

Southport and Ormskirk Hospital NHS Trust

# Green Plan 2022-2025

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# Foreword

Southport And Ormskirk Hospital NHS Trust Green Plan 2022-2025

With the NHS representing more than 5% of the UK's total carbon footprint, cutting carbon emissions as part of the fight against climate change should be a key priority for NHS Trusts and PCT's - it's all about getting your own house in order and leading by example. The UK government has set out trajectories and actions for the entire NHS to reach net zero carbon emissions by 2040 for the emissions it controls directly, and 2045 for those it can influence (such as those embedded within the supply chain).

Therefore, the NHS has a responsibility to reduce carbon emissions, not only as it is a good thing for a sustainable future, but there is also a link between health – our core business – and reducing carbon.

The Trust adopts a responsible approach to the environment and has initiated action to reduce the environmental impact of its activities. Issues of particular relevance to Trust activities are travel, procurement, energy usage, and waste

disposal including discharges to the environment in gaseous and liquid form. Many of these issues are covered by legislation with which the Trust complies, however we recognise that more can be done, and the Trust aspires to adopt best practice whenever economics allow.

The past 12-18 months has been a huge challenge due to Covid-19 pandemic, not only having a serious effect on healthcare service, but also on the environment with large increases in waste generated from PPE, infectious waste, and enhanced cleaning, however it has also provided an opportunity for the Trust to rethink the way we deliver care and conduct business.

It is recognised that to embed sustainability within our organisation the Trust must work together with our partners across the local health and care system to improve sustainability.

For the Trust to become a fully sustainable organisation, we require all Trust staff to work together in delivering this Green Plan and achieve our aims and goals.

Ann Marr OBE  
Chief Executive



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# Executive Summary

Southport And Ormskirk Hospital NHS Trust Green Plan 2022-2025

Global climate change is recognised as the key environmental threat facing the world. Concerns over fossil fuel depletion, rising temperatures, higher sea levels, security of energy supplies and rising energy costs are focussing the attention of individuals, organisations, and governments on the need for energy conservation and carbon emission reduction.

This Green Plan aims to set out Southport & Ormskirk Hospital NHS Trusts approach to mitigating climate change through carbon reduction and embedding sustainable practices within its own operations. The document details the Trusts plans to take Sustainability Management forward over the next 3 years.

Nationally there have been 9 key aspects identified to address which the Trust is taking forward within our Green Plan:

## Workforce and system leadership

The Trust will engage and develop its workforce and system partners to deliver carbon reduction initiatives and broader sustainability goals. We will set out to develop sustainability committees and working groups, develop online sustainability training and pledge platforms for staff, engage with staff and invest in opportunities for staff to support sustainability goals.

## Sustainable models of care

The Trust will endeavour to embed net zero principles across all clinical services, by evaluating how care is delivered and how carbon reduction opportunities can be achieved, for example using technology for aftercare consultations.

## Digital transformation

The direct alignments between the digital transformation agenda and a net zero NHS are clear and the Trust will focus on ways to harness existing digital technology and systems to streamline its service delivery and supporting functions while improving the associated use of resources and reducing carbon emissions.

## Travel and transport

The Trust realises that it must reduce the carbon emissions arising from travel and transport associated with its activities. The key ways to reduce these emissions are to invest in ultra-low emission and zero-emission vehicles for owned and leased fleets, increase levels of active travel and public transport and maximise efficiencies in the transport of goods and services commissioned by the Trust, such as patient transport, courier services and deliveries.

## Estates and facilities

The Trust must look to reduce the carbon emissions arising from the organisation's buildings and infrastructure by improving energy efficiency and reducing energy usage, decarbonising where possible heating and hot water systems, although this will prove challenging with the Trusts large scale CHP facilities, waste reduction and the circular economy. To help achieve these goals sustainable building design will have to be considered when carrying out refurbishments.

## Medicines

Many opportunities to reduce the carbon emissions relate to the NHS's prescribing and use of medicines and medical products, therefore the Trust will focus on medicines optimisation and reducing waste, responsible capture or disposal of waste medicines and will also consider lower carbon alternative medicines.

The 2021/22 NHS Standard Contract set out inhalers and anaesthetic gases as two key areas for early action therefore focus will be given to this within the Trusts Green Plan.





### Supply chain and procurement

The NHS supply chain accounts for approximately 62% of total carbon emissions and thus must be a priority area for focus in every Green Plan. The Trust must consider how it can use its individual or collective purchasing power and decisions to reduce carbon embedded in the supply chains, by reusing or reprocessing equipment, reducing the use of clinical and non-clinical single-use plastic items, or considering lower carbon alternative supplies, such as recycled paper.

### Food and nutrition

As a Trust we will look at reducing overall food waste and ensuring the provision of healthier, locally sourced, and seasonal menus high in fruits and vegetables, and low in heavily processed foods.

### Adaptation

The Trust must look at its plans to mitigate the risks or effects of climate change and severe weather conditions on its business and functions, by looking to mitigate the effects of flooding or heatwaves on the organisation's infrastructure, patients, and staff.

It is known that investing in carbon management makes sound economic and environmental sense. By investing in carbon management now, the Trust aims to reduce

costs, reduce our contribution to global climate change and enhance its reputation as a good corporate citizen in the future.



# Introduction

Southport And Ormskirk Hospital NHS Trust Green Plan 2022-2025

It is now widely recognised that climate change is probably the most serious threat to life, our health, and our wellbeing. As one of the world’s largest organisations the NHS has an absolute imperative to act to make a real and sustainable difference. Similarly, within the community of North Sefton and West

Lancashire, Southport and Ormskirk Hospital NHS Trust is the largest single organisation and can, through positive action on the environment, improve the lives of the local population for generations.

## Our Trust

Southport & Ormskirk Hospital NHS Trust was formed 20 years ago following the merger of Southport & Formby District General Hospital and Ormskirk District General Hospital.

These hospitals, about eight miles apart, provide acute healthcare to a population of 230,000 primarily within West Lancashire, and Southport and Formby.

The Trust employs approximately 3265 whole-time equivalent staff and has 458 adult inpatient beds 25 paediatric inpatient beds and 44 day case beds.

The Trust prides itself on being an anchor institution within the area and as well as having links with local universities and colleges, utilises many local supplies and has numerous links with surrounding communities.

The Trust also hosts the Regional Spinal Injury Service whose catchment area covers

Cumbria, North Wales, and the Isle of Man as well as the Cheshire, Merseyside, and Greater Manchester area.

Southport and Formby have one of the highest proportions of older people in the country and there are many residential and nursing homes. It is also socially and economically diverse with areas of both relatively high income and significant deprivation.

Southport is a coastal resort and as such attracts more than 5m visitors placing an increased seasonal demand on healthcare. Much of West Lancashire is rural with the largest concentration of population being in Ormskirk and Skelmersdale. There are some of the most deprived wards in the country in West Lancashire. The semi-rural geography places emphasis on access to healthcare and the high emphasis on agriculture attracts a significant number of migrant workers.

