



UNSW
SYDNEY

Energy Asset Valuation

Expertise in uncertainty modelling, risk analysis and asset valuation on energy generating and storage facilities that are subject to operational constraints, investment flexibility, and market uncertainties.

Competitive advantage

- Ability to conduct market-based asset valuations, taking energy production and storage process options into account
- Expertise in assessing the optimal timing for investment in energy assets, despite an uncertain policy environment

Impact

- Enabling the optimal adoption of clean technology to combat climate change
- Creating sustainable operations that achieve environmental stewardship

Successful applications

- Valued thermal generating units subject to physical constraints such as ramping, minimum up/down times, overfiring and preventive maintenance
- Compared tradeable permits and carbon taxes in terms of how each instrument can effectively induce clean technology adoption
- Valued the investment of a fast pyrolysis facility for producing cellulosic biofuels in Iowa

Capabilities and facilities

- Unit commitment problem in a power grid
- Clean technology investment valuation

More Information

Associate Professor Chung-Li Tseng

UNSW Business School

T: +61 (0) 2 9385 9704

E: c.tseng@unsw.edu.au

UNSW Knowledge Exchange

knowledge.exchange@unsw.edu.au

www.capabilities.unsw.edu.au

+61 (2) 9385 5008