A response to Challen’s C&C letter [See end of this document] from UK Climate and Energy Minister Chris Huhne.

Colin Challen
28 St Sepulchre Street
Scarborough
North Yorkshire
Y011 1QF

Thank you for your letter dated 8 June about Contraction and Convergence (C&C). I apologise for the delay in replying.

The Government believes that climate change is one of the gravest threats we face, and that urgent action at home and abroad is required. We are clearly in full agreement about the need for an ambitious global climate deal that will limit emissions and explore the creation of new international sources of funding for climate change adaptation and mitigation.

We consider that the Copenhagen Accord, agreed by a broad cross-section of leaders at the UNFCCC summit in December 2009, represents an important step towards an ambitious global deal. More than 120 countries have associated with the Accord, and over 70 nations accounting for 80% of global emissions have set out the targets and actions they will take to limit emissions in the medium term. The Accord clearly recognises the "need to limit the global average temperature rise to below 2°C and avoid dangerous climate change."

The C&C framework developed by Aubrey Meyer and the Global Commons Institute in many ways offers a compelling vision of a future long-term climate regime, and has a number of distinct benefits. These include:

- Recognition that per capita emissions of developed countries will need to come down significantly over time.
- The establishment of a firm global pathway to limit emissions, with corresponding long-term targets for all countries.
- The development of an approach that many consider to represent a fair and equitable response to climate challenge.

The EU noted in its March 2009 Environment Council Conclusions that, in the long term, gradual convergence of national per capita emissions between developed and developing countries will be necessary if we are to avoid dangerous climate change, taking into account national circumstances.

Countries continue to have strong views about how the long-term global emissions reductions that are required can best be translated into national targets and actions. To be successful the future climate regime will likely need to reflect a balanced range of indicators and will also need to respect national sovereignty. Per capita emissions are an important indicator of a country’s responsibility to take action, but there are a number of other important indicators of national circumstances, such as those covering economic capability to act and development needs.

The international debate about how to agree an equitable & effective long-term response to climate change remains highly active and proposals such as C&C will continue to influence and stimulate the international discussions. I therefore welcome the contribution that you and the signatories to your letter are making by high-lighting the benefits of this approach.

CHRIS HUHNE
The reply received contains newly warm words about C&C. However, these are mixed with old ideas on differentiation and unrealistic views of keeping within 2 degrees. It is on-line here: - www.gci.org.uk/politics.html

'New' from DECC is the openly encouraging form of words about C&C and the thanks to all signatories from Secretary of State for the letter where he says: -

"I welcome the contribution that you and the signatories to your letter are making by highlighting the benefits of this approach." C&C is also described as, "a compelling vision of a future long-term climate regime, and has a number of distinct benefits. These include: - • Recognition that per capita emissions of developed countries will need to come down significantly over time; • The establishment of a firm global pathway to limit emissions, with corresponding long-term targets for all countries; • The development of an approach that many consider to represent a fair and equitable response to climate challenge."

These positive words probably represent the attitude of Chris Huhne himself. Along with his party [Liberal Democrat] he has been a advocate for C&C for many years. There is also the familiar 'old' line stating that different national circumstances, responsibilities and capabilities are what the negotiations at the UNFCCC have to deal with. This does reflect the situation that the civil servants at DECC and DEFRA have had to deal with at the UNFCCC, but they:

[a] appear not yet to recognize that C&C doesn't disagree with them on this and [b] that C&C does provide a way of structuring this obviously unavoidable issue in a UNFCCC-compliant way.

The letter to Chris Huhne requested a public meeting. This has been ignored. It may well be that at least some of the signatories to him will not be happy with this. One has written to me already in this vein saying quite reasonably that a reply specifically to this request is what has been awaited and it has not been provided.

