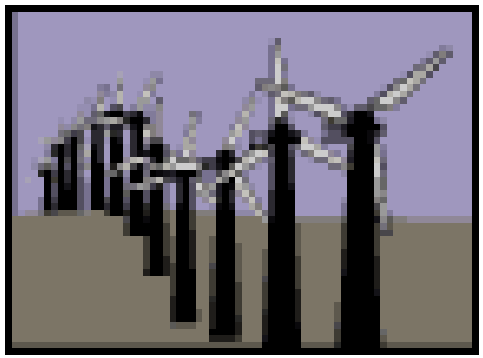
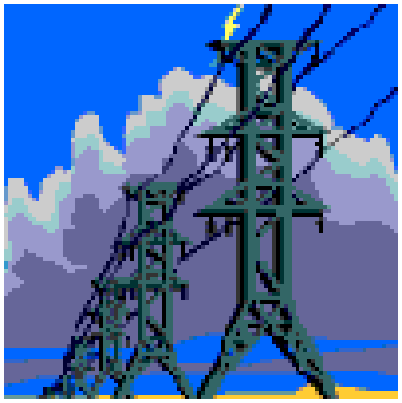
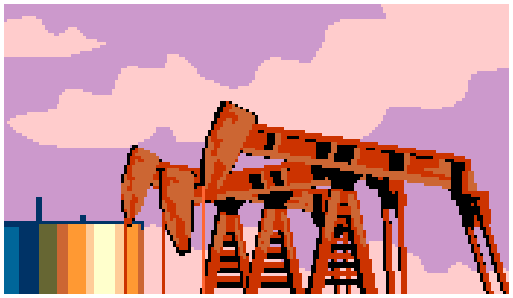
Scottish Court Service



