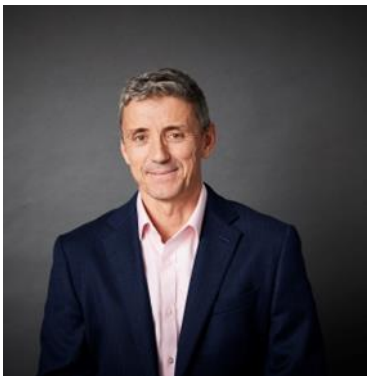
Dr Nick WOOD



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Personal Profile

I am a leader in the strategic view of climate change as a sovereign financial risk and I specialize in communicating the implications of this to Boards and leadership teams across the Australian business landscape. Over the last 25 years I have sought out and engaged with the most challenging opportunities in climate change policy that I could find. These have included conducting the quantitative analysis of price movements in new emission trading markets in Europe, designing and operating a "learn by doing" carbon exchange in advance of the start of the UKs' domestic emission trading scheme, designing policy mechanisms for emission trading for national Governments, developing greenhouse gas reporting systems in listed entities, and the creation of world leading and science based approaches to the analysis of climate-related financial risks. These experiences provide me with unrivaled expertise, knowledge and standing in the three core aspects of climate change: transition risks, reputational risks, and physical risks. I have been instrumental in building effective and professional links between business and climate change science in Australia and through this I have earned the trust of Boards and leadership teams. I achieve results by complementing my extensive technical and scientific capabilities with a deep professional curiosity, a powerful sense of purpose and through an open and engaging approach to problem solving.

Career History

Director, Climate Policy Research Pty Ltd

September 2014 - Present

I established Climate Policy Research Pty Ltd in 2014 in order to bring a technically sophisticated and agile approach to the challenge of dealing with climate change as a financial problem; one of resource allocation, valuation, and risk transfer. This strategy has been very successful, and the business model allows me to seek out challenges, engage directly with regulators, governance bodies and Australia's world class climate change science. I specialize in collaborating with large multi-disciplinary teams at client organizations to achieve groundbreaking results across climate risk assessments, net zero / decarbonisation strategies and emission reporting and assurance.

Examples below.

Technical Specialist - Greenhouse gas emissions measurement and reporting.

Clean Energy Regulator, Australian Government, April 2015 to June 2022, May 2024 - to present

The CER is the designated regulator for both the National Greenhouse and Energy Reporting (NGER) Act and the Emission Reduction Fund Act (ERF). In mid-2015 the CER set up a program of independent inspection over the activities and performance of the Registered Greenhouse and Energy Auditors (RGEAs) that audit the compliance of business with the various aspects of the regulations. I was invited to join the program because of my deep knowledge of emission reporting, of carbon policy and of assurance. I play a pivotal role in the inspection program and work alongside experts with backgrounds in financial statement audits. I have conducted over 50 inspections

covering approximately 150 individual assurance files. In particular the program has provided the CER with unique intelligence on the interaction between the RGEAs and the project proponents involved in the Human Induced Generation ERF Methodology. The inspection work is very challenging but also highly effective with the inspection findings allowing the CER to take enforcement actions, including deregistration of the RGEAs where appropriate.

Board strategy - Climate Change Master Plan and Decarbonisation Strategy for Aviation

Royal Flying Doctor Service Qld, May 2022 – Present

The RFDSQ is one of Australia's most respected organisations and I was honored to be invited to support the Board and Leadership team engage with climate change as a strategic risk. I provide a broad range of advisory services including the assessment of greenhouse gas abatement measures for both the operational bases and the aircraft fleet, guidance on the reputational issues associated with using carbon offsets and insights into the development of emission reduction targets. The decarbonisation work has been of particular interest as it allowed the Board to identify entirely new type of aviation technology from an Australian defense startup, a vertical takeoff, hydrogen powered autonomously guided air-ambulance, it could use to for zero emission operations.

Member of the National Steering Committee & Chair of the Stakeholder Advisory Group

National Environmental Science Program - Earth Systems and Climate Change (ESCC) Hub

Jan 2017 – March 2019

The ESCC was the co-ordination body for "path to impact' climate research in Australia. As a Chair of the Stakeholder Advisory Group my role was to facilitate meetings between the research community and end users of the climate research such as banks, credit rating agencies, insurers and resources companies. I developed the strategic concept that climate change is a sovereign risk and that the national science agency had a key role to play in that regard. This aspect was reinforced *via* a request from a global credit rating agency to use Australian climate science to re-rate Australian sovereign debt. I successfully established strong networks linking the scientific researchers with the financial, legal and risk management community. This led to the CSIRO becoming directly engaged in climate risk assessments for the banking sector. My success in the role in part allowed the ESCC to fully demonstrate that it had met its critical KPI of end user engagement.

