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NHS Carbon Management Programme Phase 2

A Case for Action

By

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The NHS Carbon Management Programme

Aims of Presentation

Set the Central Manchester Scene

Elements of the Programme

Organisational Drivers

Benefits and Challenges

The Project Plan

Opportunities

Case for Action

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Setting the Scene

Four Hospital Sites

Manchester Royal Eye Hospital

Manchester Royal Infirmary

Saint Mary's Hospital for Women and Children

University Dental Hospital Manchester

Booth Hall Children's Hospital

Royal Manchester Children's Hospital

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Setting the Scene

Activity 2006 -07

Over 100,000 Clinical Operations and Procedures

Heated Volume circa 578000 m³

Utility Running Costs £5.2M

Carbon Emissions of 55000 tco₂

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Setting the Scene

Major Impacts on Carbon Emissions

£ 500M PFI Development

3 Years into 5 Year Build Programme

Retention of 30% of Existing Buildings

Commissioning of New Buildings

Dual Operation of Redundant Buildings

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NHS Carbon Management Programme

The 5 Main Steps

- 1 Mobilise the Organisation
- 2 Set Baseline and Forecast Targets
- 3 Identify and Quantify Options
- 4 Finalise Strategy and Implementation Plan
- 5 Implement Plan

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NHS Carbon Management Programme

Carbon Reductions and Target Business Elements

Buildings (Energy and Facilities)

Waste Management

Transport

Procurement

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Organisational Drivers

NHS Corporate Citizenship Programme

NHS Commitment to Sustainability

Organisational Reputation

Reduction in Carbon Emissions

Reduction in Operational Costs

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Benefits of the Programme

A Structured Approach

Networking Opportunities

Sharing of Ideas

Joint Approach to Problem Solving

Robust Implementation Plan

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The Challenges of the Programme

Gaining Senior Management Support

Changing Organisational Culture

Engagement of External Stakeholders

Influencing External Stakeholders

PFI and Setting Baselines

Obtaining Funding

The Day Job

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The Project Plan

Set up a Project Team

Set Terms of Reference

Set up the Governance Structure

Set Direction of Travel

Gain Trust Board Approval

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The Opportunities Workshop

Purpose of the Workshop

Workshop Attendees

Workshop Facilitators

Outcome of the Workshop

Top Twenty Ideas

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Main Themes from Opportunities Workshop

Raising of Environmental Awareness

Where are we now Environmental Surveys

A Range of Energy Saving Engineering
Projects

Improve Segregation of Waste Streams

Transport Activity and Measurables

Procurement Activity and Measurables

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The Programme Toolkit

Suite of Spreadsheets

Populate with known Data from the
Business Elements

Automatic Calculation of Predicted
Reductions against BAU

Result is the Value at Stake

VAS Provides the Case for Action

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Microsoft Excel - Copy of nhscm_b1_baseline_and_VAS_tool_v1.1_260707

File Edit View Insert Format Tools Data Window Help

Type a question for help

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Buildings Worksheet

↑ Click on boxes in top left to expand or contract all the grouped cells

Introduction	Energy type (Keep alphabetical)	CO ₂ Factors kgCO ₂ /kWh	Typical Cost (pence / kWh)	Building Type List (Must be in alphabetical order)	GJ/100m ³		CO ₂ kg/m ² Good Practice		% Electricity	Category List
					Typical	Good Practice	Gas as fossil fuel	Oil as fossil fuel		
<p>On right, choose suitable Categories (up to 8). These are only required to display the breakdown pie chart and can be anything from general building type to</p> <p>CO₂ Factors are given on the right and can be updated as required. The data source is given.</p> <p>Notes are provided in many cells for more explanation & data sources. (Hold mouse over cells with red triangle)</p> <p>Filters: Each year below can be filtered to provide specific totals. See Autofilter feature.</p> <p>Data Entry cells are shaded Yellow. (Grey shaded cells can be overwritten)</p> <p>Benchmark values are given on the right. However</p>	Coal	0.32	0.62	Community & Mental Health	57.4	50	95	115	20.9%	Region 1
	Electricity	0.43	5.00	Community & Mental Health N	57.4	40	75	90	20.9%	Region 2
	Gas	0.19	2.50	General Acute Hospital	66.8	62	125	145	27.7%	Region 3
	LPG	0.214	3.20	General Acute Hospital New	66.8	52	105	120	27.7%	Region 4
	Oil	0.27	3.20	GP Surgeries	51.9	46	90	105	22.9%	
				GP Surgeries New	51.9	36	70	85	22.9%	
				Health Centres and Clinics	41.6	35	70	80	22.9%	
				Health Centres and Clinics N	41.6	25	50	60	22.9%	
				Teaching & Specialist	75.7	65	135	160	31.2%	
				Teaching & Specialist New	75.7	55	115	135	31.2%	