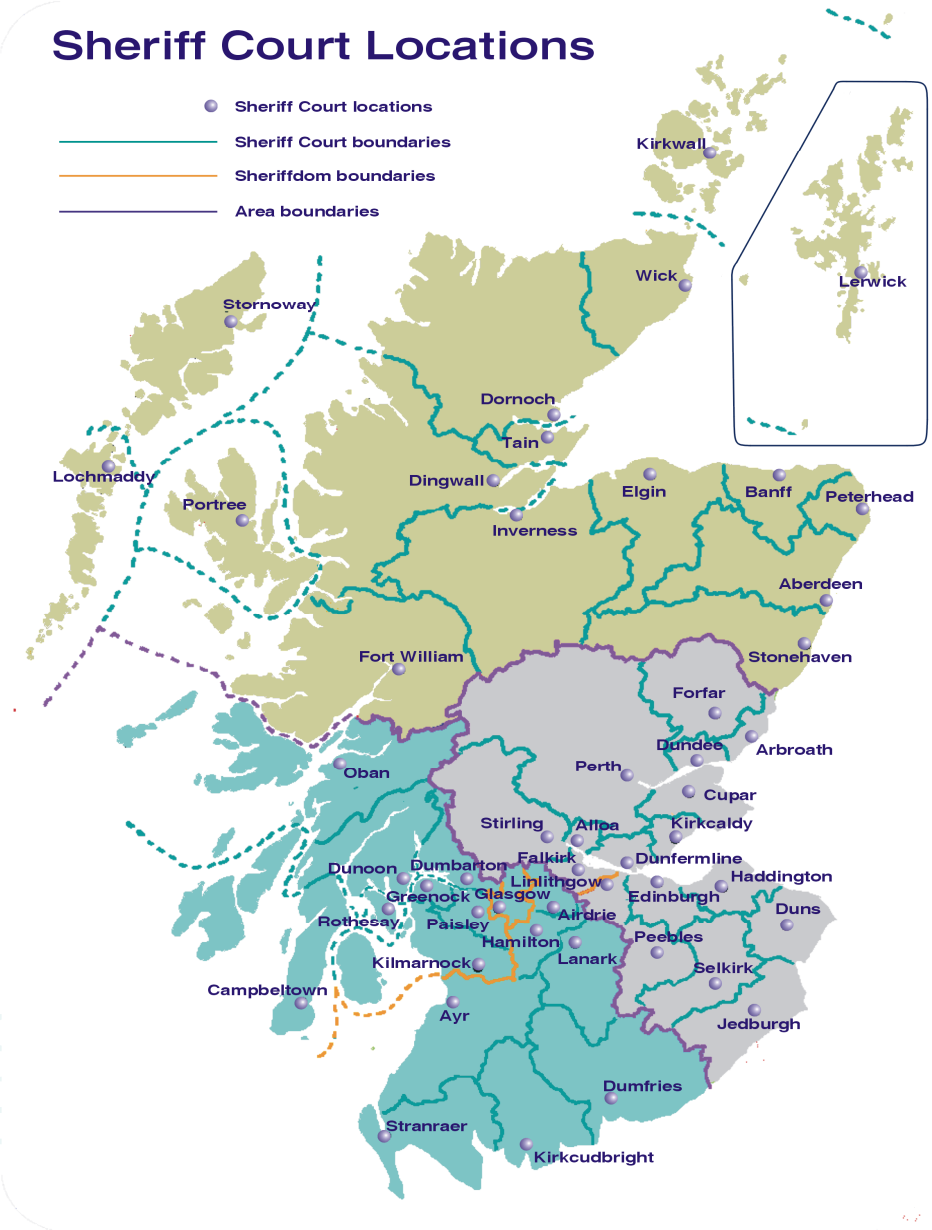




Carbon Trust Standard – Case Study

Scottish Court Service – Key Facts and Figures

- 49 Sheriff Courts
- 4 High Courts
- Asset Book Value £375M
- 81% Estate is Listed
- Annual Estate Budget £26M
- Utilities Budget £3M

