Activities and Results of the SDU (England)

Sonia Roschnik
Sustainable Development Unit

Workshop
Sostenibilità in Sanità:
Acquisti pubblici, Energia e Mobilità nel Sistema Sanitario Italiano e in Europa
Sustainability in healthcare sector:
Public Procurement, Energy and Mobility in the Italian health system and beyond
7 November 2014
SDU approach

- Consultation
- Carbon Reduction Strategy
- Future Scenarios – 2030
- Board Leadership
- MAC Curves
- A Route Map for Sustainable Health
- Public Opinion Surveys
- Sustainable Development Strategy
- UN Statements
- Cross System Group
- Coalition for Sustainable Pharmaceuticals and MD
NHS England CO\textsubscript{2} baseline to 2020 with Climate Change targets

- **NHS England forecast**
- **2007 baseline**
- **Carbon Reduction Strategy Target**
  - 10\% target from 2007
- **1990 baseline**
- **64\% target from 1990 baseline**
- **80\% target from 1990 baseline**
- **34\% target from 1990 baseline**
- **Carbon Budget Target**

Year

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Mt CO\textsubscript{2}

<table>
<thead>
<tr>
<th>0.00</th>
<th>5.00</th>
<th>10.00</th>
<th>15.00</th>
<th>20.00</th>
<th>25.00</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Carbon Reduction Strategy

• Energy and Carbon
• Procurement and Food
• Travel and Transport
• Waste
• Water
• Design of Built Environment
• Organisational and Workforce Development
• Partnerships and Networks
• Governance
• Finance
• Looking Ahead
Potential reductions

Figure 3: NHS England CO₂e baseline to 2020 with 8 reduction measures

- Refurbish buildings
- Replace buildings
- 20% less travel emissions
- 40% renewable electricity from grid
- 20% less pharma
- 20% less med-tech
- 20% less other procurement
- Model of care

Baseline emissions
Marginal Abatement Cost (MAC) curve

CO₂ Savings (tCO₂) in 2015

Cost per tonne of CO₂

Increasing Costs

Increasing Savings

100,000 200,000 300,000 400,000 500,000 600,000 700,000 800,000

-2,000 -4,000 -40,000
£1bn savings to NHS/year?

- £10 M - 1.9% reduction in energy
- £180 M - MAC curve implementation
- £68 M – improved models of care (stroke, electives recovery, # NOF)
- £65 M – corporate approach
- £17bn over 20 yrs – reduced burden of disease
Productivity, Prevention and Carbon Reduction

• 1 bedday reduces carbon emissions by ~ 80kg and saves £200
• Estimated 33M (of 55) bed days could be saved in NHS if LoS reduced to national median in 2008/9
• This would save 2.6Mt of CO2e (~ 10% of NHS carbon footprint)
Goods and Services carbon footprint – carbon hotspots

- **Acute - building energy use (gas and electricity)**
- **Acute – medical instruments and equipment**
- **Primary care – pharmaceuticals including GP prescriptions**

**Primary care and acute – business services**

**Acute**
- Specialist
- Mental Health
- Ambulance
- Primary Care
- SHA

**Sustainable Development Unit**
Working across the NHS, Public Health and Social Care System
Summary of progress - Carbon
Sustainable Health System Route Map 2050

BEHAVIOURS

STANDARDS

INNOVATION

Sustainable Development Strategy 2014/5 to 2019/20

CARBON REDUCTION STRATEGY 2009-2015

www.sdu.nhs.uk
The Public’s view

- Ipsos MORI 2011 and 2013
- 89% thought it important or very important for health system to be more sustainable
- 36% said it should even if cost more money
Health and Social Care England Carbon Footprint

CO$_2$e baseline from 1990 to 2025 with Climate Change targets

Year


Mt CO$_2$e

0.00 5.00 10.00 15.00 20.00 25.00 30.00 35.00


Trajectory wedge
HSC System England GHG emissions
HSC System England forecast
2013 baseline
Trajectory to 2020
28% from 2013 and 34% from 1990
1990 baseline
Climate Change Act Trajectory
50% Target from 1990 baseline
64% Target from 1990 baseline
80% Target from 1990 baseline
A sustainable health and care system

Enable the positives

Reduce the negatives
Cross system support
A sustainable system that protects and improves health within environmental and social resources now and for the future.
Goal 1
A healthier environment
Goal 2
Communities and services are resilient to changing times and climates
Goal 3 Every opportunity contributes to healthy lives, communities and environments.
Care model for a healthy life
• Adaptation Reporting across system 2015
• 10% Carbon Reduction by 2015
• UN Statements
• Cross System Group
• Coalition for Sustainable Pharmaceuticals and Medical Devices
Results

- Reduced environmental impact
- Prepared communities
- Local community leadership
- Embedding sustainability
- Improved health outcomes
- Recognition and replication
CLIMATE SUMMIT

What if it's a big hoax and we create a better world for nothing?

- Energy Independence
- Preserve Rainforests
- Sustainability
- Green Jobs
- Livable Cities
- Renewables
- Clean Water, Air
- Healthy Children
- Etc., Etc.
Who produces the greenhouse gases?

The world map reflecting production related to climate change. “Climate Change presents the biggest threat to health in the 21st Century” The Lancet (373;9697 pp 1659-1734, May 16-22 2009).
Who bears the burden?

The world map reflecting mortality related to climate change. “Climate Change presents the biggest threat to health in the 21st Century” The Lancet (373;9697 pp 1659-1734, May 16-22 2009).
Thank you