



Climate Change & Sustainable Energy <From Ambition to Action>



Richard Davies
Director

'Consult the genius of the place. The answers are all there. The trick is to find right question.' Alexander Pope, Poet 1688-1744

Good Morning

marches
energy agency





RE:think
Energy

Low Carbon
CO₂mmunity

mea 

PROJECT
carbon
REDUCING CARBON EMISSIONS


carbon forum

We're seeking to deliver
on the 3Ds:

Demand Reduction

Decarbonisation

Decentralisation







www.slideshare.net/mea

The Big Picture

‘We have an addiction to fossil fuels, and it’s not sustainable. The developed world gets 80% of its energy from fossil fuels; Britain, 90%. And this is unsustainable for three reasons. First, easily-accessible fossil fuels will at some point run out, so we’ll eventually have to get our energy from someplace else. Second, burning fossil fuels is having a measurable and very-probably dangerous effect on the climate. Avoiding dangerous climate change motivates an immediate change from our current use of fossil fuels. Third, even if we don’t care about climate change, a drastic reduction in Britain’s fossil fuel consumption would seem a wise move if we care about security of supply: continued rapid use of the oil and gas reserves will otherwise soon force fossil-addicted Britain to depend on imports from untrustworthy foreigners.’

Professor David MacKay FRS Chief Scientific Adviser
to DECC see www.withouthotair.com

Human induced climate change

+

Energy security

+

Peak oil

APRIL 3, 2006

SPECIAL REPORT GLOBAL

TIM

BE WORRIED. BE VERY WORRIED.

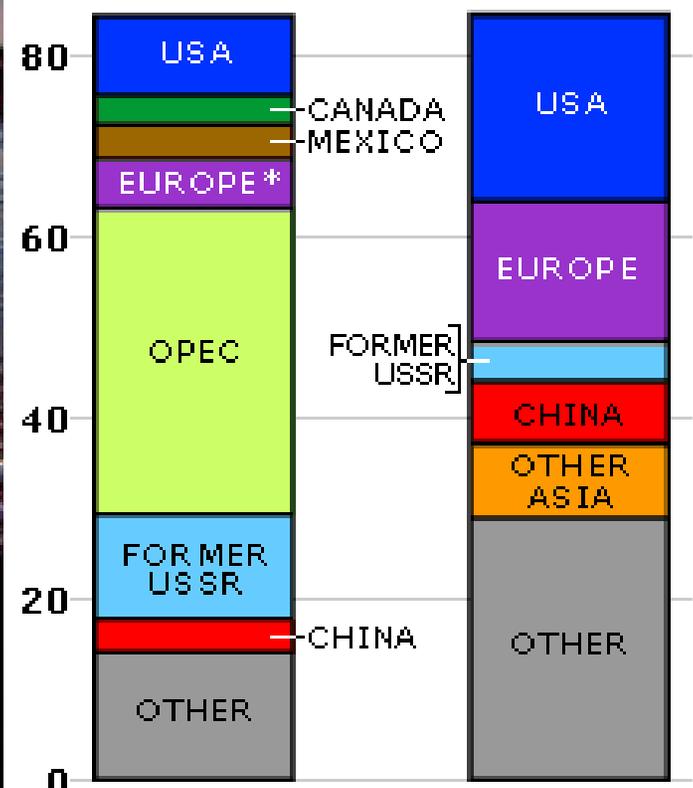
Climate change isn't some vague future problem—it's already damaging the planet at an alarming pace. Here's how it affects you, your kids and their kids as well

EARTH AT THE TIPPING POINT
HOW IT THREATENS YOUR HEALTH
HOW CHINA & INDIA CAN HELP SAVE THE WORLD—OR DESTROY IT
THE CLIMATE CRUSADERS