### The Trust has two main Clinical Commissioning Groups (CCG’s):

Southport & Formby CCG

West Lancashire CCG

### but services are also commissioned by:

Bolton CCG  
 Chorley & South Ribble CCG  
 East Lancashire CCG  
 Greater Preston CCG  
 Halton CCG

Knowsley CCG  
 Liverpool CCG  
 South Sefton CCG  
 St Helens CCG  
 Warrington CCG  
 Wigan CCG



The main services the Trusts offers are highlighted in the table below:

OUR CLINICAL SERVICES		
Accident & Emergency	Anaesthetics	Acute Medicine
Acute Paediatrics	Audiology	Clinical Microbiology
Critical Care	Cardiology	Dermatology
Elderly Medicine	ENT	Gastroenterology
General Surgery	Genitourinary Medicine	Gynaecology
Haematology	Obstetrics	Ophthalmology
Pathology	Radiology	Rehabilitation
Respiratory Medicine	Rheumatology	Stroke
Therapy Services	Trauma & Orthopaedics	Urology

### Key Achievements to Date

The Trust has previously undertaken a number of actions to reduce CO2 within its operations, including:

- ✓ Installation of two 1 megawatt CHPs across Trust sites producing lower carbon electric and heat and reducing CO2 by approximately 2800 tonnes per year (1300 Southport & 1500 Ormskirk).
- ✓ Achieving zero waste to landfill.
- ✓ Introduction of re-usable sharps containers.
- ✓ Established water monitoring saving 30-40K M3 over last 5 years.
- ✓ Developed policies for Sustainability, Energy, Waste, Transport and Procurement.
- ✓ Established working from home, thus reducing staff travel miles.
- ✓ Use of Team for meetings reducing travel between sites.
- ✓ All offensive waste is processed via waste to energy.
- ✓ All energy consumption is monitored and reported monthly to Estates Governance.
- ✓ Theatre air change set back was introduced throughout the Trust and has operated successfully for many years.
- ✓ Double glazing is being installed in all accommodation blocks.
- ✓ Operation of an electric delivery van powered by Trust own electric from CHP.
- ✓ Installation of EV charging points at Southport Hospital.

### What will the Green Plan mean for Southport & Ormskirk Hospitals NHS Trust.

The Green Plan will set out in detail the Trust's strategy for reducing carbon emissions over the next 3 years and beyond, by detailing a range of measures and actions to reduce both direct and indirect emissions across the estate as a whole and thus embed carbon management in

the operational processes and fabric of the Trust.

It is therefore hoped that the Trust will raise and enhance its environmental awareness, not just within the Trust, but with the local community thus becoming more efficient and reducing its overall environmental impact.



## Drivers For Change

Southport And Ormskirk Hospital NHS Trust Green Plan 2022-2025

It is now widely recognised and accepted that climate change due to human activity is happening and accelerating and is likely to be the most serious threat to our health and wellbeing. The Health Economy must act now to help prevent untold expenditure in the future.

In the UK climate change is expected to cause a marked regional difference in temperature and rainfall by the end of the 21<sup>st</sup> century. The climate in the UK has already changed and has experienced nine of the ten warmest years on

record since 1990. Sea-surface temperature around the UK has risen by about 0.7°C over the past three decades and sea levels have risen around 10cm since 1900. It is also clear that Central England temperatures have increased by 1°C since the 1970's and that in most parts of the UK total summer rainfall has decreased.

It is clear from the evidence that our climate in the UK has changed, and if the current rate of change continues the UK may experience: (Source Met Office):

- Greater winter precipitation, potentially causing more flooding.
- Sea level rise by the end of the century of between 11 and 76cm.
- Extreme heatwaves every other year by the 2040's, like the heatwave of 2003 when average summer temperatures were 2°C higher than normal which led to more than 2000 additional deaths in the UK and extra strain on emergency services.
- Summer will become warmer and dryer, therefore droughts are more likely.
- There may be more intense downpours of summer rainfall which could lead to flash flooding.
- Temperatures are expected to rise across the UK with summer average temperatures set to rise between 2°C and 6.4°C above current temperatures.
- The urban heat island effect already warms cities by more than 10°C on some nights, and this is expected to increase still further with increased urbanisation and release of waste heat.

### Factors driving the Trust to act on Climate Change and develop the Green Plan

The UK Government has an aim is to be the world's first net zero national health service and have set two targets: For the emissions controlled directly (the NHS Carbon Footprint), we will reach net zero by 2040, with an ambition

to reach an 80% reduction by 2028 to 2032; For the emissions we can influence (our NHS Carbon Footprint Plus), we will reach net zero by 2045, with an ambition to reach an 80% reduction by 2036 to 2039.

The Trust also has a number of other drivers:

**Display Energy Certificates:** From 1 October 2008 there is a legal requirement for all public sector buildings with a total useful floor area of over 1,000m<sup>2</sup>, to show a Display Energy Certificate (DEC) in a prominent place, clearly visible to the public. S&OHNT are currently compliant with 4 DEC's.

**Energy Performance Certificates:** From October 2008 (Energy Performance Certificates (EPC) will be required whenever a building is built, sold, or rented out. The certificate provides 'A' to 'G' ratings for the building, with 'A' being the most energy efficient and 'G' being the least, with the average up to now being 'D'. S&OHNT are currently compliant with EPC's for all rented accommodation requiring a certificate.

**Cost:** Measures to increase energy efficiency will reduce energy costs, which is particularly important for the future given the predicted increases in energy prices. Energy and fuel costs have seen a dramatic rise in recent years, with energy prices increasing by well over 50% since 2014. This trend is not expected to change, and we must accept that the price we pay for our energy will continue to increase in the coming years.





# Objectives And Vision

Southport And Ormskirk Hospital NHS Trust Green Plan 2022-2025

This plan centres around three core actionable objectives:

- 1 Reduce carbon, waste, and water
- 2 Improve air quality
- 3 Reduce avoidable single use plastics

The document displays our Drivers for Change discusses our Emissions Baseline, it clarifies the 9 Areas of Focus and demonstrates our Monitoring and Reporting structure before detailing our Governance procedures.

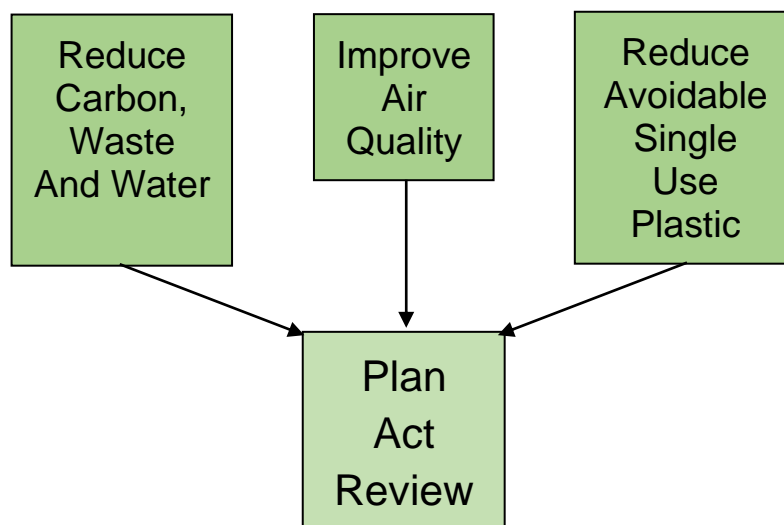
On 1st October 2020, the NHS made clear its vision to become the first health system in the world to deliver a net-zero service. This means any emissions that remain following the decarbonisation of NHS services will be offset by schemes such as tree planting or carbon capture.

The NHS have committed to two new targets:

- Achieve net zero on emissions controlled directly by the NHS (The NHS Carbon Footprint) by 2040, with the ambition to reach an 80% reduction by 2028-32.
- Achieve net zero on emissions within NHS influence (The NHS Carbon Footprint Plus) by 2045, with the ambition to reach an 80% reduction by 2036-39.

