



*Chemeca 2025 and Hazards Australasia  
28 – 30 September, Adelaide, South Australia*

## **Navigating the Green Premium: Alternative Consumer-centric Strategies**

Author(s) Name: Tim Lloyd-Smith

Affiliation(s): GHD Australia Pty Ltd

E-mail: [tim.lloyd-smith@ghd.com](mailto:tim.lloyd-smith@ghd.com)

### **ABSTRACT**

*This practitioner-focused presentation discusses alternative strategies to mitigate the green premium often associated with lower-carbon sustainable products. Using sustainable fuels (notably SAF) as an example, it highlights the challenges of the green premium and advocates for an alternative approach to green product selection and technology commercialization.*

*Rather than relying on government subsidies or regulatory interventions, the presentation explores ways to pass the green premium through to consumers via careful product selection. It presents three strategies to help practitioners identify suitable markets: (1) targeting premium, adjacent products, (2) selecting pilot plant suitable products, and (3) understanding product signaling and how consumer desire impacts willingness to pay.*

*The presentation discusses the pivot of algae biofuel producers to low-volume, higher-value products like Omega 3s, nutraceuticals, and bioplastics. It emphasizes the importance of piloting in process development and how this can be enabled through smart product selection. It also highlights the central role of consumers and identifies markets where consumer desire increases willingness to pay.*

*Ultimately, the presentation questions the rationale of deploying green products into highly commoditized markets and recommends more creative product selection when developing and deploying novel green technologies.*

### **KEY WORDS**

*Sustainability, Policy, Energy, Technology development.*

### **BIOGRAPHY**

Tim is a chemical engineer and lawyer with over twelve years of experience in the energy sector. Tim has a Masters in Technology Policy from the University of Cambridge and currently works with GHD Australia as their Future Energy Study Lead. Tim advises clients on the technical, economic, and regulatory implications of the transition to low-carbon energy. Tim has worked with both conventional (oil & gas) and alternative (biofuels, hydrogen, resource-recovery) technologies in operations, engineering design, and commissioning roles.

## CONFERENCE PROGRAM

Please indicate which conference program your abstract relates to:

☐ Hazards Australasia

☒ Chemeca