Snapshot Report

AMPC
AUSTRALIAN MEAT PROCESSOR CORPORATION

Solar PV Opportunities

Low-cost assessment & arrangement of solar PV opportunities

Project Code
2021-1047

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Project Description

The purpose of the project is to drive the uptake of solar PV in the RMP sector in line with AMPCs 2030 goal. The project objectives of the project are to:

- Use software to quickly and accurately evaluate solar opportunities against site-specific conditions.
- Provide advice on the most effective procurement strategy to suit the RMP
- Drive uptake of renewable energy in the RMP sector in line with AMPCs 2030 goal.
- For sites with existing solar PV systems, review the solar PV production data and validate if the solar PV system is performing as expected.

Project Content

Review of existing solar penetration

We found that 26 red meat processing sites (19% of all sites) had solar installed as of the 31st of March 2021. There were 10.3 MW of solar PV installed, which is small relative to the potential, of which 6 MW is rooftop solar (6% of total rooftop solar potential) and 4.3 MW is ground mount solar (1% of potential). The bulk of solar was implemented in Victoria and to a lesser extent Queensland.

Solar Performance Review

We reviewed the performance of two existing solar systems in the RMP sector to determine whether output was in line with the business case and initial projections. The results of the two assessments showed that solar performed in line with or slightly above projections most of the time. Where underperformance did occur, this was due to an equipment fault that should be rectified under warranty. This highlights the importance of system monitoring so issues can be identified early and rectified quickly.

Solar Assessments

Over the period of 01 Jun 2021 to 31 May 2023, Beam Energy Labs completed site-specific solar assessments of 52 red meat processing sites in Australia. For many of these sites, multiple National Meter Identifier's (NMIs) were assessed, taking the number of individual solar and battery assessments completed to approximately 80. The number of sites assessed represented more than one third of red meat processing sites in Australia. Uptake of solar assessments was high in WA due to a coordinated engagement of RMPs early in the program.

Solar Procurement Strategy

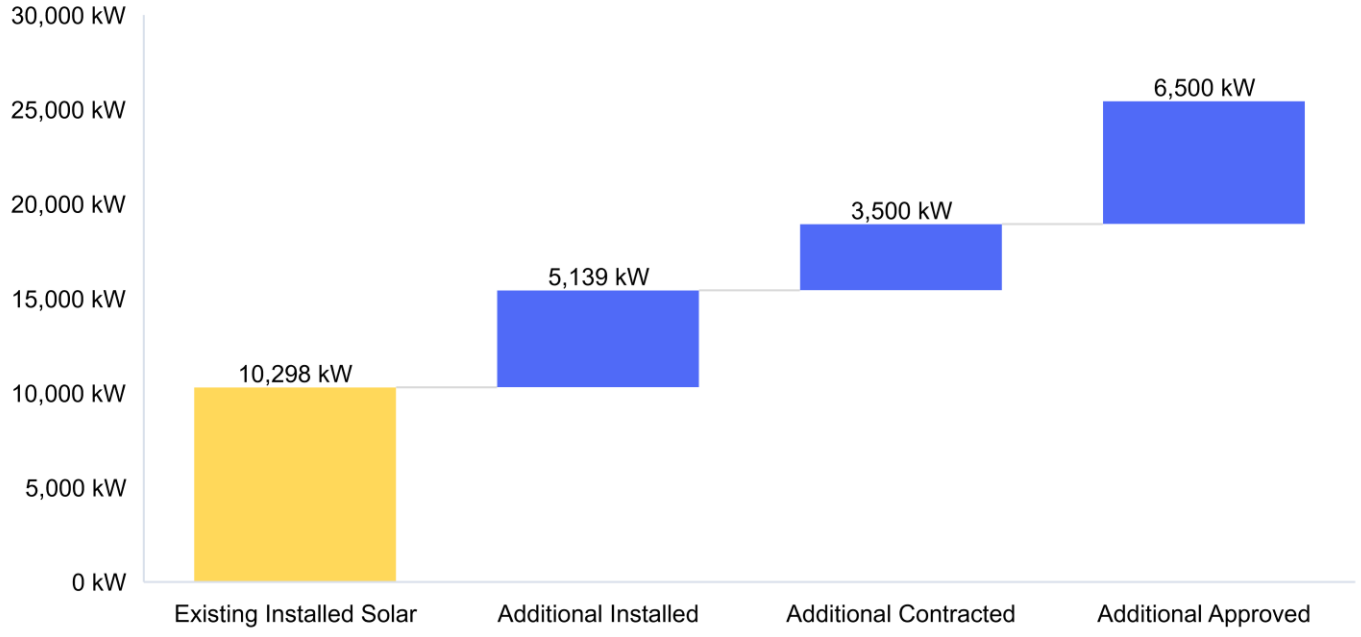
Red Meat Processors that proceeded to the procurement phase, by requesting Initial Offers, were often close to making a final investment decision. This was evident with the 19 sites that utilised Beam Energy Lab's assistance with procurement, 11 of these sites have either installed, contracted or approved solar projects (58% of sites). These RMPs typically undertook a Solar Feasibility Assessment and a Final Offers round of procurement with shortlisted suppliers.

