



CAMPAIGN TO KEEP THE LIGHTS ON CALL FOR URGENT ACTION

NEW SEP CAMPAIGN

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We urgently need your help for our brand new campaign. Following an official warning that within 5 years there could be a danger to energy supplies, SEP has launched a new campaign – a campaign to “keep the lights on” and the “heating systems running”. It’s the biggest campaign we’ve ever run, and it’s going to take a long time to win it, so we’re going to need all the help we can get. This is the first of many broadsheets explaining the campaign, but right now this is a call to action.



Martin Caton MP

OFGEM (the statutory gas and electricity regulator) warned that after 2015 there could be a danger to supplies of energy – both in price and amount. In short, without action now the lights could go out.

THE NEW BILL

The new **Climate Change (Sectoral Targets) Bill**, drawn up by SEP and tabled by Martin Caton MP (pictured) with cross-party support, spells out how we can overcome these pressing energy security problems. **We need your help to make this Bill law, and here’s why...**

“ASPIRATIONS” AREN’T GOOD ENOUGH

Energy security has been jeopardised by the government’s failure to meet its own “aspirational targets” and to accept official advice.

- **Energy efficiency:** The UK is not on track to meet its carbon reduction targets in either the domestic or public sector.¹
- **Microgeneration:** Advice from the government itself that microgeneration could provide 30-40% of the UK’s electricity need has been ignored.²

- **Small scale local energy generation:** Advice from the government itself that could have led to 3.2GW of electricity from small scale local energy generation (the equivalent of 2 nuclear power stations) is also being ignored.³
- **New technologies:** Despite energy saving potential of new technologies (described overleaf for a second campaign), no policies have been developed.

SO WHAT CAN BE DONE?

Aspirations are not sufficient. The new bill in this campaign would require all current aspirational targets to become legally binding. This can happen now but it is just the start...

Tougher targets are also needed, even in the short term. And in the longer term there will be a need for new energy generation infrastructure. So this new Bill provides a proper integrated strategy for energy efficiency and low-carbon technologies to meet the UK’s energy needs to 2050 and beyond. Until now this has not been done – it is needed NOW.

TARGETS: WHAT THE BILL WILL INCLUDE

All of these “aspirational” targets need to be made legally binding:

- (a) by 2020 the general level of energy efficiency of residential accommodation has increased by at least 20 per cent compared with the general level of such energy efficiency in 2010
- (b) by the end of 2010 the general level of energy usage in the commercial and public services sector has reduced by at least 10% compared with the general level of such energy usage in 2005 and by the end of 2020 by at least 10% compared with the general level of such energy usage in 2010.
- (c) By 2020 renewable sources of energy shall supply
 - (1) 30% of electricity
 - (2) 12% of heat; and
 - (3) 10% of transport fuel.
- (d) 10 GW of combined heat and power capacity shall be installed by 2010.
- (e) As soon as practically possible the number of dwellings with one or more microgeneration installations shall be eight times the number of dwellings with one or more microgeneration installations in 2007.
- (f) By the end of 2016 as far as is practicable all existing homes shall be low carbon.
- (g) By the end of 2016 all new homes shall be zero carbon homes;
- (h) In 2013, all new homes shall achieve a 44% carbon improvement compared to Part L of the 2006 Building Regulations.

¹ Energy White Paper, Department for Trade and Industry (DTI), 2003

² DTI Press Release, 12 Dec 2005

³ Calculations by Friends of the Earth (30 Dec 2009), based on Element Energy Report 2008

ACTION BOX

The Climate Change (Sectoral Targets) Bill urgently needs your support. PLEASE:

- Write to your MP (at House of Commons, London, SW1A 0AA) asking him/her to sign Early Day Motion 851 in support of the Bill [If you are unsure who your MP is you can find out online at www.theyworkforyou.com or by calling the House of Commons information line on 020 7219 3000]
- Contact candidates for the impending general election urging them to declare their support for the Bill [details of the candidates can be found online at www.ukace.org]
- Let us know the results
- Use the form opposite to sign up as many friends/colleagues/relatives to this campaign – we’re going to need an army of people if we want to ensure energy security for a low carbon UK

YES! I would like to support the campaign, please keep me updated.

Name _____

Organisation (if applicable): _____

Address: _____

Email: _____

Please return this slip to Lotte Blair, Sustainable Energy Partnership, 2a Prebend Street, London, N1 8PT, or email your details to info@sustenergy.org.uk.

If you would like to receive more copies of this broadsheet to distribute further, more of these sign-up slips, or simply more information then please contact Lotte as above.



NEW TECHNOLOGIES YOUR SUPPORT NEEDED

MPs are calling for action on new technologies that could reduce emissions of CO₂, reduce demand for energy and save on fuel bills.

The boxes on this page show the benefits that these technologies could bring. They can save hundreds of pounds in energy bills for the consumer and help in the fight against fuel poverty, while slashing national carbon output.

Yet they have had insufficient recognition. MPs are trying to change that.

ENERGY BILL

Alan Whitehead initiated a debate in the Committee Stage of the Energy Bill calling for a government strategy to develop these technologies. Minister David Kidney responded positively and assured the Committee that some, at least, will be included in the new microgeneration strategy being drawn up under the Green Energy Act 2009.

'We will soon publish two separate strategies covering some of the matters referred to... on passive flue gas heat recovery, when we produce the revised microgeneration strategy, I am confident that we will be able to say more about the deployment of household-scale low-carbon and renewable technologies such as passive flue gas heat recovery systems.'
(Official Report 14.1.10 col 259).

