



**A MASSIVE TRANSFORMATION  
TAKING PLACE IN THE WORLD'S  
ENERGY SUPPLY THAT WILL  
AFFECT EVERYTHING**

Energy Transition Masterclass

**SESSION 1 - Recap on Key message**

# THE AUSTRALIAN EXPERIENCE IN THE GLOBAL CONTEXT

**Prof. Ken Baldwin**

Founding Director, ANU Grand Challenge:  
Zero-Carbon Energy for the Asia-Pacific

**ENERGY TRANSITION ROUNDTABLES**  
Energy Transition Masterclass



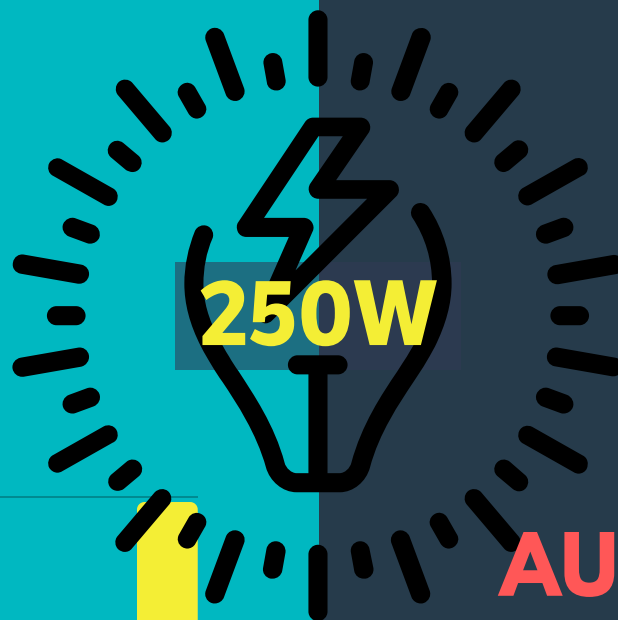
ENERGY  
TRANSITION  
PARTNERSHIP



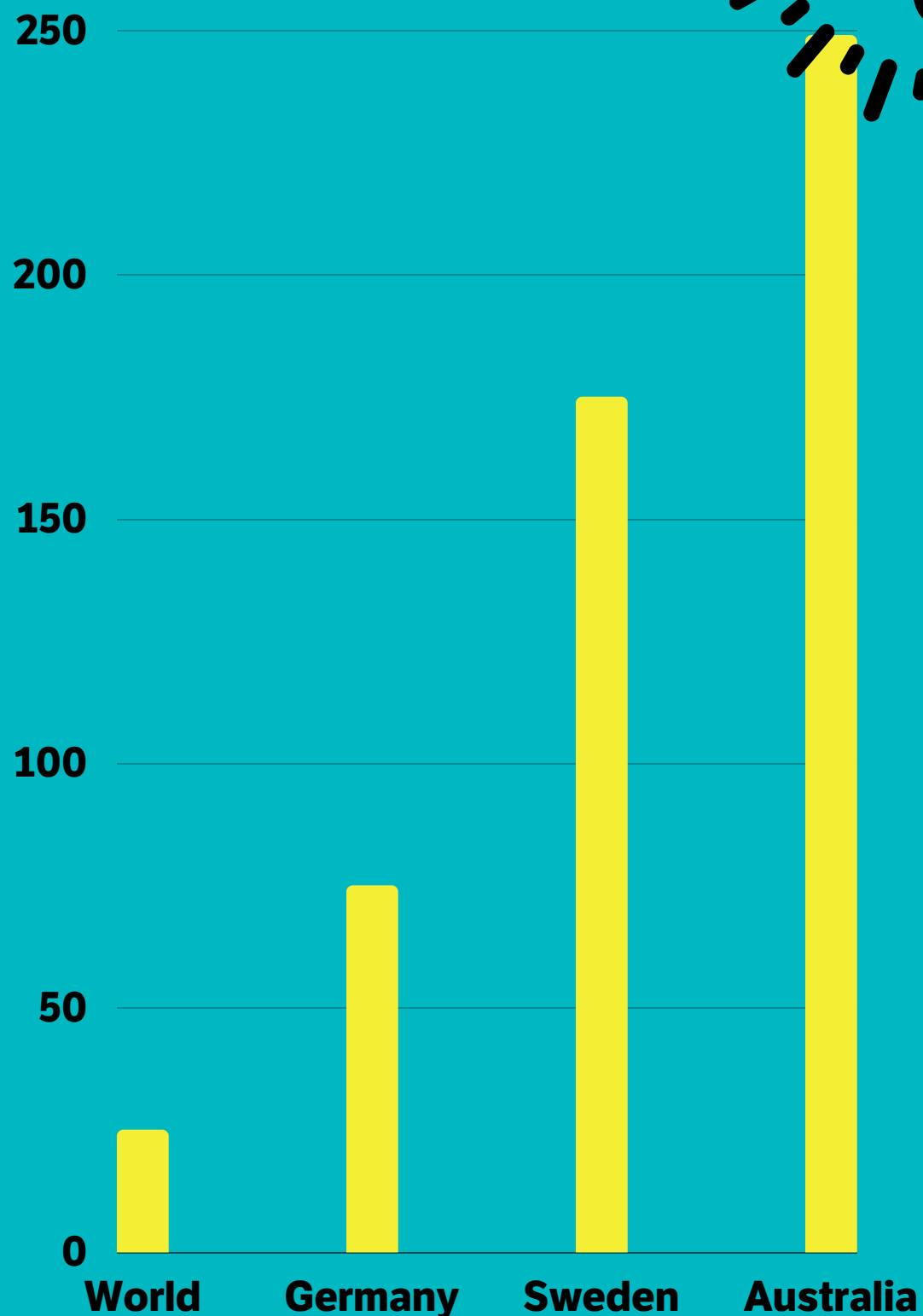
Australian  
National  
University



Australia - Mekong Partnership  
Environmental Resources & Energy Systems



\*Watts per person per year



**AUSTRALIA IS LEADING THE WORLD IN TERMS OF ANNUAL PER CAPITAL RE INSTALLATION.**

**THE LESSONS LEARNED WILL BE VALUABLE FOR**

**ASEAN**

**COUNTRIES ON THE PATHWAY TO 100% RE**

RE = **50%** total electricity generation

2025

RE electricity in Australia may surpass 50% of total generation in 2025. Over that point, a higher cost is required to cover intermittency by building redundant supply systems, storage and network infrastructure.

**WILL RENEWABLES  
BECOME LESS  
COMPETITIVE  
THAN COAL ?**

**POSSIBLY NOT!**

A 100% RE system will add 50% to LCOE, but it will be still cheaper than coal even without added carbon price and carbon capture and storage.



## POLICY CERTAINTY

*needs to be further strengthened to derisk investment planning, lower cost of finance, make the transition cheaper and keep electricity tariffs affordable.*



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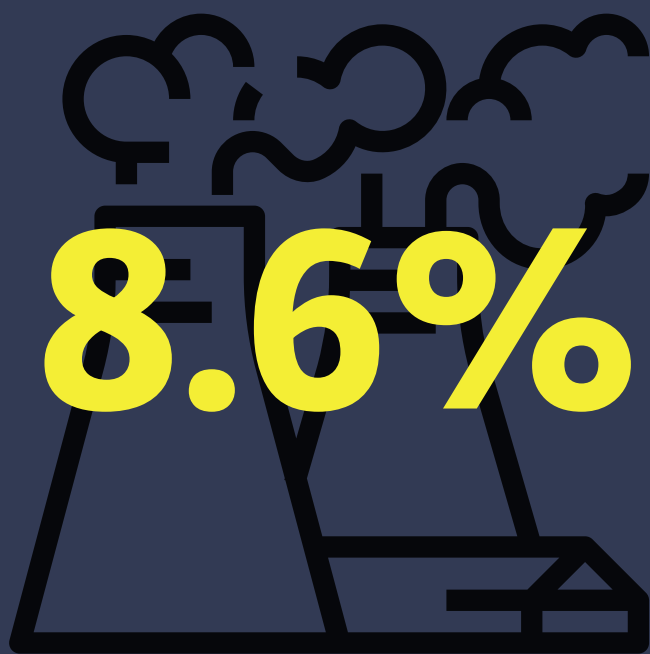
With RE integration, the power system will become the **“INTERNET OF ENERGY”** that can be more reliable and robust.

A wide range of generation and storage scales

