna Fleming, and IT project manager, Greg Walker, it was proposed that Medxnote could be a suitable tool to support this process. Medxnote note had already been purchased and was supporting the Trust's e-sepsis programme, which has since won awards.

Greg worked with Fran, Lorna and the RD&I Nursing team to identify the systems and criteria required to flag applicable patients. Based on the clinical criteria proposed by the RD&I team, Steve Freckelton and his team of IT developers were able to build an application to send messages to the Medxnote platform once a potential candidate had been detected. Medxnote now identifies patients that have reached the criteria points and messages RD&I nurses, so that they can contact clinical staff directly. The use of Medxnote means that RD&I staff no longer have to monitor a number of systems or worry about missing patients, although they still have access to these systems if required.

The patient trials are due to start in 2019, but the Medxnote system has been running successfully since December 2018 and is identifying on average two patients a week suitable for the trials.

The use of this innovative technology will enable RD&I to identify patients much more quickly, meaning that more patients will be treated within the twelve-hour limit. This obviously increases the number of patients with access to this leading-edge treatment, delivering better outcomes for our patients. In addition, enhancing the number of patients taking part in the trials could support the Trust in future research funding bids, leading to further benefits for our patients. This also meets one of the Trust's strategic themes, which is to achieve international recognition for our research and innovation, bringing new therapies from the bench to the bedside.

Working with Medxnote has enabled the Trust to work with an innovative small business, which is currently working with a handful of hospitals in the UK and Ireland.
3.8 Our People

**SDAT Performance**

**Achieved 66.67%**
Last year we scored 62.37%

Of the 31 statements, we answered 20 Yes, 2 In Progress and 9 No.
We increased our score this year due to increasing work to make our site smoke free and starting a programme to support recruitment and retention. We now include modern slavery requirements within all tenders and all Purchasing staff have completed our internal sustainable procurement and ethical procurement training packages. However we still have a lack of a formal engagement programme for staff. A lack of resource (both people and financial) has meant that this still has not been successfully rolled out.

**UN Sustainable Development Goals**

We are clearly contributing to Goals 2 and 17.
We are starting to contribute to Goals 3, 5, 8, 9 and 16.

**Action for 2018-19**

**Review the Sustainable Development Communications Plan.**

**Action lead:** Head of Sustainability.

**Timescale:** December 2018.

**Expected Outcome:** Communications Plan has been updated and further opportunities to engage with staff and other local stakeholders have been discussed at Sustainable Development Group.

**Update:** The reviewed Communications Plan has been agreed at the Sustainable Development Group.

**Action for 2019-20**

**Ensure that workforce is included within UN Sustainable Development Goals indicators.**

**Action lead:** Head of OD and learning and equality and diversity manager, supported by head of sustainability.

**Timescale:** When indicators are developed for the Goals.

**Outcome:** Indicators developed relate specifically to our people, including workforce engagement, employment support and equality data.
Case Study - Overview of Employment Engagement.

As an organisation, we work hard to ensure that we offer the widest choice of opportunities to the local community. Examples of some of the work we are doing are shown below:

**Widening Participation in conjunction with Liverpool Clinical Laboratories**

This traineeship prepares applicants from less advantaged backgrounds for entry into healthcare scientist support roles. It enables participants to gain the best learning experience possible and develop their confidence and skills in order to apply for jobs.

The programme consists of a thirteen-week course delivered in-house at Liverpool Clinical Laboratories. Five weeks of taught sessions are delivered by Wirral Metropolitan College. Participants also undertake eight weeks of work experience delivered within six different areas in the pathology departments of the Laboratories.

The programme targets young people from Black, Asian and Chinese communities alongside young people who are first generation to consider higher education, from low socio-economic groups, attending schools of low progression and those living in low-participation neighbourhoods. Participants are identified by Liverpool in Work, job centres, schools, colleges and community groups with which the team work closely. Potential candidates are interviewed enabling the team to assess their interest in science. Those who are suitable but who have not attained the standard required for maths and English receive extra tuition in these subjects.

If Healthcare Science Assistant posts become vacant whilst the trainees are undertaking the traineeship, participants are guaranteed an interview. Those who are unsuccessful at interview can be placed on our staff bank until further vacancies or opportunities become available. Some traineeship learners have continued in their career pathway and are currently undertaking a science apprenticeship in the Trust.

The Trust has expanded the traineeship and pre-employment programmes with placements in health care assistant's roles, administration and security. We hope to continue and expand areas within the Trust to support unemployed people into vacancies in the Trust. The aim is to create a talent pipeline and progress staff throughout their careers.