These targets are far more ambitious and appropriate than the previous targets set in line with the Carbon Reduction Act, 2008. The NHS is ideally placed to lead this action on climate change, as the single largest organisation in the UK its services currently contribute 4% to the countries carbon footprint. Also, clear links between emissions and population health and wellbeing makes action fundamental to NHS core principles and the sustainability of services.

Our Trust acknowledges this position and our role as an anchor institution within the communities we serve, and so we adopt these new targets in full support of NHS net-zero commitments. Our vision is to be a sustainable Trust. Through implementing this green plan, we aim to embed sustainability into every area of our organisation to help meet these targets and our objectives.



# Emissions Baseline

Southport And Ormskirk Hospital NHS Trust Green Plan 2022-2025

## Carbon Footprint

A carbon footprint is a measure of the impacts of an activity on global warming by calculating the greenhouse gas emissions of these activities, usually stated as a 'CO<sub>2</sub>e', or carbon dioxide equivalent. This is done to show all key greenhouse gases (carbon dioxide, methane,

and nitrous oxide) expressed as a common unit, allowing easy comparison across organisations, industries, and countries.

Emissions are defined under three categories, or 'Scopes' – Scope 1, 2 and 3.

### Scope 1 – All Direct Emissions

These are calculated from the activities under the control of an organisation, and this includes fuel combustion on site, from owned vehicles and fugitive emissions. Examples include fleet vehicles, gas emissions from boilers and air-conditioning refrigerant leaks.

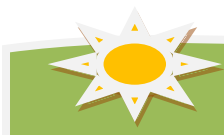
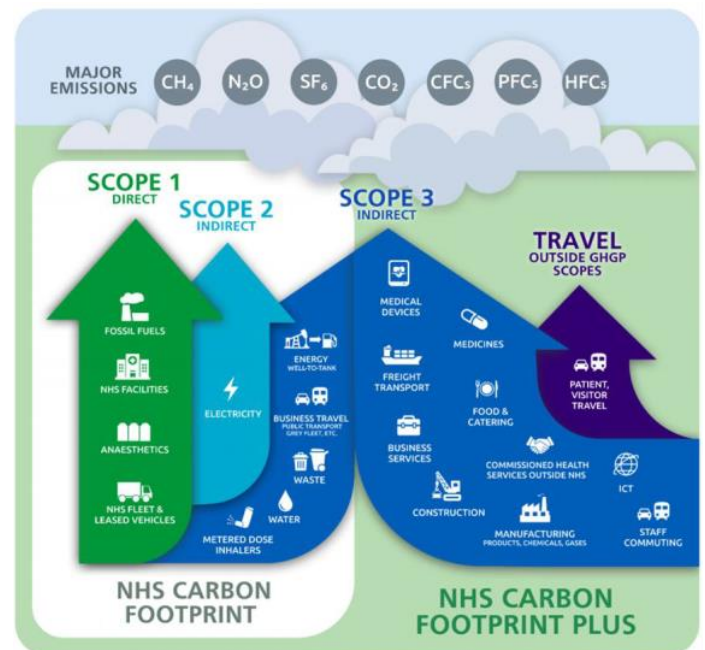
### Scope 2 – Indirect Emissions

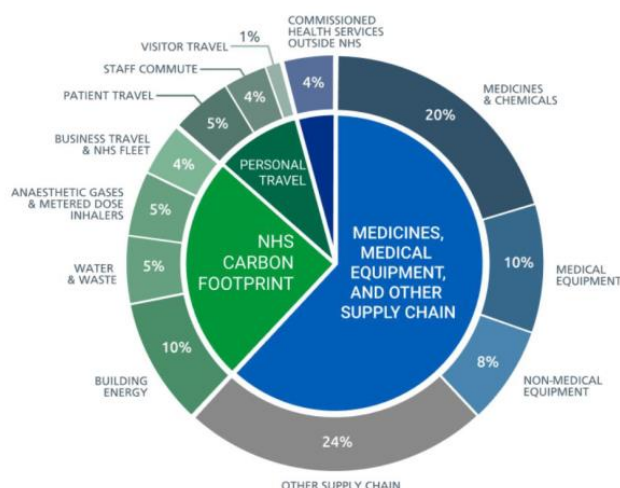
Calculated from electricity purchased and used by the organisation. Emissions will be created during the production of the energy and eventually used by the organisation. Includes electricity from energy supplier.

### Scope 3 – All Other Indirect Emissions

This is the hardest scope to calculate and is derived from activities of the organisation but occur from sources that they do not own or control. This is usually the largest share of the carbon footprint, covering emissions associated with business travel, procurement, waste, and water. Examples include patient travel, shipping of goods and waste disposal.

The table right shows that some emissions associated with our services fall outside the scopes of the 'NHS Carbon Footprint' but are accounted for within 'NHS Carbon Footprint Plus'. In line with the NHS commitments, our Trust will also work towards net zero in both categories.





The table left shows NHS emission sources by the proportion they contribute to the overall NHS Carbon Footprint Plus. This helps our Trust identify the greatest areas of opportunity to reduce NHS emissions. The chart suggests that Procurement, Medical Devices (EBME), Estates and Facilities, Pharmacy, and Travel and Transport have the most significant impact across the NHS.

### Baseline

The emissions baseline for Southport and Ormskirk Hospitals NHS are based on figures for the financial year 2019/20 ERIC figures. This year has been chosen over 20/21 as the later has been impacted by Covid-19, therefore a true result of consumption cannot be achieved.

#### Data for baseline year 2019/2020

	Total CO <sub>2</sub> Emission (tonnes)	Scope 1	Scope 2	Scope 3
Baseline CO <sub>2e</sub> emissions (tonnes)	8,244	7,930	246	68

### Why should an organisation measure its Scope 3 emissions?

There are a number of benefits associated with measuring Scope 3 emissions. For many companies, most of their greenhouse gas (GHG) emissions and cost reduction opportunities lie outside their own operations. By measuring Scope 3 emissions, organisations can:

- Assess where the emission hotspots are in their supply chain.
- Identify resource and energy risks in their supply chain.
- Identify which suppliers are leaders and which are laggards in terms of their sustainability performance.
- Identify energy efficiency and cost reduction opportunities in their supply chain.
- Engage suppliers and assist them to implement sustainability initiatives
- Improve the energy efficiency of their products
- Positively engage with employees to reduce emissions from business travel and employee commuting.



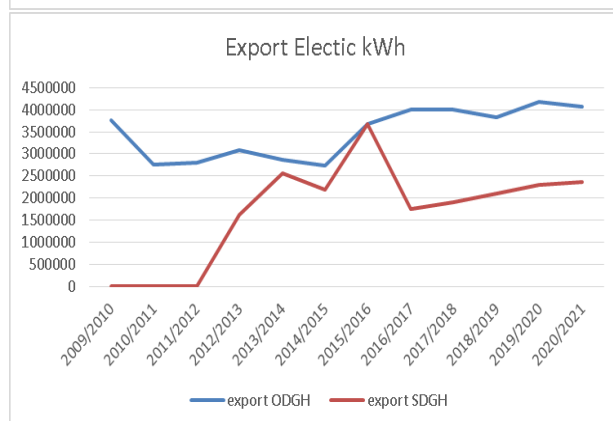
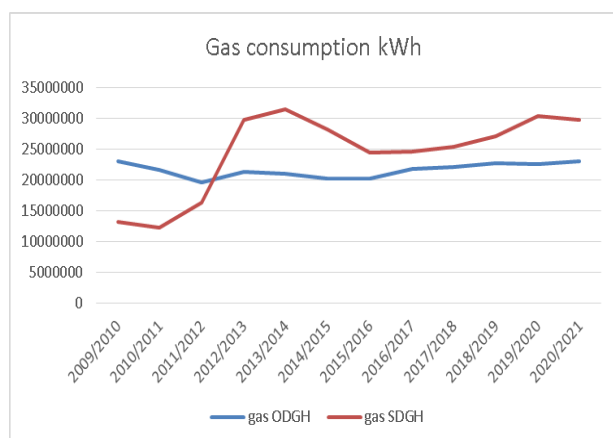
The following tables break down carbon emission by scopes:

