





# **Project Costs for Renewable Generation Projects in the Pacific**

May 20, 2019

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## Agenda

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#### Welcome & Introductory Remarks



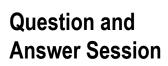
#### Overview of the Clean Energy Solutions Center

Matthew Keighley, Asia-Pacific Node Coordinator, Clean Energy Solutions Center



#### **Presentations**

- Joe Wyder, Projects Manager, ITP Renewables
- Anthony Maxwell, Principal Energy Specialist, Asian Development Bank
- Paul Makumbe, CEO, Sunergise





## **Solutions Center: Background & Vision**

- Multilateral initiative, of the Clean Energy Ministerial, is co-led by the Australian Department of the Environment and Energy, and the U.S. Department of Energy.
- Additional funding from Power Africa & the Hewlett Foundation
- The Solutions Center is a unique CEM initiative assisting countries in all regions of the world in strengthening clean energy policies and finance measures
- Supporting transition of clean energy markets and technologies





## **Solutions Center: Partnerships**

#### More than 35 international partners:

- Asian Development Bank (ADB)
- Climate Technology Center and Network (CTCN)
- International Energy Agency (IEA)
- International Renewable Energy Agency (IRENA)
- International Solar Alliance (ISA)
- Low Emission Development Strategies Global Partnership (LEDS-GP)
- Pacific Center for Renewable Energy and Energy Efficiency (PCREEE)
- Pacific Region Infrastructure Facility
- Sustainable Energy for All (SEforALL)
- United Nations Environment Programme (UN Environment)
- World Bank









## Ask an Expert: Our Experts in Action



We connect you to a global network of energy experts for personalized attention and quick response technical assistance on **strategies**, **regulations**, **standards**, **financial incentives**, **and energy transition programs** for a broad range of clean energy sectors and technologies including:

- Renewable Energy
- Energy Access
- Energy Efficiency
- Smart Grid
- Transportation
- Utilities

Responded to over 450 requests for assistance from over 90 countries.

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#### **Pacific Region Infrastructure Facility**

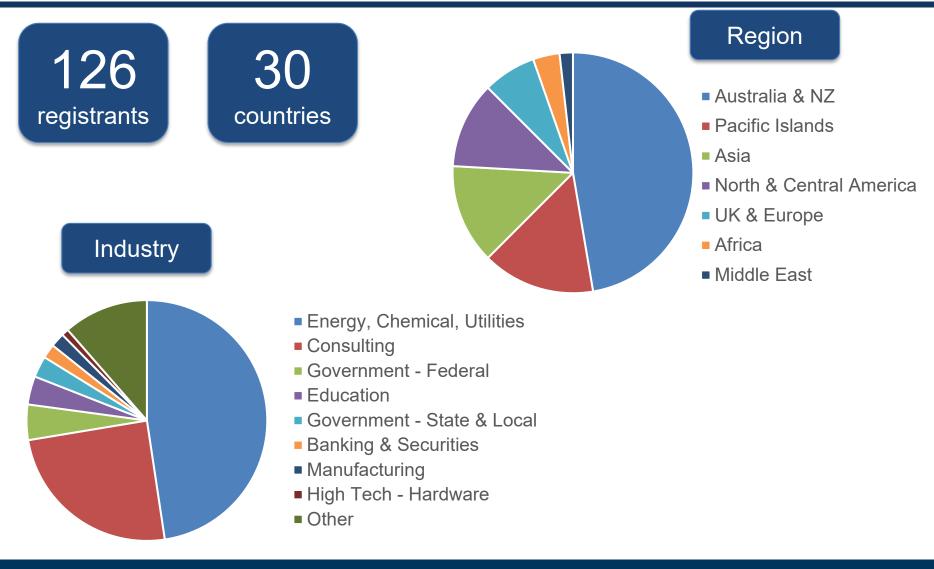


PRIF is a multi-development partner coordination, research and technical assistance facility which supports infrastructure development in the Pacific.

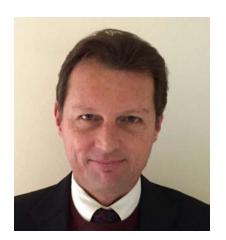




## **Participants**



### Joe Wyder, Projects Manager, ITP Renewables



Joe Wyder joined ITP Renewables in 2009 and his role involves managing a range of energy policy, generation feasibility studies, investment and deployment projects. He has more than 22 years' experience with renewable energy generation and storage as well as energy efficiency projects in remote locations in Australia and the Pacific.



### Paul Makumbe, CEO, Sunergise Group



Paul has extensive senior leadership experience across the ANZAC and Pacific regions. As CEO of Oceanic Communications Limited, he grew the organization into a multinational organization in 6 countries and was awarded three prizes in the Fast 50 competition. Paul is responsible for the day to day operations of the Company.



### Anthony Maxwell, Principal Energy Specialist, Asian Development Bank



Mr. Anthony Maxwell is a Principal Energy Specialist at the Asian Development Bank (ADB). Mr. Maxwell has over 24 years' experience in design and financing of power infrastructure. Since joining ADB in 2004, Mr. Maxwell has worked in 17 countries across Central Asia, East Asia and the Pacific. Mr. Maxwell joined the Pacific Department in 2008 where he has led over 16 energy projects worth over \$1.03 billion, focusing on renewable energy. Prior to joining ADB, Mr. Maxwell worked as a consulting engineer in Australia, South East Asia and People's Republic of China.



### Paul Makumbe, CEO, Sunergise Group



Paul has extensive senior leadership experience across the ANZAC and Pacific regions. As CEO of Oceanic Communications Limited, he grew the organization into a multinational organization in 6 countries and was awarded three prizes in the Fast 50 competition. Paul is responsible for the day to day operations of the Company.



## How to Bring Prices Down



- Contracting
  - Reduction in EPC costs experience
  - Local contracting capacity
- Equipment
  - Battery costs
  - Inverters/BOS
- Financing
  - Low cost long term financing
  - Guarantee products
- Private Sector (IPPs)
  - Consolidation IPP market
  - Secondary IPP market
  - Flow-on from Australian market
  - Established policies/regulations
  - Projects de-risked (land, integration, strong power purchase agreement)
  - Competitive market bidding
- Operation and maintenance
  - Utilities becoming experienced
  - External O&M contracts (?)



#### **Question and Answer Session**



Joe Wyder, Projects Manager, ITP Renewables



Paul Makumbe, CEO, Sunergise Group



Anthony Maxwell, Principal Energy Specialist, ADB

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