

## OUR PLEDGE

# To reduce our carbon emissions

### Why is this important?

The Climate Change Act 2008 (2050 Target Amendment) Order 2019 commits the UK government to reduce carbon emissions by at least 100% by 2050, effectively establishing a net zero carbon emissions position by that date.

**100%** ↓ ↓ ↓ ↓ ↓  
by 2050 ↓ ↓ ↓ ↓ ↓

The health and care system in England is responsible for approximately 5% of the country's carbon footprint and therefore in January 2020, the NHS launched its 'For a Greener NHS' campaign to accelerate efforts to tackle climate change with a series of co-ordinated measures to reduce its carbon output.

**3000** properties in our portfolio

With 3000 properties in our portfolio, 10% of the NHS estate, NHS Property Services has a very important role to play in supporting the NHS and the UK government in becoming net zero carbon by reducing the negative environmental impact of our buildings.

### What have we done in the past 12 months?

We have launched a series of initiatives as we commit to making our sites more environmentally friendly:



In April 2020, we signed two new energy contracts. By moving to 100% renewable electricity, we will offset 37,000 tonnes of CO2 per year without any increase in costs to either the NHS or our tenants. With the implementation of a new procurement strategy, as part of the new contracts, we will be able to deliver some of the best prices in the market, while managing risk and maintaining budget certainty.



We have kicked off a three year programme to proactively install LED lighting in, initially, 40 properties which represents an investment of £1.65m. LED lighting can produce electricity savings up to 75% or more compared to traditional forms, are more adaptable and produce a clearer, crisper light to work under. Over this three year programme we anticipate the cost savings to be in the region of £1.5 - £2m, which is money that can be reinvested in other parts of the NHS, and reducing our carbon footprint by about 2,000 tonnes of CO2.



We are undertaking energy audits at our top 50 energy consuming sites and produce concise reports detailing findings and recommendations. These reports will be used to gather and consolidate property information, identify the quick win opportunities and develop larger scale programmes of work to drive energy and water reduction, along with associated emissions.



In order to improve awareness of what we are doing, we set up an Energy Leads group at NHSPS to engage like minded individuals from each region in 2018. In 2019, the group expanded as we drive change. The group meet, discuss current actions and progress and disseminate this to their colleagues in the region as we need changes to be made at site level to help NHSPS reach net zero carbon. With energy savings seen to be over £1.9m in 2018-19 and a similar amount in 2019-20, the benefits are very real, and equate to about 4,600 tonnes of CO2 each year.



**Property Services**

## What is our goal?

NHS Property Services will align with the ambitions of the wider NHS, aiming to become net zero carbon by 2050, for the properties that we actively manage and where we supply the energy.

 **net zero**  
emissions by 2050

### Top Tips: How you can reduce your carbon emissions

- As we come into summer, review your thermostat setting and lighting controls to reflect the increasing temperatures and daylight.
- Drive down overnight energy consumption in your place of work by turning off lights, computer monitors and printers.
- Monitor your energy use and report and fix any faults in your home or office that could cause unnecessary energy consumption such as:
  - Over heating/cooling of a space on a consistent basis.
  - Broken or badly controlled heating and cooling equipment.
  - Broken or poorly fitting windows.
  - Dripping taps.
  - Heating equipment and pipework that is not insulated.

## Whats next?



**Solar technology** - In 2019, the energy demand of our portfolio was 170GWh for electricity and 335GWh for gas. We need to use energy more efficiently and consider alternative provisions of heat, hot water and electricity. Solar technology is a promising, viable and tested solution to reduce carbon emissions and at the same time to reduce the demand for electricity and gas. We are looking at innovative and traditional technologies available in the UK market to test in a pilot project and validate the potential of the technology for the rollout to a wider range of properties in our portfolio.



**Smart meters** - Although we have main fiscal meters in place for billing our electricity supply, we lack the knowledge of which rooms in a building and what pieces of equipment are consuming electricity. The ability to separate and measure electricity consumption at our sites allows us to better manage it to improve energy efficiency and reduce costs. We will be trialling a smart metering system at three sites over 12 months before decided whether to install the equipment at other sites.