### SCOPE 1

Energy type	Site	Amount Used (kWh)	CO <sub>2e</sub> emission (kg)	CO <sub>2e</sub> emission (tonnes)
Electricity – CHP*	Ormskirk	-4,184,500	-1,246,981	-1,247
Natural gas	Ormskirk	22,627,258	4,144,409	4,144
Gas oil	Ormskirk	28,167	7,233	7
Electricity – CHP*	Southport	-2,290,886	-682,684	-683
Natural gas	Southport	30,365,942	5,561,826	5,562
Gas oil	Southport	80,810	20,751	21
Class 2 (1.305 to 1.74 tonnes)	N/A	149,860	37,712	38
Class 3 (1.74 to 3.5 tonnes)	N/A	140,220	35,286	35
Rigid (3.5 to 7.5 tonnes)	N/A	197,760	49,766	50
Medium car	N/A	10,600	2,667	3

\*exported electricity

Note: Exported electric is a negative figure as this consumption is not used directly by the Trust – The carbon from gas used to produce this electric is included in the table therefore CHP electric is not included in the baseline assessment to avoid double accounting with gas provided to site.



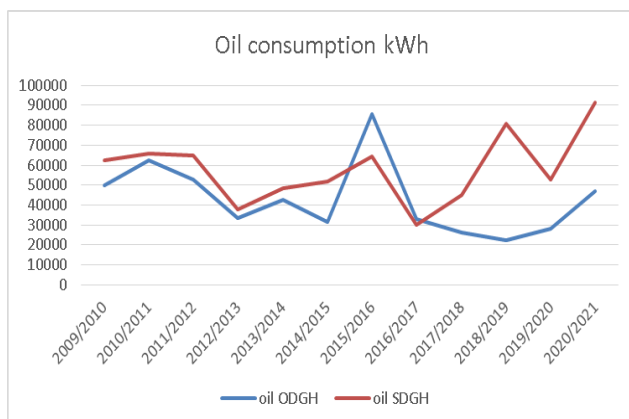
It can be seen that gas consumption at Ormskirk has stayed consistent over the last 11 years and generally the trend follows the trend for export electric due to CHP use.

Southport gas consumption increased in 2011/2012 when the CHP was commissioned. It

can also be clearly identified on the export electric where export went from zero to 1500K kWh.

The CHP is smaller at Southport and there is greater demand for the power therefore export is always greater at Ormskirk.

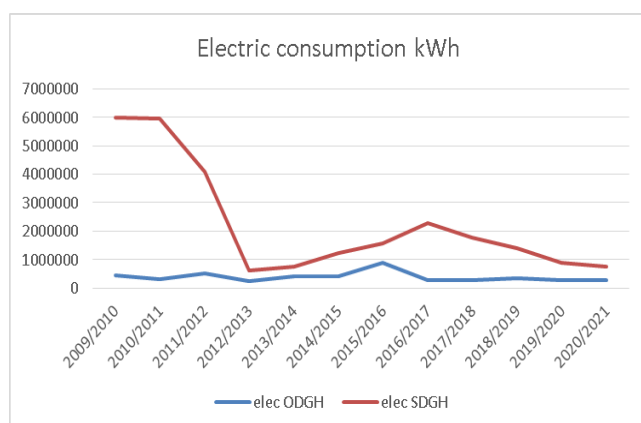




Oil consumption fluctuates with work on the hospital electrical infrastructure as it is generally only used to power the generators during any works.

### SCOPE 2

Energy type	Site	Amount Used (kWh)	CO <sub>2e</sub> emission (kg)	CO <sub>2e</sub> emission (tonnes)
Electricity (grid)	Ormskirk	283,258	60,144	60
Electricity (grid)	Southport	877,606	186,342	186



The above graph shows electric consumption from the grid. The introduction of CHP can be clearly seen at Southport in 2011/2012 when the grid consumption reduced considerably. Electric consumption from the grid at Ormskirk has been consistent throughout the period show.

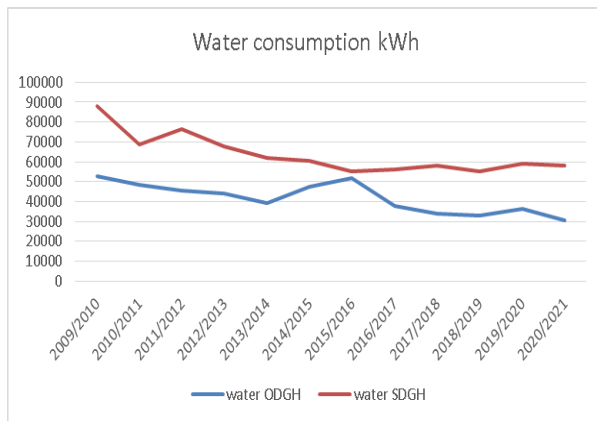
### SCOPE 3

Emission type	Site	Amount Used (M3 water)(tonnes waste)	CO <sub>2e</sub> emission (kg)	CO <sub>2e</sub> emission (tonnes)
Water	Ormskirk	36,359	15,307	15
Water	Southport	58,985	24,833	25
Clinical waste	Ormskirk	22	468	0
Alternative waste	Ormskirk	68	1,448	1
Offensive waste	Ormskirk	30	639	1
Domestic waste recycling	Ormskirk	40	852	1
Domestic waste food	Ormskirk	30	269	0





Domestic waste incineration	Ormskirk	<b>118</b>	2,513	3
Paper recycling	Ormskirk	<b>136</b>	2,896	3
WEEE	Ormskirk	<b>7</b>	149	0
Clinical waste	Southport	<b>63</b>	1,342	1
Alternative waste	Southport	<b>233</b>	4,962	5
Offensive waste	Southport	<b>89</b>	1,895	2
Domestic waste recycling	Southport	<b>67</b>	1,427	1
Domestic waste food	Southport	<b>27</b>	242	0
Domestic waste incineration	Southport	<b>175</b>	3,726	4
Paper recycling	Southport	<b>250</b>	5,324	5
WEEE	Southport	<b>0</b>	0	0



It can be seen that water consumption has reduced at both sites over the last 11 years due to leak detection and monitoring methods implemented, more efficient equipment being purchased, and several underground pipework replacement schemes carried out.



## Workforce And System Leadership

Southport And Ormskirk Hospital NHS Trust Green Plan 2022-2025

The health and wellbeing of the Trust's staff is integral to the sustainability of the Trust and the running of its services, therefore we value all our staff across the Trust and promote diversity, equality, and inclusion in our workforce. All members of staff are recognised as playing a key role in delivering and promoting our sustainability initiatives.

It is essential that sustainability is embedded within the organisation and staff at all levels of the Trust are engaged and accountable for delivering the Green Plan. To embed sustainability into the organisation's strategies, policies and reporting processes, we must engage stakeholders and assign responsibility for delivering the actions within our Green Plan. Clear leadership and strategic direction are vital if the Trust is to act on climate change, whilst improving financial stability and promoting the health and well-being of patients, staff and the local communities we are a part of. This Green Plan aims to provide a clear strategy for the delivery of sustainability objectives. The Trust's Annual Report will include a sustainability section that summarises key achievements and communicates the Trust's carbon footprint and environmental performance.

