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ENERGY

DAVID BOWDEN



DEBATING MATTERS
TOPIC
GUIDES

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MOTION:

**“IT WOULD BE
BETTER FOR NEW
FOSSIL FUEL
RESERVES TO
REMAIN IN
THE GROUND”**

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KEY TERMS

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INTRODUCTION

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Providing easy and plentiful sources of energy is a key challenge confronting any society and is today one of the most fiercely contested areas of policy. Since the Industrial Revolution, global demand for energy has soared, which has been sustained by learning how to exploit fossil fuel resources. A total of 95% of the world's energy currently comes from fossil fuels and the modern world would be unrecognisable without their use. However energy experts, such as the International Energy Agency, warn the world is facing an 'energy crunch', caused in part by the difficulties posed by increasing energy demand as the developing world industrialises, and uncertain supply over fossil fuels, allied with increasing concerns over the environmental impact of carbon emissions [Ref: [Financial Times](#)]. European Union countries, including the UK, have pledged to reduce their carbon emissions by 20% by 2020, placing even greater demands on the quest for alternative sources of energy. Some commentators suggest that future energy policy should be predicated on the assumption that the world has a limited amount of fossil fuel left, pointing to the strides countries such as Denmark have made in cutting carbon by investing heavily in alternative energy and imposing heavy restrictions on carbon-intensive sources. Others maintain that fossil fuels must continue to play a vital role in the foreseeable future: not just in rapidly industrialising countries such as China and India, but also in meeting the difficult challenge of keeping the lights on in the developed world [Ref: [Economist](#)]. This debate hinges on three questions: how much energy does the world need; how can we best produce it; and what price is society willing to pay for it?



ENERGY:

"It would be better for new fossil fuel reserves to remain in the ground"



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The end of fossil fuel?

The Deepwater Horizon (BP) oil spill in April 2010 offered a stark reminder of the dangers inherent in extracting fossil fuels [Ref: [BBC News](#)]. Some warn that oil production has reached a 'peak' and that extracting fossil fuels will become increasingly costly and dangerous as supplies become more unstable. Furthermore accessing resources from the developing world has become a core challenge of foreign policy and some argue that it usually comes at an unacceptable cost for poor nations suffering from the 'resource curse'. While these arguments are disputed [Ref: [New York Times](#)], and the long term impacts of the BP oil spill may be less than the catastrophic levels some had feared [Ref: [Guardian](#)], for many the wider environmental and social costs caused by society's 'addiction' to oil should be motivation enough for developed nations to force themselves off finite resources and to develop cleaner, sustainable energy supplies [Ref: [Independent](#)]. It is argued that the end of government subsidies, alongside controversial moves to set a floor price for carbon that takes into account its environmental impact, is not enough to move into a post-carbon world, and that tougher regulations and sanctions are needed [Ref: [Guardian](#)].

What forms of alternative energy are there?

Whilst there are alternative sources of energy, they are not yet in a position to take up the role of fossil fuels: academic Bjorn Lomborg makes the point that to cut carbon emissions by 50% in 2050, every year until then the world would need to build 30 nuclear reactors, 17,000 windmills, 400 biomass power plants, and two versions of China's Three Gorges Dam [Ref: [Project Syndicate](#)]. Nuclear power offers a carbon-free,

and comparatively efficient, source of energy but safety concerns, symbolised by the Chernobyl meltdown in 1986, and a reluctance to invest in nuclear infrastructure, which is costly and time-consuming in the short term, means that countries such as the UK struggle to maintain even their existing levels of nuclear supply [Ref: [Telegraph](#)]. In late 2010, the UK's Energy and Climate Change Secretary approved the building of new nuclear reactors, but critics are divided over whether this will solve the problem, or create new risks [Ref: [Telegraph](#)]. The potential of renewable technologies such as wind and solar are fiercely debated [Ref: [Economist](#)]. They currently make up only 5% of total UK supply [Ref: [ESRC](#)], and there are enormous logistical problems concerning storage and reliability [Ref: [Wall Street Journal](#)]. Some argue that governments should follow the example of Denmark and Iceland, working harder to price out fossil fuels and invest in alternative renewable energy sources [Ref: [Scientific American](#)].