**Widening Participation in conjunction with Liverpool Life Sciences UTC**

We also run a work exposure programme for young people from the Liverpool Life Sciences University Technical College (UTC). Over 300 young people have attended the programme, which includes professional training, shadowing, and opportunities for reflection. The work was recognised by OFSTED, who noted that students are exceptionally well prepared for their future careers.
Students attend speaker programmes and seminar afternoons, clinical education sessions, visits, taster sessions and graduation ceremonies. It has supported them to create standout applications to university, apprenticeship and employment opportunities in the sector, creating a pipeline of talent for the future workforce.

A significant number of students from the programme have been successfully accepted onto university courses in medicine, nursing, midwifery, physiotherapy and radiotherapy. In addition, the UTC has had no students become Not in Education, Employment or Training (NEET) since the programme started.

A significant proportion of students at the Liverpool Life Sciences UTC fit the criteria for widening participation through their socio-economic background or being the first generation to access a university degree programme. Over 50% of the students qualify for free school meals. A number of the students that have been supported personally by the team are looked after children. This investment of time and training is helping to change the life chances of these students, their families and the local communities in which they live.

Feedback from the students and staff has seen the programme develop to suit the different careers students are keen to progress into, allowing diversification between medical and nursing placements. The Trust now offers placements that allow more time for direct observation and reflection, supporting students to be more considered practitioners.

They have also introduced a new specific placement programme to allow assessment of the Care Certificate. This has enabled a number of students to successfully complete the qualification and to move into paid part-time and seasonal health care assistant roles within the hospital. This is a trailblazer for how schools and public sector organisations can work together successfully to improve recruitment and promote careers within the NHS. This work exposure programme is now leading the way in enabling young people at school to access careers in healthcare. It is being promoted and piloted in a number of hospital trusts across the North West.

**Cadet programme**

We have continued to develop the Cadet Programme, in partnership with Liverpool Life Sciences University Technical College (UTC). The programme aims to provide a route into healthcare careers, by enabling participants to gain valuable work experience and recognised qualifications over a 2 year period.

The Cadet programmes are employer ‘demand-led’ which means that their design and content is based on current recruitment requirements of healthcare employers. This results in a high number of potential recruits in areas where there are skills shortages, ensuring that the Trust has the skilled and professional workforce for the future.
We currently have 12 students who are studying health and social care in the UTC undertaking the cadet programme. Following Trust induction and the care certificate programme, the students have now commenced on their one day a week clinical placements in different wards within the Trust. The students are supervised and are on placement in a Health Care Assistant role until July 2019.

**Short Programmes**

Taste of the NHS: A week long programme with interactive classroom sessions for participants aged 14 - 18. This programme runs three times a year and takes 25 participants for each cohort.

Sixth form introduction to medicine: A two day programme, available for sixth form students (aged 16-19 years old) aimed at aspiring young people who have the drive and passion for a career in medicine. The programme comprises of one day informal presentations from medical students and doctors in the Trust and a shadowing experience in a clinical setting on the second day. We take 50 participants a year onto this programme.

Individual observational work placements: We also offer general observational work placements - ranging from one day to a week, for school children over the age of 16. We have had 299 people take up this opportunity over the past 12 months.

Discovering Health Day: Staff from the Trust have been involved in a Merseyside Collaborative Outreach Programme, aimed at young people from disadvantaged backgrounds to help give them an insight into the NHS and career opportunities. 50 young people visited the Trust and followed a patient journey scenario. This involved a visit to the Trusts theatres, venepuncture session, clinical laboratories and an understanding of A&E assessments and investigations.

Observational Trips: The Trust have worked in partnership with the University of Liverpool and hosted a number of oversees student nurses, who have come to observe how work is carried out in the Trust. This year we have supported two cohorts of Korean students.

Careers Fairs: The Trust attends local schools and colleges to inform students and their parents about the range of jobs available within the NHS. We encourage students to participate in work experience shadowing to explore these opportunities further.

Aspiring Careers Day: We are experiencing more young people wishing to understand roles within the NHS. Therefore we have planned various career events to be held in the Trust. These are aspiring medics, nurses, scientists, therapists, dental and pharmacists. Information has been sent out to local schools around the Royal and Broadgreen Hospitals to book onto a place.
Case Study - Overview of Health and Wellbeing

The Trust offers a range of activity and support to improve the health and wellbeing of staff and improve patient outcomes and experience. The range of support available in this area was recognised at the Liverpool and Sefton Chamber of Commerce Workplace Wellbeing Award for 2018.

All work undertaken is within the framework of the Trust’s Sickness Absence Reduction: Making a Difference Plan and is reported through the Trust’s Resource and Performance, Clinical Governance and Workforce committees.

