



Goods and services carbon hotspots

NHS
Shared Business Services



NHS England breakdown of goods and services
carbon footprint by organisation type

Executive Summary



Summary

The 2010 carbon footprint identified procurement as 65% of the NHS England carbon footprint¹.

Building on this with this exciting new research, the goods and services carbon hotspots for the NHS are identified by organisation type. Using expenditure data from 228 NHS trusts to produce a bottom-up carbon footprint for different categories of spend this reveals the patterns of carbon emissions. This cutting edge research provides a first view for prioritising action which will be improved through feedback from the health system and further research.

This research also supports the NHS in understanding the Public Services (Social Value) Act 2012², which requires all public services to consider taking into account economic, social and environmental value, not just price, when commissioning and buying goods and services.

Pharmaceuticals remain at 22% of the NHS England carbon footprint, most of this (79%) in GP prescribing, primary care and community services. With at least 48% of the goods and services carbon footprint for GPs coming from pharmaceuticals this highlights the importance of improved prescribing practices which reduce waste. Acute and mental health services contribute 13% and 5% of the pharmaceuticals footprint respectively.

Medical instruments contribute 13% to the NHS England carbon footprint with most of this (75%) from acute services and a further 13% in primary care and community services.

Building energy use remains at 18% of the NHS England carbon footprint with the largest contribution from acute services (73%), of which gas (45%) and electricity (51%). The scale of the footprint from medical instruments (1.96 MtCO₂e) is similar to that for electricity (1.3 MtCO₂e) in acute services.

¹ NHS SDU: NHS England Carbon Emissions: Carbon Footprint Report Published 2012. Available at: <http://www.sdu.nhs.uk/corporate-requirements/measuring-carbon-footprint/nhs-carbon-footprint.aspx>

² Public Services (Social Value) Act 2012. Available at: http://www.legislation.gov.uk/ukpga/2012/3/pdfs/ukpga_20120003_en.pdf

Key messages

- Pharmaceuticals are 22% of the NHS England carbon footprint
 - 79% of pharmaceuticals are prescribed in primary care and community services
- Building energy use remains a key area of focus for acute organisations
- Medical instruments are 13% of the carbon footprint
 - 75% of medical instruments are used in acute services



Given that the majority of acute, mental health and ambulance services are commissioned these contribute to the carbon footprint for CCGs. The greatest improvements in sustainability are through an analysis of the whole impact. Services commissioned from acute, mental health and ambulance services are therefore included in the carbon footprint for commissioning organisations.

Commissioned services are at least 63% of the footprint for commissioning organisations with procurement carbon footprint contributing a further 34%, making low carbon commissioning and procurement crucial for carbon reduction in commissioning organisations.

Monitoring building energy use remains much more significant for acute, ambulance, community and specialist.

In summary, this research supports the current focus on acute building energy use and also quantifies of the contribution from different categories of goods and services. Quantification of the carbon footprint from health services could be further enhanced through modelling of the travel carbon footprint.

Guidance for action on the goods and services carbon footprint is already available from the Procuring for Carbon Reduction (P4CR) documents and tools³.

NHS England results

NHS England carbon hot spots:

Category	Non-pay spend (£)	Carbon (tCO ₂ e)	Percentage
NHS England	40.1b	20m	100%
Pharmaceuticals	12.9b	4.4m	22%
Primary care and community	10.2b	3.5m	18%
Acute	1.6b	0.6m	3%
Medical instruments	5.7b	2.6m	13%
Acute	4.3b	2.0m	10%
Mental health	0.3b	0.2m	1%
Building energy use	0.8b	3.5m	18%
Acute electricity	0.3b	1.3m	7%
Acute gas	0.2b	1.2m	6%
Business services	8.0b	1.8m	9%
Acute	3.8b	0.9m	4%
Primary care and community	2.9b	0.6m	3%

³ NHS SDU: Procuring for Carbon Reduction (P4CR). Available at: <http://www.sdu.nhs.uk/corporate-requirements/interventions/procurement.aspx>



