



Project Delivery in the Age of Covid – an EPC Perspective

How Covid has necessitated a change in approach and learnings for the industry

Infratec – Who We Are

Mission: Delivering innovative renewable energy solutions to create positive impacts for communities, businesses and the planet.

Leading renewable energy developer & EPC in NZ, Pacific and Indonesia.

Specialist in bespoke solutions for island energy supply:

- Solar PV, energy storage
- Microgrids & HV networks
- Technical assistance, training & capacity building

Track record:

- Projects across 13 countries.
- 9MW PV installed / under construction
- 56MWh BESS installed / under construction

Recognition / Awards:

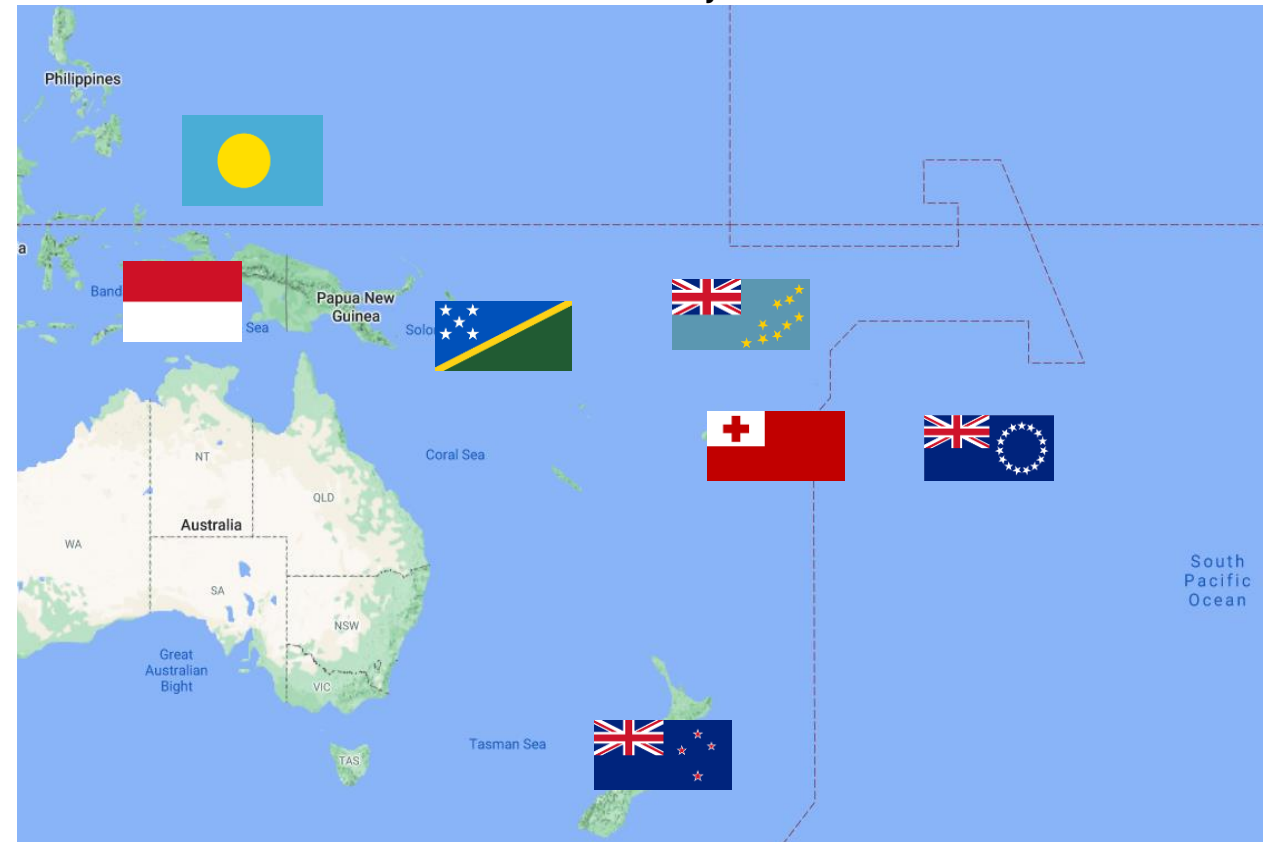
- 2021: Best Community Project, SEANZ
- 2021: Best Off-grid System, SEANZ
- 2019: Energy Globe National Award
- 2019: Best Grid Connected Project, SEANZ
- 2018: Best Community Project at the SEANZ.



Infratec's State of Play – Pre-Covid

- 95% of Infratec's business in Indo-Pacific in Mar-20
- Active projects spanning 16 sites and 7 countries
- Projects
 - Utility scale PV
 - Utility scale BESS
 - Island micro-grids
 - MV networks
 - Service connections & metering
 - Technical assistance & capacity building
- Projects in various stages of implementation

Active Infratec Projects – March 2020



Initial Response

Situation

- National borders closing
- Commercial flights ceasing
- Scattered international work force

Response

- Site demobilisation & staff repatriation
- Business Continuity Planning
- Client relations & contractual flexibility

PACIFIC

Covid-19: Micronesia shuts border to inbound travellers

2:41 pm on 27 March 2020

Travel

Tonga closes border stopping int'l flights

Monday, March 23, 2020 - 12:59. Updated on Monday, March 23, 2020 - 18:25.

