

**SUBMISSION TO THE GARNAUT ENQUIRY
BY PETER WALSH, PRESIDENT OF THE LAVOISIER GROUP**

I do not believe the Kyoto hypothesis can be reconciled with the recent history of the Earth. When the Romans were growing grapes in Northern England early in the first millennium, and the Vikings were growing cereal crops in Greenland early in the second millennium the Earth must have been substantially warmer than it is now. Those much warmer periods cannot reasonably be attributed to anthropogenic “greenhouse gases”.

Temperature sensing within the solar system by NASA has led it to estimate that the temperature on Mars has increased by about 0.5 degrees Celsius during the 20th Century – almost identical to Earth.

Nobody burns fossil fuel on Mars, but the Sun shines – and always has – on both.

Claims by the International Panel on Climate Change (IPCC) assertions that the “science” of global warming is “settled” are self serving and false.

Many well qualified scientists, see Attachment A, believe temperature changes, up and down, are driven by changes in solar behaviour, and that “Greenhouse” gases have negligible influence on the modest 20th Century warming. Many believe a cooling period will set in within 10 to 15 years.

Australian Government policy is not settled, but seems likely to aim for a 20 to 25 percent reduction in emissions by two thousand and twenty and 60 percent by two thousand and fifty. The latter figure is unachievable without substituting nuclear power in place of coal and crude oil or, alternatively, a reversion to the living standards and population densities of the Middle Ages.

The 2020 target might be technically feasible, but to suggest it can be met without a big decline in average income, is self delusory.

Within the 2020 time frame, nuclear power is unlikely to make a significant contribution. The favoured, or perhaps only, options are carbon trading or a carbon tax. To replace coal with natural gas would be effective, but natural gas is premium fuel and should probably be used for transport fuel.

Carbon trading is the Cargo Cult of the 21st Century. The rent and arbitrage seekers who beat it up would have us believe that we will all be winners. Economic theory tells us that the *cost* of decarbonising the economy could be discounted somewhat, but *only* if a perfect market and perfect knowledge prevailed among sellers and buyers.

Carbon trading has failed miserably and scandalously in Europe. As with Managed Investment Schemes in Australia the only people who make money will be the shonky promoters.

Planting trees and changing agricultural practices to increase organic carbon in the soil are at best one off measures. Organic carbon eventually returns to the atmosphere as CO². To measure and audit such schemes is simply not possible.

A carbon tax is a vastly better option. It is transparent, with low compliance and enforcement costs, and difficult if not impossible to evade.

The demand for electricity and petroleum will be price inelastic. To be effective the tax rate must be high but the extra revenue will allow other taxes to be reduced or abolished. The high rate will promptly bring home to people that decarbonisation is expensive. They may reconsider the decision to commit to Kyoto. Whether there is a carbon tax or not, the petrol excise should be indexed to the CPI and backdated to the Howard Government's irresponsible decision to suspend the excise indexation in 2004. Petrol consumption for private motoring is substantially discretionary and dependent on the buyers' choice of car.

The Climate Change Review Issues Paper sets out (Box 3.1.) adoption opportunities available for agriculture and forestry. The seven examples set out are, I believe, already embraced by most farmers and foresters. One option not available in most States is the use of Genetically Modified Seeds and Cultivars currently banned by irrational State Governments. The role for and adoption of GM could play a critical role in adaptation if perchance the Kyoto hypothesis is basically correct.

If the Earth moves into a prolonged cooling period around 2020 the Kyoto hypothesis will be thoroughly discredited. But for many decades those with heavy secular religious and/or economic vested interests will be the new “denialists”. The existence of either carbon trading or carbon taxes would prolong the period of denial and continuing economic damage. I expect a carbon tax would be easier to get rid of than emissions trading.

APPENDIX A

The list of names which are given here is based on the 100 or so signatures which were appended to the letter to UN Secretary General Ban Ki-moon during the recent Bali conference, but has been extended to include eminent scientists who are dead as well as those who are living. The list has been divided into two parts. The first list is made up of scientists and engineers. The second comprises eminent people from a non-scientific background, who have published statements or papers in which they have criticised either the scientific basis of theories of anthropogenic global warming, or have questioned the effectiveness of the global decarbonisation programme which is at the heart of the Kyoto Protocol.

