Department
for Environment
Food & Rural Affairs

Developing the UK evidence base

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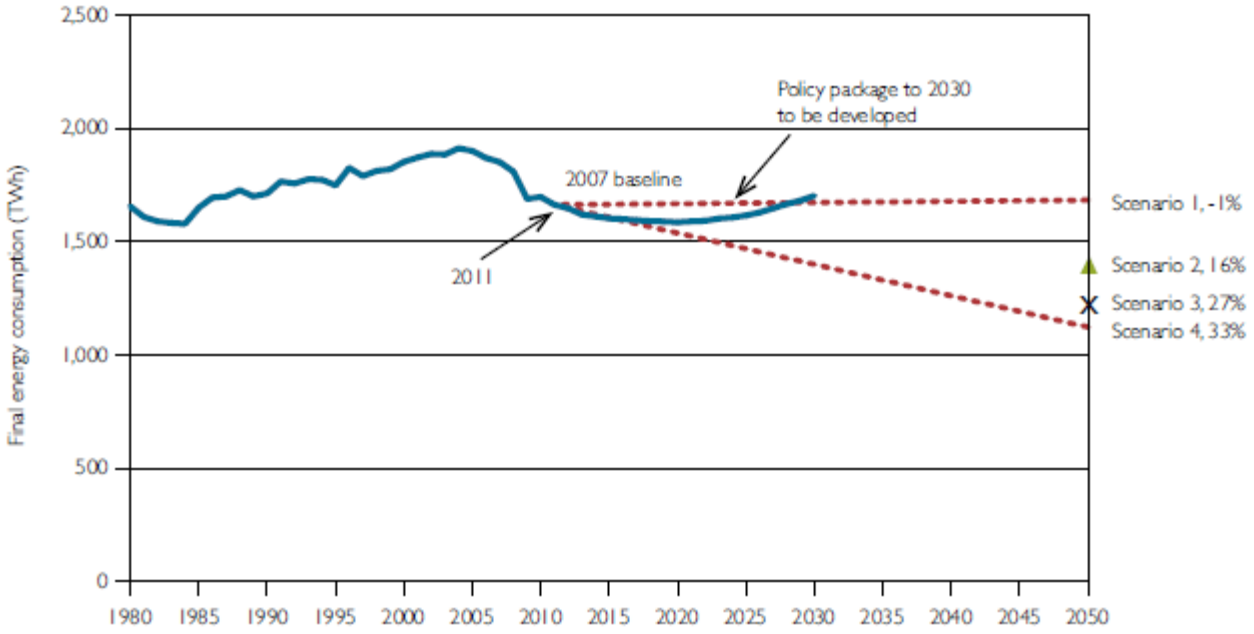
European Catering Equipment Conference 2013

Date: 26 June 2013

Energy efficiency is crucial to meeting our carbon target

Department of Energy & Climate Change

Figure 4: UK final energy consumption compared against carbon plan scenarios: 1980-2050



Total energy consumption in 2050 needs to be no higher than it was in 2011 as part of meeting the 2050 carbon target

Significant increase in energy efficiency required to meet that goal

What Defra Does

Increase the sustainability of energy using products by means of a range of product policies

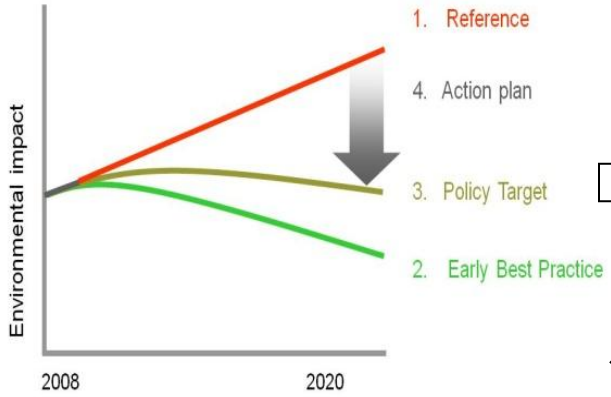
- EU wide minimum energy performance and energy labelling standards
- Supply chain and international engagement

... aimed at meeting *the 2011 Carbon Plan commitment* ***to save 14 MtCO2 pa by 2020 in the UK.***

… as a contribution to the 80% reduction by 2050 in GHG emissions under the Climate Change Act

