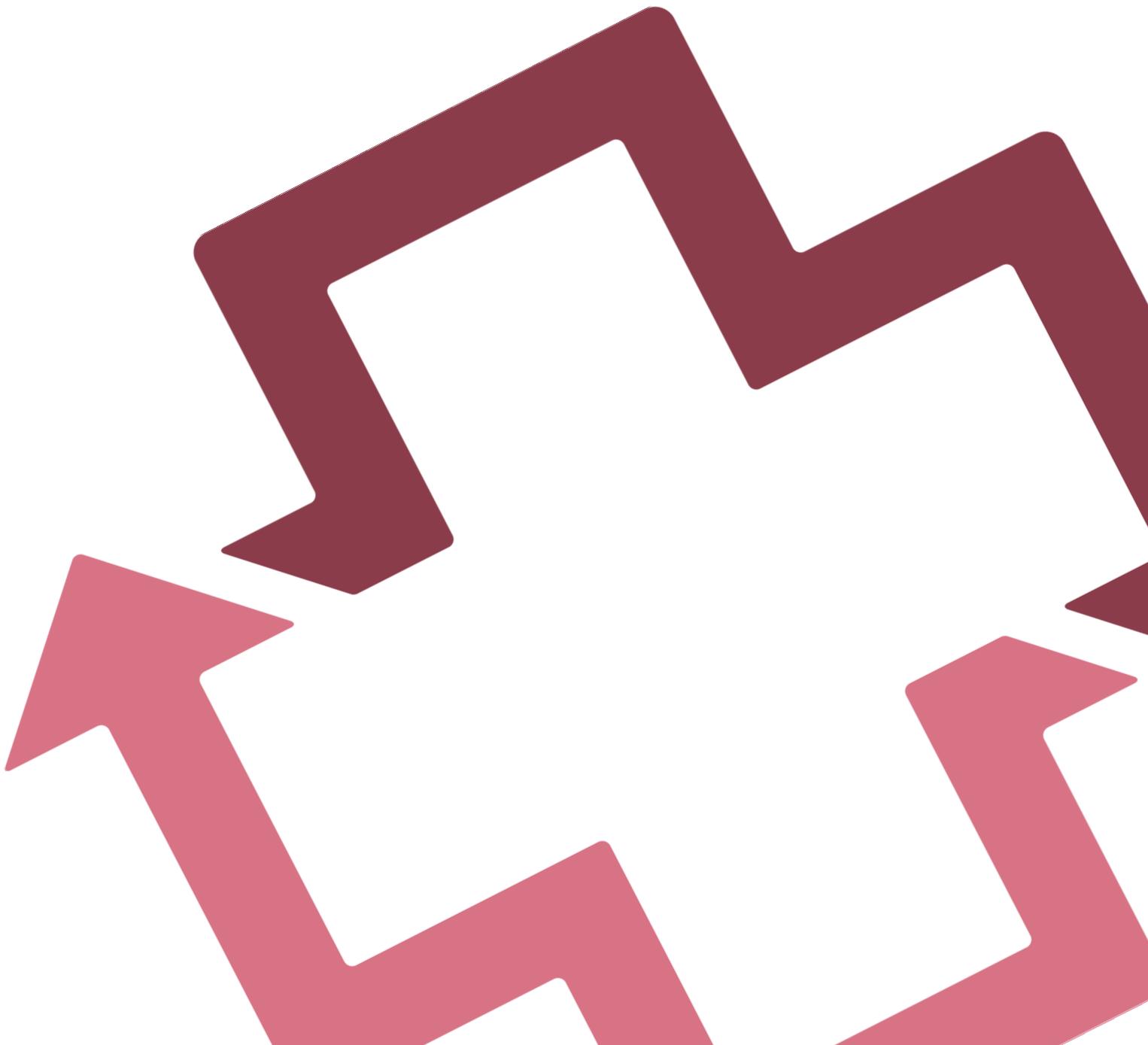


# **Case study marketplace – top tips**

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## Colindale ‘Physic Garden’

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Having implemented sustainable methods throughout the past ten years at Porton and Colindale, the quick wins had already been accomplished and due to the imminent move to Harlow, it was clear that extensive investment in projects across the site would be rejected.