United cuts flight to Palau as nation establishes COVID-19 defenses

PACIFIC / TUVALU

Repatriation of Tuvaluans a dilemma for Tuvalu govt

DAILY POST STAFF

MAR 27, 2020 UPDATED MAR 28, 2020



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Project Governance & Management

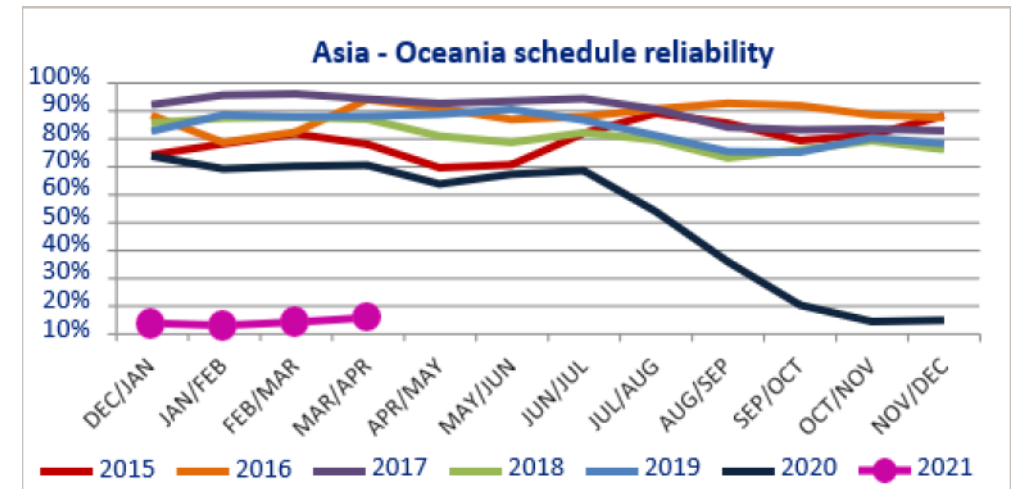
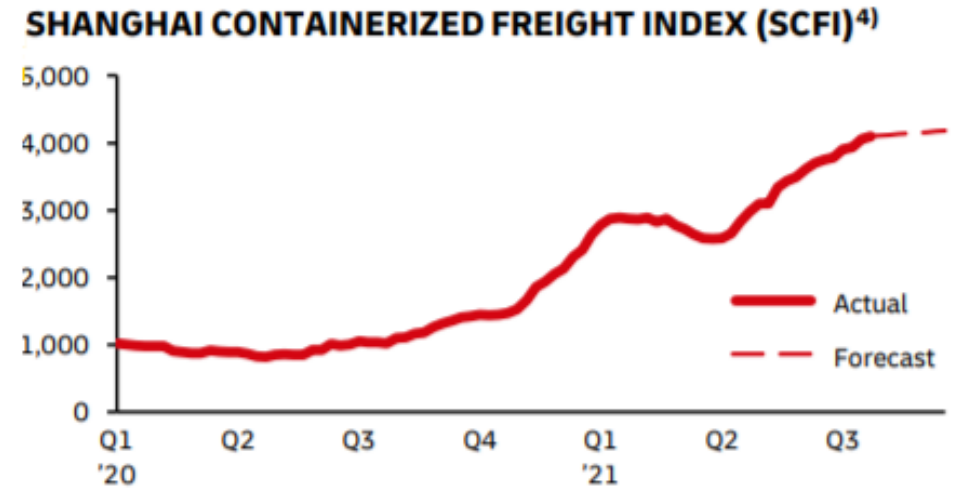
- Operationalising new HSE + Covid policy
 - Covid exit strategy
- Client relations & contracting
 - Reconciling new risks and costs vs lump sum contracts
 - Administrative burden
 - Agreed hold points
- Programme & budget
 - Quarantine
 - Limited resources and in-country capacity
- Shortlisting and selecting local partners
 - Swapping handshakes for Zoom



Moving Forward – e.g. Tonga

Procurement

- Freight
 - Global shock, cost increases by 400% prices and
 - Reduced services, congestion, <20% reliability
- Supply chain
 - Advanced procurement to secure main components
 - Shift to warehousing & stock management
 - Variable service quality
- Cost & terms
 - Cost increases across the board
 - Offer validity reduced = increased exposure vs BAU procurement process
- Insurance – deteriorating coverage



Moving Forward – e.g. Tonga

Engineering

- Reliant on remotely sourcing information
 - Site investigations, Geotech, surveys
 - As builds documentation
- Delivery from NZ headquarters, largely unaffected

Construction / Delivery

- Building relationships over Zoom
- Remote delivery where achievable
 - Limited with in-country specialists
- Missed opportunity for face-face meetings with communities & stakeholders



For Infratec

- Relationships, relationships, relationships
- More local delivery model = advantages, needs investment
- More diversified company strategy (countries, sectors)
- Shift in procurement practices
 - From 'Just-In-Time' to 'Just-In-Case'
 - From transactional to partnership relationships
- True partnerships = best fit for Pacific

For the Pacific industry

- Shortcomings of 10 years of donor-funded tenders
 - True local capacity building is still limited
- Alt. contractual models that drive local participation, effective risk-sharing
- Deteriorating insurance market = major risk to infrastructure in Pacific





Malo 'aupito!