In the round the reply from the Secretary of State portrays residual conflict within the Department of Energy and Climate Change and the Climate Change Committee where regarding C&C, some long-serving civil servants still have a mental model of the negotiations that is essentially building a 'mosaic' in an 'evolutionary' manner. It is from this position they have for many years projected a conflict with C&C.

If so then the tide is turning as the defence of what could still be classed as this 'anti-C&C-influence' increasingly depends on arguments that add up to the mosaic-failure of doing too-little-too-late, or the high-cost of 'UNFCCC-non-compliance'.

The fact is that the objective of the UNFCCC obviously makes UNFCCC-compliance teleological. Given the risks and indeed the high costs of failure, it makes sense for us all to be teleologically guided by that and do the numbers for a global deal that is globally consistent with UNFCCC-compliance. It is a certainty that over time this view will increasingly prevail.

That said the letter from Secretary of State asserts that the Copenhagen Accord is:

"an important step towards an ambitious global deal" that adds up to what "the Accord recognizes as the need to limit the global average temperature rise to below 2 degrees and avoid dangerous climate change".

This reflects what DECC colleagues claim concerning their undoubtedly valiant efforts over 15 years. However, their claim is not credible. The "medium term targets and actions" referred to do not even add up to the "2016 4% low" scenario on which the Climate Act is based. This is the scenario for which DECC unrealistically gave us only 50:50 odds for not exceeding 2 degrees.
This analysis was done by the Hadley Centre and published last year by the Climate Change Committee [CCC]. It is in this that gains in 'sink-efficiency' to 100% by 2050 - their so-called 'median case' - are projected by the Government as the most likely. This rate of gain in sink-efficiency from less than 50% now to more than 100% within 40 years is unrealistic. With ocean acidification and increased warming, evidence suggests a decline in sink-efficiency and not an increase. An increase on this scale seems wholly improbable and there is no evidence to support this trend. Consequently, the odds of the ‘Copenhagen Accord’ adding up to less than 2 degrees are even worse. However politically unappealing this may be, it is worth repeating that this claim for not exceeding two degrees is not credible.

All the way through 2009, GCI argued the case about the unrealistic rates of gain in sink-efficiency in the Climate Act in last year's Environmental Audit Committee enquiry into, “Targets in the Climate Act: where did they come from and were the models on which they were based valid?” The Met Office indicated their broad agreement only at the end of the enquiry: - www.gci.org.uk/Documents/GCI_EAC.pdf

The recent and more detailed animation-analysis of this matter shown here: - www.gci.org.uk/animations/Sources_and_Sinks_UK_Climate_Act.swf or here: - www.gci.org.uk/animations/Sources_and_Sinks_UK_Climate_Act.exe

Hadley Centre now say, “it is not unreasonable that the “sink efficiency” rises above 100% in scenarios with rapidly declining emissions.” However in their own published assessment of this falling-emissions:falling-concentrations scenario, temperature continues to rise up from 1.78 degrees in 2050 to 2.13 degrees in 2125. So what is claimed as “not unreasonable” is that temperature will continue to rise for 75 years after concentrations start falling in 2050. i.e. while emissions are still declining, sink-function strengthens as temperature rises, breaking the ‘radiative forcing’ link between concentrations and temperature. This is as ‘reasonable’ as contrarians who argue the opposite viz that temperature is falling while concentrations are rising!
The political problem that attends this remains the predictable lack of focus and clarity in the collective-mind of the 'policy community' inside DECC and beyond.

Chris Huhne’s letter talks reasonably about the need for, "a balanced range of indicators relating to national responsibilities and circumstances, economic capabilities and developments needs." However, to keep within 2 degrees, we need to get global emissions down to about net-zero within the next 40 years. However, the needs in this "balanced range of indicators" are zeroed out for everyone within 40 years so making this indicators-list sacrosanct and the reason for resisting C&C, is error. It results from trying to negotiate contraction, convergence and implementation with a balanced range of indicators simultaneously, so the negotiations to achieve the objective of the UNFCCC remain structureless and doomed to continue the failure generated so far.

