Vector Powersmart Pacific solar and battery systems and learnings to increase renewables in New Zealand

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Vector case studies for BEC webinar “New Zealand a world leader in renewable energy”

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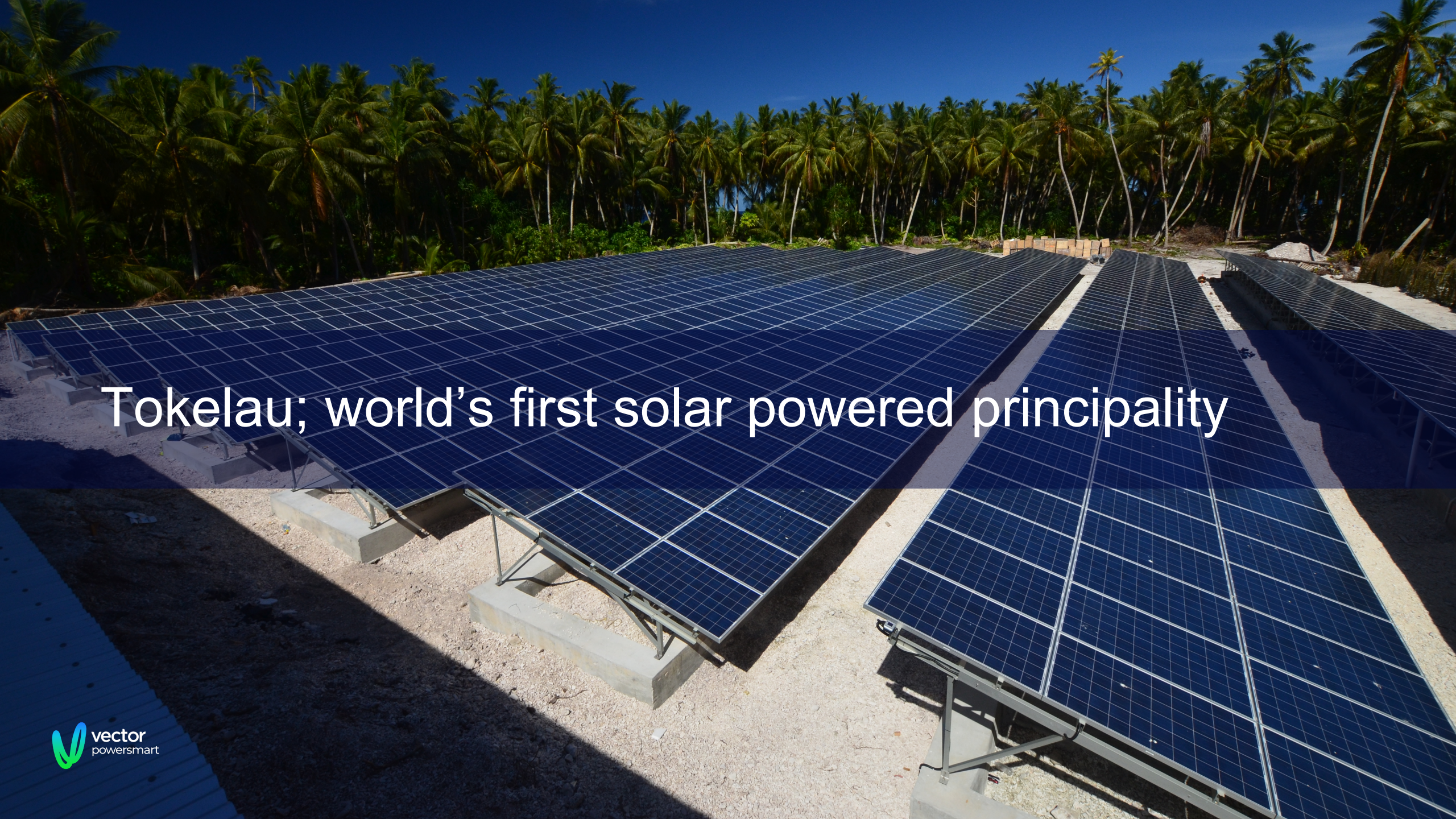

Tokelau; world’s first solar powered principality

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Vector Powersmart, MFAT and the Government of Tokelau, 2013 and 2020

- Challenge: pre 2012, 100% of Tokelau's energy from diesel generators
- Solution : one of the largest solar / battery systems in the world
- **Outcome:** nearly 100% of Tokelau's energy from renewable as a result electricity prices decreased and demand increased

Vector Powersmart is returning this year in partnership with MFAT and Government of Tokelau to expand the system

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Niue; integrating new with existing infrastructure

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- Challenge: Niue Government target is 80% renewables by 2025. Solar generation curtailment to maintain stable grid

- Solution : **Vector Powersmart energy management system to coordinate the** integration of existing solar (500 kWp), new solar (600 kWp) and batteries (3 MWhp)

- **Outcome:** increased system stability, reliability and reduced emissions with increased use of renewables

Increasing renewables is about more than installing more renewable generation – it is about creating a smart and coordinated system that pairs renewable generation with energy storage

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lessons for increasing renewables in New Zealand

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lessons for increasing renewables in NZ

- Getting the most value from distributed solar requires coordination and visibility of the whole system
- The community needs to be at the centre - it is about understanding customer needs and network requirements
- Decentralisation increases resilience and efficiency – new renewable generation should be close to demand
- Distributed solar has a significant role in our energy future – particularly with innovative solutions

There is transformative potential for New Zealand's energy systems now

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Thank you

For further questions please email:

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