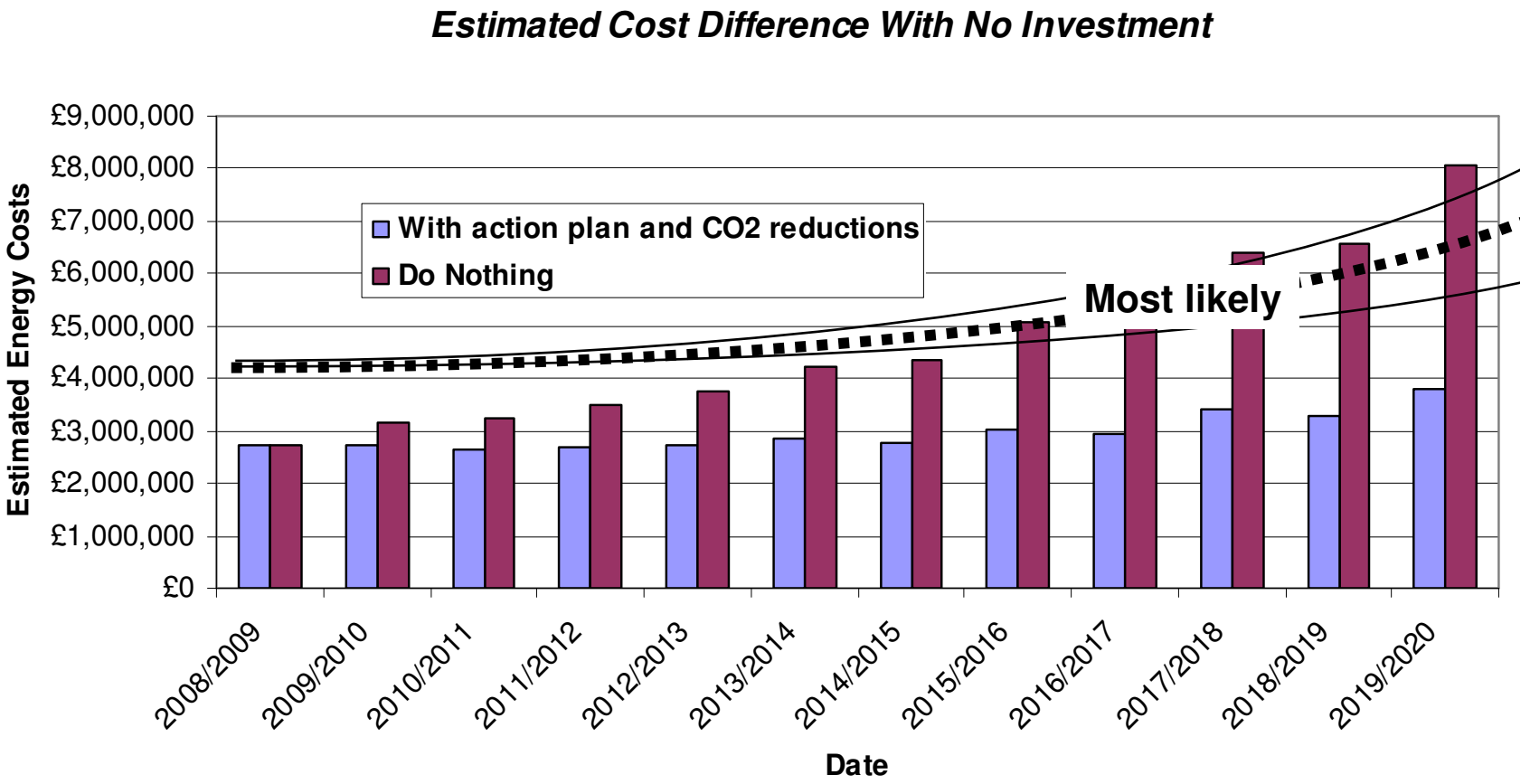


WHY: what were the key drivers?

- Understanding our Carbon Footprint
- Cost Saving
- Scotland's Climate Change Declaration
- Carbon Reduction Commitment
- Reputation / leadership within the sector

…….the right thing to do

To help reduce future annual costs by £2-4m by 2020.



Current SCS environmental impacts and targets

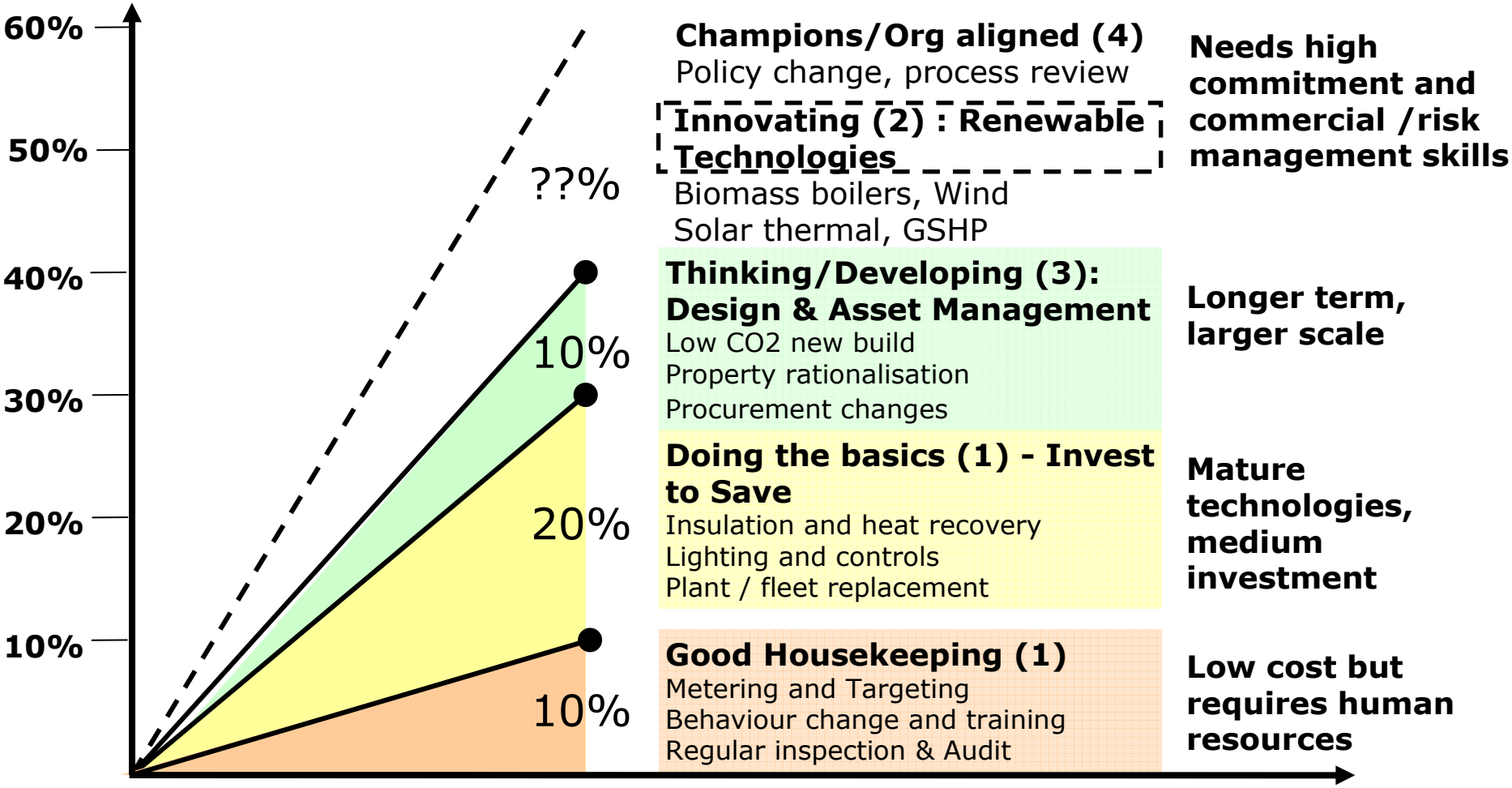
- We currently consume 36,800,000 kWh of energy per year:
  - Same as a town of 6,000 people
  - Costs £3 million per year

