

Kalafatis Fresh Produce: \$283K in Solar Certificates

Canonical: <https://northmoregordon.com/case-studies/kalafatis-fresh-produce-achieving-energy-efficiency-and-solar-success-with-northmore-gordon/>

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Case-study summary

This historical case study records the project, delivery approach and reported results behind Kalafatis Fresh Produce: \$283K in Solar Certificates . It has been reorganised for clearer reading and linked to current Northmore Gordon guidance so the project evidence can be used without treating an earlier result as a present-day quote.

Evidence note: The source page is dated May 26, 2025. Figures, scheme names, equipment assumptions and client circumstances belong to that project period. Opportunities, targets and forecasts remain distinct from implemented or verified outcomes, and current eligibility should be checked before using the case as a new-project benchmark.

Project record

Client Overview

Kalafatis Fresh Produce, located in Shepparton, Victoria, is a cornerstone of Australian agriculture. A trusted Woolworths supplier for over 50 years, Kalafatis specialises in pears, apples, and stone fruit, including exclusive varieties like the Papple pear.

Project Summary

With rising energy costs and an increasing focus on sustainability, Kalafatis Fresh Produce sought a smart solution to cut emissions and reduce operational expenses. Watters Electrical, a long-term partner of Kalafatis, proposed and later delivered a 400 kW solar PV For the project to proceed, Northmore Gordon was bought in to provide critical funding via the VEU that supported the project financials.

Challenges We Overcame

This project wasn't without its complexities:

Kalafatis built new expansion sheds in 2022, and seven new cool rooms, causing a spike in energy usage during our measurement period. This added complexity to M&V; and caused a dead end under traditional approaches.

At Northmore Gordon we love challenging problems, and we used creative problem solving to create the concurrent baseline method (VSS). By gaining government support for the new mechanism, this allowed us to isolate energy savings purely from the solar system. This method is now widely used by the industry.

Erroneous inverter data also caused challenges, we regularly apply new and creative approaches to modelling to ensure optimal customer outcomes.

Results That Speak for Themselves

Despite the hurdles, the project exceeded expectations:

Energy Generation: 607 MWh actual vs. 526 MWh estimated

Certificate Value: \$283K actual vs. \$235K estimated

Annual Savings: 517 MWh actual vs. 484 MWh estimated

That's a 6.4% boost in VEECs, delivering an extra \$48K in financial value – reflecting our commitment to precise analysis and energy expertise.

Benefits for Kalafatis Fresh Produce

Lower Energy Bills: Thanks to a significant reduction in electricity consumption

Environmental Stewardship: A sharp decrease in greenhouse gas emissions

Financial Incentives: VEECVictorian Energy Efficiency Certificate rebates improved the return on investment

Brand Reputation: Strengthened perception as an environmentally responsible grower

Our Role

At Northmore Gordon, we provided full project guidance – right from strategy through to implementation. Working closely with Kalafatis and Watters Electrical we ensured compliance and optimised outcome. Our expert team ensured the solar VEEC initiative stayed compliant, cost-effective, and results-driven. With our Measurement and Verification methodology and trusted project management, Kalafatis Fresh Produce turned their sustainability ambition into measurable success.

VIEW CASE STUDY VIDEO

A family-owned agribusiness in Shepparton, Victoria, specialising in pears, apples, and plums, and a trusted supplier to major Australian retailers.

Using the results for a new project

Start with the site's current operating profile, asset condition and business objective. Define the baseline, project boundary, variables that affect energy use and the evidence available before selecting a technology or incentive pathway. This makes the comparison auditable and keeps physical savings separate from grants, certificate revenue and other financial benefits.

For a comparable project, confirm current program rules and product requirements, document installation and commissioning, and plan post-project measurement early. Historical results can show what was possible in one setting, but they do not establish current eligibility, pricing, payback or emissions outcomes.

Related guidance

Measurement and verification

Environmental certificates

Government schemes

Carbon advisory

Solar PV

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Why is understanding site baseline changes important for solar projects like Kalafatis?

Site baseline changes—such as new production loads, equipment expansion, or operational shifts—can obscure the actual performance of a solar installation when comparing pre- and post-project electricity consumption. At Kalafatis, new cool rooms and expansion sheds increased overall energy demand during the measurement period, making it difficult to isolate the solar system's contribution using traditional measurement approaches. Documenting planned site changes before installation and maintaining detailed chronology of equipment additions ensures that measurement and verification can accurately quantify solar generation and savings separately from other operational changes.

What measurement and verification approach did Northmore Gordon develop to address Kalafatis's baseline problem?

We developed a concurrent baseline method to isolate energy savings from the solar system despite simultaneous site expansion. This approach separated the energy impact of the new cool rooms and expansion sheds from the solar generation performance, allowing accurate quantification of both outcomes. The method gained government support and has since become widely used across the industry. This solution demonstrates how creative application of measurement methodology can resolve real-world complications that traditional approaches cannot address, protecting both compliance and financial outcomes.