There is an established team managing sickness absence as part of the Business HR team. Action taken includes:

- Improved management reports highlighting sickness absence and stress levels
- Auditing departmental compliance for good practice including Return to Work Interviews and First Day Referral letters
- Using trend analysis and identifying areas of good practice
- Training for managers to ensure that the Managing Sickness Absence Policy is followed.

Directorates with high levels of stress-related sickness absence are monitored closely and Business HR has an on-going programme ensuring good practice is followed. All areas should also be developing their individual sickness absence improvement plans in conjunction with managers and divisional leads with support from Business HR.

The process for completing individual Stress Risk Assessments is highlighted through the Health and Wellbeing Update. Individual Stress Risk Assessments remain a key component in identifying stressors in the workplace. Managers and staff are reminded that all directorates should have a trained risk assessor in their area. Monthly training sessions or refresher training is available. If a person in the same department is not appropriate managers should approach an assessor from another department or approach Business HR.

Support Available to Managers and Staff to Improve Attendance.

The Trust has taken a holistic approach to support staff to ensure work becomes a positive experience and improves wellbeing. We aim to improve the health and wellbeing of individual staff and provide a supporting network which includes:

- 24/7 Staff Support Service including access to counselling at seven sites
- Occupational Health Service
- Staff Therapy Service including quick access to Physiotherapy and Occupational Therapy
- Individual case management through the Business HR team.
Over the past year we have promoted our ‘Let’s Talk About Mental Health’ initiative. More than 70 staff have attended the ‘Creating a Mentally Healthy Workplace’ training. We also provide regular ‘Managing Your Own Personal Stress’ courses and these have benefited a further 250 staff. Other interventions to support this include:

- Stress Training for Line Managers
- I Resilience tool from Robertson Cooper (on-line)
- On-line Mental Health Awareness modules (including Making Adjustments, Having Difficult Conversations).

The range of support and training available is highlighted to staff on a regular basis and through the Health and Wellbeing Update. We also have a system to encourage managers to ensure all staff who are absent from work are sent a First Day Letter which highlights support available. All absences should be followed by a documented return to work interview. These initiatives are regularly audited within the Business HR team and form part of the Trust Sickness Absence Plan.

Training is one aspect of a comprehensive range of Health and Wellbeing activity that has been devised to provide support for staff, tackle long-term conditions and reduce stressors. The range and quality of this work has been recognised nationally by achieving Gold in the NHS England Physical Activity@Work Awards. Health and Wellbeing Support for staff includes:

- A range of physical activity sessions for staff on both sites
- Occasional access to weight management advice from Trust dieticians
- Participation in local and national initiatives such as the Liverpool City Council ‘Fit For Me’ and the NHS North West Games.
- Our on-going ‘Let’s Talk About Mental Health’ initiative continues to encourage greater openness about mental health issues in the organisation
- Promotional activity such as Love Your Liver, Skin Cancer Awareness, Checking Blood Pressure, Managing the Menopause and supporting staff with gambling issues.

The Health and Wellbeing team are also working to ensure that staff have opportunities to undertake programmes such as Mindfulness. We are currently developing Schwartz Rounds to promote reflective learning and wellbeing.

The culmination of this work can be seen in a number of ways:

- Reduced levels of sickness absence
- Increased levels of self-referral to support services from staff prior to incurring sickness.
- Higher levels of participation in Mental Health training.
3.9 Sustainable Use of Resources

### SDAT Performance

<table>
<thead>
<tr>
<th>Achieved 50.00%</th>
</tr>
</thead>
<tbody>
<tr>
<td>In 2018 we scored 38.89%</td>
</tr>
</tbody>
</table>

Of the 24 statements, we answered 11 Yes, 3 In Progress and 10 No.

We scored additionally in this section due to a project by Purchasing to visit all 70 locations in the Trust to review stock, restrict the number of lines stocked and to remove unwanted lines. Both ISS and Avrenim (our soft and hard facilities management providers) continue to maintain environmental management systems to ISO 14001 standards.

### UN Sustainable Development Goals

We are starting to contribute to Goals 2, 6, 11 and 12.

### Action for 2018-19

**Review the support that we can provide to staff to help them to increase the sustainable use of resources.**

**Action lead:** Head of sustainability with support from environmental services manager.

**Timescale:** For winter 2018.

**Expected Outcome:** Communications prepared for staff regarding the benefits of sustainable products and services.

**Update:** Sustainable procurement training has been produced and completed by all Purchasing staff. In addition, Pharmacy and Critical Care have both started to look at single-use plastics. Additional information has been added to the intranet to provide guidance to staff.