Conversion Assistant

Energy Cost: £ -> kWh

Coal	0
Electricity	0
Gas	0
LPG	0
Oil	0

LPG/propane: kg -> kWh

Gas: m³ -> kWh

Oil: litres -> kWh

Coal: tonnes -> kWh

Ready Circular

Intro Buildings Transport Commuting Other Baseline Data Basel

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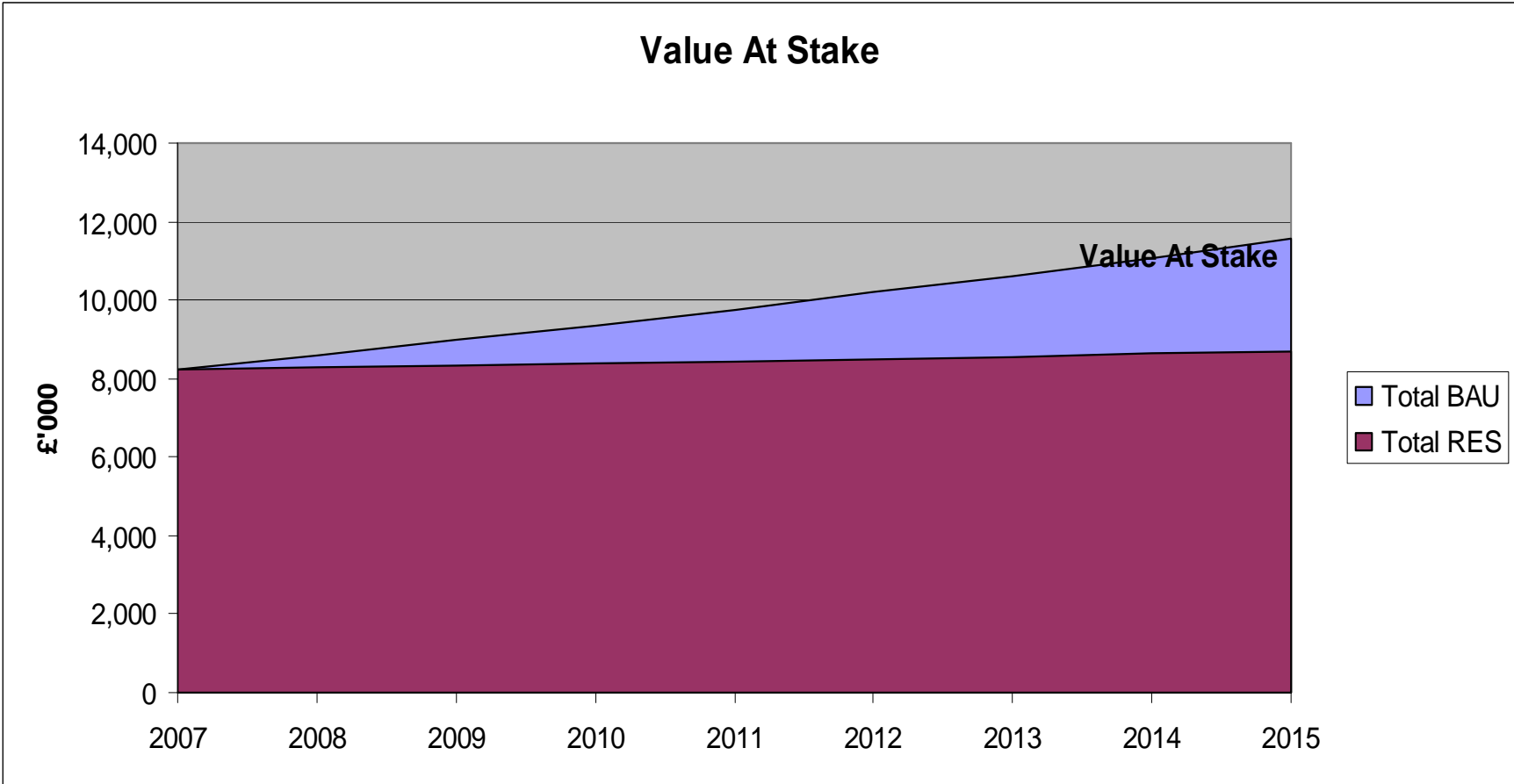
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Value at Stake £'s