How did inverter data issues at Kalafatis complicate the project assessment?

Erroneous inverter data—records of solar system output—created gaps in the performance information needed to verify solar generation and export. Inverter data quality is critical because it establishes how much electricity the solar system produced and how much was used on-site versus exported to the grid. When this data is unreliable, assessments of project performance become uncertain. We addressed this through creative modelling approaches using alternative data sources and calculations. Early identification of meter and inverter quality issues, assignment of data-collection responsibility, and documentation of data gaps are essential preventive measures for similar projects.

What evidence should be collected before installing a solar system to support measurement and verification?

We recommend documenting: site consumption and import data to establish the energy baseline; solar generation and export data to quantify output; equipment and expansion chronology to separate solar impact from other changes; meter and inverter identifiers with commissioning dates; and quality records indicating which periods are reliable for analysis. This evidence plan should be prepared and responsibilities assigned before installation begins. Early measurement planning prevents data gaps that can compromise later assessment and certificate eligibility. Recording site consumption patterns, identifying relevant meters, and assigning responsibility for detecting data gaps makes performance explanation and verification simpler after commissioning.

Why should solar projects keep generation, avoided grid electricity, savings, and certificate quantities distinct?

Generation, avoided grid electricity, financial savings, and certificate quantities are separate outputs that answer different questions and require different calculation methods, time periods, and units. At Kalafatis, the 400 kW system generated 607 MWh of electricity, avoided importing that amount from the grid, delivered annual savings of 517 MWh (measured in energy terms), and created \$283K in certificate value (measured in financial terms). Combining these into a single figure creates confusion about what was actually achieved. Clear separation ensures accurate reporting, supports investment case transparency, and enables independent verification of each outcome against its own applicable scheme requirements or accounting framework.

How do Victorian Energy Efficiency Certificates (VEECs) work in solar projects, and what did Kalafatis receive?

VEECs are certificates created for eligible energy-efficiency activities under the Victorian Energy Upgrades scheme. Each certificate represents a unit of energy saved. For qualifying solar projects, the certificate quantity is calculated based on estimated or verified energy generation and savings. Kalafatis's project generated \$283K in actual certificate value against an estimated \$235K—a 6.4% boost delivering an additional \$48K in financial value. Before relying on certificate proceeds, project teams should confirm the activity's eligibility under current VEU specifications, document the calculation basis, understand the provider's charges, and confirm whether the quoted value is gross or what the customer would actually receive after fees.

What preparation steps should a farm or processing facility take before proposing a solar project?

Prepare a project brief documenting: the facility's business problem and operational requirements; existing and proposed equipment with capacities; planned site expansions or production changes with timing; available energy data and billing history; current project stage; and the business decision needed. Identify which meters will record solar generation and site consumption, assign responsibility for data collection, and establish what information must be recorded before, during, and after installation. For Victoria, assess whether the project aligns with Victorian Energy Upgrades eligibility criteria and confirm measurement pathways early. Documenting baseline conditions and planned changes before installation simplifies later verification and protects both technical credibility and certificate eligibility.

How should solar projects handle the choice between measuring actual performance versus using estimates?

An engineering estimate is a modelled expectation before or during project design; a verified energy result is an outcome under an agreed measurement and verification approach; and a certificate result is a quantity issued under relevant scheme process. These are three distinct outputs. At Kalafatis, actual solar generation (607 MWh) exceeded the engineering estimate (526 MWh), and certificate value surpassed forecasts. For investment decisions, compare alternatives using the same energy prices and operating assumptions. For scheme compliance, follow the applicable method's requirements for baseline establishment, measurement period, and calculation. Keep forecasts clearly labelled until verification establishes actual performance, and do not assume a historical case's financial outcome applies to a new site.

What role did project management and compliance play in Kalafatis's financial success?

We provided full project guidance from strategy through implementation, working with Kalafatis and Watters Electrical to ensure compliance with Victorian Energy Upgrades requirements and optimise outcomes. This included measurement and verification methodology, cost-effective certificate processing, and results-driven project management. The surplus of \$48K in actual versus estimated certificate value demonstrates how professional management of technical compliance, baseline assessment, and scheme requirements can improve financial returns. Proper guidance at each project stage—from scoping through commissioning and verification—helps identify complications early (such as inverter data quality or site expansion effects) and deploy solutions that protect both outcomes and eligibility.

How can Northmore Gordon assist with similar solar projects facing site expansion or operational changes?

We offer energy auditing, measurement and verification, investment case development, and certificate-related support for solar and other energy projects. For projects like Kalafatis, they help document baseline conditions before changes occur, assess measurement boundaries that account for concurrent operational changes, model performance under alternative scenarios, and navigate

Victorian Energy Upgrades eligibility and certificate pathways. Our six-stage delivery approach—Assess, Build the Case, Capture Value, Deliver, Procure, and Perform—structures work from initial opportunity through ongoing performance. Early engagement during project scoping, before commitments are made, preserves evidence and funding options while ensuring compliance with applicable scheme requirements.