### Action for 2019-20

**Review proposed hospital food standards internally.**

**Action lead:** Head of Sustainability.

**Timescale:** Prior to launch of the new standards.

**Outcome:** Meeting held with representatives from Nutrition Steering Group, Health and Wellbeing Group and Sustainable Development Group.
Case Study - Sustainable Food

The Trust was referenced as a best practice case study in the first Hospital Food Standards Panel report on healthcare catering in 2014; this was for our work to develop a call order service for patient meals. In 2015 we approved our first Food and Drink Strategy, which set out how we would work towards the standards referenced in the Panel report. Between 2015 and 2017, the Trust provided three case studies to Defra, following the inclusion of the Government’s balanced scorecard for public food procurement within the Trust’s outsourced catering contract. The Trust was the only NHS organisation referenced in the January 2017 update on the Panel report, and we approved our second Food and Drink Strategy in September 2017, which included a Healthy Weight Declaration that had been developed with other local trusts and the City Council’s Public Health team.

This early work has continued to mature and the Trust has been involved in two national projects over the last twelve months.

Plan for Public Procurement: Balanced Scorecard

The Trust’s head of sustainability has been a member of the Government Food Procurement Plan Implementation Taskforce for a number of years. Throughout 2018, the Taskforce undertook a number of interviews and online consultations. The research will provide evidence of barriers and opportunities faced by the public sector and food suppliers / producers in using the Balanced Scorecard as a reporting tool. The Trust’s experience of including the scorecard within our catering tender provided useful input to this work. The project was paused at the end of 2018, as the Government shifted resources towards EU Exit planning.
In 2018, the Trust’s head of sustainability was invited to join a group set up by NHS Improvement to review the Hospital Food Standards guidance. Sub-groups are drafting new guidance and updating the existing standards. The Trust is represented on the Procurement, Sustainability and Food Waste sub-group and has drafted guidance on sustainability reporting and supported the sections on wider sustainability and the use of the Balanced Scorecard. In April 2019, the Trust hosted a focus group to find out what was important to patients, carers and relatives in relation to hospital food and the Trust will host the full NHS improvement group in August 2019.

The updated guidance is expected to be completed later in 2019 and the Trust plans to hold a staff focus group, which will get feedback from members of the three Trust groups who currently manage the Food and Drink Strategy; Nutrition Steering Group, Health and Wellbeing Group and the Sustainable Development Group.
### SDAT Performance

**Achieved 47.75%**  
Last year we scored 49.55%

Of the 37 statements, we answered 17 Yes, 2 In Progress and 18 No.  
A number of the statements within this section are duplicated from other sections, including Corporate Approach, Transport and Logistics, Asset Management and Utilities and Capital Planning. The score decreased as one of the duplicated statements should have read ‘In Progress’ rather than ‘Yes’. Last year was the first time we had input details into SDAT and it was not possible to view answers in other sections once they had been input, leading to this confusion.  
We can improve our score if we work with local partners to progress carbon reduction and engage staff and patients to reduce their own emissions; this duplicates the action proposed in the Asset Management and Utilities section.

### UN Sustainable Development Goals

We are clearly contributing to Goal 6.  
We are starting to contribute to Goals 7 and 8

### Action for 2018-19

**Review carbon intensive products and services and identify potential interventions.**  
**Action lead:** Head of sustainability with support from environmental services manager and head of purchasing.  
**Timescale:** December 2018.  
**Expected Outcome:** Initial survey complete and key suppliers have been engaged.  
**Update:** This work has not been undertaken. Purchasing Department has a new lead, so this action can be discussed going forward.

### Action for 2019-20

**Review Aintree Hospital’s carbon reporting to ensure alignment.**  
**Action lead:** Environmental services manager, with support of head of sustainability and Aintree’s sustainability and energy manager.  
**Timescale:** March 2020.  
**Outcome:** Both trusts prepared to produce carbon data in same format for 2019-20 reporting.
Case Study - Carbon emissions

We report our carbon data a year behind, as the full information for 2018-19 is not collated before our annual report sign-off. Our total carbon footprint for 2017-18 has decreased slightly on the previous year. Scope 1 (gas and oil) and 2 (electricity and imported heat) emissions have remained relatively stable, although our electricity exports have decreased which has resulted in smaller negative scope 2 emissions. It is expected that the improved energy performance of the new Royal hospital will contribute towards meeting our energy targets in the future.