Alongside this, our organisation and estates are totally smoke free, and we provide support for staff and visitors looking to quit. We promote an agile working culture to our staff, which includes home working and telecommunication. If managed well, this will help the Trust to meet its sustainability aims of reducing both travel and the office footprint. This dual focus on agility and sustainability can certainly reduce environmental impact as well as estate-related costs, but also improve service resilience, productivity, patient focus and Corporate Social Responsibility.

In addition, this Green Plan will be aligned to Trust's Reward and Benefits package and Staff Engagement Plan encouraging our staff to be part of the Trust's sustainability journey.

### Completed/ongoing projects

- Continuation of awareness campaigns and staff engagement campaigns
- Trust benchmarks performance against peer Trusts via ERIC and Modal Hospital
- Promotion of blended working as a flexible working option for staff and Trust oversight of take up
- Established a Sustainability Group comprised of senior service leads to ensure delivery of plan
- Have an annual awards ceremony to celebrate staff achievements and contributions – to include category for Sustainability
- Undertake a staff survey to monitor staff satisfaction and wellbeing
- Provide opportunities for staff to become more physically active
- Reduce sickness absences and demonstrate workforce wellbeing is supported
- We have a nominated board lead for the Green Plan and Sustainability



### Future Key Actions

- Provide information about Trust's sustainability plans and objectives at induction/mandatory training
- Incorporate sustainability and environmental responsibilities as a standard in all job descriptions
- Engage with staff and provide regular communications on green issues and provide a platform for staff to raise and share ideas
- Trust to approve Green Plan
- Alignment of Green Plan to the Trust's Staff Engagement Plan to encourage staff to contribute to sustainability
- Use of Resources Group remit to be extended to oversee service plans for sustainability and hold leaders to account
- Sustainability progress included within the Trust's Annual Report
- To have a clear and publicly available Modern Slavery Statement
- Improve carbon reporting across Trust activities and finance data to improve to improve scope 3
- Review Staff Reward and Benefits schemes to increase options for staff to greener transport solutions, such as cycle to work schemes, rail discounts and electric lease car schemes and reduced car parking incentives
- Engage with external partners on greener transport solutions, such as shuttle bus, car share initiatives, electric hook ups



## Sustainable Models Of Care

Southport And Ormskirk Hospital NHS Trust Green Plan 2022-2025

The Trust are aware of the benefits from providing the best healthcare we can from the resources we have and are working to ensure that prevention is embedded in the development of all our models of care, both internally and with external partners through the programme Shaping Care Together run by NHS leaders in Southport, Formby and West Lancashire that seeks to 'futureproof' NHS services by exploring new ways of working and delivering services as well as utilising money, staff and buildings to maximum effect.

Many of our hospital services were designed decades ago to respond to the health needs of the population at that time but this means they are not quite right to meet today's challenges and expectations and that is why Southport, Formby and West Lancashire health and care providers have been examining how we can work better together to provide better and improved health and care for patients. Building on the national NHS Long Term Plan, our aim is to continue to make health and care services in the local area seamless to help patients get the right care in the right place, at the right time.

We hope to improve the health and wellbeing of local communities, enabling people to live longer and healthier lives, by creating and delivering safe, integrated and sustainable services that meet people's needs using the best assets and resources we have available to us. Wellbeing comes from everyone taking ownership of what they can do for themselves and their community, with support available when and where it's needed.

### Completed/ongoing projects

- With Shaping Care Together views are being sought on what currently works well at Southport and Ormskirk hospitals as well as in primary and community healthcare services and, more specifically, what steps should be taken to improve the following areas:
  - o Care for the frail and elderly
  - o Care for those who need urgent or emergency treatment
  - o Care for children
  - o Maternity care for pregnant women and new-born babies
  - o Care relating to women's reproductive and urinary systems (gynaecology)
  - o Sexual health care
  - o Planned care (for example, outpatient appointments)
  - o Treating patients at home
- Importantly, the Trust will work to ensure that prevention of illness is embedded in all care models. The Trust will work with staff and external partners to attempt to improve the factors which contribute to poor health and cause illness to ensure the Trust is helping to improve.
- The Trust will continue to encourage, where clinically appropriate, the use of Sevoflurane as the primary anaesthetic agent in favour of Desflurane and the use of 41 of dry-powder inhalers (DPIs) in favour of metered dose inhalers (MDIs) to significantly reduce carbon emissions.
- As the NHS continues to face financial pressures. If we can help people avoid unnecessary hospital admission by accessing care closer to home, they are likely to live the best life that they can, and money can be saved and reinvested into more patient care.





### Future Key Actions

- The need for planned care is increasing, and in response we must also consider how we can improve on managing the demand, maximise our capacity, and harness relevant existing and emerging technology that will support both the demand and capacity challenges into the future.
- Include sustainability as a part of the quality of care we provide
- Quantify the financial, economic, social and health benefits of some of our sustainable care models.
- Calculate the environmental and carbon impact of a specific care model to inform improvement plans
- Establish a board member to consider leading on the understanding of sustainable clinical models within the Trust
- Pharmacy direct implementation





## Digital Transformation

Southport And Ormskirk Hospital NHS Trust Green Plan 2022-2025

Digital technology is a significant part of our everyday lives improving the way we socialise, shop and work. It also has great potential to improve how the NHS delivers its services in a new and modern way, providing faster, safer, and more convenient care.

The NHS Long Term Plan will increase the range of digital health tools and services and give people more control over their own health and the care they receive from the NHS. People will be able to seek health information and support online and choose whether they speak to a doctor/consultant on the phone or in person. A wide range of NHS-approved apps will help people get ongoing support to help them manage their health and wellbeing needs, backed up by face-to-face care when this is needed.

We are therefore investing in improving NHS IT systems and in developing new technology to give health and care staff the technology they need to help them complete administrative tasks more quickly, freeing up time to spend with patients. We will make sure staff have the technology they need to do their jobs and ensure our systems can talk to each other and share vital information to support the delivery of care.

### Completed/ongoing projects

- Virtual Desktop Infrastructure – The Trust currently uses Horizon VDI in many clinical areas. The thin clients used have less components than a standard PC which reduces in lower emissions and less parts to be replaced
- Cloud Hosting – Our aim by 2024 will be to move at least one of our data centres (SDGH) into the Cloud. This will:
  - o reduce our onsite server presence
  - o will release estate back to the Trust
  - o reduce our power consumption
  - o reduce waste during server and data centre refreshes
- Careflow Connect & Narrative – The aim of both projects is to digitise paper-based processes. This will see the Trust reduce its reliance on printing and reduce the amount of paper used.
- Agile Working – Many of the Trust staff now have access to Laptops and Horizon meaning they are able to operate from many locations reducing the amount of travel required to attend meetings, or the staff commute to work.
- Attend Anywhere – Virtual consultations allows patients to attend clinics remotely via a web browser therefore reducing patient travel.
- Technology Enabled Care Pathways – The creation of these involves using remote monitoring, telehealth, apps, wearables, etc to care for patients without them having to travel to the Trust.