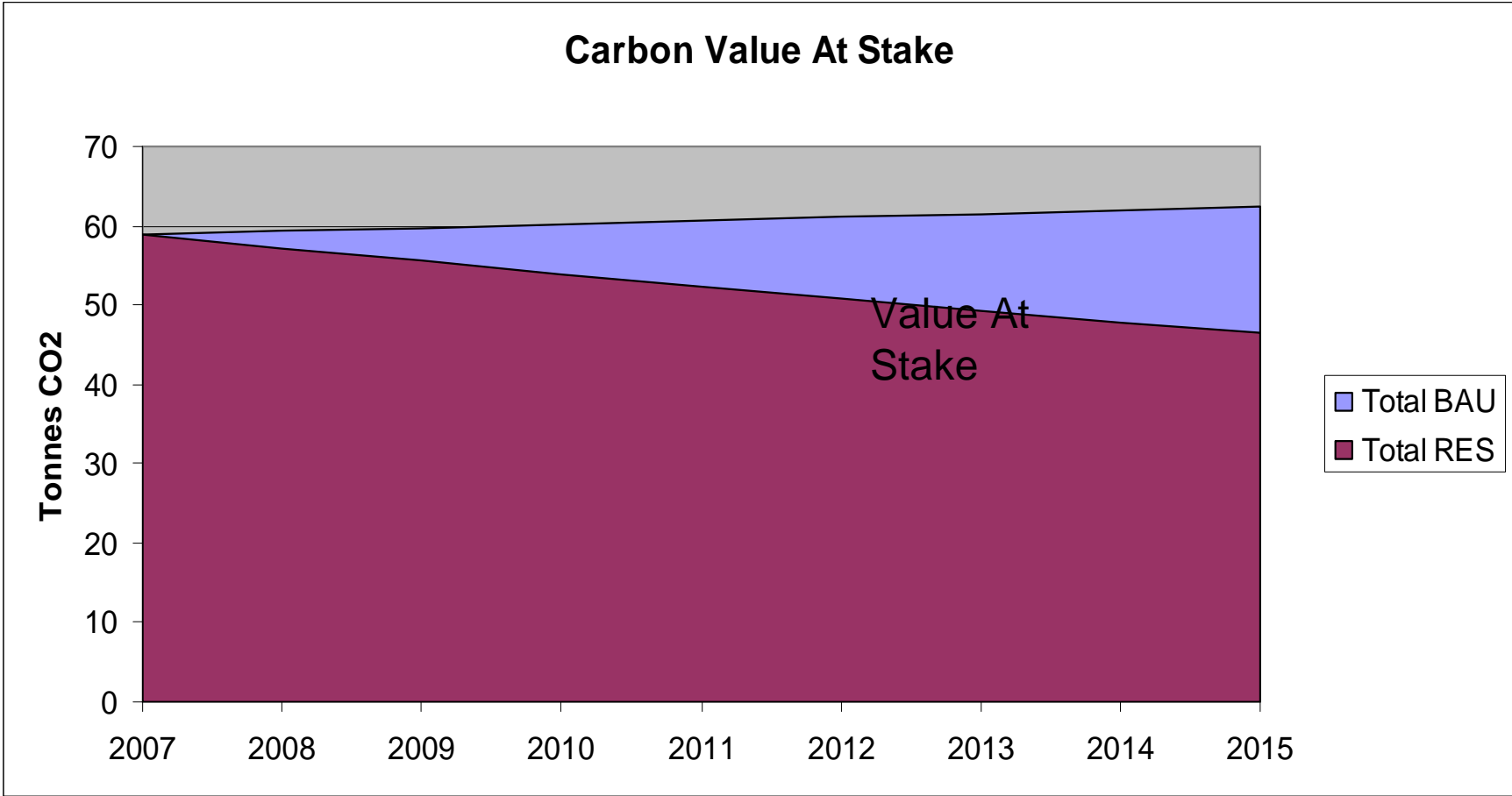
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Value at Stake tCO2



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Implementation Plan

Case for Action

Vision

Strategy

Aims and Objectives

Projects

Funding Requirements

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Implementation Plan

Case for Action

Five Year Plan (optional)

Carbon and Cost Values at Stake

Project Team Responsibilities

Identified Stakeholders

Communication Plan

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To Summarise

The Five Step Approach

Set the Scene

Discussed Organisational Drivers

Assessed Benefits and Challenges

The Case for Action and the Implementation Plan

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Our Next Steps

Trust Board Approval of the Implementation Plan
January 2008

Implementation

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