How we work

Eco-design Directive



Improve compliance and enforcement

Mandatory EU labelling

Supply Chain initiatives

International engagement IEA 4Es, SEAD

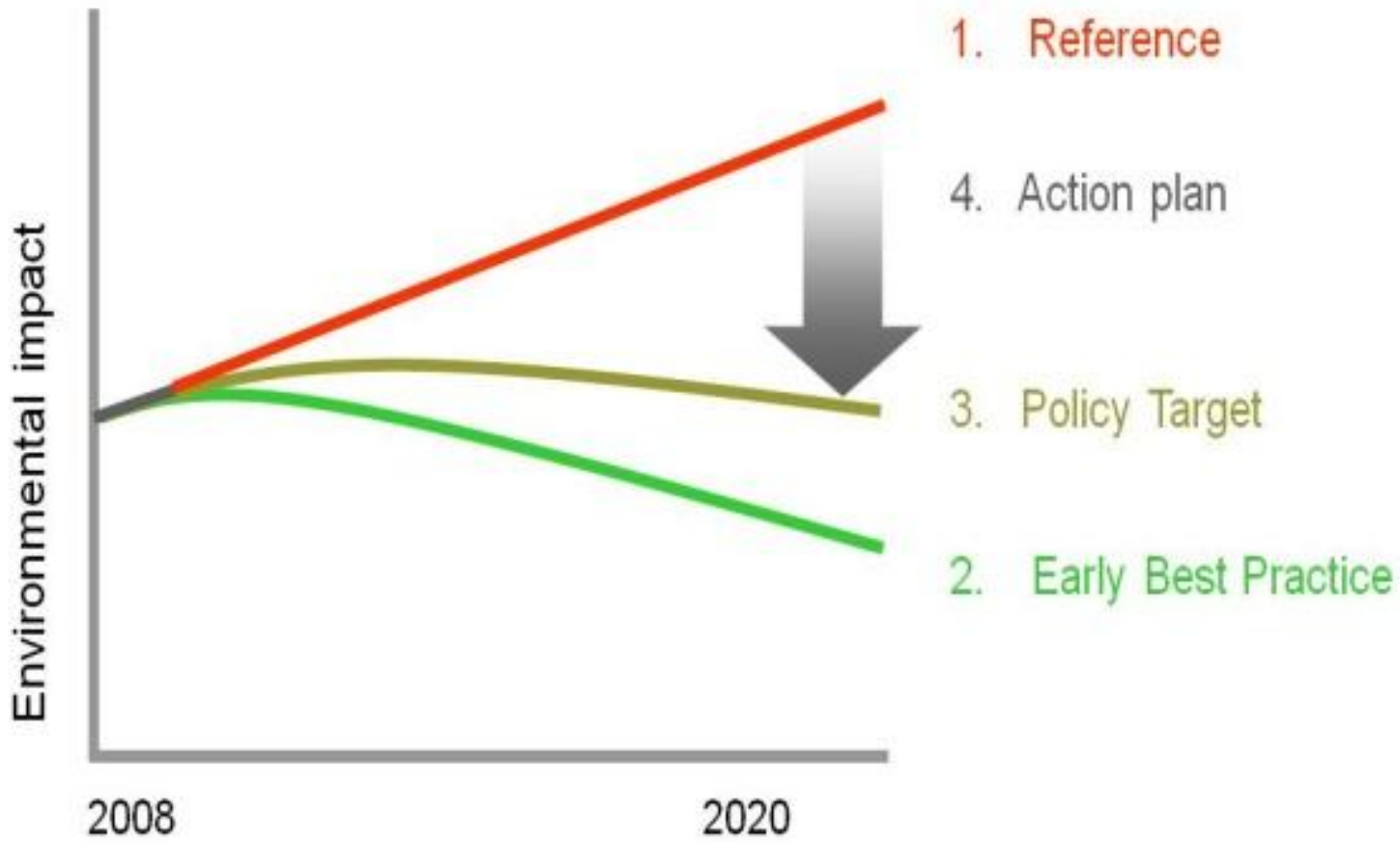
Influence other policies

What is happening in Europe?

- Commission proposals for ecodesign and energy labelling of domestic hobs and ovens
  - Expect regulations to be agreed later this year
  - Saving 23 PJ / year in 2020, 60PJ / year in 2030
  - Equivalent to around 8-9 % of current consumption
  - MEPS for ovens hobs and range hoods
  - Labels for ovens and range hoods only

  - Vote on ecodesign measure 11July
  - MS to discuss labelling measure 11 July
- Commercial equipment to follow?

