



## Our views

Healthcare sector leaders, whether working for the NHS, private healthcare providers or pharmaceutical businesses are, quite rightly, very focused on their most significant challenges – from saving lives every day, to meeting targets and improving care.

However, the potentially huge benefits which can be achieved from focusing on energy and resource efficiency are currently being underestimated, or missed altogether. Three of KPMG in the UK's health and sustainability experts share their insights on this critical healthcare issue.



## Karen Wordsworth | KPMG Director - Sustainability Services

highlights the potential to align cost saving and sustainability agendas – and how the NHS can save half a billion pounds through energy and resource efficiency.

The combination of rising energy costs, scarce resources and climate change are creating critical challenges for healthcare providers. In financial terms alone, the cost of delivering health services looks set to rise significantly and consume larger proportions of healthcare budgets.

Energy is a particularly difficult challenge. For example, a leading UK supermarket expects its energy costs to more than double in five years, with little prospect of being able to pass on extra costs to customers. Healthcare providers are, whether they recognise it or not, facing the same challenge – and with far less preparation.

At a time when margins are being squeezed, hospital budgets are being cut, pharmaceutical businesses are facing financial pressures and healthcare estates require investment, energy and resource efficiency represents a smart approach to reducing costs and releasing resources to be spent elsewhere.

The 'A Marginal Abatement Cost Curve for NHS England' NHS SDU Report has calculated that the NHS could save half a billion pounds annually through energy and resource efficiency. This is a huge sum of money when considered in terms of the staff that it could buy for example.

## Getting sustainability opportunities heard

My experience is that quantifiable savings of this scale would be likely to receive far more attention by healthcare leaders if they were attributed to the likes of improved drug regimes, lower cost drug regimes or outsourcing programmes.

Energy and resource efficiency still appears to be a blind spot – or out of the comfort zone for many healthcare decision makers, despite the relative ease of implementing such changes compared to existing cost saving challenges which have been tackled such as staffing costs and adapting workforce models of care.

So how can energy and resource efficiency be improved and what does success look like? In practical terms, a good example is the value in a change of approach towards waste management.

## Waste becomes an asset

While the healthcare sector is paying to have waste collected, leading practice could be adopted from retailers who expect waste management companies to be paying them for their waste in the near future – waste has become an asset rather than a liability.

An average sized UK hospital currently pays millions of pounds a year for clinical waste processing alone and the technology exists today to make this clinical waste generate revenue instead of costs.

In terms of energy efficiency, in addition to the financial pressures associated with growing energy costs, regulatory change, principally in the form of the Energy Act, means that in April 2018, it will be against the law to rent out commercial (or residential) premises where a minimum energy efficiency standard has not been achieved. This issue is especially relevant to the private providers, where property companies lease premises to operating companies.

## **Benefiting front-line care**

Energy and resource efficiency savings programmes may not sit comfortably within the cost-saving toolkit of many healthcare leaders today, but I haven't yet assessed a healthcare organisation and identified savings representing anything less than twenty percent of costs – a figure which typically represents millions of pounds of savings. We would all, I'm sure, like to see these millions spent on front-line care rather than energy and waste processing.

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## ...failing to address and reduce energy consumption will become a greater burden in two years...



## Roger Widdowson | KPMG's UK Head of Private Sector Healthcare

highlights the opportunity for public private partnerships to realise energy and resource efficiency benefits.

My view is that energy costs are only going to go one way (up), we are becoming ever-more energy hungry and, in the UK, there is uncertainty surrounding almost all future energy sources, from nuclear, to renewable energy and most recently, fracking.

Similarly waste, for a variety of reasons, is going to become more expensive to dispose of unless, as Karen Wordsworth describes, appropriate steps are taken – costs will grow as a disincentive to produce waste and to stimulate the market to play a role in managing waste disposal.

## Rubbish technology

Short term financial barriers clearly exist, which are preventing many healthcare operators and suppliers from tackling escalating energy costs and waste effectively. In terms of waste, affordable technology is readily available which allows waste to be converted into a commodity with value (see Transforming waste).

While many hospitals simply don't have the money to fund such programmes independently, a public private partnership model could, I believe, enable hospitals or clusters of hospitals to access the necessary capital to purchase such technology.