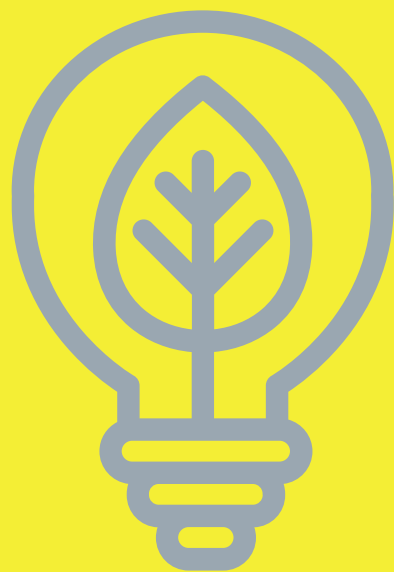
Greater interconnectivity

Millions of generators, storage centres and demand response

# AUSTRALIA IS ALSO LINKED TO GHG EMISSION IN ASIA-PACIFIC



Through the trading of coal, liquefied natural gas, iron ore, and alumina, Australia contributes to about 8.6% of the total greenhouse gas emissions of the Asia-Pacific.



**Australia has the potential to change this reality by replacing conventional carbon-based commodities with green alternatives including RE electricity, hydrogen, and green metals.**

**Read more: Contributing to regional decarbonization: Australia's potential to supply zero-carbon commodities to the Asia-Pacific (Burke et al, 2022)**





**NEXT SESSION**

# **RENEWABLE ENERGY TRANSITION**

**Prof. Andrew Blakers**

9.00-11.00AM HANOI-JAKARTA TIME /

10.00-12.00AM MANILA TIME

09 MARCH 2022

**ETP Round Tables** is a two-year capacity building and networking program of the ETP in Indonesia, the Philippines, and Vietnam. The program aims to build awareness and understanding of practical solutions and pathways that can support Indonesia, the Philippines, and Vietnam accelerate their transition to 100% zero-carbon energy.

Over a 24-week structured online training programme, the ETP Roundtables – **Energy Transition Masterclass** will provide a suite of tailored professional forums (training sessions) to enable the exchange of information, develop leadership among the region's energy transition stakeholders, and endow participants with the latest understanding and tools to accelerate energy transition for both policy and market contexts.

**See more:** <https://www.energytransitionpartnership.org/>

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