NHS England hotspots summary

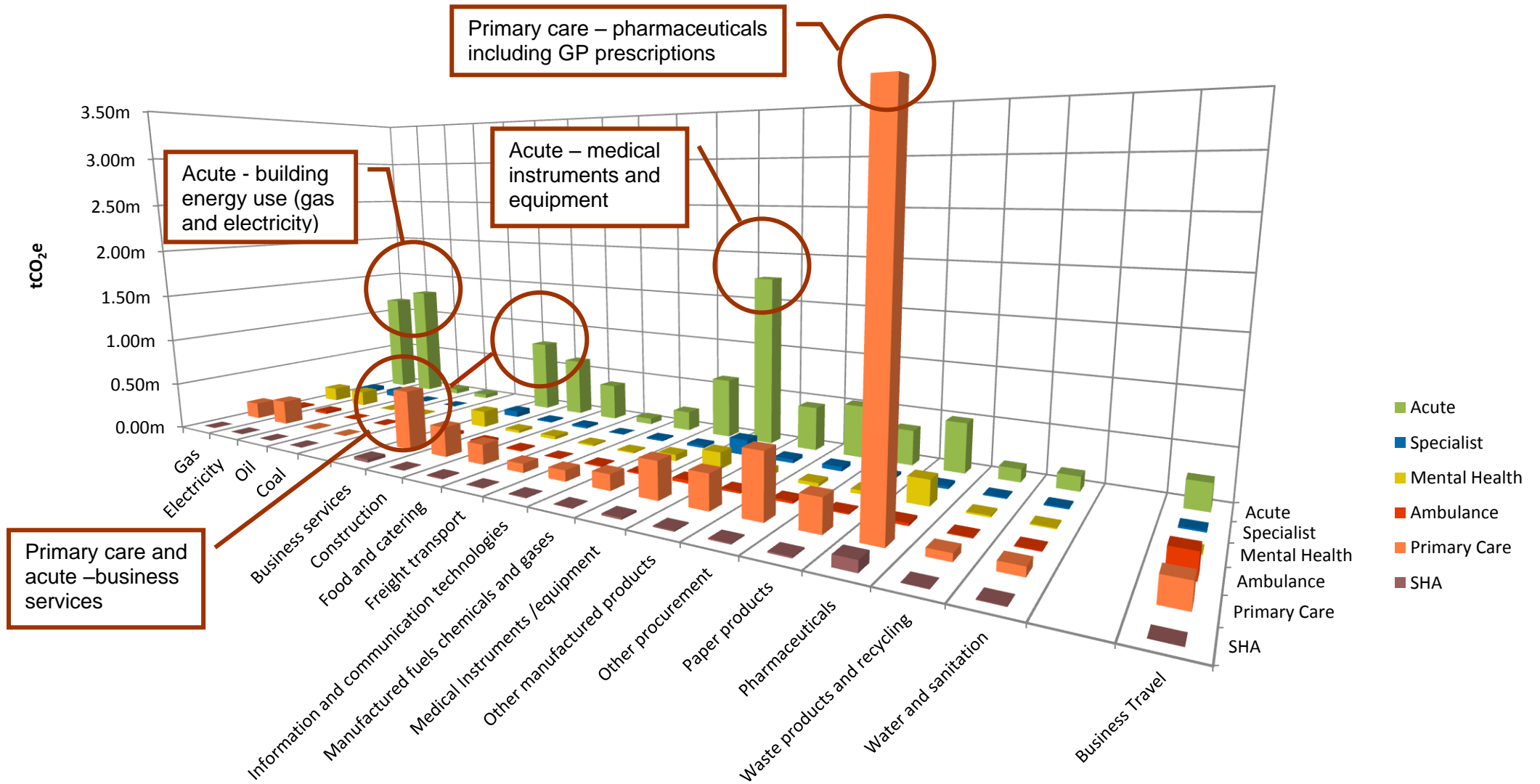
- Pharmaceuticals are 22% of the NHS England carbon footprint of which:
 - o 79% is in primary care and community services
 - o 13% is in acute services and 5% in mental health services
- Medical Instruments account for 13% of the NHS England carbon footprint of which:
 - o 75% is acute services
 - o 13% is primary care and community services
- Building energy use is 18% of the NHS England carbon footprint of which 73% is acute services of which:
 - o 51% electricity
 - o 45% gas
- Business services is 9% of the NHS England carbon footprint of which:
 - o 50% is acute services
 - o 34% is primary care and community services

For ambulance services fleet vehicles, gas and electricity together make up 55% of the carbon footprint from goods, services and building energy use.

The full report is available on our website www.sdu.nhs.uk.



Goods and Services carbon footprint – carbon hotspots





NHS Sustainable Development Unit

Victoria House, Capital Park
Fulbourn, Cambridge CB21 5XB
Tel: 01223 597 792
Fax: 01223 597 712
Web: www.sdu.nhs.uk

The NHS Sustainable Development Unit develops organisations, people, tools, policy, and research to help the NHS in England fulfil its potential as a leading sustainable and low carbon organisation.