

Scientists · Architects · Engineers · Technologists

SGR Newsletter

Spring 2009 Issue 37 • £3.50

Time for global responsibility in the global economy

Stuart Parkinson looks at the potential for a sustainable, low-carbon economy to be created through efforts to tackle the current global economic problems.

The major problems that the global economy is currently facing have many of their roots in the irresponsible practices of the financial sector. High levels of credit have been granted to those unable to repay, and bad debts have been hidden in complex financial packages sold and re-sold in the financial markets. It has brought the global financial system to the brink of collapse, and is driving the global economy into recession.

There is widespread acceptance that major reform of the financial sector is necessary to help tackle the problems. But there is also growing recognition among governments across the world that action to rapidly expand the development and deployment of greener technologies will provide a major boost to the economy and create many jobs. The question is: will the scale and the breadth of the action be enough to shift our societies onto a truly sustainable and peaceful path?

Green New Deal

A number of national programmes have been proposed, or are already being implemented, by governments of the major economies that in some way contribute to the development of a low-carbon economy. For example, the UK government has announced¹ a new programme on domestic energy efficiency worth nearly £1 billion and a financial assistance package² to the ailing motor industry including over £2 billion of loan guarantees for lowcarbon initiatives. Meanwhile, incoming US President Barack Obama has promised to spend \$150 billion (£105 billion) over 10 years to "build a clean energy future",³ and China has announced a similarly sized programme of low-carbon initiatives.⁴

However, programmes such as these, while very welcome, could be much bolder. Evidence for this perspective can be found in some groundbreaking reports published in the last six months that outline radical programmes to tackle both the economic crisis and global environmental and energy problems.



Some of these have adopted the term 'Green New Deal' – inspired by the 'New Deal' programme undertaken by US government of Franklin D Roosevelt following the Wall Street Crash of 1929.

One key set of proposals that focus on the UK situation are given in a report by the Green New Deal Group⁵ (see review on p.24) – a group of nine leading green thinkers. The report outlines proposals for major reform of the economic and financial systems, which could allow an investment of up to \pounds 50 billion a year in UK skills, infrastructure and new technologies and hence bring about a rapid shift to a low-carbon economy.

Contents

SGR News	
A few words from the Director	
Security and disarmament activities	
Climate change and energy activities4	
National Co-ordinating Committee4	
Wendy MacLeod-Gilford 1939-20085	
Science ethics and policy activities5	
Fundraising activities5	
1,000 members and counting!5	

Feature Articles6
Key principles in making sustainable buildings and places6
Social housing projects could learn from past successes8
The MOD Grand Challenge: war games for young engineers?10
President Obama and a world free of nuclear weapons11
Deterrence irrelevance: Trident, Britain and nuclear weapons12
The low-carbon energy debate14
Safer medicines through non-animal testing?17
Event & Publication Reviews19
Event & Publication Reviews19 SGR conference & AGM19
SGR conference & AGM19
SGR conference & AGM19 Study war no more23
SGR conference & AGM19 Study war no more23 Trident and British Identity23
SGR conference & AGM19Study war no more
SGR conference & AGM19Study war no more.23Trident and British Identity23A Green New Deal24Sustainable construction25
SGR conference & AGM19Study war no more.23Trident and British Identity23A Green New Deal24Sustainable construction25Sustainable biofuels25

Continued on page 18

Time for global responsibility in the global economy

...continued from front page

The United Nations Environment Programme (UNEP) has also been arguing the social and environmental case for a major shift to a low-carbon economy. In a report⁶ on 'green jobs', it estimates that at least 2.3 million people currently work in the renewable energy sector worldwide, with many more in related sectors. The report argues that with the right combination of policies and measures the market for environmental goods and services could grow to a massive \$2,700 billion (£1,900 billion) by 2020.

Even the organisers of the World Economic Forum have made radical proposals⁷ – arguing that globally, over \$500 billion (£350 billion) needs to be spent each year up to 2030 on limiting carbon emissions.

The peace dividend

But even these reports are failing to discuss a key issue. As SGR and several peace organisations have repeatedly pointed out, huge resources – in terms of skills, finance and materials – are still tied up in the vast military programmes of the world's major economies, especially the USA. Government spending on the military across the industrialised world dwarfs that spent on, for example, tackling climate change.⁸ Furthermore, while employment is increasing in the green economy, rationalisation has led to a less rosy situation in military industry. In the UK, for example, employment in this sector is showing a long-term downward trend, despite the high levels of funding.⁹

And the current economic problems mean that military industrial programmes are starting to come under greater scrutiny. Recently the UK government announced that the construction of its two new aircraft carriers was to be spread over a longer timeframe as a way of controlling costs.¹⁰ This therefore seems to be an opportune moment to ask more searching questions about spending on this and other large military technology programmes such as the Astute submarines, Type 40 destroyers, Joint

Strike Fighters and – especially – the planned replacement of the Trident nuclear weapons programme.