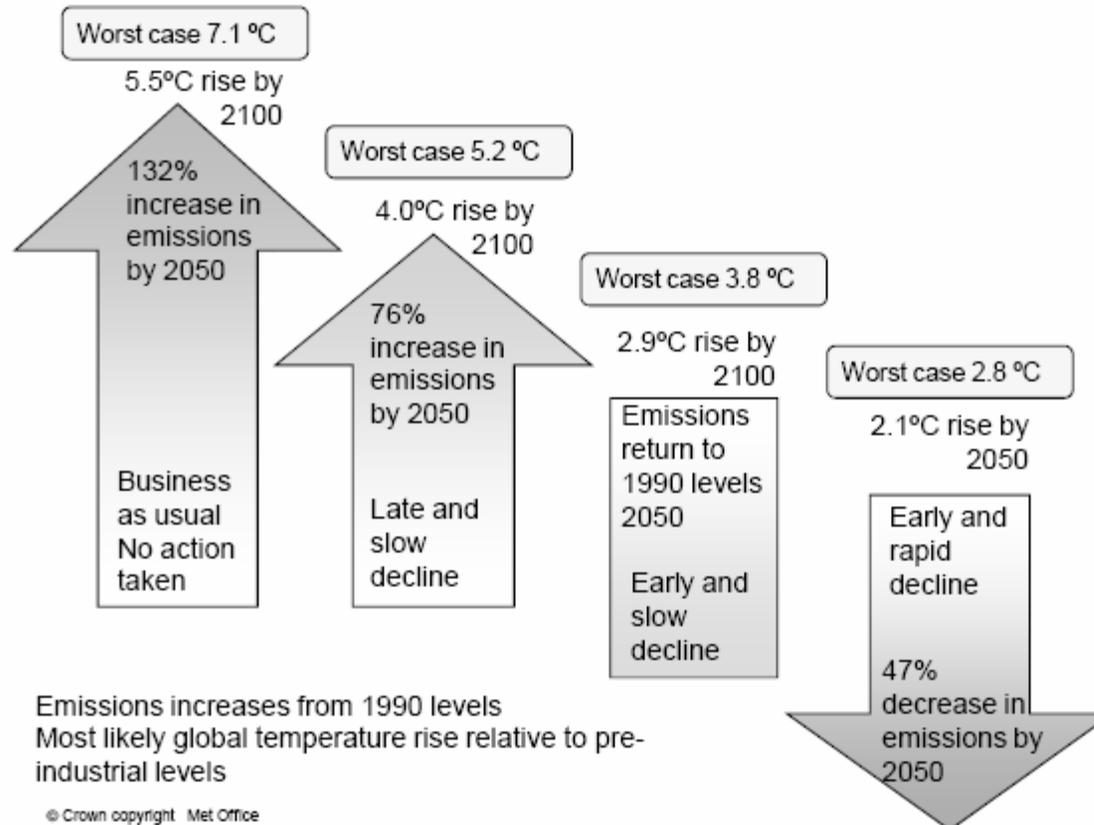
SUPPLY
84.12
 million
 barrels
 per day

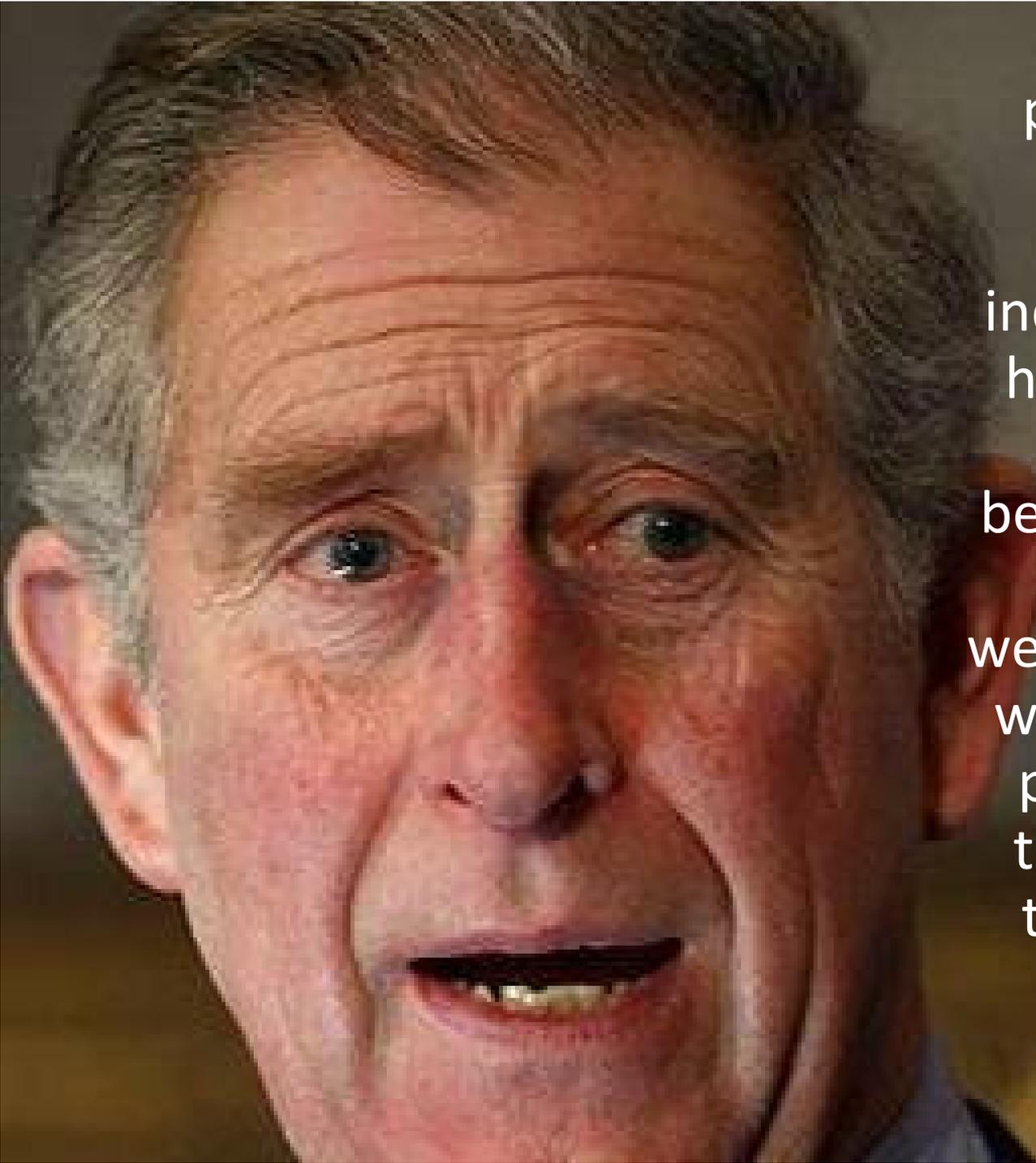
DEMAND
84.38
 million
 barrels
 per day



*NORTH SEA
 SOURCE: ENERGY INFORMATION ADMIN.

Temperature increases with higher emissions: but risks increase faster





‘The best scientific projections indicate that we have very little time left - indeed, less than one hundred months - in which to alter our behaviour drastically. Although I wish it were otherwise, I fear we have reached the point when if we do too little, too late to tackle this problem, the consequences could be catastrophic.’

BBC



00.17 / 05.11



‘Can nine billion people be fed? Can we cope with the demands in the future on water? Can we provide enough energy? Can we do it, all that, while mitigating and adapting to climate change? And can we do all that in 21 years time? That's when these things are going to start hitting in a really big way. We need to act now. We need investment in science and technology, and all the other ways of treating very seriously these major problems. 2030 is not very far away.’

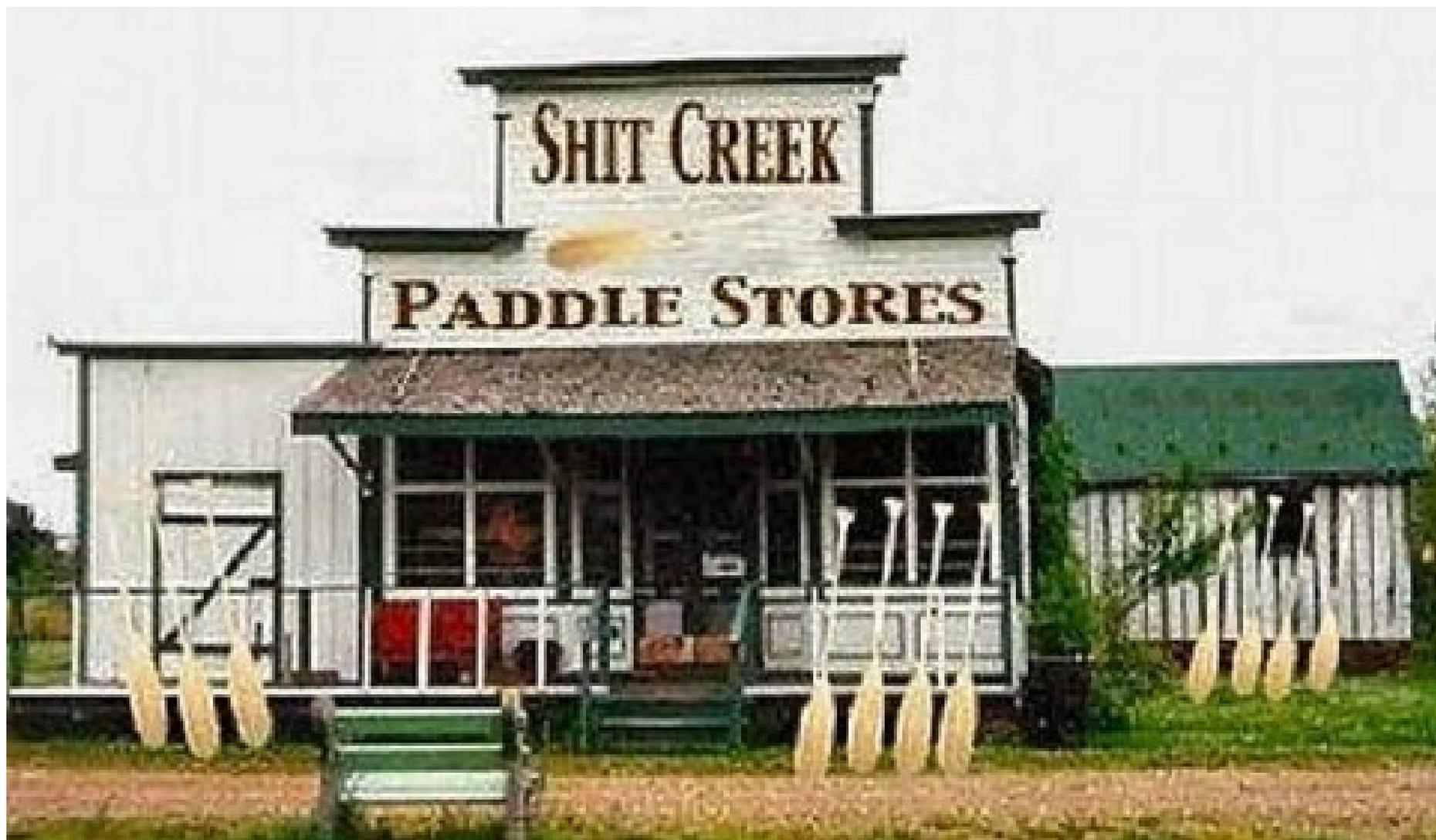
Professor Sir John Beddington 19th March 2009, London

"Regardless of which route we choose, the world's current predicament limits our maneuvering room. We are experiencing a step-change in the growth rate of energy demand due to population growth and economic development, and Shell estimates that after 2015 supplies of easy-to-access oil and gas will no longer keep up with demand."

Jeroen van der Veer, CEO Shell
28th January 2008







Tory plans give householders up to £6,500 to improve energy efficiency

Campaigners welcome proposals which are compared to Barack Obama's 'green economy' plans

Alok Jha, green technology correspondent
guardian.co.uk, Friday 16 January 2009 15.43 GMT
[Article history](#)



Church powered by wind turbine - Island of Westray - Orkney Photograph: Mike Roper/PR

Britons will get £6,500 to make their homes more energy efficient under plans by the Conservatives to build a green economy in the UK. The plans are part of the opposition party's move to claim the environmental lead from Labour following the outpour from green groups at Thursday's announcement of a third runway at Heathrow.

[Comments \(77\)](#)



A [larger](#) | [smaller](#)

Environment

- [Energy efficiency](#)
- [Alternative energy](#)
- [Carbon emissions](#)
- [Renewable energy](#)

Politics

- [Green politics](#)

UK news

[More news](#)

More on this story

[Cameron: we will build £1bn 'smart' National Grid](#)

[Interview: David Cameron](#)

[Audio: David Cameron on the smart grid](#)

[Cameron's revolution begins at home](#)



"I'M ASKING YOU TO BELIEVE.
Not just in my ability to bring about
real change in Washington ... I'm
asking you to believe in yours."