The way to deal with this from a C&C perspective is straightforward.

1. define a full-term global emissions budget for two degrees at the UN;
2. split this budget in two at the UN so above average and below average converge on the per capita average by negotiated year 'x' noting that, "the rate of convergence is the main equity lever."

The UK did this in the UK Climate Act but prescribed year 'x' as 2050. They then tried with others to prescribe these rates of C&C to the UN at COP-15. The attempt failed.

The ‘global deal’ is points 1 & 2. Then, away from the UN, each side negotiates within itself and amongst themselves as to how they share the proceeds of points 1 & 2. This wouldn’t prevent exchanges/trading between the two sides, it just can get a realistic global deal for Africa, India and China with 'accelerated convergence' first.

Beyond C&C the US, the UK and others are being faced with ever more extreme and arbitrary demands for climate-justice: - www.gci.org.uk/animations/C&C_COP_15.swf
90% Emissions Contraction by 2080
Convergence to Per Capita Equal Globally by 2040

High Developed Country Per Capita Average

Global Per Capita Average Emissions

Low Developing Country Per Capita Average

Global Gross Emissions

Developing Country Gross Entitlements

Developed Country Gross Entitlements

Yellow = 16 GTC @ £100/tonne = £1.6 Trillion.

90% Emissions Contraction by 2080
Convergence to Per Capita Equal Globally by 2030

High Developed Country Per Capita Average

Global Per Capita Average Emissions

Low Developing Country Per Capita Average

Global Gross Emissions

Developing Country Gross Entitlements

Developed Country Gross Entitlements

Yellow = 29 GTC @ £100/tonne = £2.9 Trillion.
90% Emissions Contraction by 2080
Convergence to Per Capita Equal Globally by 2020

High Developed Country Per Capita Average

Global Per Capita Average Emissions

Low Developing Country Per Capita Average

Global Gross Emissions

Developed Country Gross Entitlements

Yellow = 40 GTC @ £100/tonne = £4 Trillion.

90% Emissions Contraction by 2080
Convergence to Per Capita Equal Globally by 2010

High Developed Country Per Capita Average

Global Per Capita Average Emissions

Low Developing Country Per Capita Average

Global Gross Emissions

Developed Country Gross Entitlements

Yellow = 50 GTC @ £100/tonne = £5 Trillion.
CLIMATE JUSTICE WITH A VENGEANCE [1]

e.g. 90% Emissions Contraction by 2080
Instant Convergence to Per Capita Equal Globally

• Known as ‘Cap and Share’, it ‘insists’ on an immediate global convergence to per capita equality for ‘instant’. **Climate Justice.**

• Per capita emissions entitlements for Developed Countries and Developing Countries must go to the global average *immediately* [see next image].

• An extreme demand of negotiators.

90% Emissions Contraction by 2080
Convergence to Per Capita Equal Globally by 2001

- Global Average Tonnes Per Capita
- Global Gross Emissions
- Developing Country Gross Entitlements
- Developed Country Gross Entitlements
CLIMATE JUSTICE WITH A VENGEANCE [2]

e.g. 90% Emissions Contraction by 2080
Double Convergence beyond Per Capita Equal Globally

- Known as ‘Common but Differentiated Convergence’.
- Global convergence to per capita equal shares and then a divergence beyond that followed by a second ‘reverse convergence’ to equality at zero.
- Developed Countries per capita emissions averages go below the global average so Developing Country averages can go above that average [see next image].
- Trying to intensify Climate Justice with more ‘flexibility’, its calculations become arbitrary and the politics in this worsen an already intractable negotiation.