Report: *Climate Change and Good Corporate Governance*,

Australian Institute of Company Directors, December 2016

The Australian Institute of Company Directors (AICD) commissioned me to author a report on how the emergence of climate change as a financial risk should to be addressed by appropriate governance. I co-authored the report with Ms Kate Mackenzie, formerly Head of Finance and Investment at The Climate Institute and a Bloomberg journalist. The report was very well received and allowed the AICD to demonstrate leadership and to provide its members with examples of best practice. The content was based upon the work I undertook in 2015 to develop the syllabus for Board level training on climate change and governance.

Technical specialist – Greenhouse gas measurement, reporting and assurance,

KPMG Global Assurance Methodology Group, USA , July 2022 to present.

The implementation of the mandatory reporting of GHG emission as part of prudential regulatory frameworks of many national jurisdictions has driven the need for a globally consistent approach to its assurance. I provide detailed technical advice on all aspects of GHG monitoring and reporting to the core team at KPMG's global assurance methodology group (based in UK / US). The global methodology for the assurance of GHG will be rolled out in 2025 to 100,000 audit Partners across 150 jurisdictions.

Climate Risk Expert, Energetics Pty Ltd,
October 2018 - Nov 2024

In 2018 I formed a strategic alliance with the energy consultancy, Energetics PL, in order to maximize the value of my deep professional networks in the climate science community that I had built over the previous four years. The arrangement was an outstanding success from the start and allowed Energetics quickly to take a market leading position in the conduct of climate risk assessments. Detailed projects were undertaken for a wide range of organisations from sectors including banking, retail, agriculture, aquaculture, utilities, resources, telecommunications and national transport infrastructure. As the Climate Risk Expert I played a key role in developing the risk assessment methodologies, in designing the project workflows and in accessing the required climate change data from national and state based science agencies. The outcome of the risk assessments were particularly confronting for the clients in sectors such as broad scale agriculture in Western Australia and aquaculture in Tasmania. I used my extensive knowledge of assurance to ensure that all the work was robust, fully transparent and backed up by the best available science.

Examples below.

Analysis of climate risks to Australian agriculture
Commonwealth Bank of Australia (CBA), Jan - Oct 2019

I was contacted by the CBA in late 2018 and asked if I could deliver a risk assessment on the future impact of climate change to its agricultural banking business. I engaged with the CSIRO and built the required project team. I designed the detailed workflow for the analysis covering dairy, grains and livestock. This linked the climate science, the farm productivity statistics and the bank's decision-making process in farm lending. Critical to this work was my strong relationship with Australia's national climate science capability. I ensured that CBA had access to the best-in-class advice and information on climate change science and its impact on agriculture. The results of the assessment were published in the CBA's Annual Report 2019. The rigour and sophistication of the analysis was widely acknowledged across the banking sector and still sets the benchmark for best practice and transparency today.

Analysis of climate risks to Australian agriculture
Westpac Banking Corporation, 2021
National Australia Bank, 2023

The project work on risk analysis originally undertaken for the CBA in 2019 was repeated at the request of the Westpac Banking Corporation in 2021 and included the analysis of counterparty exposure in response to the Australian Prudential Regulation Authority's climate vulnerability assessment. The work was also repeated at the request of the National Australia Bank in 2023.

Decarbonisation pathways in broad area cropping farms
Macquarie Infrastructure and Real Assets (MIRA), April 2020 - March 2021

I was the technical lead on a project to establish the decarbonisation pathway for the Viridis Agriculture Group, part of the MIRA Fund. The detailed project included a site visit to a pilot farm located in the WA wheat belt during the COVID lockdown, the development of long and short lists of pragmatic options for reducing emission at a farm level and the development of a pathway, including land-based carbon. The findings were communicated to the leadership team at Viridis and to the Board of MIRA and allowed them to make key strategic decisions on the development of net zero targets.

Decarbonisation pathway for power transmission infrastructure

Transgrid, March 2021 – Aug 2021

The decarbonisation of the power grid is central to Australia meeting its emission reduction targets. Although the distribution grid itself is not a material source of greenhouse gas emissions it is an integral part of the overall system. In order to deliver the project I worked closely with energy markets team at Energetics and the leadership team at Transgrid. A key requirement of the project was the presentation of the results and the broader climate change context to the Board including representatives from the large investor organisations. The work identified significant financial opportunities for the company arising from the need for additional capacity to service the more complex renewable energy systems of the future.