### Future Key Actions

- We will track and monitor emissions from information technology (ICT)
- IT to consider the circular economy when purchasing goods
- Extend to everyone the NHS App as a new digital ‘front door’ to give people secure digital access to their own medical records; find trusted information about their health online; allow patients to conveniently book appointments and view test results online. In time it will also provide medical advice and consultations securely
- Printer Estate Reduction – As part of our printer contract renewal next year, we plan to reduce our printer fleet which will then reduce our printing and our associated waste. We already use pull printing in the Trust which means staff get to review what they are printing before it goes to print. This prevents printer errors



## Travel And Transport

Southport And Ormskirk Hospital NHS Trust Green Plan 2022-2025

As a Trust we must reduce the negative impacts from travel by supporting staff and patients to use more sustainable forms of travel to our sites and thus creating a reduction in the number of journeys necessary, which will have a range of benefits including improving health from reduced air and noise pollution. Reducing travel can also help our sites that experience limits on car parking and congestion, as well as easing late or missed appointments because of lack of parking availability.

The coronavirus pandemic has helped us, along with the rest of the NHS, to increase the use of telemedicine. Combined with our staff working from home whenever they can, our aim is to keep these positive sustainable steps in the future. The use of virtual meeting technologies has allowed staff to work remotely and will therefore reduce the requirement for staff to travel for work. Similar technology will also be used in the delivery of telemedicine services which will allow patients to access health services without having to travel.

### Completed/ongoing projects

- Increase storage bike racks (gates on courtyard?) and provide lockers showers for visitors
- Expand EV charging network across both sites, with consideration on making available some “free of charge” points for staff
- Promote the shuttle bus and increase frequency
- Promotion of electric vehicles, via salary sacrifice scheme
- Update the Green Travel Plan to create a board approved Green Travel Plan
- Put into place a means of improved monitoring of consumption of fleet vehicles

### Future Key Actions

- Low emission/electric fleet vehicles only to be purchased with a commitment that 90% of the fleet is ultralow and zero emission by 2028
- Encourage greener & more active travel alternatives among staff, patients & visitors
- Partner with council to improve local infrastructure and transport links round the hospital
- Monitor the levels of working from home and e-medicine to reduce travel
- Undertake a staff travel survey in 2022
- Assess our transport and travel and calculate/quantify the carbon footprint for business, patient and staff transport and report these emissions and show a reduction
- Put all fleet drivers through an environmental driving course
- Implemented a Board-approved Sustainable Travel Plan
- Established a Bicycle User Group via Sustainability group
- Carry out an education and awareness campaign designed to increase knowledge of sustainable transport options



## Estates And Facilities

Southport And Ormskirk Hospital NHS Trust Green Plan 2022-2025

The Trust's estate is a significant consumer of energy (electricity and gas) and water, which contribute a major proportion of the Trust's carbon dioxide emissions, but to aid the reduction of emissions the Trust generate their own energy from a combined heat and power (CHP) plant at both Southport and Ormskirk hospitals. Excess energy from these plants is exported to the National Grid. In 20/21 this was enough to supply 1,208 three-bedroomed houses for a whole year. The power plants have also reduced the Trust's reliance on the National Grid with only 9% of total power used on site being derived from that source (7% Ormskirk, 12% Southport). Unfortunately, due to the long-term agreement with a provider on the CHP the Trust may face some issues fully implementing a net zero/heat decarbonisation plan.

The Trust has programmes aimed at maximising the amount of waste sent for recycling and minimising power and water use, and over the last couple of years with improved working practices within the laundry has seen water reductions of over 11,000m<sup>3</sup> and we are in the process of planning decarbonisation and emissions reductions across all of our sites.

Estates and Facilities teams ensure buildings and services are managed safely and efficiently to reduce costs and limit the environmental impact of the Trust's estate and our Capital Project teams encourage innovative or sustainable technologies to be included in our refurbishments.

Green spaces are an important feature of our sites. Not only do they improve the natural aesthetics, making our sites more appealing, but they also play an important role in maintaining local air quality, patient wellbeing and protect wildlife corridors.

### Completed/ongoing projects

- Develop and implement a net zero/heat decarbonisation plan by identifying low-carbon and renewable energy technologies, including solar photovoltaic (PV) panels, heat pumps, micro-wind and biomass to tie into the Governments Public Sector Decarbonisation Scheme (PSDS)
- Continue to monitor electricity, gas, oil, water, waste and transport to enable reporting
- Continue to install LED lighting across the Trust's estate and introduced passive infra-red-light sensors across the Trust (where feasible)
- Investigate the use of absorption chillers to utilise heat from CHP
- Provide on-site designated spaces for virtual consultations and meetings (linked with IT)



**Future Key Actions**

- Commit to renewable electric tariffs for imported electric by 2022
- No leasing of buildings unless they meet a certain “green” standard
- Develop our outdoor spaces in a way that reflects the importance of green spaces and natural environments for people’s health for the use of patients, staff, and the wider community (wild flowering meadows, providing bird and bat boxes etc)
- Undertake annual carbon footprint for the Trust’s activities to measure progress against carbon reduction targets
- Create a board approved green space and biodiversity strategy.
- Develop our Estates Strategy to ensure that the design process is informed by the views of our staff, patients, visitors, and local community
- Carry out occupancy surveys to ensure we maximise the value of our estate by delivering services in the most efficient manner possible
- Develop clinical waste segregation and work with the infection control division to consider wider implementation of the offensive waste stream (where feasible)
- Identify an individual in projects to take responsibility for sustainable capital and refurbishment projects
- Provide formal training for Capital Team on how they can develop more sustainable outcomes within their roles, such as understanding energy efficiency technologies, use of space, space utilisation and adaptation
- Utilise funding options outside capital for reducing energy and water usage
- Create a sustainable capital projects process to ensure sustainability is maximised on new builds and major refurbishments
- Design our capital projects and major refurbishments to be usable during future projected weather profiles such as extreme heat
- Deliver new buildings that are rated “Excellent” by BREEAM, and “Very Good” for major refurbishments
- Share successful sustainable capital projects with other healthcare organisations
- Report on Scope 3 emissions from all capital project activities
- Include life-costing in the design of all major developments
- Consider biodiversity and habitat protection during construction projects



## Medicines

Southport And Ormskirk Hospital NHS Trust Green Plan 2022-2025

Anaesthetic gases (Nitrous Oxide, Desflurane, Isoflurane and Sevoflurane) are potent gases that account for a large portion of the carbon footprint for the entire public health and social care system.

73 million inhalers are used in the UK every day, many of which use Hydrofluorocarbon gases as an aerosol propellant; 1 tonne of Hydrofluorocarbon gasses can be equivalent to 1000 tonnes of carbon dioxide in terms of their impact on the environment, thus contributing greatly to overall CO<sub>2</sub>e emissions.

It is however also recognised that the consumption of anaesthetic gases, and pharmaceuticals varies in line with patient contact, therefore the more patients we treat the more products we will consume. It is also noted that the re-use of patients own medicines are high within the Trust compared to the rest of Cheshire and Mersey, and we can only recycle those medicines that we have dispensed and have not left the Trust.

### Completed/ongoing projects

- The Trust will reduce our direct and embodied greenhouse gas emissions, such as that caused by harmful levels of anaesthetic gases, by becoming more sustainable in our use of medicines and medical equipment, such as issuing meter-dosed inhalers.
- Review the amount using Define software and then reduce the proportion of desflurane to sevoflurane used in surgery. (Although we are already low users of both gases)
- Reduce the levels of nitrous oxide and fluorinated gases emitted through inhalers, by promoting clinically appropriate prescribing of inhalers with lower greenhouse gas emissions overall – have a campaign with the CCG to switch on admission to dry power or CFC free with the added bonus of training the patient on the change
- Put system into place for monitoring gases i.e., anaesthetic gases, inhalers etc

### Future Key Actions

- Improve waste management within pharmacy and explore reuse of pharmaceuticals – and establish a method for costing the waste of expired drugs
- Indicate carbon costs when ordering prescriptions to encourage use of low-carbon alternatives
- Monitor and report carbon from pharmacy
- Promote the economic use of disposables, such as canulars and make staff aware of the cost and impact on the environment of their wastage





## Supply Chain And Procurement

Southport And Ormskirk Hospital NHS Trust Green Plan 2022-2025

More than 70% of emissions from the health care sector are primarily derived from the health care supply chain, the production, transport, use, and disposal of goods and services that the sector consumes, therefore our procurement policies will be developed, as reducing these emissions is crucial if we are to become net zero by 2045. We require our suppliers to be aligned with our ambitions and to understand our long-term goals and expectations.