- Energy reduction target: 80% by 2050

- Waste reduction target: 30% by 2014

Everyone in SCS needs to help!

How: How can the targets be met?



Glasgow Sheriff Court Case Study

*We will take measures to reduce energy use, including the increased use of solar power and the introduction of energy conservation measures throughout the public sector……*Scottish Government energy efficiency and micro generation strategy SEA report 2007

*Public Sector to lead by example – large public organisations to provide demonstration schemes……..*White paper – meeting the energy challenge 2007

scottish court service

Glasgow SC PV Array

- Building Opened 1986
- Floor area 27000m^2
- 22 Courts
- Electricity consumption 3.2 million kWh
- Gas Consumption 2.5million kWh
- Over last 3 years electricity reduced by 3% and gas by 16%

scottish court service

Approvals and Timeline

- Aug 2007 Tentative bid for additional Capital submitted
- Sep 2007 Business case approved to proceed
- Oct 2007 Project Managers appointed
- Nov 2007 Planning Application submitted
- Nov 2007 Solar Technology engaged
- Dec 2007 Final layout and Design agreed
- Jan 2008 LCBP2 Grant submitted and Approved
- Feb 2008 Site work starts
- Apr 2008 Installation complete 14 April
- Apr 2008 Scottish Power G59 testing complete and system goes on line

Glasgow SC PV Array

- **Fixed Panels 30º**
- **70kg Ballasted panels**
- **Mono-crystalline PV cells**
- **25 year Guarantee**
- **Low Maintenance**

scottish court service

Array Statistics

- System Size : 2 @ 48.5 kWp
- Active Area : 698 m²
- Annual Yield : 69,896 kWh
- Annual CO2 Offset : 39,701 kg
- Fully Installed Price : £631,500
- Cost per kWp: £5,007
- Price with 50% Grant: £471,500
- £ per kgCO2 Offset/yr: £9.08

scottish court service

How 1. Housekeeping / doing the basics well:

- Improve Monitoring and Reporting –BMS Smart meters

- Complete EPC ratings (37 Courts over 1000m2)

- Energy audits being prepared

- Focused Backlog Maintenance investment strategy

- Develop site and corporate Green Travel Plans

- Recycling/Waste champions

How 2. Innovating: on a case-by-case basis

- ***River cooling*.** **Using river, particularly Glasgow as source for cooling / air-con**
- ***CHP.*** **Reduce consumption and Carbon and base energy demand**
- ***Micro Generation.*** **Seeking locations for wind turbines on land SCS own.**
- ***Solar/PV.*** **Locations for PV / Solar cells on SCS Buildings**
- ***Biodiversity.*** **Investigate and pilot various biodiversity supporting techniques (e.g. green roofs)**

All projects are assessed by business case analysis. Apply for :

- ***Grants where applicable***
- ***Additional bids for SG funding***

How 3. Thinking and developing: design guides

- ***Design Guides*** Revise for future regulation, targets and bench marks

- ***Maintenance Guides*** Work with FM provider to establish and agree processes under Sustainable Development principles

- ***Corporate Operational guides*** Building usage, People, Travel etc

How 4. Engaging staff: through Champions

- ***Establish Sustainability Champions.*** **Ideally one per building**

- ***Engagement Events.*** **Switch it off days, Hand it in days, no car days, cycle to work schemes etc**

- ***Recycling and Waste Management .*** **Develop the HQ pilot, fund local court initiatives**