The steady-state economy

18

But the debate over the economy could go even deeper. One issue that mainstream economists and senior policy-makers still refuse to discuss is whether the current economic system – based on the unending growth of economic activity, itself based on the continual growth of consumption of materials and energy – can be sustained for much longer as we start to reach resource and environmental limits. To its credit the *New Scientist* magazine devoted a recent issue¹¹ to this question, entitled 'The folly of growth'. Prominent among the recommendations was the need to move to some sort of a 'steady-state' economy – something first argued by former World Bank economist, Herman Daly, as far back as 1973.¹²

Conclusion

The last time the world saw a financial crisis of the current magnitude was in 1929. It led to a global depression, the rise of extremist governments in major countries, and ultimately the biggest war in history. Arguably the action being taken now by leading governments will be enough to avert a global depression this time, but it is much less certain that we will avoid one further down the line if we do not take action to deal adequately with climate change, peak oil and other natural resource problems. And if we reach a crisis point without having achieved elimination of the 25,000 nuclear weapons currently in global arsenals, we are going to be very serious trouble.

The current global economic problems have catalysed scrutiny of the financial sector. But policymakers need to go further, and grasp the opportunity for deep and lasting change across the whole economy, starting with the energy, environmental and security sectors. Professionals across science, design and technology will need to push for this change as much as we can.

Dr Stuart Parkinson is Executive Director of Scientists for Global Responsibility.

References

 DEFRA (2008). Save money, save energy: government takes action on family fuel bills. News release, 11 September. http://www.defra.gov.uk/news/2008/080911a.htm
 BERR (2009). Mandelson announces support package for the Automotive Industry. News release, 27 January. http://nds.coi.gov.uk/environment/fullDetail.asp?ReleaseID=39092
 8&NewsAreaID=2&NavigatedFromDepartment=True
 The White House website (2009). The agenda – energy and the environment.

http://www.whitehouse.gov/agenda/energy_and_environment/ 4. Black R (2009). 'Climate hope' in economic plans. BBC news online, 26 January.

http://news.bbc.co.uk/1/hi/sci/tech/7851227.stm 5. Green New Deal Group (2008). A green new deal: joined-up policies to solve the triple crunch of the credit crisis, climate change and high oil prices. New Economics Foundation, London. http://www.neweconomics.org/gen/z_sys_publicationdetail.aspx?pi d=258

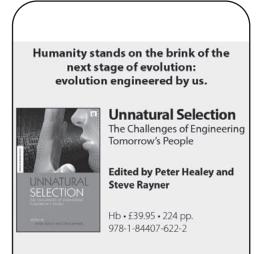
6. UNEP (2008). Green jobs: towards decent work in a sustainable, low-carbon world. United Nations Environment Programme, Geneva. http://www.unep.org/greeneconomy/ 7. Elliot L (2009). World Economic Forum wants \$10th to save the world. The Guardian, 29 January.

http://www.guardian.co.uk/business/2009/jan/29/davos-greenenergy

 Langley C, Parkinson S, Webber P (2007). More soldiers in the laboratory: the militarisation of science and technology – an update. Scientists for Global Responsibility, Folkestone. http://www.sgr.org.uk/ArmsControl/MilitaryInfluence.html
 Schofield S (2008). Making arms, wasting skills: alternatives to militarism and arms production. Campaign Against Arms Trade, London. http://www.caat.org.uk/publications/

10. Wyatt C (2008). Carriers victim of cash crisis. BBC news online, 11 December. http://news.bbc.co.uk/1/hi/uk/7777723.stm 11. New Scientist (2008). Special issue: the folly of growth. 18 October. http://www.newscientist.com/

12. Daly H (1973). Toward a steady-state economy. WH Freeman & Co Ltd.



Written by a range of experts in science, technology, bioethics and social science, *Unnatural Selection* examines the range of technological innovations offering lives that purport to be longer, stronger, smarter and happier, and asks whether their introduction is likely to lead to more fulfilled individuals and a fairer world.

20% off for SGR members!

Use the voucher code SGR09 when ordering online. Offer ends 31st May 2009

Explore Earthscan's Science in Society series online at: www.earthscan.co.uk