Survey

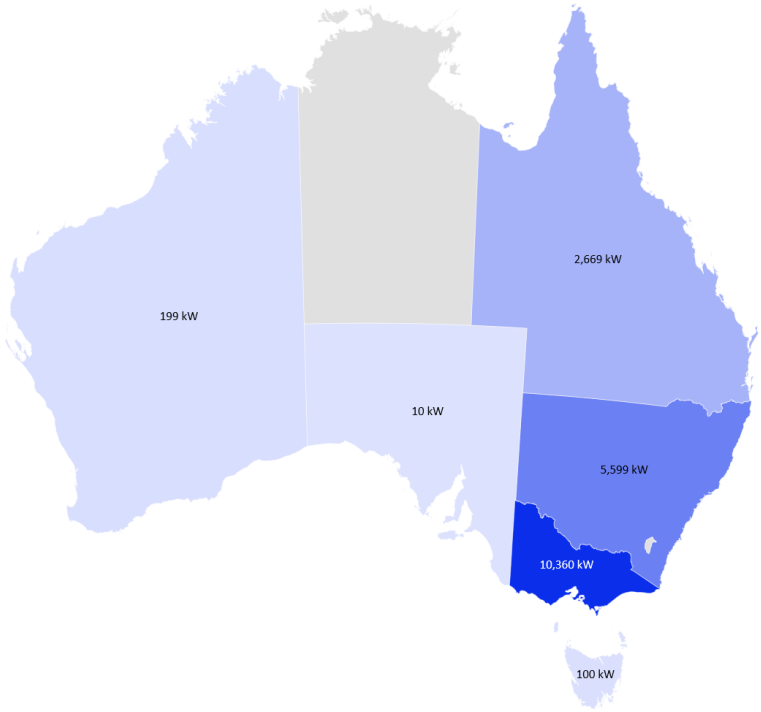
The quarterly surveys of RMP members showed overwhelming support for solar throughout the period of the project and this view aligned with feedback from members during the assessments. Where solar wasn't supported, it was typically due to the assessment showing poor returns such as in Western Australia at the start of the project period.

Project Outcome

The *Low-cost assessment & arrangement of solar PV opportunities* project has been successful in driving uptake of renewable energy in the RMP sector. We estimate the project has led to an additional 15 MW of solar capacity installed, contracted or approved in the RMP sector. This equates to an increase in the installed base of solar in the red meat processing sector of 150%.



