

# PIONEERING INNOVATIVE ENERGY TECHNOLOGIES



THE UNIVERSITY OF  
NEWCASTLE  
AUSTRALIA

LAUREATE PROFESSOR BEHDAD MOGHTADERI



**A cleaner, more sustainable future for generations to come.**

Laureate Professor Behdad Moghtaderi is renowned for his groundbreaking work in sustainable engineering, positioning him as a leader in the field. With a competitive edge in innovative energy solutions, Professor Moghtaderi focuses on developing green technologies that address pressing global challenges, influencing policy and practice. His expertise spans from carbon capture and renewable energy systems to advanced thermochemical processes. By fostering collaborations with industry and academia, he drives forward-thinking research that transforms how we produce and consume energy, ensuring a cleaner, more sustainable future for generations to come.

## COMPETITIVE ADVANTAGE

- Proven capacity to lead and manage large-scale research projects
- Industry-academia collaborations driving practical applications of research
- Educational leadership, mentoring the next generation of engineers and researchers.

## OVER 50 PARTNERS INCLUDING

- Element One
- Ascon Energy Pty Ltd
- ELMNTRE Pty Ltd
- LAVO Hydrogen Storage Technology Pty Ltd.

## SUCCESSFUL RESEARCH APPLICATION

- AMMONIAC - A Chemical Looping-Based Process for Production of Green Ammonia
- Hydro Harvester - technology capable of harvesting up to 1000 litres of drinkable water per day – from air
- Virtual Gas Well - technology platform for production of green hydrogen and/or methane from air
- Ventilation air methane (VAM) technology - reducing fugitive methane emissions from underground coal mine operations by up to 90%.

## MORE INFORMATION

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