With our own land around the site at Colindale, a staff initiative was to build allotments with old scaffolding planks and a compost contribution from a community-led organization. They prospered for a few years with production of organic vegetables for staff however in order to keep interest, a rejuvenation was required. The project needed to utilize different ideas to enhance the garden area for staff, using sustainable methodology.

### Top Tips

- Look to established projects to obtain advice and direction.
- Ask help from enthusiastic activists to get them to communicate your ideas to others.
- Think of fund-raising ideas to bridge any incurred costs.
- Consider any climate changing issues in the decision-making process.
- Establish links to all stakeholders and shareholders to highlight the advantages of your project.
- Find an expert to explain the health links with known scientific research to give your project the kudos it deserves.

## Sustainability in the Laboratory – University College London, King’s College London and beyond

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Research laboratories often aren’t what a patient immediately sees within an NHS setting, but “99 per cent of trusts and 48 per cent of general medical practices are actively engaged in clinical research” (NHS statistics). Such laboratories can be extremely resource-intensive, requiring complex and expensive equipment, large amounts of energy, and produce waste streams which require specialised treatment.

To address these specialist areas University College London (UCL), King’s College London (KCL), both in significant trust partnerships, and a growing number of institutions have initiated sustainable laboratory, or green lab, programmes. Such programmes are developing and spreading good practice, benefitting all in the process.

Savings at UCL, KCL, are in the hundreds of thousands and continue to grow, due to a variety of initiatives. These include staff/student engagement through tailored green impact programmes, design and facility improvements, procurement/waste

programmes, equipment usage, and more. As further institutions take action, consideration for systemic improvements must be made.

For free resources and information on what's been done, take a look at [UCL](#) and [KCL's](#) web pages and case studies.

Benefits include:

- reduced energy consumption
- reduced procurement and waste costs, improved recycling rates
- improved equipment selection, reduced consumables
- improved environment for all, including health and safety
- increased consideration for research technique and methods
- improved sample security and management
- significant cost savings, time efficiencies
- novel exciting area of sustainability.

### Top Tips

- Consider what you want to achieve and start small.
- Bring others on board by leading through example and evidence.
- Be understanding (in sustainability, we all live in glass houses!).
- Always consider alternative priorities, look for common ground.
- Ensure continuity of any good achievements.

### Moving travel forwards

Andrew Broadbent, Head of Governance and Performance, Estates, Facilities and Sustainable Development Lead, Epsom and St Helier University Hospitals NHS Trust  
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Calculating transport mileage for staff and visitors for the Sustainability Annual Report gives some startling figures – staff mileage is approx. 10 million per annum. Patient and visitor mileage is approx. 38 million per annum. Patient transport provide by the Trust is approx. 1.2 million per annum.

Over a number of years Epsom and St Helier NHS Trust has implemented a variety of travel solutions to get staff and visitors away from using cars to travel to, from and between our sites. The two main hospital sites are nine miles apart, car parking space is limited and public transport links are not well joined up because of the geography.

- Introduced a staff shuttle bus scheme that runs every half-hour between our sites, Monday to Friday. This includes a park and ride scheme from a third site located between the two main sites.
- Built a decked car park at St Helier Hospital to allow better usage of space and increased visitor parking spaces.

- Introduced a car park permit exclusion zone (2 miles) to encourage staff to walk or use public transport.
- Use variable car parking costs for staff – the more you earn the more you pay to encourage staff to use active transport.
- Moved our electric car charging points to be situated adjacent to the staff and visitor car parks at St Helier Hospital.
- Acquired new changing and cycle facilities for use.
- Developed staff cycle loan scheme and encourage participation.
- Pay staff cycle mileage for business travel.
- Installed more visitor cycle parking facilities.
- Arranged with Transport for London to extend the route of one of the local buses so that it will start and finish at Epsom General Hospital.
- Opened discussion with Transport for London regarding the same bus route to alter the route so that it runs closer to St Helier Hospital to provide a site to site link for visitors and staff at weekends
- Participate on the local council 'Public Transport Liaison Committee' and encourage any transport initiative which improves transport links across the area.
- Created a taxi service for our Elective Orthopaedic Centre patients, reducing the pressure on car parking spaces.
- Have two electric vans in use by the Estates Operational Team.