90% Emissions Contraction by 2080
Double-Convergence beyond 2025
CLIMATE JUSTICE WITH A VENGEANCE [3]

e.g. 90% Emissions Contraction by 2080
Convergence beyond Per Capita Equal Globally
To Negative Emissions Entitlements by 2030
For Developed Countries

- This ‘Greenhouse Development Rights’ demands convergence to equal per capita and then divergence beyond to Negative Entitlements for Developed Countries with unrestrained emissions for Developing Countries [see next image].
- Calculations and the politics become yet more arbitrary and steer the negotiations into conflict.
- This really is Climate Justice with a Vengeance.
MAKING A MOCKERY OF CLIMATE & JUSTICE

- There is a ‘fourth’ alternative called ‘Kyoto-2’.
- Described as ‘acting in the spirit of C&C’, it . . .
- . . . assumes ownership of fossil fuel reserves globally;
- . . . re-designates the ‘consumption’ entitlements under ‘contraction’ as ‘production’ permits;
- . . . auctions these permits to the world’s energy producers, through the world’s central banks;
- . . . redistributes the trillions of dollars rent raised annually in this way to the world’s deserving causes;
- . . . and essentially abandons the UNFCCC [and reality] altogether.

This ‘fourth alternative’ - Kyoto-2 - does not calculate or even engage in any direct linkage with the objective of the UNFCCC - i.e. emissions calculations of contraction:concentrations and contraction:convergence - at all.

It is therefore impossible to graphically chart the Kyoto-2 proposals as self-standing proposals relating to the objective of the UNFCCC, so this space is a blank. The Kyoto-2 website simply says: -

*Global Commons Institute, the “home” of Contraction and Convergence as promoted by the visionary Aubrey Meyer. The website contains and vast amount of information on climate and C&C in particular.*

*The “contraction” part of C&C is very much part of Kyoto2 and we see no reason to dispute the models or conclusions on desirable CO2 trajectories outlined.*

Saying it is production and not consumption that should be the focus of attention, its authors and advocates present Kyoto-2 as the necessary replacement for C&C.

However, since its agenda is a recipe in favour of arrangements not between nations but between the fossil fuel producers and central banks, it is a fiction to claim that Kyoto-2 is an international arrangement to achieve the goal of the UNFCCC. In reality it is a goal-free and unguided private sector proposal, that glosses over asymmetric development by paying futile lip-service to the ‘world’s deserving causes’.
Dear Chris

UNFCCC-compliant Global Climate Change Framework

We all face an increasingly urgent situation with the threat of runaway rates of climate change occurring and the persistent failure to come to terms internationally to deal with this. COP-15 was another example of this and the odds for COP-16 appear no better as things stand.

So we write to you with the request to convene a high-level public meeting to focus on this predicament and the international need to establish a UNFCCC-compliant Global Climate Change Framework to redress this threat as soon as possible.

Contraction & Convergence is a prime example of this. It is a rational formulation for reconciliation of ‘Climate Justice without Vengeance’. With growing support for this approach internationally, we note the positions taken in the UK context by: -

The RCEP in 2000 that, “The government should press for a future global climate agreement based on the contraction and convergence approach [C&C], combined with international trading in emission permits. Together, these offer the best long-term prospect of securing equity, economy and international consensus.”

The UNFCCC Executive at COP-9 [2004] - achieving the objective of the UNFCCC “inevitably requires contraction and convergence”.

The Liberal Democrat party that, “an agreement must be based on reducing emissions overall, while equalising emissions between the developed and developing worlds – the principle of contraction and convergence.”

Yourself and what you called the “morally compelling logic” of C&C.

The All Party Parliamentary Group on Climate Change in the previous parliament.

The UK Climate Act, which Adair Turner effectively characterised as C&C in evidence to the EAC and DECC select committees last year saying that converging to equal per capita entitlements globally is the only option that is, doable and fair for organising and sharing the full-term emissions-contraction-event to bring us to UNFCCC-compliance and that if, for reasons of urgency the rate of global contraction has to be accelerated, for reasons of equity the rate of international convergence has to be accelerated relative to that.”