Head of Carbon Advisory, KPMG Australia, July 2012 – August 2014, (Associate Director, June 2008 – August 2014)

As the Head of Carbon Advisory, I lead a team of 12 staff to achieve revenue growth in KPMG's greenhouse gas measurement, reporting and assurance business in Australia. I achieved this by driving the continuous improvement in the capacity of the firm to deliver market-leading services in the areas of assurance, internal audit, and risk advisory. Three examples of successful developments that I lead were:

- The development, in conjunction with a major investment bank, of an on-line carbon trading platform that subsequently allowed Australian corporate entities to develop their carbon trading skills and test management oversight prior to the introduction of the carbon price mechanism,
- The creation of a specialist team to assist the Clean Energy Regulator and the Australian coal mining sector with a new method for measuring and reporting greenhouse gas emissions and,
- The design and implementation of an original approach to the management of carbon cost in the supply chain for clients in the food and beverage and building materials sectors.

The carbon team and I collaborated closely with staff in KPMG's core service lines of financial statement audit, internal risk and compliance, tax, economic modeling, and transaction services to ensure that the risks and opportunities presented by emerging climate change policy were integrated into all of KPMG's services to its national, regional, and global clients. This required me to be an effective and persuasive communicator and to understand the drivers and opportunities for revenue growth across the wider KPMG firm.

A key part of my role was to function as KPMG's expert on climate change policy in the media, at business functions with the leadership team of global business and in the wider market in Australia and to represent KPMG Australia at global and regional conference and seminars. I was the ASPAC representative for the KPMG Global team that attended the UN Climate Change Conferences in Copenhagen in December 2009 and Cancun in 2010. I presented at the International Emissions Trading Association events on both occasions. I was the lead author of KPMG's global publication on the Copenhagen Accord in 2010 and of numerous publications on Australian policy developments.

Principal Consultant, Entec UK Ltd, April 2007 – May 2008 (Senior Consultant June 2004 – April 2007)

My role at Entec was the technical and commercial leadership in the area of climate change policy. The two main policy drivers were the development and implementation of mitigation policy based on market-based mechanism by UK and European Governments and the requirement for regional Government to develop plans and contingencies for the projected physical impacts of climate change. Examples below.

Analysis of the European Union Emission Trading Scheme (EU ETS) in its first year of operation.
UK Carbon Trust, 2006

I supervised the development of a database of the operation of the EUETS at 12,000 sites in the EU over 2005, the first year of the scheme's operation. By using my strong knowledge of the industrial sector, I was able to take an innovative approach to data analysis and identified a "phantom scarcity" issue . This proved to be the key to explaining the cause of both the elevated market prices for carbon allowances across 2005 and the price crash in May 2006. The findings were widely reported in the UK financial media.

EU ETS New Entrant Reserve,
UK Department of Trade and Industry, 2004 - 2005

The development of a system by which new facilities could receive their fair allocation of tradable emission permits in Phase II of the EU ETS was a significant and high-profile piece of work and had political implications for the burden sharing agreement between the EU member states. I was responsible for the research, development, and stakeholder engagement for the allocation formula for two high profile sectors in the UK economy: the cement and lime sector and the integrated iron and steel works.

Education

BSc Physics and Chemistry, 1985, University of Leeds.

PhD Chemistry of Nuclear Reactor Cooling Fluids, 1989, University of Leeds

Introduction to Psychology, 1998, Open University, UK

Social Psychology, 1999, Open University, UK

Lifelong learning on-line courses.

Global Warming I: The Science and Modelling of Climate Change, The University of Chicago, US, Nov 2017

Fundamental of GIS, University of Californian Davis, US, June 2019

GIS Data Format, Design and Quality, University of Californian, Davis, US, Sept 2019

AI For Business Specialization., University of Pennsylvania, US, August 2024

Machine Learning Specialization, Stanford University & DeepLearning.AI, October 2024

Recent Publications

Fiedler, T., Wood, N., Grose M.R. & Pitman, A.J. (2024) Storylines: A science-based method for assessing and measuring future physical climate-related financial risk. Accounting & Finance, 00, 1–24. Available from: https://doi.org/10.1111/acfi.13295

Arribas, A., Fairgrieve, R., Dhu, T. *et al.* Climate risk assessment needs urgent improvement. *Nat Commun* **13**, 4326 (2022). https://doi.org/10.1038/s41467-022-31979-w

Fiedler, T., Pitman, A.J., Mackenzie, K. *et al.* Business risk and the emergence of climate analytics. *Nat. Clim. Chang.* **11**, 87–94 (2021). https://doi.org/10.1038/s41558-020-00984-6

A J Pitman *et al* , Acute climate risks in the financial system: examining the utility of climate model projections, 2022 *Environ. Res.: Climate* **1** 025002. https://iopscience.iop.org/article/10.1088/2752-5295/ac856f