GET INVOLVED NOW

FIND AN EVENT
NEAR YOU

- [LEARN](#)
- [ISSUES](#)
- [MEDIA](#)
- [ACTION](#)
- [PEOPLE](#)
- [STATES](#)
- [BLOG](#)
- [STORE](#)

NEW ENERGY FOR AMERICA



New Energy for America

- [5 Million Green Collar Jobs](#)
- [A Bold New National Goal on Energy Efficiency](#)
- [American Energy](#)
- [Read the New Energy for America plan](#)
- Watch Barack's speech in Lansing, MI on his new energy plan:*





Climate Change Act 2008

The target for 2050

1 The target for 2050

- (1) It is the duty of the Secretary of State to ensure that the net UK carbon account for the year 2050 is at least 80% lower than the 1990 baseline.

Climate Change Act Targets

- 1990 baseline of CO₂ emissions was approximately 590 million tons of CO₂.
- An 80% reduction is based on the minimum reductions necessary to avoid causing catastrophic and permanent changes to the climate
- 80% of 590m tons = 118 million tonnes.
- The UK level of CO₂ emissions (1.76 tonnes/capita cf. ~10 tonnes today) hasn't been that low since..... when?



1950's?

1920's?



1900?

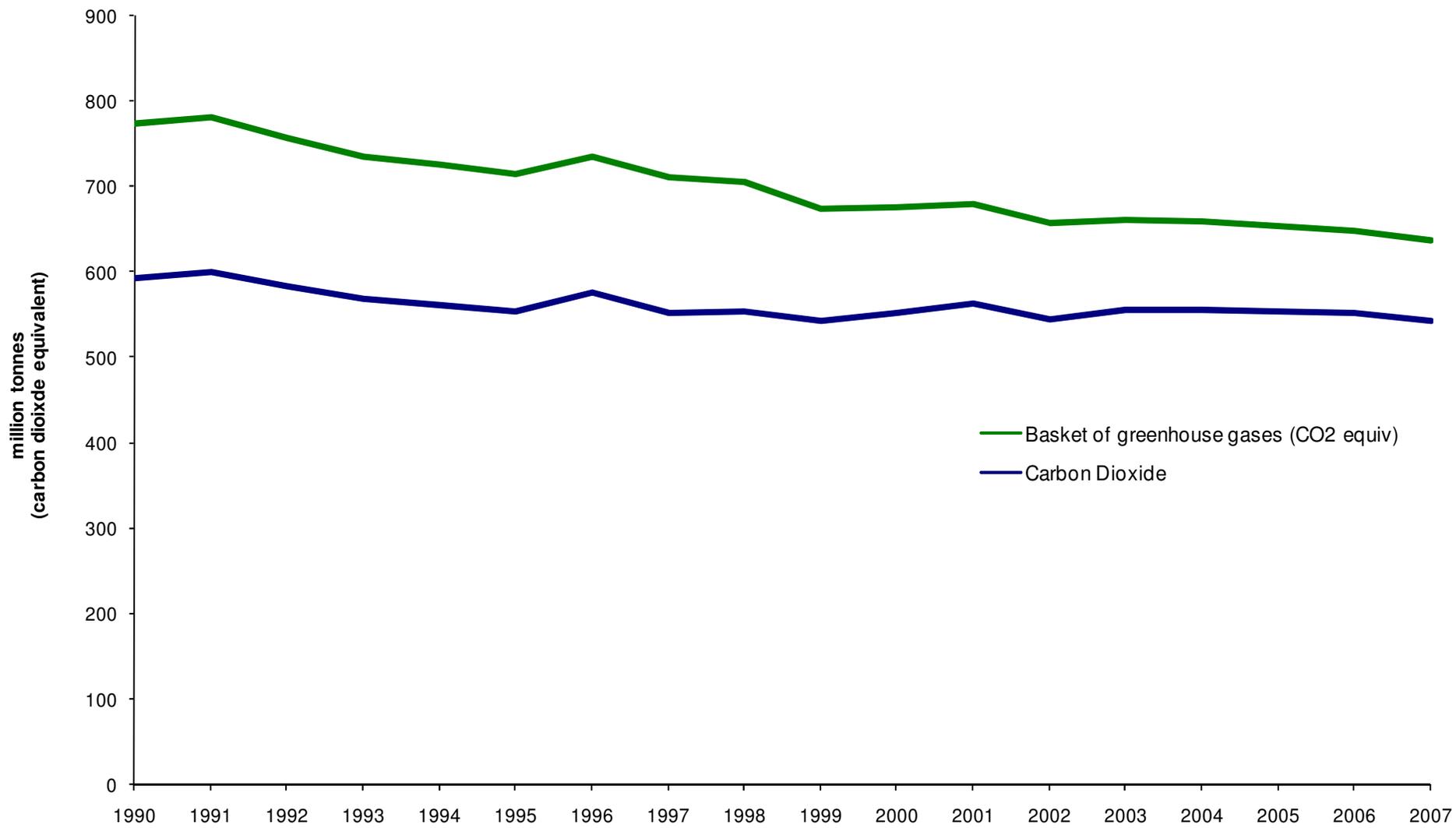


Chelmsford Fire Brigade Recigned. April 1907

Fred Spalding
Photo
Chelmsford
England

1850?

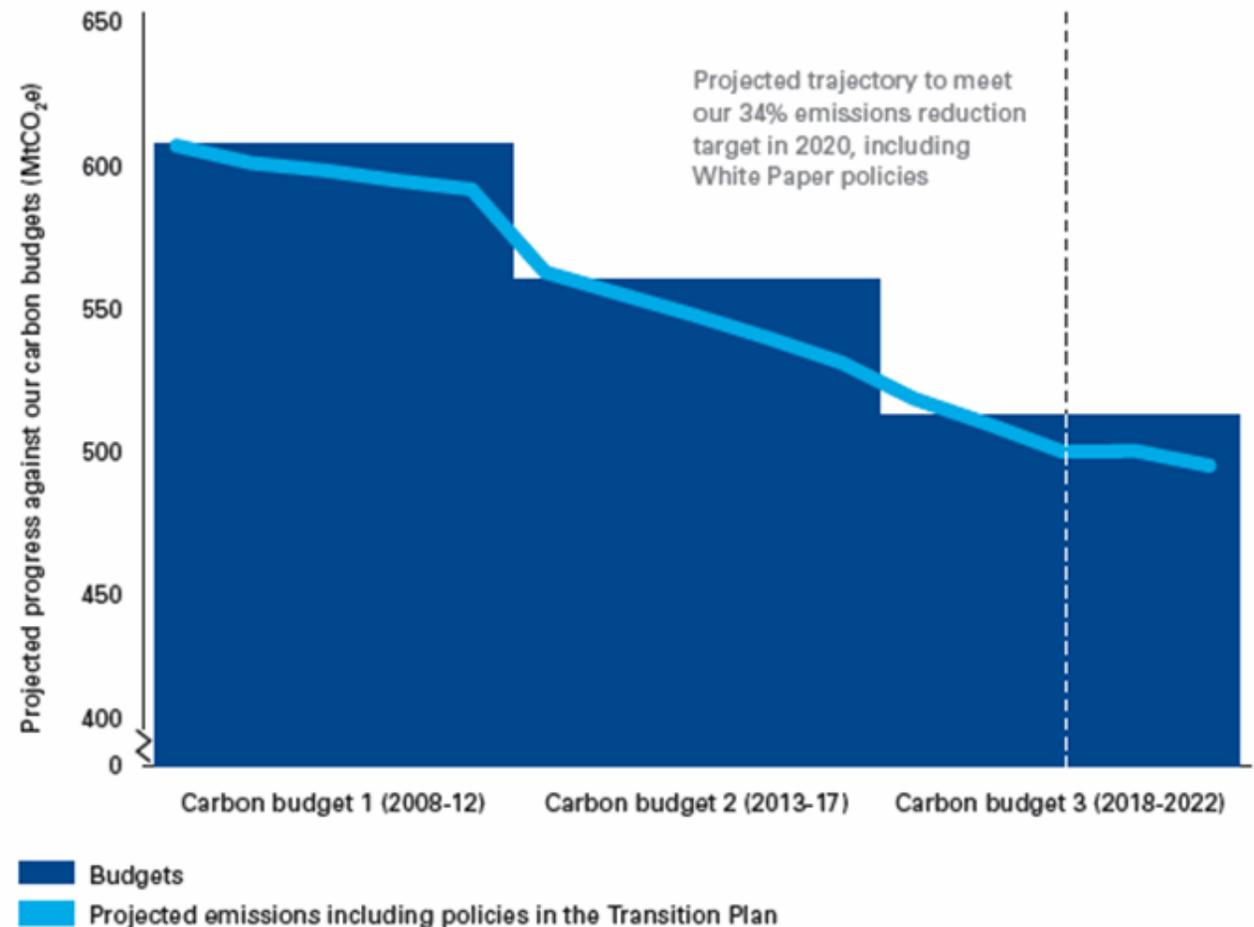




Source: AEA

The Government will drive the transition to a low carbon UK using the world's first ever legally binding carbon budgets

The UK's carbon budgets are equivalent to a **34% cut in greenhouse gas emissions in 2020** on 1990 levels. The UK also has a target to cut emissions by at least **80% by 2050**.