Several ideas derived from C&C have surfaced since Kyoto with ideas that can be perhaps in various ways incorporated into C&C. However, there is an overwhelming need for an over-arching UNFCCC-compliant Framework that enables the globally competing interests of the over-consuming and the under-consuming to be reconciled with each other and with the objective of the UNFCCC in a non-random manner.

We feel that C&C is the veteran and indeed the apex example of this and urge you to consider our request. At Kyoto in December 1997 and shortly before they withdrew from these negotiations, the USA stated, “C&C contains elements for the next agreement that we may ultimately all seek to engage in.”

The adversarial reasons for their withdrawal then were in play again at COP-15: - http://www.gci.org.uk/public/COP_15_C&C.swf

C&C answers this in a unifying and constitutional way and the need for this answer becomes increasingly critical.

With best wishes

Yours sincerely
Colin Challen  
Former Chair UK All Party Parliamentary Group on Climate Change

Professor Sir Tom Blundell  
FRS, FMedSci,  
Department of Biochemistry, University of Cambridge,  
Former Chairman of the Royal Commission on Environmental Pollution

Professor Peter Guthrie  
OBE  
Professor in Engineering for Sustainable Development in the UK  
Fellow of St Edmund’s College Cambridge

Professor Martin Rees  
Trinity College Cambridge

Sir John Houghton  
President, John Ray Initiative

Michael Hutchinson  
CEO Tangent Films

The Rt Revd & Rt Hon Richard Chartres  
KCVO DD FSA  
Bishop of London

Anthony J. McMichael, MBBS, PhD  
Professor and NHMRC Australia Fellow National Centre for Epidemiology & Population Health, ANU College of Medicine, Biology and Environment, ANU,  
Honorary Professor of Climate Change and Human Health, University of Copenhagen

David Wiggins  
Wykeham Professor of Logic, Emeritus, Oxford University

Ruth Reed  
President Royal Institute of British Architects [RIBA]

Sunand Prasad  
Former President of RIBA

Maneka Gandhi  
Member of Parliament India

Lord David Puttnam  
Film Producer

Jack Pringle  
PPRIBA Hon AIA FRSA Dip Arch BA(hons)  
Vice Chair Construction Industry Council (CIC)  
Council Member International Union of Architects (UIA)  
Past President Royal Institute of British Architects (RIBA)

Sir John Harman  
FRSA Hon FICE, FIWEM, FIWM, FSE, DCL

Professor Aubrey Manning, OBE,FRSE,  
Emeritus Professor of Natural History, University of Edinburgh.

Sir Crispin Tickell  
Director Policy Foresight Programme Oxford University

Tim Livesey  
The Archbishop of Canterbury’s Secretary for Public Affairs

Professor Sir Michael Marmot  
MBBS, MPH, PhD, FRCP, FFPHM,FMedSci  
Director, UCL International Institute for Society and Health  
MRC Research Professor of Epidemiology and Public Health, University College London  
Chairman, Commission on Social Determinants of Health  
Chairman, Department of Health Scientific Reference Group
Professor Sir Andy Haines  
Director, London School of Hygiene & Tropical Medicine,  
London WC1E 7HT [in a personal capacity]

Professor Brendan Mackey  
The Fenner School of Environment & Society  
The Australian National University  
* Member, IUCN Council (Oceania Regional Councilor)  
* Member, Earth Charter International Council  
Professor David Orr Environmental Studies and Politics Oberlin College and James Marsh Professor at the University of Vermont.