Our goal is to improve the Trust's use of resources by reducing waste through better procurement decisions (and improved waste management) and thus the Trust will reduce the environmental impact of the goods and services used, switching to low-carbon alternatives, and moving away from single-use products.

None of the Trust's domestic waste goes to landfill. Our domestic waste is split into RDF (Refuse Derived Fuel) and DMR (Dry Mixed Recycling) waste streams. This year, 20/21, 373 tonnes of waste have been sent offsite as RDF, and 136 tonnes has been sent successfully as DMR.

### Completed/ongoing projects

- We will improve at reducing, reusing, and refurbishing a range of equipment like walking aids quickly and safely.
- Whole life costing, energy consumption, social value, and environmental considerations to be included in future tendering processes (e.g., such as 100% renewable energy, 0% landfill for suppliers) to communicate our ambitions to suppliers and partners
- Better monitoring of stock management and streamlining of product lines to reduce waste
- Continue engaging with medium sized enterprises (SMEs), voluntary sector organisations and local suppliers

### Future Key Actions

- Develop a repurposing programme (Warp IT) to store and recycle furniture/equipment, and remove working parts of condemned equipment to use to repair similar equipment where possible thus reducing disposal costs and supporting conservation programs
- Promote the Warp IT scheme and report associated carbon and financial savings
- Adopt a standard equipment list throughout Trust to prevent waste/ easy refurbishment
- Engage in dialogue with our key suppliers to encourage them to use resources sustainably in their own operations
- Switch to purchasing 100% recycled paper when our printer contract is next renewed
- Produce a Board-approved Sustainable Procurement Policy by 2022 to ensure a higher percentage of goods and services are procured from accredited sustainable suppliers committed to on-going carbon reduction and sustainable development
- Procurement will report on carbon emissions associated with products and services
- Repair and re-use medical devices where practical before buying new
- Donate items which cannot be reused by the Trust to Charity and the local community
- Support staff to minimise waste and expense at home
- Actively promote access to sustainable products to our staff and patients
- Invite our providers and suppliers to share their carbon and environmental impacts with us and support them to reduce



## Food And Nutrition

Southport And Ormskirk Hospital NHS Trust Green Plan 2022-2025

All food makes a journey from where it is grown or produced to your plate. How far food has travelled is known as its food miles and we should be aiming for as few miles as possible, choosing foods produced closer to the Hospital with fewer food miles helps reduce pollution and protect our planet as well as benefiting the local community.

DEFRA estimates that moving food is responsible for 25 per cent of all miles covered by heavy goods traffic in the UK. Transporting food within, to and around the UK produces 19 million tonnes of CO<sub>2</sub> annually – equivalent to around 5.5 million typical cars, and that airfreight, used to transport perishable products like out of season berries accounts for 11 per cent of the UK's food transport emissions.

It is also understood that eating a healthy, balanced diet is an important part of maintaining good health, therefore as a healthcare provider we must promote and offer a wide variety of foods in the right proportions to help keep staff and public healthy.

As for our food waste, all of it is collected and sent to a processing plant where it is broken down by anaerobic digestion to produce biogas which is supplied into the grid and bio-fertiliser for use on farmlands helping produce the next crop.

### Completed/ongoing projects

- Re-invigorate the signed NHS Plastics Pledge to eliminate single-use plastics from catering and removed plastic cutlery/containers from the canteen
- Continue work to reduce the food wastage generated from the in-patient meal service
- Reduce waste generated from food packaging

### Future Key Actions

- Work with Procurement to establish a strategic approach towards purchasing a higher percentage of catering and food products from sustainable sources, focusing on local, ethical, fair-trade, and sustainability-certified suppliers
- Offering plant-based menu
- Creating seasonal menus
- Reduce heavily processed food offered on the menu
- Engage staff and patients in food growing onsite or at home, and local sustainable food sourcing and gather staff feedback on their wellbeing improvements due to greater access to green space during working hours.
- With the guidance of Procurement review our supply chains to track the food miles, consumption patterns and disposal of food and drink products for staff and patients



## Adaptation

Southport And Ormskirk Hospital NHS Trust Green Plan 2022-2025

The effects of climate change pose a range of risks to the health of local populations and the ability to operate our services effectively. Climate change adaptation is the understanding and implementation of resilience measures to enable our Trust to be ready for the future by clearly identifying the risks and responding to them. With the COVID-19 pandemic prompting a change in demand for health services across the country, the Trust has contingency plans in place for major incidents, including an adverse weather plan, aligned with the requirements of the national plans. However, the risks from climate change should be further integrated into the Trust's risk assessment process and adaptation planning and should include but not be exclusive, flooding, and coastal change, risk from high temperatures, risk of water shortages, risk to natural capital, risk to food production and trade and new and emerging pests and diseases.

The Trust has designated a key lead responsible for coordination of climate change adaptation and resilience planning and by ensuring the resilience of our organisation through emergency preparedness and response and business continuity planning, is building resilience against the impacts of climate change on our infrastructure, supply chain and resources to enable the long-term delivery of services and the continued safety of all members of staff, patients, and visitors.

### Completed/ongoing projects

- Develop adverse weather plans
- Develop business continuity plan to include response to flooding, unavailability of fuel etc
- Update the Trust risk register to include climate change effects and record the number of impacts on the risk register
- Develop local protocols aligned to national heat wave plans, cold weather plans and multiagency flood plans in relation to civil contingencies act etc.

### Future Key Actions

- Create a board approved adaptation plan to include the financial impacts of climate change to our Trust and the cost of doing nothing
- Monitor and report on the development of the adaptation plan
- Develop a Climate Change Risk Assessment (CCRA)
- Establish a climate change adaption working group
- Identify a procedure for monitoring, recording, and managing over heating events in clinical areas
- Undertake a flood risk assessment, highlighting access routes and supply chains
- Create green space/wildlife gardens
- Link in with local schools, community groups etc for litter picking days, tree planting and other environmental schemes within the hospitals and local area



## Monitoring And Reporting

Southport And Ormskirk Hospital NHS Trust Green Plan 2022-2025

The Green Plan has been designed to operate as an evolving document and will be developed and amended throughout the next 3 years in order to reflect internal improvements and management procedures. The Green Plan will undergo a full review, analysis, and update after the first twelve months of implementation.

A Sustainability Group has been formed which will meet and report on initiatives, barriers to progression and future opportunities on a quarterly basis. All findings will be detailed in an associated Green Plan annual summary.

It is understood by the Trust that data management is measuring the difference and measuring the benefit therefore the Trust has robust data measuring and reporting system in place.

The Sustainability Group will develop an action plan from the actions within this document and progress on this will be reported to the Executive Team.