Sustainable Development Unit



Saving Carbon, Improving Health



NHS CARBON REDUCTION STRATEGY FOR ENGLAND

January 2009

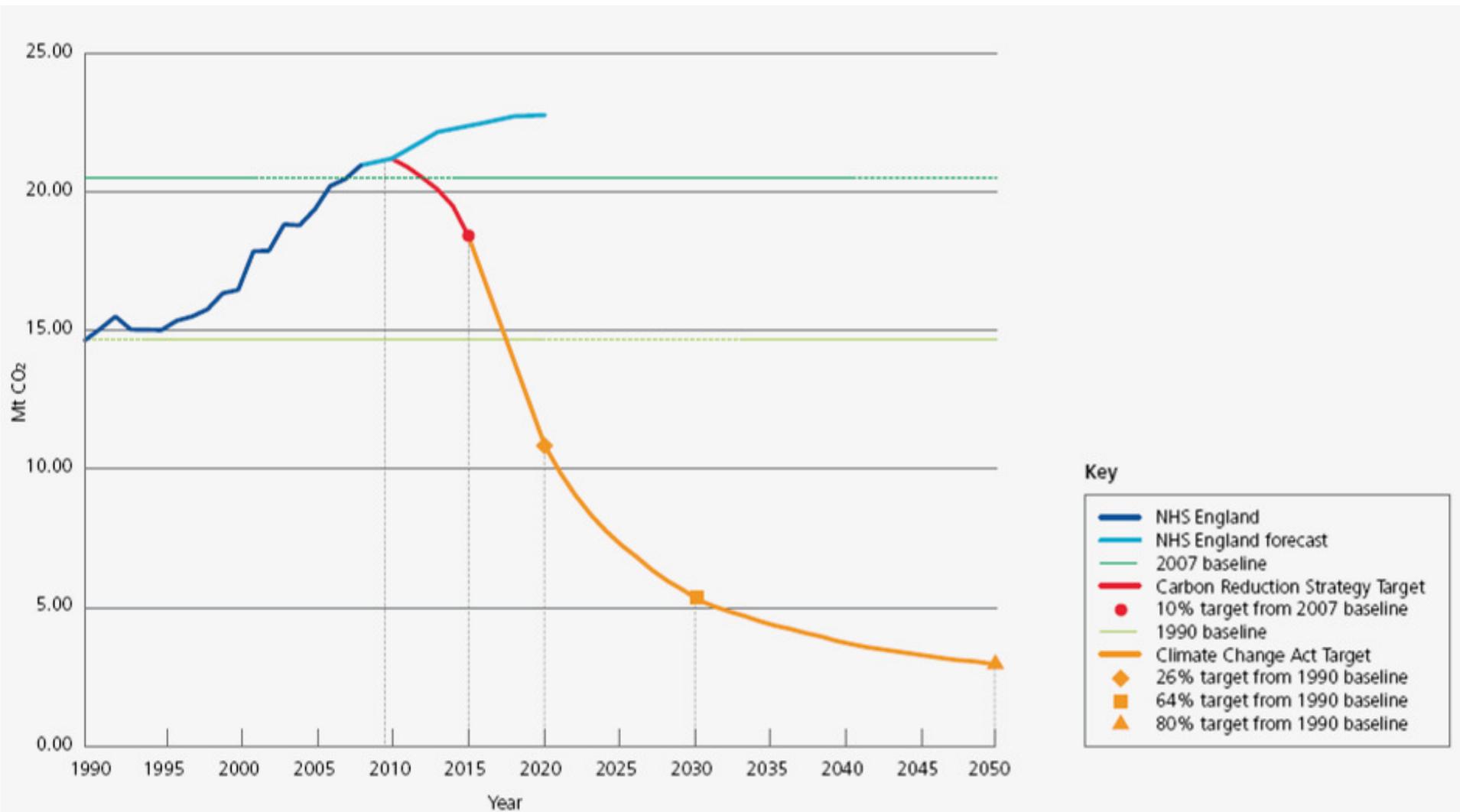


Figure 1: Graph of the NHS England CO₂ Emissions Baseline and Climate Change Act Targets



**<It's the delivery
stupid!>**

‘The public discussion of energy options tends to be intensely emotional, polarized, mistrustful, and destructive. Every option is strongly opposed: the public seem to be anti-wind, anti-coal, anti-waste-to-energy, anti-tidal-barrage, anti-fuel-duty, and anti-nuclear.’

David MacKay FRS

Anti compact fluorescent lighting, anti cavity wall insulation, anti condensing boilers.....

Collaboration between Nottinghamshire & Derbyshire Local Authority Energy Partnership & MEA.....

The purpose of the collaboration is to continue to deliver LAEP activities in a way that also assists MEA to establish rapidly a substantial capacity in the area, paving the way towards increased and more effective action to reduce greenhouse emissions.

Seeking Funding

Seek funding for projects that will deliver carbon reductions across the LAEP area.

Sharing best practice

Deliver a 'How To' seminar and workshop programme to share expertise, highlight best practice and help resolve problems. Four events will be run per year, topics to be agreed between LAEP and MEA. One will be attached to the LAEP Annual General Meeting and others may be attached to Officer Working Group (OWG) meetings if appropriate.

Co-ordinating the partnership

Provide LAEP co-ordination, comprising four OWG meetings, an AGM and Executive Group meetings, when required.

Networking and communication

Circulate policy and information updates, maintain and develop the membership database and provide day to day support and information to the officer network.

Website provision

Develop and maintain a secure section of new MEA/ETACC website.

Reporting

Produce quarterly updates of activity and results to be provided to LAEP at OWG meetings.

LAEP - MEA Communications Service

Core element: General co-ordination of the service, taking bookings, regular reporting, continued access to collateral and branding, and rebuilding and maintenance of the Everybody's Talking website.

2 in 1 workshop MEA will offer two free half day workshops for officers from subscribing LAEP authorities. The workshops will give officers some new tools and inspiration for communicating climate change, and will explain in detail how the pick and mix element of the service will work.

Pick and mix menu The full pick and mix part of the service will be available immediately and offers a menu of 12 communications tools to subscribing local authorities. Each item on the menu is worth a number of points, and each subscribing authority has 9 points to spend on their own tailored selection of items.

LAEP/MEA communications service menu	Normal price	MEA	LAEP system	points
	one off	combi	one off	combi
NB Each subscribing authority has nine points to spend				
Light Fantastic - price per day, local authority provides one or more member(s) of staff	£850	£600	5	4.5 if booking 2 visits
Carbon Workshops – a range of themed workshops on topics such as footprinting, renewables, heating etc price per workshop.	£4-750	-	3	-
Energy Bike – fun, educational activity for events. Pedal to switch on light bulbs and other items	£400	£250	3	2
Presentations – range of inspirational and informative presentations, on topics including renewables, transport, climate science and more	£4-750	-	3/4	-
Climate Cinema – choice of 5 films. Price per film screening. DVDs also available to borrow free.	£250	-	2	-
Climate Cartoons – set of 27 thought provoking prints for you to keep and use in events, authority buildings etc. Good press opportunity.	£475	-	4	-
Eco vehicle – eye catching conversation starter to attend event. Fully branded.	£400	£100	3	1
50 action packs – 12-month action plan for households on cutting carbon emissions	£250	-	2	-
Climate Talk event – gets people talking about climate change and producing an action plan for an individual or organisation	£350	-	3	-
Carbon Foot-printing – drop-in carbon foot-printing for individuals at event/on high street	£400	-	3	-
Pub Quiz – fun and eye opening quiz, daytime activity or evening social.	£400	-	3	
50 Eco Vehicles Top Trumps packs – fun and engaging packs, plus 10 eco driving guides	£265	-	1	-

.....in addition

- NHS Service Providers
- Carbon College
- Quals for Public Sector on Climate Change
- Low Carbon Communities
- www.wesave.org.uk
- SME Vacuum
- Banish the inefficient Community Building
-All the talents

Missions to
consider/
take back...