Alistair Woodward  
Head of the School of Population Health, University of Auckland

Dr Nigel Woodcock  
Reader, Department of Earth Sciences, University of Cambridge

Professor Bill McGuire  
Director, Aon Benfield UCL Hazard Research Centre  
University College London

Lord Anthony Giddens  
Professor Emeritus LSE

John Carstensen  
Chief Executive Officer Society for the Environment

Professor Mark Swilling  
Sustainability Institute, School of Public Management and Planning  
Stellenbosch University, South Africa

Lynne Jackson  
Coastal & Environmental Consulting, Cape Town, South Africa

Dr David Pencheon  
Director - NHS Sustainable Development Unit (SDU)

Professor Anthony Costello  
FMedSci,  
Director UCL Institute for Global Health

Tom Spencer  
Vice Chairman, Institute for Environmental Security

Dr Mayer Hillman  
Senior Fellow Emeritus Politcy Studies Institute

Susan George  
President of the board of the Transnational Institute

Alex Kirby  
Former BBC News environment correspondent

Professor Tim Jackson  
Sustainable Development Surrey University  
Director of the Research group on Lifestyles, Values and Environment

Professor William E. Rees, PhD, FRSC  
UBC School of Community and Regional Planning, Vancouver, BC, CANADA

Jeremy Leggett  
Chairman Solar Century

Andrew Dlugolecki  
UK Climate Change Committee Member, Sub Committee on Adaptation
The Hon. Tom Roper
Board Member, Climate Institute, Washington DC

Roger Arthur Graef OBE
criminologist and film-maker

Susan Richards
non-executive director and founder of openDemocracy

Adam Poole
The EDGE UK

Professor Lord Smith of Clifton

Peter Head,
Chairman of Global Planning Arup.

Linda Rosenstock MD, MPH
Dean, UCLA School of Public Health
Former Director, U.S. National Institute for Occupational Safety and Health

Professor Alan Maryon-Davis
President, UK Faculty of Public Health

John Guillebaud
Emeritus Professor of Family Planning & Reproductive Health, UCL

Professor Hugh Montgomery
Director, UCL Institute for Human Health and Performance

Dr Robin Stott
Director of the Climate and Health Council

Emeritus Professor Brian Moss
University of Liverpool

Steven Earl Salmony
AWAREness Campaign on The Human Population [estab. 2001]

Robert Costanza
Gordon and Lulie Gund Professor of Ecological Economics
Director, Gund Institute for Ecological Economics
Rubenstein School of Environment and Natural Resources
The University of Vermont

Jenny Griffiths OBE,
Member, Climate and Health Council

Tim Helweg Larsen
Director Public Interest Research Centre

Jonathon Porritt
Forum for the Future

Lorna Walker
CABE

Dave Hampton
Carbon Coach MA (Cantab) C Env C Eng FCIOB,
Society for the Environment Board Member, The Edge,
RIBA Sustainable Futures, Superhomer, Transition Town Marlow Founder

Leslie Watson
Director Sustainability South West
Nick Reeves
Executive Director CIWEM

Professor Ernst Ulrich von Weizsäcker PhD
Lead Author, Factor Five, Former Chairman of the German Bundestag’s Environment Committee

Professor Robert B. Whitmarsh
School of Ocean and Earth Science, National Oceanography Centre, SOUTHAMPTON

Patrick Ainley
Professor of Training and Education, University of Greenwich

Michael H. Glantz,
Director CCB (Consortium for Capacity Building)
INSTAAR University of Colorado

Antonio Sarmiento G
Instituto de Matemáticas, UNAM México

Tim Smit
Director of the EDEN Project

Ulrich Loening
Former Director of the Centre for Human Ecology

Paul Allen
External Relations Director of the Centre for Alternative Technology

Dr Richard Horton
Editor in Chief Lancet Magazine

Fiona Godlee
Editor in Chief British Medical Journal

Dr Jean-Baptiste Kakoma
Rwandan School of Public Health

Ian Roberts
Professor of Epidemiology and Public Health LSHTM
University of London

Sarah Walpole, BSc, MBChB,
York District Hospital, UK

Professor Sir Sabaratnam Arulkumaran
President, Royal College of Obstetricians & Gynaecologists, UK

Mr Tim Campbell-Smith MBBS BSC FRCS (Gen Surg)
Consultant colorectal and general surgeon