Despite our best endeavours the list may well contain some important omissions. But the science list has within it some of the most famous scientists of the 20th century. The argument put forward by protagonists for decarbonisation that there is a scientific “consensus” behind theories of a climate controlled by atmospheric carbon dioxide is palpable nonsense.

Science List

Habibullo Abdussamatov, Saint Petersburg's Pulkovo Astronomical Observatory, Russia.

William J.R. Alexander, PhD, Professor Emeritus, Dept. of Civil and Biosystems Engineering, University of Pretoria, South Africa.

Claude Allegre, Geo-chemist, Institut de Physique du Globe de Paris, France.

Myles R Allen, PhD, Head of the Climate Dynamics group at the University of Oxford's Atmospheric, Oceanic and Planetary Physics Department, UK.

Bjarne Andresen, PhD, physicist, Professor, The Niels Bohr Institute, University of Copenhagen, Denmark.

David Archibald, geo-physicist and oil explorer, Perth, Western Australia.

Geoff L. Austin, PhD, FNZIP, FRSNZ, Professor, Dept. of Physics, University of Auckland, New Zealand.

Timothy F. Ball, PhD, environmental consultant, former climatology professor, University of Winnipeg.

Ernst-Georg Beck, Dipl. Biol., Biologist, Merian-Schule Freiburg, Germany.

David Bellamy, English botanist, author, broadcaster, environmental campaigner, and a global warming sceptic.

Chris C. Borel, PhD, remote sensing scientist, U.S.

John Brignell PhD, formerly Professor of Industrial Instrumentation at the University of Southampton.

Reid A. Bryson, PhD, DSc, DEngr, UNE P. Global 500 Laureate; Senior Scientist, Center for Climatic Research; Emeritus Professor of Meteorology, of Geography, and of Environmental Studies, University of Wisconsin.

Dan Carruthers, M.Sc., wildlife biology consultant specializing in animal ecology in Arctic and Subarctic regions, Alberta.

Robert .M. Carter, PhD, Professor, Marine Geophysical Laboratory, James Cook University, Townsville, Australia.

Ian D. Clark, PhD, Professor, isotope hydrogeology and paleoclimatology, Dept. of Earth Sciences, University of Ottawa.

Richard S. Courtney, PhD, climate and atmospheric science consultant, IPCC expert reviewer, U.K.

Willem de Lange, PhD, Dept. of Earth and Ocean Sciences, School of Science and Engineering, Waikato University, New Zealand.

David Deming, PhD (Geophysics), Associate Professor, College of Arts and Sciences, University of Oklahoma.

Freeman J. Dyson, PhD, Emeritus Professor of Physics, Institute for Advanced Studies, Princeton, N.J.

Don J. Easterbrook, PhD, Emeritus Professor of Geology, Western Washington University.

Lance Endersbee, Emeritus Professor, former Dean of Engineering and Pro-Vice Chancellor of Monash University, Australia.

Hans Erren, Doctorandus, geophysicist and climate specialist, Sittard, The Netherlands.

Robert H. Essenhigh, PhD, E.G. Bailey Professor of Energy Conversion, Dept. of Mechanical Engineering, The Ohio State University.

Christopher Essex, PhD, Professor of Applied Mathematics and Associate Director of the Program in Theoretical Physics, University of Western Ontario.

David Evans, PhD, mathematician, carbon accountant, computer and electrical engineer and head of 'Science Speak,' Australia.

William Evans, PhD, editor, American Midland Naturalist; Dept. of Biological Sciences, University of Notre Dame.

Robert J Foster, paleo-climatologist and energy consultant, Queenscliff, VIC, Australia.

Rhodes Fairbridge, 1914-2006, internationally acclaimed solar scientist and astronomer.

Stewart Franks, PhD, Professor, Hydroclimatologist, University of Newcastle, Australia.

R. W. Gauldie, PhD, Research Professor, Hawai'i Institute of Geophysics and Planetology, School of Ocean Earth Sciences and Technology, University of Hawaii at Manoa.

Lee C. Gerhard, PhD, Senior Scientist Emeritus, University of Kansas; former director and state geologist, Kansas Geological Survey.