**Building management system** - A good building management system would allow all us to know when something goes wrong before the occupiers feel the impact, improve energy efficiency and reduce costs. We will be trialling two different software platforms at four sites to test the technology and understand how we can utilise it to drive change. Using this technology will inform us of the current operation of the BMS. It will also provide insight into which specific assets are failing or have failed so we can operate more efficiently, and help us identify cost saving opportunities.



**Smart thermostats and controls** - There are a large number of small properties that are served by domestic style boilers for heating and hot water, but with limited flexibility for changes to occupancy times, locations and occupancy levels. This means that some of these systems are operating inefficiently and wasting energy. A smart thermostat solution provides a unique opportunity to provide more flexible and accurate control to our customers, improve energy efficiency, enable global settings and remote maintenance opportunities, leading to improved energy efficiency and reduced costs. We aim have the systems in place for the 2020/2021 heating season.



**Property Services**

## OUR PLEDGE

# To reduce waste

### Why does this matter?

England alone generates around  
**177m tonnes**  
of waste every year



This is a poor use of resources and costs businesses and household's money. It also causes environmental damage, for example, waste sent to landfill produces methane, a powerful greenhouse gas.

The UK Government  
aspires to move towards a  
**'zero waste  
economy'**

This doesn't mean that no waste exists - it's a society where resources are fully valued, financially and environmentally. It means we reduce, reuse and recycle all we can, and throw things away only as a last resort.

To help people and organisations make the most of opportunities to save money by reducing waste, The Waste Prevention Programme for England has been launched. The programme sets out to:



Working with the food and drink sector to prevent food waste.



Making it easier for organisations to recycle more.



Making businesses responsible for what they produce so a proportion of materials they manufacture can be easily recycled.



Working with the waste industry to make it easier for organisations to recycle.



Working with local councils to improve waste collection services and infrastructure projects.



Supporting energy from waste where appropriate.



Addressing waste crime such as fly-tipping and the operation of illegal waste management sites.



Regulating landfill sites.



Working with the Environmental Agency to control hazardous waste.

## What have we done in the past 12 months?



Identified sites which do not have recycling facilities and started to implement the appropriate internal and external waste bins.



Standardised our internal recycling, general and clinical waste bins and made it easier for our colleagues to procure these.



Conducted right sizing and collection frequency exercises with our waste contractors. This allows us to determine if our sites have the correct size waste bins and are on the correct collection schedule. This will allow us to recycle more and reduce our carbon impact



Developed waste training and toolbox talks for our colleagues.



Completed hundreds of pre-acceptance audits which helps us understand how clinical waste is being managed and how we can improve waste segregation.



Introduced a waste compactor at a highly utilised site which allows us to compact waste and reduce our waste collections.



Developed waste management procedures and guidance documents for colleagues to follow.



Standardised our pedal bin waste labels which indicates what can and cannot be disposed of in the receptacles.



## What is our goal?

Our goal is to reduce our amount of waste and increase the amount of recycling as much as possible.

## What's next?

We are going to build on our current procedures and processes by:



Increasing the use of dry mixed recycling on our sites.



Ensuring that waste is segregated as much as possible.



Reducing clinical waste where possible.



Carrying out bin sizing exercises to ensure that sites have the correct bin.



Introducing internal recycling bins in sites.

We will also be encouraging our employees to take an interest and active part in working towards our company goal.

## Top Tips: How you can help reduce waste

- Ensuring that colleagues and those around you dispose of waste in the correct waste receptacle.
- Raise any issues around incorrect waste segregation.
- Help introduce recycling at your home or place of work.
- Do not use single use items such as water bottles, coffee cups and plastic bags.



## OUR PLEDGE

# To become more fuel efficient

### Why does this matter?

The World Health Organisation says **7M** air pollution causes the death of **people a year worldwide**

In the UK, transport is one of the biggest contributors to air pollution, particularly in urban environments.

Medical experts believe that **9,000 deaths** a year are from traffic pollution



NHS Property Services has over

**3000 properties**

in its estate across England, with properties ranging from local GP surgeries through to large community hospitals. These properties are visited by large numbers of NHSPS staff, other NHS staff, other healthcare professionals and members of the public on a daily basis.