Mark Thompson
General Practitioner

Dr. Marie-Claire Lobo
Consultant in Public Health Medicine NHS Hampshire

Tony Waterston
Consultant paediatrician (retired)
Chair of Royal College of Paediatrics and Child Health Advocacy committee

Robert Johnstone MSc MInstP MIPEM CEng
Clinical Scientist, London

Professor David Webb
Engineering The Praxis Centre Leeds Metropolitan University
Dr Stuart Parkinson
Scientists for Global Responsibility

Professor Fiona Stanley
Director Telethon Institute for Child Health Research Perth Western Australia

Bhavani Prakash
Founder Eco WALK the Talk.com, www.ecowalkthetalk.com/blog

Professor Andrew Weaver
Canada Research Chair University of Victoria

Dr Tom Barker
Sustainability ecologist, Dept of Ecology, University of Liverpool.

Sean Kidney
Chair, Climate Bonds Initiative

Dr Samuel Bonnett
Biogeochemist, Institute for Sustainable Water, Integrated Management and Ecosystem Research, University of Liverpool.

Dr Peter North,
Senior lecturer, Department of Geography, University of Liverpool.

Dr Jane Fisher,
Lecturer in Ecology, Liverpool John Moores University.

Prof Andy Plater,
Director of Oceans and Ecosystems Research Cluster and Head of Green Economy incubation Network, University of Liverpool

Romayne Phoenix
London Green Party Campaigns Officer

Penny Kemp - GCI

Jim Berreen – GCI

Dr Richard Lawson
General Practitioner

Mr Mike Zeidler
Chairman, Association of Sustainability Practitioners

John Bunzl
Trustee, International Simultaneous Policy Organisation

Roger Martin
Chair, Optimum Population Trust

Anthony and Anne Wilson
Staffordshire

Marianne McKiggan
Crisis Forum

David Cook
Executive Ambassador the Natural Step

Ian Roderick,
Director of the Schumacher Centre, lead partner in the CONVERGE project
Michael Herrmann
Senior Lecturer in Sustainability
Kingston University School of Architecture & Landscape
Faculty of Art, Design & Architecture Surrey

Professor Peter Reason
School of Management, University of Bath

John H Crook PhD DSc
Formerly Head of Joint School in Psychology and Zoology
Psychology Department, Bristol University

Francesca Vandelli
Systemic Learning and Development Officer, Health and Social Care Bristol

Tim Malnick
Co-Director Ashridge Masters in Sustainability and Responsibility

Toddington Harper
MD, The Low Carbon Economy Ltd

Dr Nicholas Allott
Postdoctoral research fellow at Centre
for the Study of Mind and Nature, Oslo University

Doug Whitehead
Partner Consulting & Student Bond University
Post Graduate Programme Carbon Management
EnSight Consultancy, Brisbane

Hilary Griffiths
Coordinator of Friends of the Earth, Guildford and Waverley.

Elizabeth Tomlinson
BSc (Econ), ITEC, LLSA, MBNSRTA

Dr Keith Baker
Director, Sustainable Footprints

Tim Yeo MP
Chairman of the House of Commons Energy and Climate Change Committee

Caroline Lucas MP
Martin Caton MP
Joan Walley MP
Paul Flynn MP
Jo Swinson MP

Rt Hon Michael Meacher MP
UK House of Commons

Dr. Rupert Read
Norwich Green Party and University of East Anglia Philosophy Department

Jenny Jones AM
Green Party Group London Assembly

Darren Johnson AM
Green Party Member London Assembly

Dr Martin Hemingway
Green Party, North West Leeds
James Del-Gatto  
Head of CSR - SThree plc  

Raja Mitra  
Senior executive & Management professional  

Stuart Jeffery  
Campaigns Officer, Kent Green Party  

Andrew Dakers  
Spokesperson for Hounslow Borough Liberal Democrats  

Meenakshi Subramaniam  
UCCK, Kodaikanal  

Paul Anderson, PhD  
Research Fellow, University of Warwick  

John Russell  
Chairman Giltbrook Studios, Nottingham  

Esther Maughan McLachlan,  
Managing Director, Strong Language Ltd.  