Gerhard Gerlich, Professor for Mathematical and Theoretical Physics, Institut für Mathematische Physik der TU Braunschweig, Germany.

Jeffrey A. Glassman PhD, formerly Division Chief Scientist for Missile Development and Microelectronics Systems Divisions at Hughes aircraft Company, Author of Evolution in Science, Hollowbrook, New Hampshire, 1992.

Albrecht Glatzle, PhD, sc.agr., Agro-Biologist and Gerente ejecutivo, INTTAS, Paraguay.

Fred Goldberg, PhD, Adjunct Professor, Royal Institute of Technology, Mechanical Engineering, Stockholm, Swede.

Vincent Gray, PhD, expert reviewer for the IPCC and author of The Greenhouse Delusion: A Critique of 'Climate Change 2001, Wellington, New Zealand.

William M. Gray, Professor Emeritus, Dept. of Atmospheric Science, Colorado State University and Head of the Tropical Meteorology Project.

Howard Hayden, PhD, Emeritus Professor of Physics, University of Connecticut.

Sir Fred Hoyle, FRS, 1915-2001, internationally acclaimed astronomer and physicist.

Craig D. Idso, PhD, Chairman, Center for the Study of Carbon Dioxide and Global Change, Arizona.

Sherwood B. Idso, PhD, President, Center for the Study of Carbon Dioxide and Global Change, AZ, USA.

Zbigniew Jaworowski, PhD, physicist, Chairman - Scientific Council of Central Laboratory for Radiological Protection, Warsaw, Poland.

Wibjorn Karlen, PhD, Emeritus Professor, Dept. of Physical Geography and Quaternary Geology, Stockholm University, Sweden.

Olavi Kärner, Ph.D., Research Associate, Dept. of Atmospheric Physics, Institute of Astrophysics and Atmospheric Physics, Toravere, Estonia.

Joel M. Kauffman, PhD, Emeritus Professor of Chemistry, University of the Sciences in Philadelphia.

David Kear, PhD, FRSNZ, CMG, geologist, former Director-General of NZ Dept. of Scientific & Industrial Research, New Zealand.

Douglas Keenan, Mathematician and statistician, London, UK.

Madhav Khandekar, PhD, former research scientist, Environment Canada; editor, Climate Research (2003-05); editorial board member, Natural Hazards; IPCC expert reviewer 2007.

William Kininmonth M.Sc., M.Admin., former head of Australia's National Climate Centre and a consultant to the World Meteorological organization's Commission for Climatology.

Jan J.H. Kop, MSc Ceng FICE (Civil Engineer Fellow of the Institution of Civil Engineers), Emeritus Prof. of Public Health Engineering, Technical University Delft, The Netherlands.

Prof. R.W.J. Kouffeld, Emeritus Professor, Energy Conversion, Delft University of Technology, The Netherlands.

Salomon Kroonenberg, PhD, Professor, Dept. of Geotechnology, Delft University of Technology, The Netherlands.

Christopher Landsea, PhD, Science and Operations Officer at the National Hurricane Center, Florida, USA.

Douglas Leahey, PhD, meteorologist and air-quality consultant, Calgary.

David R. Legates, PhD, Director, Center for Climatic Research, University of Delaware.

Marcel Leroux, PhD, Professor Emeritus of Climatology, University of Lyon, France; former director of Laboratory of Climatology, Risks and Environment, CNRS.

William Lindqvist, PhD, independent consulting geologist, California.

Richard S. Lindzen, PhD, Alfred P. Sloan Professor of Meteorology, Dept. of Earth, Atmospheric and Planetary Sciences, Massachusetts Institute of Technology.

A.J. Tom van Loon, PhD, Professor of Geology (Quaternary Geology), Adam Mickiewicz University, Poznan, Poland; former President of the European Association of Science Editors.

Anthony R. Lupo, PhD, Associate Professor of Atmospheric Science, Dept. of Soil, Environmental, and Atmospheric Science, University of Missouri-Columbia.

Richard Mackey, PhD, Statistician, Australia.

Horst Malberg, PhD, Professor for Meteorology and Climatology, Institut für Meteorologie, Berlin, Germany.