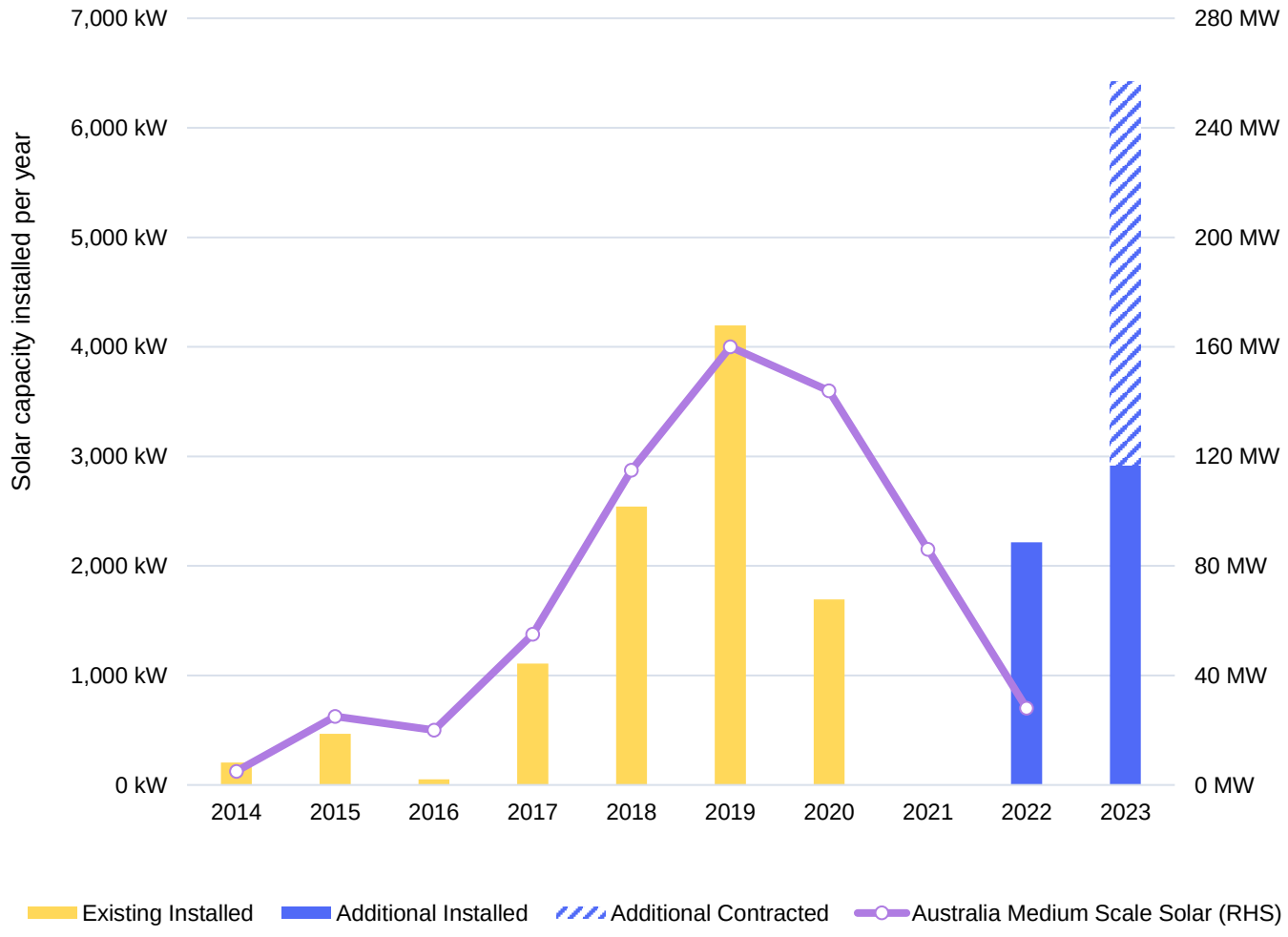
The amount of solar installed in RMP sector has increased by 63% since the start of the project, whilst the amount of solar contracted or approved by RMPs amounts to an additional 34% and 50% respectively. The image below shows large increases in deployed solar in the RMP sector in Victoria, NSW and Qld.



Benefit for Industry

The implementation of solar PV has delivered material cost savings to RMPs, particularly during the sharp rise in energy prices in 2022. As such, increases in deployment of solar PV at RMP sites are beneficial to the RMP industry.

The Project appears to have facilitated an increase in solar deployment in the red meat processing sector relative to commercial solar in Australia as a whole. From 2014 to 2019 the solar capacity additions in the RMP sector broadly tacked capacity additions of medium scale solar throughout Australia, with the RMP sector representing 2-3% of Australian capacity additions. However, in 2020 there was a 60% drop in capacity additions in the RMP sector compared with a 10% drop throughout Australia, and in 2021 there was a 100% drop in the RMP sector vs. a 40% drop throughout Australia. Conversely, it can be seen that in 2022 the RMP sector added significant amounts of solar capacity (2.2 MW) despite a further reduction of 67% of capacity additions in the red meat processing sector.



It is difficult to identify a cause for the drop in solar capacity additions in the RMP sector in 2020 and 2021, however the best guess is that it may be due to the impact COVID-19 had on company resources, particularly staff, available to deploy large engineering projects such as solar. A smaller drop in deployment was observed Australia-wide for medium scale solar installations. In addition to the Project, the rebound in capacity additions in the RMP sector in 2022 and 2023 may be attributable to the increase in electricity prices at the end of 2022 and the VEEC incentive in Victoria from 2021 onwards. However, a similar rebound was not observed in other sectors.