The UK Government recently declared a Climate Emergency, with factors such as minimum numbers of electrical vehicle charging points in new and existing buildings set to be transposed into law and **the NHS long term plan sites both air quality and transport as key factors we need to overcome on our journey to become more sustainable.**



Air Quality



Transport

The way people visit our properties is going to change in the coming years and we need to make sure we are prepared for this and can drive behaviour change our selves, rather than wait to be changed.

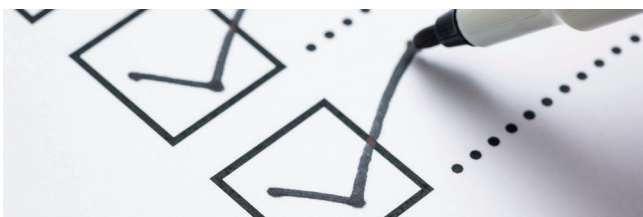


Property Services

## What have we done in the past 12 months?



We are developing an electric vehicle strategy to advance the technologies, procedures, policies and plans to enable our own transition to electric vehicles and enable those who use our properties to do the same.

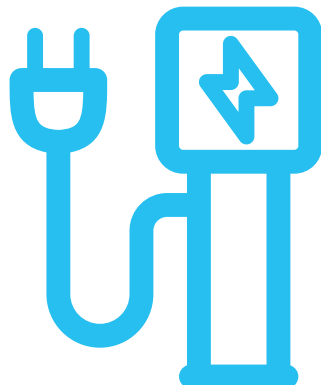


We are currently undertaking a review of the current position of the estate and the business, which will inform us of the priorities to focus on and the longer-term solutions we need to consider.

## What is our goal?

To implement and enable low carbon, clean air transport across our portfolio.

With our properties being an essential destination for our tenants, patients, staff and visitors, ensuring the infrastructure is available in the right locations for cars, ambulances and delivery vans, for example, to charge their vehicles is a priority for us.



## What's next?

To move our fleet of cars and vans from being diesel fuelled to **hybrid and full electric alternatives**. This will have a large impact on our transport carbon and pollution emissions, and also lead to a reduction in fuel costs.

We will be looking at which **technologies** we should be utilising and where these should be placed, from vehicle selections through to the charging points and software to control volume and tariffs.

We will also need to work with **electricity suppliers** and DNOs to understand where we have spare electricity capacity, and where we might be limited.

We also need to understand what the **demand** is in the vicinity of our sites, and where the highest levels of air pollution are, so we can prioritise these where possible.

By facilitating the electric charging infrastructure we will also encourage others to move away from polluting vehicles, so further **reducing emissions associated with our properties** and providing health benefits to those people using our properties.

## Top Tips: How you can become more energy efficient

- When deciding on how to get from A to B, review your options in the following order:
  - Can I walk or ride a bike?
  - Can I use public transport such as a train, bus or tube?
  - If I need to use a vehicle, can I share the journey with a colleague?
- When buying or leasing a vehicle, review the tax and other financial benefits of moving to an electric or hybrid vehicle.
- When driving try to keep acceleration and braking smooth to maintain fuel efficiency.

## OUR PLEDGE

# To become more water efficient

### Why does this matter?

As we develop the land around us, either for farming or building on, we affect the natural water cycle process and with an increasing population, we need to ensure we efficiently manage the way we use and recycle water so as to preserve water availability for future generations.

The UK Government's 25-year Environment Plan sets out environmental policies and aims, including the efficient use of water throughout society, such as reduction of water leaks by water companies and improving water efficiency by end users.

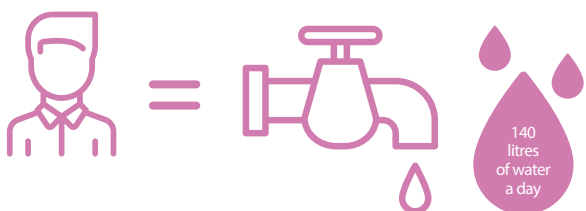
### According to the NHS Long Term Plan:

Between 2010 and 2017 the health and care sector  reduced water consumption by **21%**

This is the equivalent to around:

**243,000**  Olympic swimming pools

However, there is still a long way to go in ensuring we operate water efficient buildings for the NHS, especially considering that on average, we each use 140 litres of water a day in England.