Modelling and evidence



Commercial catering equipment

- We didn’t have much data to develop support our position on ecodesign and labelling
- We asked The Carbon Trust to undertake a study to provide more
- Focussed on the contract catering sector
- 4 sites from different parts of the sector

The Contact Catering Sector

UK Food Service Industry		
Profit sector: food service is main business	Restaurants, QSR Hotels, Pubs, Leisure	
Cost sector: serving food within another business	**Contract catering:** Business and Industry, Healthcare, Education, Services	Self-catering

The study focuses on the Contract Catering sector.

A key characteristic of the contract catering sector is that typically equipment and utilities are provided by the client.

Site profiles

Business and Industry: Elior	Health Care: Sodexo
• City centre office with 850 staff • 90,000 meals per year • Cafeteria, staff restaurant, hospitality • Wide range of equipment • 5 day operation	• 85 bed specialist hospital • 130,000 meals per year • Cafeteria, coffee bar, patient meals • Prime cooking on site • 7 day a week operation
Education: BaxterStorey/Caterlink	**MOD: Aramark**
• 1,500 pupil school • 80,000 meals per year • Lunch service only • 5 day operation • 39 weeks/year	• Junior Rank's Mess • "Pay as you dine" • 45,000 meals per year • Three meals a day • 7 day operation

•The sites were selected from each major segment of the Contract Catering Sector and have very different profiles

Results: sector footprint

- **Estimated footprint for Contract Catering**
- The sector includes 16,583 sites serving 1,607 m meals per year
- Carbon footprint for energy use 1,320 kT CO_2 per year
- Cost of sector energy £292m per year
- Large savings possible

Segment	Number of sites[1]	Meals served[2] (m)	kWh/ meal[3]	GWh /year	Cost /meal[4]	Cost £m /year	kg CO_2e /meal[5]	kT CO_2e /year
Business & Industry	8,183	582	2.43	1,412	£0.24	£139	1.07	624
Healthcare	810	250	1.95	488	£0.19	£46	0.85	213
Education	5,423	353	0.64	228	£0.05	£16	0.22	78
MoD	566	215	3.01	647	£0.30	£64	1.34	288
Other[6]	1,601	207	1.88	394	£0.18	£38	0.82	170
Total for sector[7]	**16,583**	**1,607**	**1.90**	**3,056**	**£0.18**	**£292**	**0.82**	**1,320**

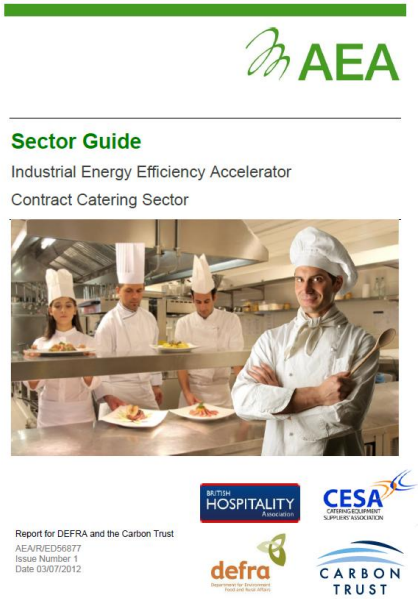
1-2. BHA Food Service Management Survey 2010

3-5. Study results

6-7. Site average used

Results: Barriers to energy saving

- Lack of data “we need good objective data”
- Split incentives “caterers don’t get the financial benefit”
- Investment horizon “contract length 3-5 years”
- Equipment replacement cycle “8-10 years plus”
- Equipment purchasing criteria “tend to buy on price”
- Tax incentives “ETL doesn’t apply to cooking or dishwashing”
- Classic landlord/tenant split is disincentive to investment in energy-efficient equipment and behaviour change