### Top tips

- Use as many different approaches to travel as possible and introduce as many as possible as long as there is some anticipated take up.
- Try to price staff car parking costs close to public transport costs to encourage active transport.
- Liaise with local council and transport providers to improve links between areas to benefit staff and visitors.
- Ask staff and visitors what they want regularly.

### Combined heat and power (CHP) plant

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We are making huge savings from a new 1,200 kW CHP plant which became operational at the hospital in late 2017. The state-of-the-art CHP plant is estimated to generate £500,000 net savings a year from October 2020, contributing to efficiency savings and improve our carbon footprint by saving 3,000 tonnes of carbon dioxide (CO<sub>2</sub>) emissions which is like taking 1,000 cars off the roads each year.

Heating, lighting and providing hot water to our 530-bedded medium acute hospital was previously costing £1.82 million a year and produced over 10,000 tonnes of CO<sub>2</sub> emissions. Both are now reduced. Initial savings are £111,000 a year post green loan repayments and in around three years are expected to rise to £500,000.

Funding the £1.69 million CHP cost are Salix interest-free green loans paid back through the savings generated. CHP works by self-generating electricity by a gas fired heat engine connected to an electrical generator, which produces hot water as a valuable by-product; this results in a net increase in site energy. Savings accrue as gas is cheaper and less polluting than electricity.

The design, planning and procurement of our CHP started five years ago and followed energy saving measures ranging from LED lights, heating controls and cavity wall insulation to new windows and software to automatically turn unwanted computers off.

While large parts of the town get its power from remote power stations, up to 70 per cent of the hospital's power is generated on-site by low carbon electricity – enough to power 2,900 houses a year. CHP is a win-win for us as it provides social, economic and environmental benefits.

### Top tips

- CHP projects have long timescales – gathering site heat and electricity data, procurement including possibly European tender advertising, board or committee approvals, equipment delivery times, site works, etc. will all affect the date savings start
- To run efficiently CHP plant needs regular maintenance throughout its lifetime so remember to include both CAPEX and OPEX contracts when you go out to tender.
- CHP plant is procured in euros and therefore subject to the vagaries of currency movement. Consider lock-down of the euro: pound exchange rate to reduce this price risk.
- Engage a consultant with previous experience of CHP.
- Make sure you get early buy in from your maintenance and facilities teams as their help to integrate the CHP plant to existing infrastructure will be vital.

### Clinical Sustainability in Care Without Carbon Project

Claire Jordan, Clinical Sustainability Lead, Darzi Fellow, Sussex

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The Care Without Carbon team successfully gained funding for a one-year Darzi Fellowship project to identify and develop opportunities to integrate sustainable development into clinical care.

Climate change is a complex problem which WHO has described as the “greatest threat to global health in the 21<sup>st</sup> century.” The NHS is responsible for approximately five per cent of all UK environmental emissions. However, 80 per cent of the NHS carbon footprint is from procurement, medication, patients and staff travel. These are determined by clinical decisions and models of care and therefore present the greatest opportunities for reducing healthcare's carbon emissions.

The Darzi project began to look at how to help clinical teams and services identify sustainable development opportunities. A questionnaire based on 3 key themes was developed – Prevention, Efficiency and Pathways. This was promoted and circulated across the Trust. The use of the questionnaire and themes enabled links to be made between Care Without Carbon team and clinical teams as well as other service improvement and development teams in the trust.

## Top Tips

- Use social media – twitter is a great way of both gaining information and sharing, @ClaireAJordan @CareWithoutCO2.
- Try and understand and use language of other teams/services.
- Find out about and make links with other departments in your organisation who may be doing similar work for example QI, project management, delivery team.
- Check out if there is a bigger picture, system change – find ways to be part of it.
- 98 per cent of staff think it is important for health and social care sector to support the environment (SDU workforce questionnaire) – so staff already onboard but do they know how?
- All change/improvements, some example starting points might be time, staffing, financial or patient improvement, will nearly always have positive environmental impact. Find a way to identify and highlight added benefit.
- Learn about language of behaviour change; ways to influence and persuade others to do things different.
- Other people don't think like you do – this may not be because they don't care about the environment – they just haven't thought about it.