Stephen Thomson,  
Editor, Plomomedia.com  

Peter Martin  
Research Director CarbonSense  

Dave Yates  
Newport Friends of the Earth  

Dr Michael Taylor  
Retired Teacher  

Terry Wyatt  

Jo Abbess  
BSc  

Miles Litvinoff  
writer  

John Cossham  

Milena Buchs  

Stan Mowatt  
Chemistry Teacher  

Audrey Urry  
Liberal Democrat  

Chris Keene  
Green Party  

Dr Clive R Sneddon  
Liberal Democrat  

John Dougill  
Artist  

Tony Burton  
Wind Energy Consultant  

Tamas Szabados  
PhD Maths Dept Budapest University
Rebecca Findlay  
Lambeth Green Party & Sustainable Streatham

Brian Orr  
Civil Servant

Penney Poyzer  
Author and Broadcaster

Jeffrey Newman  
Earth Charter

Kate Prendergast  
Freelance consultant, member Crisis Forum

Mr Leo Giordano  
Homes and Communities Agency

Rev. Canon Peter Challen  
Christian Council for Monetary Justice

Alex Lawrie  
CEO, Lightweight Community Transport, Chair, The Ecological Land Co-operative

Keith Taylor  
Green MEP

John Whiting  
GCT

Sabine McNeill  
Green Credit

Dr Alan Bullion  
Business Analyst, Informa Agra

Dr. Robert Davis

Steve Wright  
Reader Global Ethics, Leeds Metropolitan University

Dr Arvind Sivaramakrishnan

Michael Sackin

Phil Harris  
retired Government Grade 7 scientist

Barbara Panvel  
Centre for Holistic Studies [India]

Dr Mark Levene  
Reader in Comparative History, University of Southampton

Jonathan Ward  
MSci, MSocSc, StudentForce for Sustainability

Richard Jordan MA

Nic Lee and Heather Finlay  
London

Jim Roland  
Liberal Democrat party member

Ashton Shuttleworth  
BSc (Dunelm) MSc DipIC DipFM FRGS - Environmental Finance and Consulting
Ben Brangwyn  
co-founder Transition Network

Michelle Thomasson  
Transition Minchinhampton

Anne Adams

Peter Kent Bsc. Msc  
Lib Dem. Town Councillor

Clare Palgrave  
Chair; Woking Local Action 21

Scott Ainslie

Susan Chapman  
BA (Theol) Retired Teacher

Georgia Meyer  
Teacher

Lucinda Cridland

Sophie Rees

Zahra Akram

Laura McCutcheon

Rhiannon Dorrington

Pippa Bartolotti

Carolyn Kelley Gopalan

Prakash Natarajan  
IT Director

Brian Wills

Philip Valentino  
The Food and More Project

Owen Clarke  
Green Party Torfaen

Ms Mary Scott  
Environmental consultant

Angie Zelter  
Reforest the Earth

Nina Venkataraman

Liam Proven  
Writer - London

Hugh Fraser  
Transition Kensington

Jean Vidler  
Green Futures Festivals Co Ltd

Ankaret Harmer  
Kings Heath Transition Initiative & BrumLETS, Birmingham

Dr Martin Hemingway  
Green Party, North West Leeds
Jamie Bull MSc
oCo Carbon

Sheila Freeman  Friends of the Earth London

Reggie Norton MA

Christine Dawson
Artist

Nicola Wareing
Physics Student, Lancaster University

Chris Speyer
Writer

Diana Korchien
Publisher of Calendar of Climate Change (2007, 2008, 2009)
Transition Leytonstone

Ros Bedlow
Transition Leytonstone

Roisin Robertson MICHT VTCT