Total Place: Climate Change



Making Sustainable Energy & Climate Change Services better for people & communities by doing things differently. Apply the principles of Total Place to Climate Change in a locality.



Total Place

Led by:
Leadership Centre for Local Government
Supported by:
Communities and Local Government
Local Government Association
IDeA

- > Home
- > About Total Place
- > Total Places
- > Themes
- > Learning
- > News
- > Events
- > Contact us

Workstreams and Work themes

Total Place workstreams

There are three complementary strands that make up Total Place, each of which is critical to ensure that together we can make public services better for people at lower cost by doing things differently.

[Counting](#)

[Culture](#)

[Customer insight](#)

Key Total Place themes

The Total Place initiative encompasses a number of areas of work that are common to some or all of the pilots.

[See a list of the Total Place themes by theme group.](#)

Hot topics

The tag cloud below draws on all the content uploaded to the Total Place website. The more articles there are connected to a particular keyword, the larger that keyword will appear. Click a link below to see all articles on that topic.

adult health **asset management** **birmingham** bournemouth bradford central
 bedfordshire **child health** community safety **conference** conservative
counting coventry **crime** criminal justice croydon **cumbria** customer insight disability
 dorset durham education gateshead **health** kent labour leaders **leadership** learning
leicester leicestershire lewisham luton manchester **networking** nhs norfolk poole
pre-pilot gipp **resources** solihull south tyneside suffolk sunderland unemployment
 warwickshire worcestershire **worklessness**

RSS feed 

Follow us on twitter 

→ Get involved

Discuss Total Place issues in the dedicated [Community of Practice \(CoP\)](#)

→ Information about events

- > [Networking and sharing event for programme leads and project managers](#)
- > [Networking and sharing event for senior leaders](#)

→ Recent news

- > [Total Place in the news: September](#)
- > [Website launched](#)
- > [First meeting of the Total Place pilots](#)

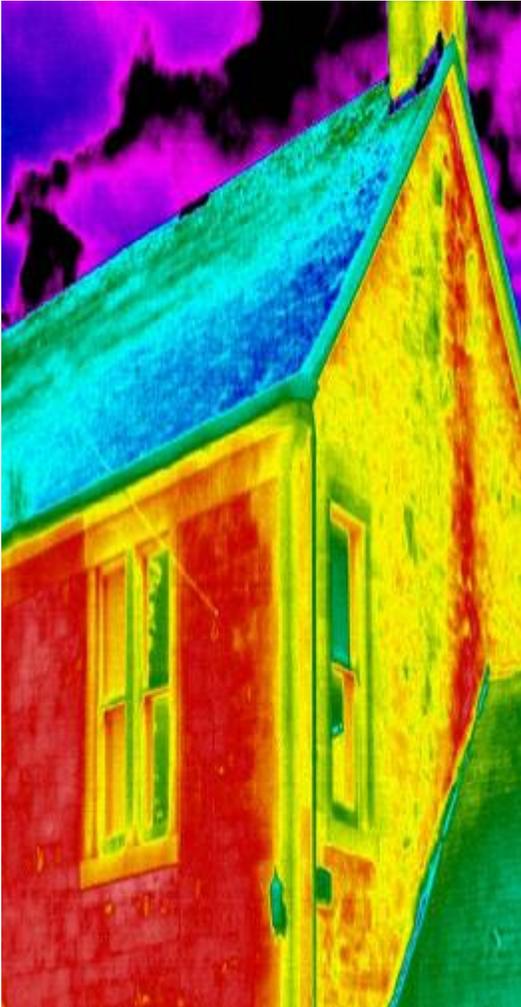
Mind the Gap: (Between Ambition & Action)



Take a 'Mapping' +
'Commissioning' approach to
Sustainable Energy & Climate
Change activity in a locality.

What isn't happening that
should be happening? Where
are the gaps & vacuums? What
needs to be 'commissioned'?

The Great Refurb



In February 2009 Ed Milliband announced that by 2050 all British homes will be near carbon zero. Is now the right time for a EM locality to step forward & seek to be the first place in the UK to deliver this in existing homes?

[Home](#)

[Have Your Say](#)

Read More:

[Consultation summary](#)

[Supporting documents](#)

[References](#)

» News

[Bloggers' toolkit](#)

[Further info](#)



Press Notice from Ed Miliband (Secretary of State for the Department of Energy and Climate Change)

BE PART OF THE GREAT BRITISH REFURB – TO CUT EMISSIONS AND CUT ENERGY COSTS – ED MILIBAND

Plan for all UK homes to be near zero carbon emissions by 2050 Improvements to existing energy efficiency scheme also outlined

British households will be able to receive expert, targeted help to reduce their fuel bills and access low-carbon heat and power in their homes, under an ambitious long-term Heat and Energy Saving strategy.

The draft plan sets out the need to reduce household carbon emissions to almost zero, in order for the UK to achieve its ambitious target of an 80 per cent cut in emissions by 2050. By 2030, the aim is for whole-house improvements to be available to householders in every home, in every street.

The plan, which will be published for consultation later today by Ed Miliband, Hazel Blears and Margaret Beckett, includes proposals for improving the quality and widening the availability of information and advice, new finance packages and options for the delivery system of energy efficient and low carbon improvements.



Kevin Says

“ Live in a low energy home that is cheaper to run, more comfortable to live in and massively reduces your carbon emissions. Join my campaign and be part of the Great British Refurb.

”

Kevin McCloud

READ MORE >



Our house; in the middle of our...

Kevin and various MPs including Ed Miliband, Greg Clark and John Healey insulate a model house outside the Houses of Parliament. [Read More](#)



NEWS & EVENTS

FROM THE BLOG

FROM TWITTER

about 18 hours ago

It's not our homes but it still matters...9 out of 10 people say better quality buildings improve their quality of life
<http://tiny.cc/yyarnl>



JOIN THE CAMPAIGN >

Affordable Warmth



Eradicate 'Fuel Poverty'

Maximise share of support e.g. Warmfront, CERT, Community Energy Saving Programme etc

Place Based approach –
Affordable Warmth Community



News Front Page

World

UK

England

Northern Ireland

Scotland

Wales

Business

Market Data

Your Money

Economy

Companies

Politics

Health

Education

Science & Environment

Technology

Entertainment

Also in the news

Video and Audio

Have Your Say

Page last updated at 23:50 GMT, Sunday, 12 July 2009 00:50 UK

✉ E-mail this to a friend

🖨️ Printable version

Thousands 'facing fuel poverty'

Rising unemployment and higher energy prices are likely to push hundreds of thousands more homes into fuel poverty, a key government advisory body says.

The Fuel Poverty Advisory Group (FPAG) says about 4m households in England are already in fuel poverty, spending more than 10% of their income on energy.

And it has urged ministers to set out a detailed plan for meeting their own target of ending the problem by 2016.

The government says it has spent £20bn on cutting fuel poverty since 2000.

Vulnerable

One of the key causes of fuel poverty is high energy prices. Average domestic fuel bills have increased by 125% over the past five years.

The report warns that the long-term trend on prices is likely to be upwards, not least due to the huge industry investment needed to meet green energy targets.

Unemployment is becoming a key factor too, the report added. The jobless rate is expected to hit three million in the next year and about 38% of those out of work are fuel poor.