Public private partnership models could allow hospitals to reduce or eliminate waste disposal costs and gain a share of the revenue from the waste which now has a commodity value. Using this approach, the private sector would act as a funding partner and a technology partner. This enables healthcare providers to break free from inefficient and costly waste disposal arrangements without the need to provide the investment capital.

The risk associated with inaction is that today's waste management businesses adopt the technology and exclude the providers of waste from the benefits – and continue to charge for waste collection.

## The growing burden of energy costs

Reducing energy costs requires a different approach, even fitting LED lights consuming between two and four watts (instead of 50 watts for example) reduces energy consumption very simply. It's hard for healthcare professionals to focus on the cost saving implications of lighting when firefighting bigger issues, but failing to address and reduce energy consumption will become a greater burden in two years and greater still in five years as energy costs increase.

Also, for example, solar energy, despite our climate, is able to heat water cheaply. The private sector could also fund the installation of more efficient boilers and the installation of more sophisticated environmental control systems, sharing overall cost savings (net of the cost of investment in equipment) with the hospital.

Energy compliance is already becoming a critical issue when valuing private sector healthcare property portfolios, if improvements are needed to an estate to meet regulatory standards, as set out in the Energy Act, this could significantly reduce the value of these assets. Consequently, this reduces income and profit generation, and in turn value.

## The win-win public private partnership

I would argue that one of the biggest barriers to this approach today, is overcoming the scepticism about the motives of private sector partners. The private sector does have a role to play, and it needs to make a profit from such partnerships in order to invest in tomorrow's technology, but existing technology, funding and operating models can result in all parties winning.

# Transforming waste Waste collection Waste centre

**Case Study** – NHS estate with £2.9m spend. Through changes to waste strategy potential save identified is £2.0m per year

Source: KPMG in the UK

The burden of delivering energy and resource efficiency improvements is not one which many healthcare providers can often meet alone. My belief is that a pragmatic approach to realising such benefits involves bringing together a waste producer or energy consumer, such as a hospital, with a private sector funding partner and a technology partner – after all, the need to address these issues looks set to become ever-more pressing and be forced higher up the agenda over time as costs increase.



## Healthcare does not have a 'moral offset' – we have as much responsibility as other organisations and sectors...



**Professor Hilary Thomas | KPMG Partner and Clinical Lead, Healthcare and Life Sciences** argues that environmental sustainability should be driving significant change in the healthcare sector.

'I'm too busy saving lives to dedicate time to sustainability issues in healthcare'. This unfortunately, continues to be seen by some in our sector as a valid argument for avoiding engaging in sustainability issues. The reality is that healthcare does not have a 'moral offset' – we have as much responsibility as other organisations and sectors to ensure that we have and will continue to have, the water, materials, and resources to protect human health and our environment.

In fact, it could be argued that we have a greater responsibility than other sectors. First, because protecting human health is at the heart of the day-job. Secondly, the healthcare sector is a significant consumer of energy and producer of carbon, from manufacturing pharmaceuticals to renal dialysis – and the size of the NHS alone means that it should be a leader rather than a follower in terms of sustainability.

But how do you persuade healthcare professionals, as individuals as well as employees, that their initiatives with strong sustainability credentials are highly valued by their organisation and should be pursued – and that sustainability is part of their organisation's DNA? This is a significant challenge, but I believe that sustainability has to become a way of life for us all. Globally, we're all on a 'burning platform' in terms of the future of the planet.

I'm interested in working with healthcare and life sciences organisations to make sustainability-led change the way healthcare is delivered. For example, making virtual appointments the norm, changing the way outpatient services are delivered to reduce the number of visits which need to be made to a central hospital building and harnessing the transformative potential of technology. Such changes are ambitious, but have been shown to be a win-win for the healthcare provider and the patient.

For example, the Ontario Telemedicine Network, one of the largest in the world, uses two-way video conferencing to provide access to care for patients in every hospital and hundreds of other health care locations across the province.

In the fiscal year 2011-12, more than 200,000 Ontario patients received care through telemedicine, and a 50 percent increase is expected in 2012-13. This achieves significant financial savings for healthcare providers, as for every dollar invested in telemedicine, five dollars in hospital costs are avoided.