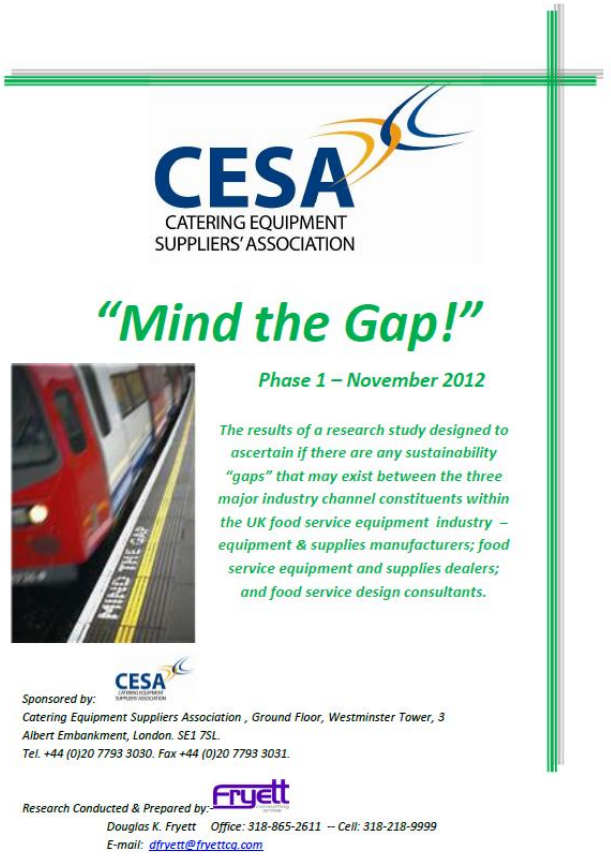
Key findings

- Behaviour change can make significant savings
  - Optimising use of ovens/ hobs, dishwashers and refrigeration
  - Turning things off when not in use…
- Sub- metering
  - Sub metering of kitchen allows costs to be picked up by the caterer, not the client
  - Incentivises the operator to cut energy use
- Investment
  - Buy the most efficient equipment
    - Most of the lifetime cost is in operation not purchase

CESA Research

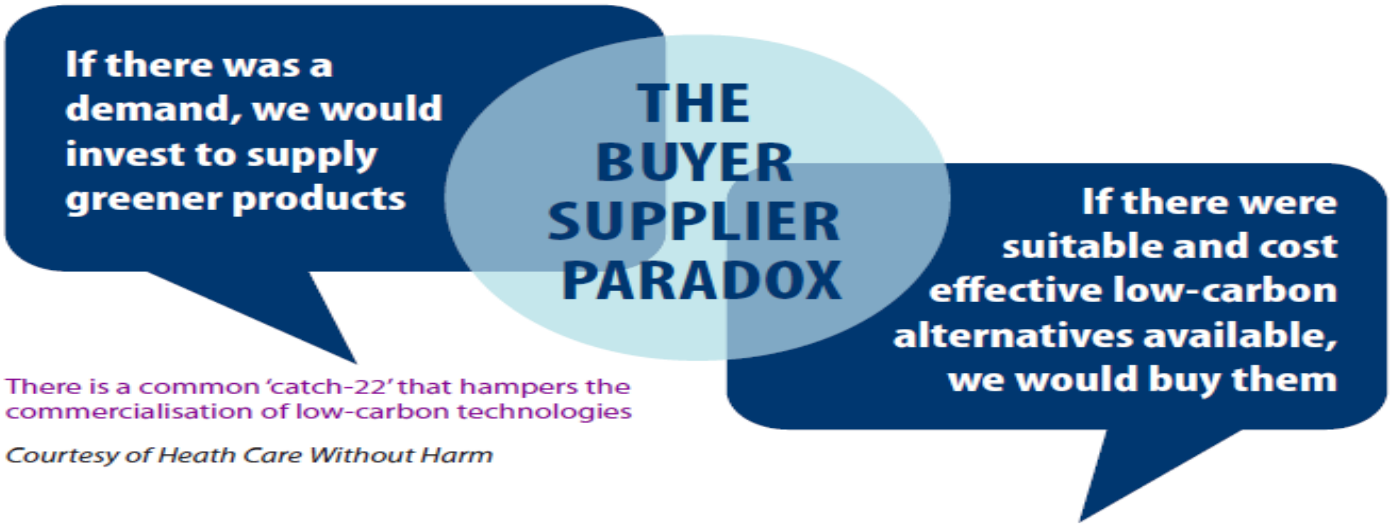
- CESA undertook further research into the supply chain
- ‘Mind The Gap’

- There is a need for greater communication and transparency through supply chain.



The problem: an information gap

- BUT there is a disconnect between aspirations and actions to buy more efficient /sustainable equipment
- And a lack of data makes it hard to compare energy use of catering equipment.



Taking things forward

- Need to provide clarity on the lifecycle value of catering equipment to facilitate the move towards a low carbon catering sector.
- Identify opportunities to reduce running costs.
- Everyone in the value chain will benefit – and emissions will go down.

- We need a carbon calculation tool for the sector…

Developing the tool

- Working with all parts of the supply chain…
  - Manufacturers
  - Dealers
  - Consultants
  - Operators
- …Defra has commissioned a working tool through

The Carbon Calculator

- We now have a working model – free to download

- It can be used by all parts of the supply chain
- First version based on range of data
  - EU preparatory studies
  - UK studies
  - Manufacturers specification sheets

- Considering next steps in terms of developing
  - Better data

Thank you for your attention

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