The government has spent £20bn since 2000 on tackling fuel poverty

FUEL BILLS

LATEST NEWS

- ▶ Middle earners 'cut energy use'
- ▶ Energy bills 'must be accurate'
- ▶ Warning shot over energy bills
- ▶ Upgrade to lift electricity bills
- ▶ Fuel scheme 'failing the poorest'

ANALYSIS

- ▶ What smart meters will do for you
- ▶ 'Long-term rise' in energy prices
- ▶ Ofgem energy market probe
- ▶ Where to go for help with bills

ENERGY EFFICIENCY

- ▶ Energy saving tips

SEE ALSO

- ↳ Tax plan to tackle fuel poverty

UK Fuel Poverty Statistics

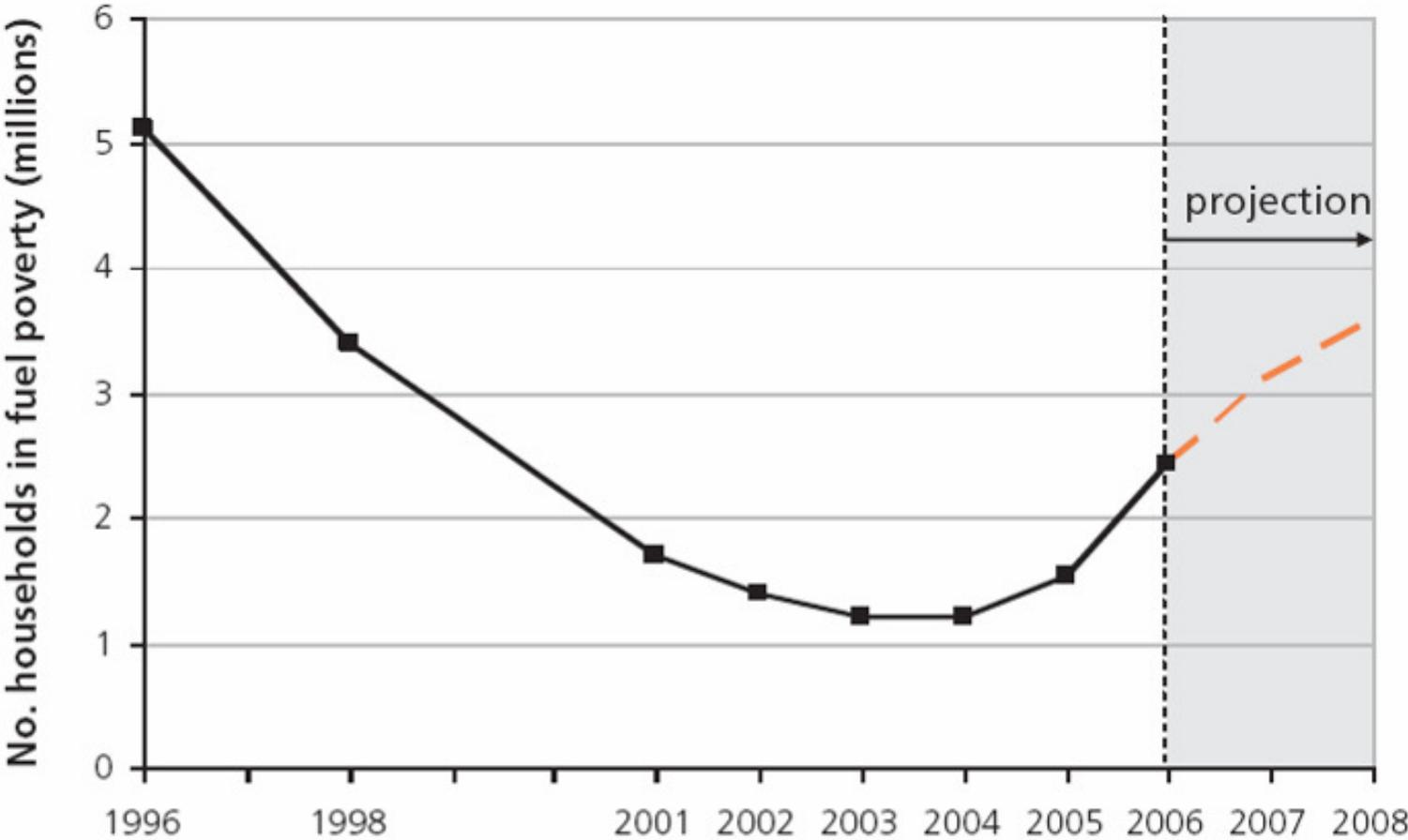
Despite this significant spend on fuel poverty programmes and benefits, our 2006 figures show there were approximately 3.5 million households in fuel poverty across the UK, an increase of 1 million households since 2005. Around 2.75 million of these were vulnerable households. This increase in fuel poverty reflects the impact of energy price rises on fuel poverty levels.

This report is accompanied by a series of internet-based annexes¹ which include more in-depth statistics on the demographic, geographic and socioeconomic breakdowns of fuel poverty. Also published for the first time as part of the report is a detailed statistical annex which provides comprehensive analysis of the 2006 figures and projects forward the position for fuel poverty in 2007 and 2008.

The Government's Fuel Poverty Advisory Group

This report also responds to the recommendations of the Fuel Poverty Advisory Group for England (FPAG), whose determined efforts and commitment are continuing to energise and take forward the fuel poverty agenda.

Chart 18 – projections of fuel poverty for England for 2007 and 2008



GET YOUR
DAILY EXPRESS
FOR JUST
20p
SEE PAGE 10



SAVE £5
ON YOUR SHOPPING AT



WHEN YOU SPEND £30 - SEE PAGE 56

PLUS ESSENTIAL WIMBLEDON GUIDE FREE INSIDE

£5,000 POWER BILLS SHOCK

Rises of up to 42% for the next decade

By Louise Barnett
Consumer Editor

ENERGY bills will hit a shocking £5,000 a year to strike a blow to millions of struggling families, experts warned last night.

Consumer champions said the massive sum was a "wake-up call", marking the end of cheap electricity and gas.

Bills will rise by up to 42 per cent a year over the next decade - with the biggest single increase an eye-watering £1,280.

But they said this will be boosted by a yearly £548 to help overhaul the UK's out-of-date energy supply system.

And they warned that the huge rise would stretch household budgets to breaking point and dump hundreds of thousands more people into fuel poverty.

Experts at uswitch.com said that average annual bills have more than doubled from 1980 five years ago to £1,243 today.

Over the next decade customers will suffer even steeper price rises with fees quadrupling by 2020, they warn. Investment in outdated infrastructure and new green energy policies will drive bills higher.

The growing reliance on Eastern European gas also makes Britain vulnerable to the volatile energy market. A predicted



Who is Top Gear's The Stig? SEE PAGE 3

Carpet RIGHT OFFER DAILY EXPRESS READERS £50 OFF CARPETS OR BEDS WHEN YOU SPEND £250 SEE PAGE 24 & 30

ENERGY bills will hit a shocking £5,000 a year to strike a blow to millions of struggling families, experts warned last night.

Consumer champions said the massive sum was a "wake-up call", marking the end of cheap electricity and gas.

Bills will rise by up to 42 per cent a year over the next decade - with the biggest single increase an eye-watering £1,280.

But they said this will be boosted by a yearly £548 to help overhaul the UK's out-of-date energy supply system.

And they warned that the huge rise would stretch household budgets to breaking point and dump hundreds of thousands more people into fuel poverty.

Experts at uswitch.com said that average annual bills have more than doubled from 1980 five years ago to £1,243 today.

Over the next decade customers will suffer even steeper price rises with fees quadrupling by 2020, they warn. Investment in outdated infrastructure and new green energy policies will drive bills higher.

The growing reliance on Eastern European gas also makes Britain vulnerable to the volatile energy market. A predicted

Do as I do? LSP Partners



LSP Partners to contribute to National Indicator 186 through a programme of climate change & sustainable energy action.....

Working together to cut energy use

The organisations taking part in Our Big Energy Challenge are all members of Bath and North East Somerset's Local Strategic Partnership. They have joined the project because they are committed to tackling climate change, saving energy at work and helping their staff save energy (and money) at home.

< 1 2 >



Challenge 12

Switch off your monitor when you leave your desk – even for just 20 minutes

Our Big Energy Challenge

Making Bath and North East Somerset more energy efficient

Unfair Share: Maximise Uptake

Ensure that the 'LSP' & 'locality' know what Sustainable Energy & Climate Change services are available in their locality and then consume them or promote the consumption of them.

The Art of the Possible.....