NEXT STEPS

Charles Hendry has now tabled a new clause for discussion at Report Stage of the Bill, requiring the government to ask its own advisory bodies to advise on how these technologies can play their full role in combating fuel poverty and climate change.

Surprisingly many of these technologies are currently excluded from the reduced VAT rate of 5% afforded to other energy efficiency and microgeneration measures. Colin Challen has tabled EDM 550 calling for this to be rectified.



'These ideas represent British Ingenuity at its best. They would appear to have great potential to assist us in dealing with fuel poverty and climate change. That is why I have tabled my amendment to the Energy Bill calling on the government to seek the views of its formal advisors on the best ways to help them. I hope that the government will respond positively' — **Charles Hendry MP**

Energy Bill: New Clause 14

Charles Hendry, Greg Clark and Gregory Barker — Advice on benefits of new or under-utilised technologies

- (1) For the purpose of enabling him to assess the benefits of new or under-utilised technologies in dealing with fuel poverty the Secretary of State must request the advice of the bodies specified in subsection (2) on the following technologies:
 - (a) passive flue gas heat recovery systems ('PFGHR systems'),
 - (b) voltage optimisation technologies
 - (c) standby down-powering technologies
 - (d) dynamic demand technologies
 - (e) district network connection technologies' and
 - (f) such other technologies as he thinks appropriate.
- (2) The bodies referred to in subsection (1) are
 - (a) the Energy Saving Trust;
 - (b) the Fuel Poverty Advisory Group; and
 - (c) the Sustainable Development Commission.
- (3) A request for advice made pursuant to subsection (1) may also include a request for advice as to how those technologies can assist in combating climate change.
- (4) The Climate Change Committee must within 12 months consider and produce a Report on the ways in which the technologies specified in subsection (1) can assist in dealing with fuel poverty and climate change.

THE TECHNOLOGIES

- ▷ 'Passive flue gas heat recovery systems' is technology that can use the waste heat from condensing boilers in order to heat water;
- ▷ 'voltage optimisation technologies' are technologies that lower the input of voltage to electrical equipment from that at which electricity is currently generated;
- ▷ 'standby down-powering technologies' are methods by which electrical equipment is turned off, or reduced, during periods of non-use;
- ▷ 'dynamic demand' is a method of shutting down appliances when not needed at times of peak demand
- ▷ 'district network connection technologies' are technologies that enable consumers to link up lower cost and lower polluting energy generation.

PLEASE HELP!

In order help develop these new technologies; we need the support of as many MPs as possible. So we ask that you:

1. Write to your MP (at House of Commons, London, SW1A 0AA) as soon as possible urging them to
 - a. sign Early Day Motion (EDM) 550, in support of a Fiscal Strategy for New Energy Efficient Technologies; and
 - b. support Charles Hendry's new Clause 14 to the Energy Bill.
2. Urge others to do the same – the more letters and emails MPs receive the better.

PASSIVE FLUE GAS HEAT RECOVERY SYSTEMS

Costs and emissions of different Domestic Hot Water Systems based on independent tests (DHW) (TUV NEL 2009)

DHW heating system configuration	Total gas consumption per year (kWh)	Total electricity consumption per year (kWh)	Annual cost of electricity and gas (£)	Total CO ₂ emissions per year (kg)
Passive flue gas heat systems	2455	26	£102	520
Theoretically ideal gas system	2852	0	£114	587
Condensing regular boiler with twin coil solar store and evacuated tube solar collectors	3200	125	£145	725
Non-storage combi-boiler	3932	26	£161	824
Condensing regular boiler plus cylinder	4832	26	£197	1009

Possible Electricity and CO₂ savings through new technologies (ACE 2009)

Technology	Estimated max range of electricity savings	Maximum possible CO ₂ savings	Moderate assumption of electricity Savings	Moderate assumption of electricity of CO ₂ estimates	Potential contribution to UK electricity savings if take-up level is:						
					1%	2%	5%	10%	20%	50%	100%
Standby Power Limit	max 5.84% of residential, so 2% total	4.06 Mt	1%	2.03Mt	0.01%	0.02%	0.05%	0.10%	0.20%	0.50%	1%
Daylight responsive lighting	12%	NK	5%	NK	0.05%	0.10%	0.25%	0.50%	1%	2.50%	5%
Voltage Optimisation	10-17%	NK	8%	NK	0.08%	0.16%	0.40%	0.80%	1.60%	4%	8%
Dynamic Demand	0%	2Mt	0%	1Mt	0%	0%	0%	0%	0%	0%	0%
TOTAL					0.14%	0.28%	0.7%	1.4%	2.8%	7.0%	14%

Supported by: All Party Parliamentary Group for Intelligent Energy • Association for the Conservation of Energy • Association for Environment Conscious Building • Association of Coal Mine Methane Operators • British Hydro • British Energy Efficiency Federation • British Wind Energy Association • Campaign to Protect Rural England • Combined Heat and Power Association • Consumer Focus • Cornwall Sustainable Energy Partnership • Country Land & Business Association • Energy Centre for Sustainable Communities • Friends of the Earth • GLOBE UK All-Party Parliamentary Group • Good Energy • Green Liberal Democrats • Green Party • Greenpeace • Help the Aged • London Energy Managers Group • Micropower Council • National Energy Action • National Federation of Women's Institutes • National Home Improvement Council • National Housing Federation • National Right to Fuel Campaign • PV-UK • PRASEG • RSPB • Renewable Energy Association • SERA • SHELTER • Solar Century • Tenants & Residents Organisations of England (TAROE) • Tory Green Initiative • Town and Country Planning Association • UNISON • WWF-UK

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