### What have we done in the past 12 months?

Water efficiency has generally not been high on the agenda for organisations but it is increasingly becoming a priority due to risks from climate change and dwindling water supplies in some areas of the country. **NHS Property Services is no exception to this trend, with water efficiency being in its infancy in the organisation.** However, this is starting to change with the new Energy and Environment team.



### Targeting water use

The first step in the journey has been to create an action plan for targeting water use effectively. Since 161 different bodies used to own and manage our properties before NHS Property Services was created in 2013, **we are currently undertaking the big task to understand who our suppliers are and how much we pay.** From this point, we can look to make changes to increase efficiencies across our estate.



### Reusing water

Simultaneously, we are developing methods to **reuse water**, rather than it going into the sewerage system. This may be diverting rain water run off or using greywater for suitable activities.



## What is our goal?

Our goal is to ensure we are being metered and billed correctly, making sure we have accurate data so that in the coming years we can ensure we manage our water usage appropriately.



Ensure we have accurate data

## What's next?

Once we have a better idea of who supplies our water we can look at understanding how, where and when we use it.

### To do this we will:



Look to **consolidate the suppliers** across the estate to choose one or two that can provide the service, price and efficiency we expect.



Work with our supplier(s) to **develop water intensity metrics** and use these to target improvements.



**Use metering** (half hourly and/or automatic meter reading) to better understand water use across our estate.



Ensure we **utilise water efficient equipment**, such as dual flush WCs, low flow taps, automatic urinal control systems.



Ensure we **reduce the amount of waste water** that we pay for that goes to sewerage systems.



**Investigate technologies** that can reduce water use, such as water leak detection equipment.

We will also be **working alongside the NHSPS Construction team** to guide their decision making for water efficiency, to match or exceed current standards.

At the same time we will be **increasing awareness through training** and providing information on what all of us can do to reduce water use in the buildings we work.



Guide decision making



Increasing awareness through training

## Top Tips: How you can become more water efficient

1. Being aware of water use through your day, such as:
  - Making a cup of tea – do you need to keep the tap running?
  - Washing your hands – only turn the tap on when you wet and rinse your hands
  - Flushing the toilet – in general use the short flush (where available), and only use the long flush when necessary
2. Reporting leaks, dripping taps or low water efficiency equipment that could be upgraded, such as toilets with old, large cisterns (these can use between 10-13l of water in each flush, with modern cisterns using between 3-6l with each flush) or urinals with no automatic flush control.
3. Checking landscape watering is not excessive and only occurs when it is needed.



## OUR PLEDGE

# To implement best practice for environmental management

### Why does this matter?

NHS Property Services believe sustainable development forms a strong foundation on which a secure, more prosperous future for both humanity and the planet stems. As such, we are supporting the 'For a Greener NHS' campaign and helping our customers achieve their environmental ambitions, alongside our wider commitment to the UN Sustainable Development Goals.

Around the globe, **climate change** is not only **altering the environment** we live in and affecting social, economic growth but it is also posing a real threat for our future.



As part of this, we want to reduce the negative environmental impact of our 3000 properties across key areas including waste, emissions to air, flood risk, transport, as well as ensuring we have the right processes in place for one-off events in order to protect the environment in which we work.



### Where are we now?

In the last financial year, our focus has particularly been on the deployment of carbon, water, waste and transport strategies across the organisation.



**Centralised process**



**Incorporating best practice**

We recognise that we have more work to do to enable consistent best practice environmental management standards across all of our estate. Going forward, we aim to raise the environment profile by creating a centralised process that is not only structured but incorporates all the best practice adopted from across the board.

To this end, we recently hired an Environment and Compliance Manager to assist in driving this agenda as part of our 2020 environment strategy.

### What are our goals?



Establish a centralised environment management system that is well structured, easily accessible and transparent to all.



Establish key performance indicators that are based on continual improvement to monitor our progress and spark innovation.

## What's next?

We will be implementing a well-defined environmental management system based on the PLAN-DO-CHECK-ACT principle.

### The management system will cover:



Process of identifying best practice within the industry and replicating it across the business to demonstrate continuous improvement.



Implementation of relevant processes and procedures including a well-defined NHSPS adaptation plan.



Key performance indicators set with a regular monitoring regime.



Leadership commitment, engagement and participation.



Provision of environmental training and awareness.



Creation of a positive environmental culture across the business.