Explore what has been achieved within the system as it is. Why can't the East Midlands replicate examples of 'Good Enough Practice'. The Domestic Energy Support of Kirklees, the Biomass Uptake of Barnsley, the Leadership of Woking.....



ASHDEN AWARDS <input type="text" value="QUICK LINK"/> <input type="button" value="Go"/>	SUSTAINABLE ENERGY KNOWLEDGE CENTRE	MEDIA CENTRE <input type="text" value="QUICK LINK"/> <input type="button" value="Go"/>
---	--	--

[Case study database](#)

[< Back to Case study database](#)

[Reports](#)

Technology	Region	Year
Insulation	UK	2009

The technologies

- [Biogas](#)
- [Micro-hydro](#)
- [Solar](#)
- [Wind](#)
- [Wood stoves](#)

Kirklees Council, Huddersfield Free-for-all insulation rolls out warmth



- [Introduction](#)
- [Activities](#)
- [Films](#)
- [Taking action](#)
- [Feedback form](#)



< 1/3 >

Installing cavity wall insulation in Kirklees, Yorkshire

- [Case study \(pdf\)](#)
- [View Film \(Windows Media\)](#)
- [Download Film](#)

The 'Kirklees Warm Zone' scheme is rolling out free insulation to its residents to reduce the council's carbon footprint, improve comfort and reduce fuel bills. By tackling one or two wards at a time, it is super streamlined and making quick headway at a rate of 600 measures a week. Over 115,000 households – two-thirds of the total – have been visited already and 25,000 have had cavity wall or loft insulation. The CO₂ emissions avoided are around 18,000 tonnes a year, which will reach 40,000 by the end of 2010.



ASHDEN AWARDS

QUICK LINK



Go

SUSTAINABLE ENERGY
KNOWLEDGE CENTRE

MEDIA CENTRE

QUICK LINK



Go

[Case study database](#)

[< Back to Case study database](#)

[Reports](#)

Technology

Region

Year

Insulation

UK

2008

The technologies

[Biogas](#)

[Micro-hydro](#)

[Solar](#)

[Wind](#)

[Wood stoves](#)

ASHDEN
SCHOOLS
RESOURCE 

[Introduction](#)

[Activities](#)

[Films](#)

[Taking action](#)

[Feedback form](#)

Leeds City Council, West Yorkshire

Continually improving efficiency in a large housing stock



< 1/3 >

Leeds Civic hall, in Leeds city centre.

[Case study \(pdf\)](#)

[View Film \(Windows Media\)](#)

[Download Film](#)

Leeds City Council is the second largest Local Authority in the UK. Its Fuelsavers programme developed a strategy which has improved the energy efficiency of housing by over 21% since 1996. It currently helps 25,000 households per year, providing major insulation installations, improved heating and glazing upgrades. A new programme is providing home energy assessment visits to 32,000 homes. Improved energy metering and condensing boilers have been installed in council buildings, and a combined-heat-and-power unit at a sports centre.



ASHDEN AWARDS

QUICK LINK



Go

SUSTAINABLE ENERGY
KNOWLEDGE CENTRE

MEDIA CENTRE

QUICK LINK



Go

[Case study database](#)

[< Back to Case study database](#)

[Reports](#)

Technology

Region

Year

Insulation

UK

2008

The technologies

[Biogas](#)

[Micro-hydro](#)

[Solar](#)

[Wind](#)

[Wood stoves](#)

ASHDEN
SCHOOLS
RESOURCE 

[Introduction](#)

[Activities](#)

[Films](#)

[Taking action](#)

[Feedback form](#)

Arun District Council, West Sussex District council brings energy efficiency throughout its operations



< 1/3 >

Mr Gerry Yorke in front of his property in Littlehampton, Arun council have given him a grant to help heat his house as part of their carbon reduction scheme in the borough.

[Case study \(pdf\)](#)

[View Film \(Windows Media\)](#)

[Download Film](#)

Arun District Council has improved energy efficiency in its own estate (using extensive metering, and behavioural campaigns in partnership with the trade union); in council housing (through a continuing upgrade policy that has reached 99% of homes); in houses with multiple occupants (through support to landlords and liaison with student groups); and in religious organisations (through the Ecofaith group). Specific council policies and the Arun Carbon Management Action Plan have led and coordinated this work.



ASHDEN AWARDS

QUICK LINK



Go

SUSTAINABLE ENERGY KNOWLEDGE CENTRE

MEDIA CENTRE

QUICK LINK



Go

[Case study database](#)

[< Back to Case study database](#)

[Reports](#)

Technology

Region

Year

Biomass

UK

2007

The technologies

[Biogas](#)

[Micro-hydro](#)

[Solar](#)

[Wind](#)

[Wood stoves](#)

Nottinghamshire County Council, UK

Wood fuel heating for schools

ASHDEN SCHOOLS RESOURCE ?

[Introduction](#)

[Activities](#)

[Films](#)

[Taking action](#)

[Feedback form](#)



< 1/3 >

Year 8 pupils at West Bridgford School look into their boiler converted to run on wood-fuel.

[Case study \(pdf\)](#)

[View Film \(Windows Media\)](#)

[Download Film](#)

Nottinghamshire's Robin Hood territory of dense forests, also traditionally an area of coal mining, is now home to a radical programme to bring wood back as a sustainable fuel.

Schools across the County are getting a big carbon-cutting boost by converting their old boilers from coal to wood - a cleaner, more sustainable source of fuel. The Nottinghamshire County Council scheme is saving around 2,400 tonnes of CO₂ a year and catalysing a local wood pellet industry. Already 17 schools have benefited, with 27 more schools to be converted by the end of 2008.

[Case study database](#)[Reports](#)

The technologies

[Biogas](#)
[Micro-hydro](#)
[Solar](#)
[Wind](#)
[Wood stoves](#)

ASHDEN
SCHOOLS
RESOURCE

[Introduction](#)
[Activities](#)
[Films](#)
[Taking action](#)
[Feedback form](#)

[< Back to Case study database](#)

Technology	Region	Year
Biomass	UK	2006

Barnsley Metropolitan Borough Council, UK

District heating from local tree waste



< 1/2 >

Woodpile at Smithies Depot, where waste wood is converted to biomass fuel.

[Case study \(pdf\)](#)
[View Film \(Windows Media\)](#)
[Download Film](#)

Barnsley Metropolitan Borough Council (MBC) has installed nearly 1 MW of wood-chip boilers in council flats and buildings. A further 800 kW is currently being commissioned and more planned, and it has set up a supply chain to produce wood-chip from council tree-waste.

Barnsley is situated in an old coal-mining area: many residents used to be employed as miners and many properties are still heated by coal-fired boilers. The Council disposes of many tonnes of wood waste from its parks and gardens each year. In June 2004, Barnsley MBC adopted a Biomass Implementation Policy, committing it to considering biomass heating systems for all new and refurbished buildings. It has already completed a 470 kW wood-fuelled district heating scheme for 166 flats, and a 500 kW scheme for the council depot. Both of these replaced old coal boilers, but the next scheme will use 800 kW of wood-fuelled district heating in new office buildings, in preference to gas. This work has enabled a small wood-chip supply business to start up, and Barnsley MBC is also starting its own wood-chip supply from Council waste. There is plenty of scope to go further, with 133 coal boilers still in place in Council-owned properties; and significant further potential for local wood supply from forestry management and coppice

[Case study database](#)[< Back to Case study database](#)[Reports](#)

Technology

Region

Year

Solar Photovoltaics

UK

2006

The technologies

[Biogas](#)[Micro-hydro](#)[Solar](#)[Wind](#)[Wood stoves](#)**ASHDEN
SCHOOLS
RESOURCE** [Introduction](#)[Activities](#)[Films](#)[Taking action](#)[Feedback form](#)

Kirklees Metropolitan Borough Council, UK Domestic solar electricity



< 1/3 >

Solar panels generating electricity on newly built and retro-fitted homes, built in the 1960s, Primrose Hill Solar Village

[Case study \(pdf\)](#)
[View Film \(Windows Media\)](#)
[Download Film](#)

Kirklees Metropolitan Borough Council (MBC) has undertaken the largest photovoltaic (PV) programme in the UK, with 351 kWp of PV installed on social housing, community buildings and luxury flats.