Why not use less energy?

Some argue that the shortfall in supply could be met by focusing on reducing energy consumption [Ref: [Battle in Print](#)]. There have been considerable investments and developments made in energy efficiency technologies, ranging from energy-saving light-bulbs (now legally required across the EU) and smart-meters to monitor home usage; to schemes that allow home users to generate electricity using solar panels or wind turbines and plans for low-carbon 'transition towns' [Ref: [Local Government](#)]. High-profile campaigns such as 10:10 [Ref: [10:10](#)] and the Energy Saving Trust [Ref: [Energy Saving Trust](#)] claim that individuals could easily cut out 10% of their carbon emissions by making



adjustments to their lifestyles [Ref: [Guardian](#)]. However others question whether constraining individuals' consumption is a desirable goal at all, pointing out that using less energy generally necessitates reductions in freedoms in everyday life such as mobility, leisure time and personal consumption, which we currently take for granted [Ref: [spiked](#)].

Shale gas: a future for fossil fuels?

A 'natural' resource only becomes an energy source when society develops the technology and knowledge to exploit it: therefore, the definition of what acts as a finite or limited resource depends on context. A significant recent breakthrough for the fossil fuel industry has been seen in the development of 'fracking' – a drilling technique which enables energy companies to exploit previously untapped resources of unconventional gases such as shale gas [Ref: [Prospect](#)]. Such technologies arguably have the potential to give an abundant supply of low-carbon fossil fuels that can be exploited all around the world [Ref: [Washington Post](#)]. As a relatively new method, however, shale gas extraction carries certain risks; and allegations (as yet unproven) regarding the toxicity of the chemicals involved and the impact on water supplies have already led to vociferous opposition [Ref: [BBC News](#)]. Furthermore, some argue discoveries like shale gas will only encourage the thirst for fossil fuels and that the long-term solution to resource shortages is not finding another finite energy supply [Ref: [Guardian](#)].



ESSENTIAL READING

Shale gas: an energy saviour?

Roger Harrabin *BBC News* 21 December 2010

The biggest energy shake-up for 25 years

Chris Huhne MP *Telegraph* 16 December 2010

A system under increasing pressure

Ed Crooks *Financial Times* 12 September 2010

The looming electricity crunch: dark days ahead

Economist 6 August 2009

FOR

Obama could kill fossil fuels overnight with a nuclear dash for thorium

Ambrose Evans-Pritchard *Telegraph* 29 August 2010

Americans should be thanking BP

David Strahan *Independent* 1 June 2010

Oil, risk and technology: choices we need to make

William Jackson *BBC News* 18 May 2010

If fossil fuel reserves rise carbon should be left where it belongs: in the ground

George Monbiot *Guardian* 25 February 2010

Why is energy a battlefield today?

Duncan McLaren *Battles in Print* 21 October 2009

AGAINST

Let's put the Gulf-spill crisis into perspective

Rob Lyons *spiked* 1 June 2010

Cleaning up oil's reputation

Robert Bryce *Wall Street Journal* 23 April 2010

Energy independence for Europe

Derek Brower *Prospect* 22 March 2010

An energy policy re-think is required

Dan Lewis *Wall Street Journal* 28 December 2009

Low carbon future? Try natural gas

Tony Hayward *Washington Post* 6 November 2009

IN DEPTH

How humankind was liberated from localism

Colin McInnes *spiked* 6 January 2011

There will be fuel

Clifford Krauss *New York Times* 16 November 2010

Could Denmark be fossil fuel free by 2050?