- ✓ All meter readings are taken on a monthly basis (AMR and manually) and consumptions checked and verified.
- ✓ All waste tonnage from site is recorded.
- ✓ Monthly reports for energy are compiled each month and any concerns are highlighted to the site maintenance manager and rectified.
- ✓ ERIC (Estates Returns Information Collection) returns are submitted annually to the Department of Health and our performance against similar sized organisations is assessed. Includes costs and figures for operating the NHS estate including buildings, maintenance, equipment, provision of services and utilities.
- ✓ Pam (Premises Assurance Model) returns are submitted annually to the Department of Health. This is a management tool used to provide NHS organisation with a method for assessing the safety and efficiency of their estates and facilities services.
- ✓ Trust Annual Report has a dedicated section where sustainability is reported – highlighting achievements and soon to include the Trust carbon footprint.
- ✓ Quarterly Greener NHS Data Collections – A reporting requirement to NHS Improvement and NHS England where 20 responses are required ranging from food waste, EV charging points and overheating incidents.



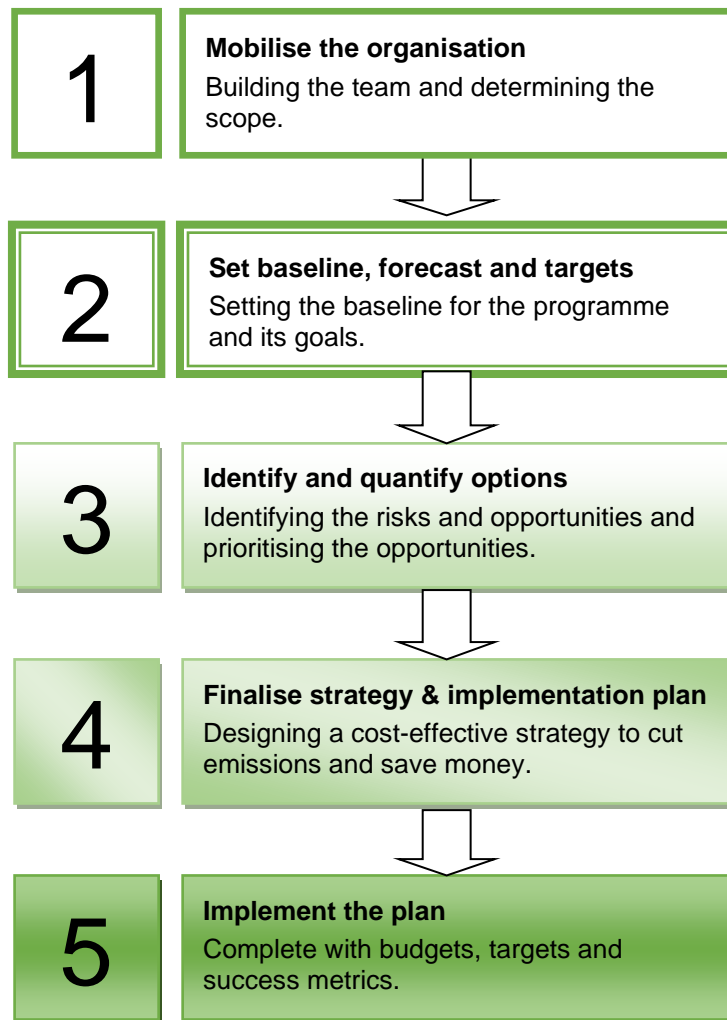
# Governance

Southport And Ormskirk Hospital NHS Trust Green Plan 2022-2025

Clear leadership, strategic direction and the support of senior staff and other decision makers will ensure the Trust successfully delivers the Green Plans actions, but we must also remember that saving CO<sub>2</sub> is everyone's job and to succeed in becoming net zero carbon we require all staff to be engaged or we may fail to meet our reduction target, therefore every member of staff should be encouraged to

take responsibility for energy consumption and carbon reduction.

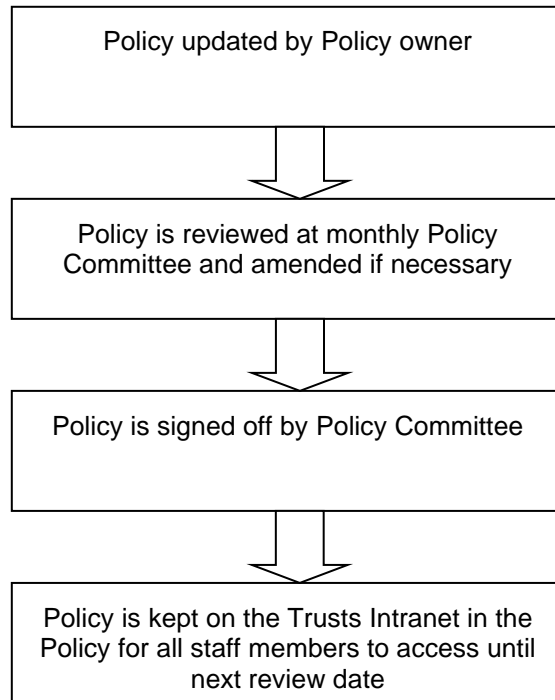
This Green plan will be a living document that will guide the way to the Trust becoming sustainable. On the journey to becoming Net Zero this document will be reviewed and update to reflect changes in Policy and technology. We have highlighted a five-stage process to work through and are currently on number four working towards five.





## Policy Alignment

The Trust has developed over a number of years numerous policies relating to referencing the green agenda. All the policies are reviewed on a two-year basis, or when legislative change occurs. The Trust has an established structure for policy review and a Policy Committee is held on a monthly basis as detailed in the diagram below.



## The Sustainability/Carbon Management Team – delivering the Green Plan

Overall success of the Green Plan will only be achieved by having appropriate, organised, and responsible programme governance in place.

Senior management must ensure adequate support and resources are available, therefore management level ownership for carbon reduction targets and schemes will be in place.

Programme governance will ensure overall progress is reviewed, deliverables are completed, membership on the project board is still relevant etc.

The table below details the core team members although other members of staff will be required from time to time to make decisions and recommendations based on specialist knowledge.

Name and position in Trust	Contact details via department
<i>Finance Director</i>	<i>Finance</i>
<i>Associate Director of Facilities</i>	<i>Estates &amp; Facilities</i>
<i>Estates Matron</i>	<i>Estates &amp; Facilities</i>
<i>Head of Information Technology</i>	<i>Information Technology</i>



<i>Deputy Chief Pharmacist</i>	<i>Pharmacy</i>
<i>Head of Procurement</i>	<i>Procurement</i>
<i>Head of Facilities</i>	<i>Estates &amp; Facilities</i>
<i>Planning &amp; Resilience Manger</i>	<i>Emergency Planning Resilience</i>
<i>Communications/PR Manager</i>	<i>Communications/PR</i>
<i>Sustainability Manager</i>	<i>Estates &amp; Facilities</i>
<i>Head of Hard FM</i>	<i>Estates &amp; Facilities</i>
<i>Compliance &amp; Performance Manager</i>	<i>Estates &amp; Facilities</i>
<i>Staff Side Lead</i>	<i>Staff Side</i>

**Succession planning for key roles**

Over the duration of the Green Plan implementation key members of the management team could change, therefore measures are in place to ensure new members are informed of their role and responsibilities within the team and will be assisted with the transition by way of a meeting with the current

role holder informing them of their responsibilities, current progress and details of meetings and projects the new member has ownership for. It has also been agreed that nominated deputies are used to stand in as needed and these deputies will have an understanding of the project.



## Engage

Southport And Ormskirk Hospital NHS Trust Green Plan 2022-2025



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

- i. Email any comments, ideas, suggestions to [gturton@nhs.net](mailto:gturton@nhs.net)
- ii. Talk to you manager on how you can be invovled and improve sustainability within your department.