### CO2 Emissions (tCO2e)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Scope 1 (gas and oil use)</th>
<th>Scope 2 (electricity and imported heat)</th>
<th>Scope 3 (inc procurement, travel, waste and water)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012/13</td>
<td>84,936</td>
<td>34,505</td>
<td>-7,758</td>
<td>58,189</td>
</tr>
<tr>
<td>2013/14</td>
<td>87,389</td>
<td>33,528</td>
<td>-7,027</td>
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<tr>
<td>2014/15</td>
<td>84,526</td>
<td>31,991</td>
<td>-6,927</td>
<td>59,461</td>
</tr>
<tr>
<td>2015/16</td>
<td>97,457</td>
<td>33,697</td>
<td>-7,644</td>
<td>71,403</td>
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<tr>
<td>2016/17</td>
<td>113,734</td>
<td>33,825</td>
<td>-7,625</td>
<td>87,534</td>
</tr>
<tr>
<td>2017/18</td>
<td>110,721</td>
<td>34,517</td>
<td>-6,662</td>
<td>82,866</td>
</tr>
</tbody>
</table>

Scope 3 emissions have decreased. Procurement emissions are calculated by the Sustainable Development Unit using our non-pay and capital spend. Other scope 3 emissions are calculated by the Sustainable Development Unit using data that we provide. Patient and visitor travel is estimated from our patient contacts and commuting is calculated by using an average commute for the NHS and our staff numbers. Emissions from water use and the waste that we produce are calculated using the data that we report through the Estates Return Information Collection annually. 2016/17 and 2017/18 scope 3 emissions are larger than in previous years, as we are now able to include an estimate of emissions from patient and visitor travel.

### CO2 Emissions (tCO2e)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Procurement</th>
<th>Commissioning</th>
<th>Patient and visitor travel</th>
<th>Commuting</th>
<th>Waste</th>
<th>Water</th>
<th>Energy - transmission and well to tank</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012/13</td>
<td>58,189</td>
<td>51,577</td>
<td>1,536</td>
<td>0</td>
<td>2,079</td>
<td>190</td>
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<tr>
<td>2013/14</td>
<td>60,887</td>
<td>53,147</td>
<td>1,586</td>
<td>0</td>
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<td>226</td>
<td>213</td>
<td>3,626</td>
</tr>
<tr>
<td>2014/15</td>
<td>59,461</td>
<td>52,300</td>
<td>1,686</td>
<td>0</td>
<td>2,157</td>
<td>8</td>
<td>221</td>
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<tr>
<td>2015/16</td>
<td>71,403</td>
<td>64,025</td>
<td>2,033</td>
<td>0</td>
<td>2,044</td>
<td>0</td>
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<td>2016/17</td>
<td>87,534</td>
<td>67,568</td>
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<td>0</td>
<td>2,205</td>
<td>57</td>
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<tr>
<td>2017/18</td>
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<td>1,891</td>
<td>0</td>
<td>2,173</td>
<td>56</td>
<td>254</td>
<td>3,738</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Corporate Approach</th>
<th>Align sustainability reporting with Aintree University Hospitals NHS Foundation Trust prior to merger.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset Management and Utilities</td>
<td>Identify existing sustainability and energy guidance that can be shared with patients.</td>
</tr>
<tr>
<td>Travel and Logistics</td>
<td>Support work with Liverpool hospitals regarding travel consolidation.</td>
</tr>
<tr>
<td>Adaptation</td>
<td>Work with Manchester and Aintree hospitals on adaptation risk assessment.</td>
</tr>
<tr>
<td>Capital Projects</td>
<td>Work with new Royal contractor to deliver successful social sustainability programme. <strong>Carried forward:</strong> Review the sustainability aspects of post-occupancy evaluation required for the new Royal, to ensure we will meet requirements and can learn from the project.</td>
</tr>
<tr>
<td>Green Space and Biodiversity</td>
<td>Review first summer’s use of Therapies Garden. <strong>Carried forward:</strong> Produce a biodiversity strategy for the Trust.</td>
</tr>
<tr>
<td>Sustainable Care Models</td>
<td>Ensure that models of care are included within UN Sustainable Development Goals indicators.</td>
</tr>
<tr>
<td>Our People</td>
<td>Ensure that workforce is included within UN Sustainable Development Goals indicators.</td>
</tr>
<tr>
<td>Sustainable Use of Resources</td>
<td>Review proposed hospital food standards internally.</td>
</tr>
<tr>
<td>Carbon / GHGs</td>
<td>Review Aintree Hospital’s carbon reporting to ensure alignment. <strong>Carried forward:</strong> Review carbon intensive products and services and identify potential interventions.</td>
</tr>
</tbody>
</table>
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