Scientific American 1 October 2010

Affordable green energy

Bjorn Lomborg *Project Syndicate* 14 July 2010

How to reduce your carbon emissions by 10%

Chris Goodall *Guardian* 1 September 2009

The future of energy

Economist 19 June 2008

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BACKGROUNDERS

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BP oil spill report: what the analysts, politicians and industry leaders are saying

Telegraph 12 January 2011

World Energy Outlook 2010 fact-sheet

International Energy Agency November 2010

Q&A: will shale gas deliver?

BBC News 24 September 2010

Nuclear energy overview

New York Times 1 July 2010

Energy and the environment explained

US Energy Information Administration 7 January 2010

Can countries cut carbon emissions without hurting economic growth?

Wall Street Journal 21 September 2009

Will Canada's tar sands destroy the global climate?

Nathaniel Gronewold *Scientific American* 22 May 2009

Carbon Capture Storage: Trouble in store

Economist 5 March 2009

Special report: Energy in the UK

BBC News 2 April 2008

Energy: what lies ahead

New Statesman 2 July 2007

Introduction: energy and fuels

New Scientist 4 September 2006

UK by numbers: Energy

ESRC Society Today

ORGANISATIONS

BP

Carbon Culture

Department of Energy and Climate Change

Eaga

Energy Savings Trust

Greenpeace International

International Energy Agency

Local Government Improvement and Development

Tyndall Centre for Climate Change Research

US Department of Energy



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IN THE NEWS

BP to cut production amid impact of Deepwater Horizon spill

Guardian 30 January 2011

Miliband calls BP's Russian tie-up 'worrying'

Guardian 17 January 2011

Shale gas moratorium in UK urged by Tyndall Centre

BBC News 17 January 2011

Chris Huhne promises Britain will speed up switch to green energy

Guardian 3 January 2011

MPs rule out deep-water drilling ban

Telegraph 2 January 2011

Chris Huhne unveils plans for reform of electricity market

Guardian 16 December 2010

How BP's oil spill costs could double

Reuters 1 December 2010

New energy sources vital to tackle climate change

BBC News 30 November 2010

US drops oil-drilling moratorium

Guardian 13 October 2010

Largest offshore wind farm opens off Thanet in Kent

BBC News 23 September 2010

Thousands surround Merkel office in nuclear protest

Reuters 18 September 2010

Ecuador signs \$3.6bn deal not to exploit oil-rich Amazon reserve

Guardian 4 August 2010

Obama: end dependence on fossil fuels

MSNBC 2 June 2010

BP fights to limit controls on shale gas drilling

Guardian 4 May 2010

Oil firms attacked for tar sands pollution

Telegraph 15 December 2009

10 new nuclear power stations named

Independent 9 November 2009

Downturn is 'climate opportunity'

BBC News 6 October 2009

Warning: oil supplies are running out fast

Independent 3 August 2009

Barack Obama announces plans to 'end America's dependence on foreign oil'

Telegraph 26 January 2009

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ABOUT DEBATING MATTERS

Debating Matters because ideas matter. This is the premise of the Institute of Ideas & Pfizer Debating Matters Competition for sixth form students which emphasises substance, not just style, and the importance of taking ideas seriously. Debating Matters presents schools with an innovative and engaging approach to debating, where the real-world debates and a challenging format, including panel judges who engage with the students, appeal to students from a wide range of backgrounds, including schools with a long tradition of debating and those with none.

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Debating Matters engages a wide range of individuals, from the students who take part in the debates, the diverse group of professionals who judge for us, the teachers who train and support their debaters, and the young people who go on to become Debating Matters Alumni after school and help us to continue to expand and develop the competition. If you enjoyed using this Topic Guide, and are interested in finding out more about Debating Matters and how you can be involved, please complete this form and return it to us at the address below.

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49-51 Farringdon Road
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EC1M 3JP

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- I am a sixth form student and would like further details about events in my area
- I am interested in becoming a Debating Matters judge
- I am interested in sponsoring/supporting Debating Matters
- Other (please specify)

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Surname

School/company/
organisation

Professional role
(if applicable)

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THINKING DEEPLY
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ISSUES”**

IAN GRANT, CEO, BRITANNICA

