

## **Speaker: Dr. Karel Nolles**

Visiting Professor at JGSEE-CEE, Aton Consulting, Orange NSW Australia

# 2022 IN THE AUSTRALIAN ENERGY AND ENVIRONMENTAL MARKETS. FAILURES, CHALLENGES AND OPPORTUNITIES

Online via Zoom and Facebook LIVE Monday 27 June 2022 at 1.00-2.30 pm (Thailand, GMT+7)







**Dr. Karel Nolles**Visiting Professor
at JGSEE-CEE

Aton Consulting,
Orange NSW Australia

On 15 June 2022 the Australian Energy Markets Operator suspended the Australian National Electricity Market, and imposed price caps and administered prices. The combination of issues that led to this have a long history, related in part to the transformation of the energy sector and the rise of environmental markets. In this talk Dr Nolles will summarise from an Australian perspective some recent developments in energy and environmental markets. This will include:

- The rise of "mega-projects" involving very large renewable energy projects
- The nature of the Australian Energy Market Rules, and how these have failed to cope with the rise in intermittent generation.
- The development of "green funds", "green bonds", "carbon" exchanges, and the opportunities these are presenting for attracting "environmental finance" into "green investments"
- As a case study, the NSW biodiversity offset market and other initiatives to attract investment into biodiversity and Natural Capital.







### **About the speaker**

#### Dr Karel (Karl) Nolles

Visiting Professor, JSGEE-KMUTT (Bangkok, Thailand)
Director, Aton Consulting Pty Ltd (Orange, NSW, Australia)

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Karl has 30-year experience in the energy and environmental finance sectors, variously as an academic, banker, industry executive and consultant. He was appointed as a Visiting Professor with JSGEE-KMUTT in 2020, and with the easing of COVID restrictions it is planned that he will make a number of visits to JSGEE-KMUTT during 2022 and 2023.

As an academic, Karl was a Senior Lecturer / Senior Research Fellow at the University of New South Wales and later at the University of Sydney. He was a visiting fellow with the Interdisciplinary Centre for Economic Science at George Mason University (Washington DC) and was a co-founder of the UNSW Centre for Energy & Environmental Markets. He has worked closely with CSIRO on a number of research projects related to eco-system services and sustainable finance.

Outside of academia, Karl was a founding member of the Macquarie Bank / Macquarie Capital renewables & climate change team (2007-2013), Head of Strategy and Product for the Clean Energy Derivatives Corporation (2017-19), and Manager Electricity Reform with NT Power and Water (2019/2020) – in which capacity he worked in the System Control of an electricity grid supplying the cities of Darwin and Katherine. He was the Chief Investment Officer for the Yamanah Investments pilot project for the Indigenous Land and Sea Corporation in 2020. During his years with Macquarie Bank he represented Macquarie on the boards of various companies where Macquarie had investments, and was seconded from Macquarie to be the CEO of an energy brokerage business.

In 2009 he led the Macquarie/CapGemini/Bloomberg consortium shorted-listed to implement and operate then proposed Australian Carbon Auctions on behalf of the Australian Government. From 2000 to 2004 he was a Senior Policy Advisor on energy and environmental markets with the Australian Financial Markets Association.

Since early 2021 he has been retained as a consultant with the NSW Department of Planning and Environment, advising on a range of environmental finance initiatives being developed by the NSW Government. A particular focus has been on how to attract private investment into preserving biodiversity.

#### About JGSEE-KMUTT

The Joint Graduate School of Energy and Environment (JGSEE) is an autonomous graduate school focusing on energy and environment technology. The School operates as a consortium involving King Mongkut's University of Technology Thonburi (KMUTT), with King Mongkut's Institute of Technology North Bangkok, Chiang Mai University, Sirindhorn International Institute of Technology at Thammasat University, and Prince of Songkhla University as partners. The mission of JGSEE is to provide high quality graduate education and training, conduct high quality research and provide technical services, with a view to meeting societal needs for the development and deployment of efficient, economical, and sustainable energy services while protecting the environment.