Photovoltaics are the easiest renewable energy technology to integrate in towns and cities, because they can be installed on roofs and building facades with minimal intrusion, and they have the highest acceptance by the general public. They are now widely used in Germany and the Netherlands. Starting in 2000, Kirklees MBC, based in Huddersfield, took part in a major European project to supply electricity from PV in city buildings. The EU-funded SunCities Project contributed to the installation of 351 kWp of PV (also solar thermal systems) on a range of private and public-sector housing and residential homes in Huddersfield. This is the largest domestic PV programme in the UK, and represents about 5% of installed PV capacity. All buildings were either refurbished or newly built to high environmental standards, so households gained the benefits of energy efficiency as well as the more visible PV.

Planning for new Policy & Programmes

How can localities benefit from what DECC are planning.
Community Energy Saving Programme, Feed In Tariffs, Heat & Energy Saving Strategy

Homes and communities will contribute 13% of emission cuts in 2018-22

The Government is making homes greener using new measures in the Transition Plan:

Extending the
Carbon Emissions Reduction Target

Introducing the
Community Energy Saving Programme.

Piloting “**pay as you save**” ways to help people make their whole house greener

Introducing **clean energy cash-back** schemes such as Feed-in Tariffs

The Government is helping people to play their part by:

- Rolling out **smart meters**
- Launching a new **personal carbon challenge** and developing more proactive services from the **Energy Saving Trust**
- Announcing ‘**Green Villages, Towns and Cities**’ competition

Maintain secure gas supplies

Keeping Score.....



The Transition Plan delivers emission cuts to 2020. But we need to consider now the possible pathways to 2050

What we might see in 2050

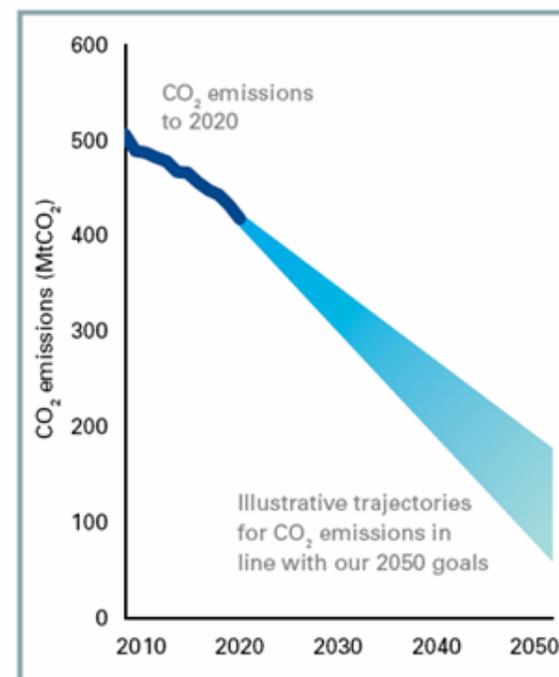
Early work shows **common themes** across most scenarios

Energy demand will have to fall significantly

But electricity use likely to increase

But some **big uncertainties**

Such as, how much electricity or bio-energy is used in heat and transport



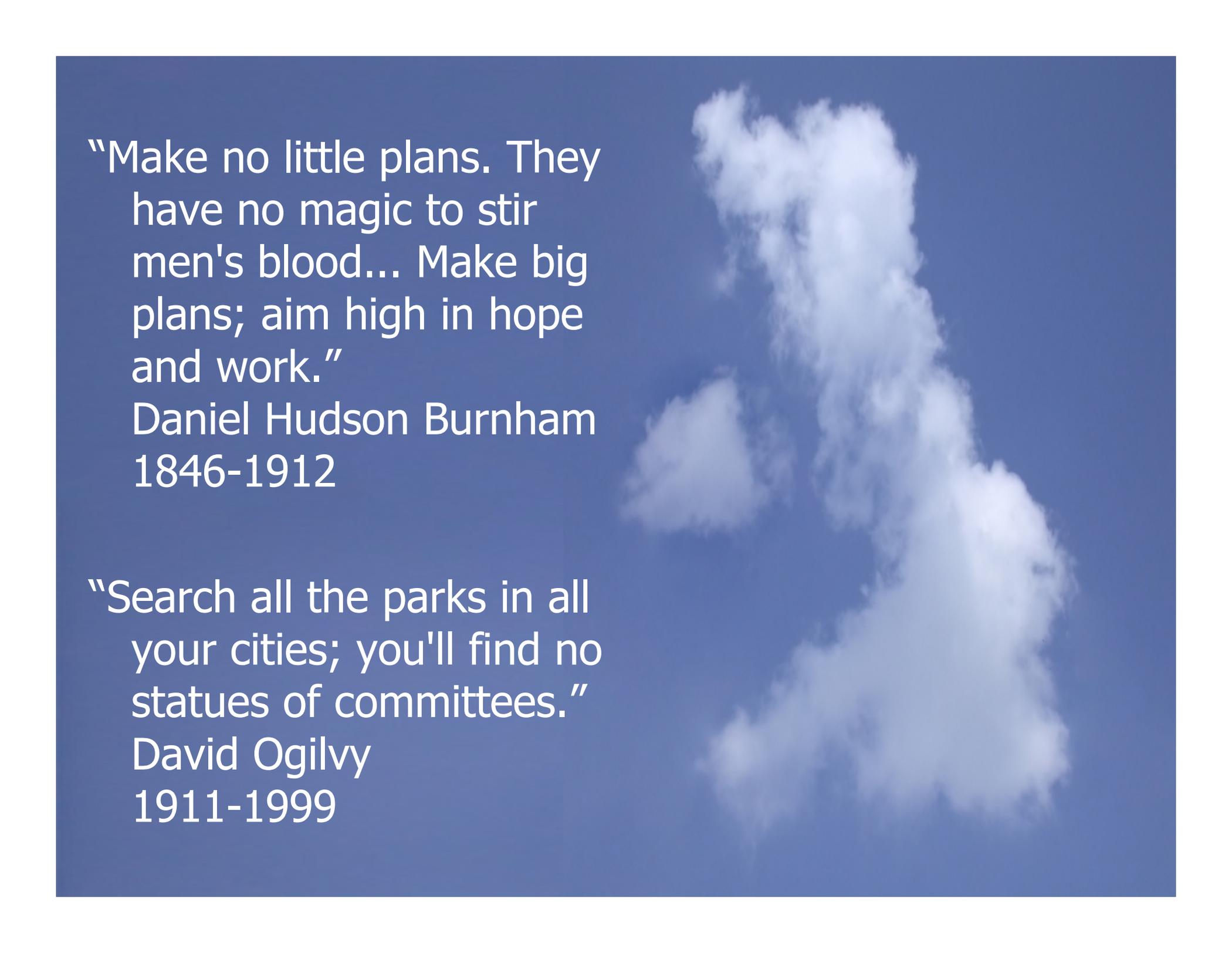
The Government will work with industry and the public to publish a **roadmap setting out the path to 2050** by spring 2010

'The Gross National Product counts air pollution and cigarette advertising, and ... the destruction of the redwood and the loss of our natural wonder in chaotic sprawl... Yet [it] does not allow for the health of our children, the quality of their education, or the joy of their play... the beauty of our poetry or the strength of our marriages... it measures everything, in short, except that which makes life worthwhile.'

Robert Kennedy, 1968

“What we think, or what we know, or what we believe is, in the end, of little consequence. The only consequence is what we do.”

John Ruskin



“Make no little plans. They
have no magic to stir
men's blood... Make big
plans; aim high in hope
and work.”

Daniel Hudson Burnham
1846-1912

“Search all the parks in all
your cities; you'll find no
statues of committees.”

David Ogilvy
1911-1999

“Leaving mobile phone chargers plugged in” is often held up as an example of a behavioural ecocrime, with people who switch their chargers off being praised for “doing their bit.” The truth is that a typical mobile phone charger consumes just 0.01 kWh per day. The amount of energy saved by switching off the phone charger, 0.01 kWh, is exactly the same as the energy used by driving an average car for *one second*. I’m not saying that you shouldn’t switch phone chargers off. But don’t be duped by the mantra “every little helps.” Obsessively switching off the phone-charger is like bailing the Titanic with a teaspoon. Do switch it off, but please be aware how tiny a gesture it is.

David MacKay ‘Sustainable Energy Without the Hot Air’ www.withouthotair.com

CO₂



Every ~~little~~ helps
big

www.slideshare.net/mea

thank you

marches
energy agency