Oliver K Maniel, Professor of Nuclear Chemistry, University of Missouri-Rolla.

John Maunder, PhD, Climatologist, former President of the Commission for Climatology of the World Meteorological Organization (89-97), New Zealand.

Alister McFarquhar, PhD, international economy, Downing College, Cambridge, U.K.

Ross McKittrick, PhD, Associate Professor, Dept. of Economics, University of Guelph.

John McLean, PhD, climate data analyst, computer scientist, Australia.

Patrick Michaels, PhD, Professor of Climatology, University of Virginia.

Fred Michel, PhD, Director, Institute of Environmental Sciences and Associate Professor of Earth Sciences, Carleton University.

Asmunn Moene, PhD, former head of the Forecasting Centre, Meteorological Institute, Norway.

Nils-Axel Morner, PhD, Emeritus Professor of Paleogeophysics & Geodynamics, Stockholm University, Sweden.

Lubos Motl, PhD, Physicist, former Harvard string theorist, Charles University, Prague, Czech Republic.

Tad Murty, PhD adjunct professor in the departments of Civil Engineering and Earth Sciences at the University of Ottawa. His PhD is in oceanography and meteorology from the University of Chicago.

John Nicol, PhD, Professor Emeritus of Physics, James Cook University, Australia.

David Nowell, M.Sc., Fellow of the Royal Meteorological Society, former chairman of the NATO Meteorological Group, Ottawa.

Brian J. O'Brien, PhD, formerly Chairman and Director of the EPA of Western Australia. Awards include the NASA Medal for Exceptional Scientific Achievement.

James J. O'Brien, PhD, Professor Emeritus, Meteorology and Oceanography, Florida State University.

Cliff Ollier, DSc, Professor Emeritus (Geology), Research Fellow, University of Western Australia.

Garth W. Paltridge, PhD, atmospheric physicist, Emeritus Professor and former Director of the Institute of Antarctic and Southern Ocean Studies, University of Tasmania, Australia.

Eugene Parker, Enrico Fermi Institute, University of Chicago.

Don Parkes, PhD, Visiting Senior Research Fellow King's College University of London, Formerly Professor of Human Ecology University of Newcastle, Australia and University of Niigata, Japan.

R. Timothy Patterson, PhD, Professor, Dept. of Earth Sciences (paleoclimatology), Carleton University.

Al Pekarek, PhD, Associate Professor of Geology, Earth and Atmospheric Sciences Dept., St. Cloud State University, Minnesota.

Ian Plimer, PhD, Professor of Geology, School of Earth and Environmental Sciences, University of Adelaide and Emeritus Professor of Earth Sciences, University of Melbourne, Australia.

Brian Pratt, PhD, Professor of Geology & Sedimentology, University of Saskatchewan.

Harry N.A. Priem, PhD, Emeritus Professor of Planetary Geology and Isotope Geophysics, Utrecht University; former director of the Netherlands Institute for Isotope Geosciences.

Paul Reiter, Director of the Pasteur Institute, Paris.

Colonel F.P.M. Rombouts, Branch Chief - Safety, Quality and Environment, Royal Netherlands Air Force.

R.G. Roper, PhD, Professor Emeritus of Atmospheric Sciences, School of Earth and Atmospheric Sciences, Georgia Institute of Technology.

Arthur Rorsch, PhD, Emeritus Professor, Molecular Genetics, Leiden University, The Netherlands.

Rob Scagel, M.Sc., forest microclimate specialist, principal consultant, Pacific Phytometric Consultants, B.C.

Tom V. Segalstad, PhD, (Geology/Geochemistry), Head of the Geological Museum and Associate Professor of Resource and Environmental Geology, University of Oslo, Norway.

Frederick Seitz, Past President, National Academy of Sciences, U.S.A.

Nir Shariv, PhD, astro-physicist, University of Tel Aviv, Israel.

Gary D. Sharp, PhD, Center for Climate/Ocean Resources Study, Salinas, CA.

S. Fred Singer, PhD, Professor Emeritus of Environmental Sciences, University of Virginia and former director Weather Satellite Service.