It also offers strong sustainability credentials in terms of reducing the number of journeys and CO2 emissions.

If you look at large organisations which have successfully baked sustainability into how they operate, a virtuous circle is created in terms of aligning corporate and sustainability ambitions.

**GSK's** environmental sustainability strategy 2020 has goals which include achieving a 25 percent carbon footprint reduction, a 20 percent reduction in water use, zero waste to landfill, and almost doubling mass efficiency – the efficiency with which it uses materials in new pharmaceutical products.

**Johnson & Johnson's** Healthy Future 2015 goals range from environmental sustainability and enhanced supply chain stewardship, to greater transparency and commitments to address diseases in the developing world.

**Marks and Spencer's** Plan A programme, launched in 2007, shapes a clear way of working with customers and suppliers to combat climate change, reduce waste, use sustainable raw materials and trade ethically.

I would like to see sustainability embedded in leadership thinking and approaches more broadly in the healthcare sector – not a box which is ticked. Efforts made by the healthcare sector, in my view, will be well rewarded. Patient access and satisfaction will be increased, carbon footprints reduced, improved models of care will evolve and healthcare estates will be reconfigured.



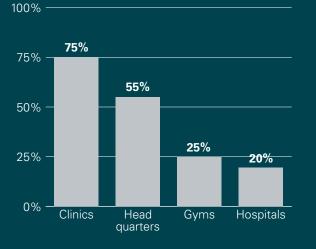
## Case study

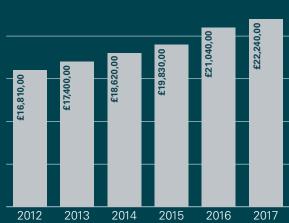
KPMG's sustainability team performed an energy efficiency review for a healthcare company, by using benchmarking to inform, consumption levels were measured against typical CIBSE (Chartered Institution of Building Services Engineers standards across 80 different sites which showed:

- 85% of the energy data did not comply with typical benchmark standards.
- This was often linked to disproportionately high gas usage.
- It is predicted that by 2017 the energy spend will increase by 25% from £15 million to £20 million.
- Year-on-year comparison showed that increases in annual consumption will cost the company £250,000 more than the previous year.
- In this particular review, and over a five year period, KPMG findings highlighted a potential saving of £5 million.

## Energy consumption breakdown

## Trend in energy prices (p/kWh)















## **About KPMG's Health Care**

KPMG's Global Healthcare and Life Sciences Team comprises a cross functional network covering over 40 countries. The hub of our practice is the KPMG Global Health Centre of Excellence (COE). The team is made up of individuals from KPMG's global network of member firms, and works with clients at the heart of health reform and life sciences practice. Many have held senior positions in private or public sector healthcare and life science organisations and are prominent members of highly influential think tanks and associations.

Spanning KPMG member firms in Europe, North America and Asia/Pacific, the team is mobile and works across our network to design and implement creative and practical approaches for clients that are designed to harness the latest in national, regional and global perspectives. KPMG member firms are leaders in delivering a breadth of audit, tax and advisory services to meet the unique needs of healthcare clients from national and local government, to private and listed businesses including leading pharmaceutical companies and a range of investors.

## KPMG's sustainability profile

At KPMG, we are we committed to our people, communities and environment. Sustainability is embedded in KPMG's global strategy and our commitment is led by a team of Partners and Directors from across the firm, many of whom are recognised opinion leaders.

KPMG's Performance in The Carbon Reduction Commitment (CRC) Energy Efficiency Scheme league table rankings

- 38th out of 2097 in the latest league table, an improvement from 99th in 2011
- KPMG is ranked 17th out of all private sector organisations (out of 1463)
- The highest ranking amongst the Big Four Accounting firms for the second year in a row

This is the result of investments in the UK firm's energy efficiency, consolidation of our property estate, installation of smart meters and accreditation to the Carbon Trust Standard (CTS). Our CO2 emissions covered by CRC dropped by 18% between 2011 and 2012, due to:

- Consolidation of offices particularly in London
- Move to a new, energy efficient, Breeam (BRE Environmental Assessment Method) Excellent-rated, Head Office building in Canary Wharf
- Installation of sophisticated Building Management Systems at many offices, resulting in better control over energy consumption and significant reductions

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