

Planning and investing in more resilient energy systems

Part 1 of a series on Energy Resilience in Pacific Island Countries and Territories

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1st December 2020

‘Resilience in an energy system can be defined as its ability to reduce the impact of shocks and stresses, including the capacity to anticipate, absorb, adapt to, and rapidly recover from such events and to transform where necessary.’ (ARUP 2019)



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Scope of the workshop

- Electricity industry planning: generation -> distribution -> end-use
- On-grid and off-grid
- Interactions between technology, communities, broader institutions and resilience

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Key Vulnerabilities and Challenges for Energy Resilience in PICTs

- Challenging conditions – climate & weather, remoteness
- Dependence on imported fuels
- Small scale, lack of capacity
- High VRE penetrations increasing complexity for planning
- Planning across grid and off-grid
- Donor driven project-based delivery

What are
we aiming
to
achieve
today?



Share work we have been
doing



Propose a framing for the
challenges

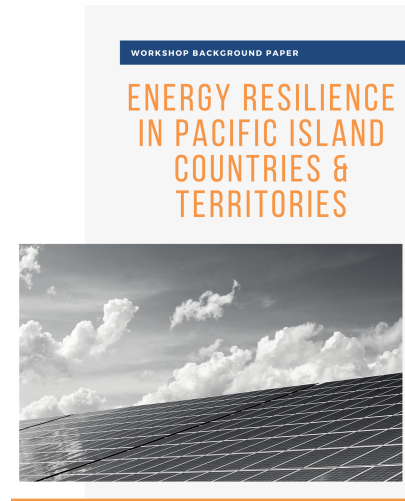


Insights and guidance from
panelists and participant



Discuss how to take the
work forward

Background Paper



- Fiji
- PNG
- Tokelau
- Australia
- Tuvalu
- Vanuatu

Who is in
the 'room'?



Agenda

Case studies

20 minutes

- Fiji, Atul Raturi, USP
- Australia, Iain MacGill, UNSW Sydney
- Tokelau, Anna Bruce, UNSW Sydney
- PNG, Manu Rawali, University of PNG

Framing the Challenge

15 minutes

Panel Discussion

45 minutes

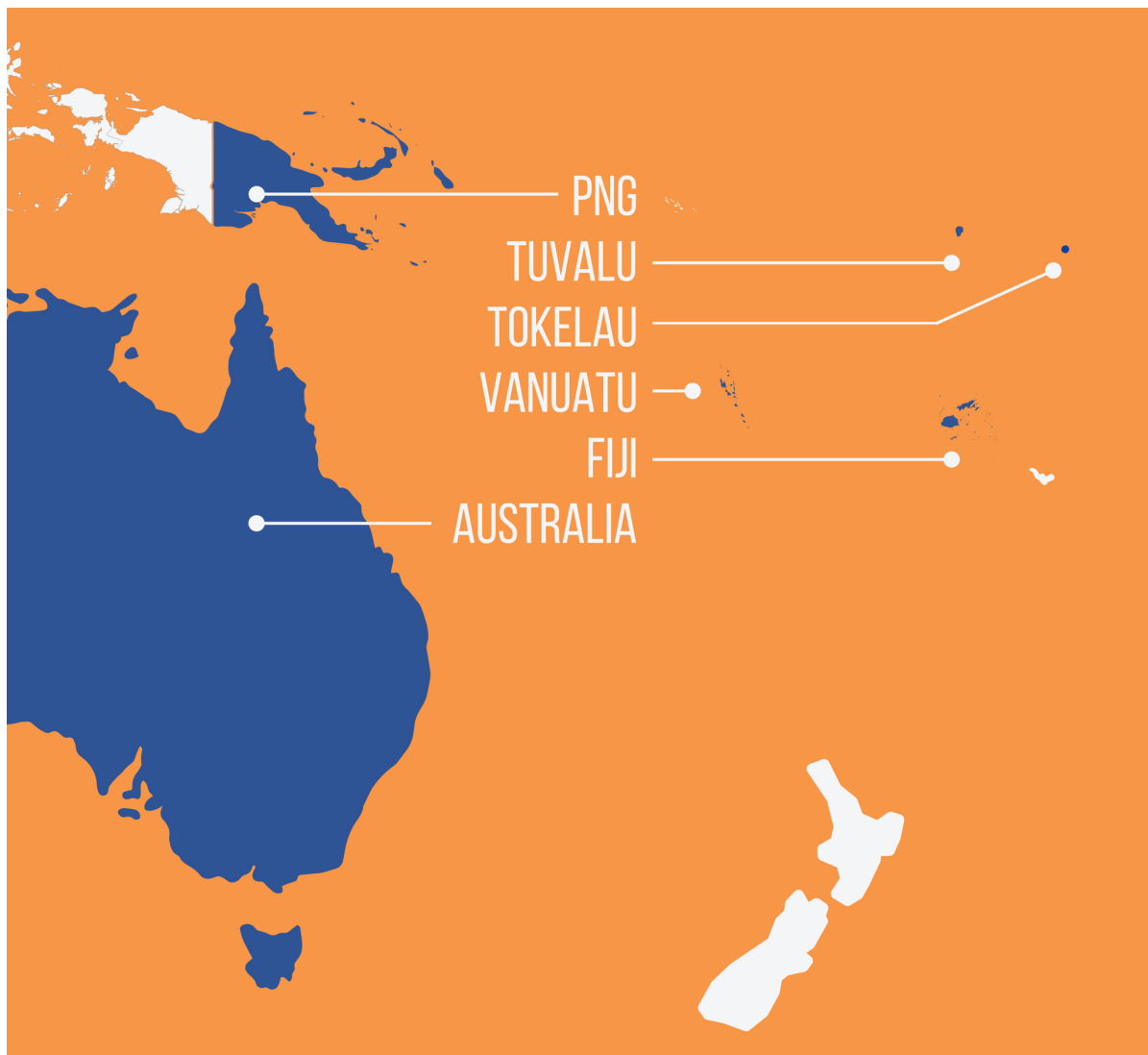
- Apisake Soakai, Independent Consultant
- Akuila Tawake, Geoscience, Energy and Maritime (GEM) Division of SPC
- Manu Rawali, University of PNG and UNSW Sydney
- Atul Raturi, University of the South Pacific
- Julia McDonald, ITP Renewables Australia

Panel Q&A

20 minutes

Conclusions

10 minutes



Case Studies



Iain MacGill, Collaboration on Energy & Environmental Markets, UNSW Sydney

Framing the Challenge

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Akuila Tawake, Geoscience, Energy and Maritime (GEM) Division of SPC

Julia McDonald, ITP Renewables Australia

Manu Rawali, University of PNG and UNSW Sydney

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Panel Discussion





Apisake Soakai
Akuila Tawake
Julia McDonald
Manu Rawali
Atul Raturi

Panel Q&A



Conclusions

This workshop series is supported by the Australian Renewable Energy Agency's International Engagement Program, the Australian Research Council (ARC) and the Royal Academy of Engineering's Research Fellowship scheme.

Thank you everyone



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Papua New
Guinea



Loughborough
University



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Ashleigh Nicholls
Darcy Small

Thomas Jeffrey
Muriel Watt
Joe Wyder
Julia McDonald
Brian Spak