L. Graham Smith, PhD, Associate Professor, Dept. of Geography, University of Western Ontario.

Roy W. Spencer, PhD, climatologist, Principal Research Scientist, Earth System Science Center, The University of Alabama, Huntsville.

Peter Stilbs, TeknD, Professor of Physical Chemistry, Research Leader, School of Chemical Science and Engineering, KTH (Royal Institute of Technology), Stockholm, Sweden.

Philip Stott, Professor emeritus of biogeography at the School of Oriental and African Studies, University of London.

Henrik Svensmark, Danish National Space Center in Copenhagen, Denmark.

Hendrik Tennekes, PhD, former director of research, Royal Netherlands Meteorological Institute.

Dick Thoenes, PhD, Emeritus Professor of Chemical Engineering, Eindhoven University of Technology, The Netherlands.

Brian G. Valentine, PhD, PE (Chem.), Technology Manager - Industrial Energy Efficiency, Adjunct Associate Professor of Engineering Science, University of Maryland at College Park; Dept of Energy, Washington, DC.

Gerrit J. van der Lingen, PhD, geologist and paleoclimatologist, climate change consultant, Geoscience Research and Investigations, New Zealand.

Jan Veizer, emeritus professor of Earth Sciences at the University of Ottawa.

Edward J. Wegman, PhD, Department of Computational and Data Sciences, George Mason University, Virginia.

Duncan Wingham, PhD, Professor of Climate Physics at University College London.

Stephan Wilksch, PhD, Professor for Innovation and Technology Management, Production Management and Logistics, University of Technology and Economics Berlin, Germany.

Boris Winterhalter, PhD, senior marine researcher (retired), Geological Survey of Finland, former professor in marine geology, University of Helsinki, Finland
David E. Wojick, PhD, P.Eng., energy consultant, Virginia.

Raphael Wust, PhD, Lecturer, Marine Geology/Sedimentology, James Cook University, Australia.

A. Zichichi, PhD, President of the World Federation of Scientists, Geneva, Switzerland; Emeritus Professor of Advanced Physics, University of Bologna, Italy.

Non-Scientists

Don Aitkin, PhD, Professor, social scientist, retired vice-chancellor and president, University of Canberra, Australia.

His Holiness Pope Benedict XVI.

Sonja A. Boehmer-Christiansen, PhD, Reader, Dept. of Geography, Hull University, U.K.; Editor, Energy & Environment journal.

Nigel Calder, author and editor of scientific books and journals including the New Scientist.

Michael Crichton, author and commentator.

David Henderson CMG, economist, formerly Director of Economic Research, OECD, London.

Louis Hissink MSc, M.A.I.G., editor, AIG News, and consulting geologist, Perth, Western Australia.

Andrei Illarionov, PhD, Senior Fellow, Center for Global Liberty and Prosperity; founder and director of the Institute of Economic Analysis.

Jon Jenkins, PhD, MD, computer modelling - virology, NSW, Australia.

Hans H.J. Labohm, PhD, economist, former advisor to the executive board, Clingendael Institute.

(The Netherlands Institute of International Relations), The Netherlands
Deepak Lal, James S. Coleman Professor of International Development, UC
LA.

The Rt. Hon. Lord Lawson of Blaby, economist; Chairman of the Central
Europe Trust; former Chancellor of the Exchequer, U.K.

Bryan Leyland, International Climate Science Coalition, consultant and power
engineer, Auckland, New Zealand.

Bjorn Lomborg, PhD, Adjunct Professor at the Copenhagen Business School,
statistician.

Vaclav Klaus, President of the Czech Republic.

Owen McShane, PhD, economist, head of the International Climate Science
Coalition; Director, Centre for Resource Management Studies, New Zealand.

Frank Milne, PhD, Professor, Dept. of Economics, Queen's University.

Christopher Monckton, Viscount Monckton of Brenchley, retired international
business consultant, policy advisor, writer, and inventor.

Alan Moran, PhD, Energy Economist, Director of the IPA's Deregulation Unit,
Australia.

Cardinal George Pell, Archbishop of Sydney.

Alex Robson, PhD, Economics, Australian National University.

Richard S. J. Toll, PhD, Senior Research Officer, Economic and Social
Research Institute, Dublin, Ireland.

Len Walker, PhD, Power Engineering, Australia.