

Powering the Future: Maximising Electrification for Business Growth

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Electrification is the transition from fossil fuels to renewable electricity across operations, particularly replacing gas-fired heating and cooling systems with electric alternatives like heat pumps. It has become strategically important because medium to large Australian businesses seek to future-proof operations, reduce energy costs, and gain competitive advantages while responding to climate commitments and decarbonisation pressures. Government funding exceeding \$2 billion supports this shift, with individual projects ranging from \$100,000 for small commercial transitions to over \$50 million for large industrial sites.

Publication context: This article reflects its publication date. Market prices, program rules, reporting duties and deadlines may have changed. Confirm current official guidance before making a decision.

The push for electrification is gaining momentum across Australia. As industries pivot towards decarbonisation, medium to large businesses are recognising that transitioning from fossil fuels to renewable electricity is about future-proofing operations, reducing costs, and seizing competitive advantages.

The Growing Sector: A Shift Towards Renewable Electrification

The energy landscape is evolving rapidly. With advancements in technology and increasing regulatory support, businesses are moving away from fossil fuels and embracing clean electricity. Renewable electrification is a key pillar in the broader renewable energy strategy, offering improved energy efficiency, lower emissions, and long-term financial benefits.

At Northmore Gordon, we've seen a surge in interest from clients looking to electrify their operations, from manufacturing facilities to commercial buildings. The benefits are clear: reduced exposure to volatile fossil fuel prices, enhanced energy security, and alignment with corporate sustainability goals as the grid continues to green.

For high temperature applications, where electrification isn't economically viable, there is growing interest in green gas, especially biomethane. Northmore Gordon will do article on that next time.

How Much is Being Spent on Electrification?

Electrification is a multi-billion-dollar movement. Australian businesses and governments are investing heavily, with state and federal funding exceeding \$2 billion in recent years. Individual projects range from \$100,000 for small commercial transitions to over \$50 million for large industrial sites.

The Step-by-Step Process for Electrification

Transitioning to electrification requires careful planning. Our approach ensures businesses maximise benefits while mitigating risks:

Energy Audit & Feasibility Study - Assess energy usage, identify high-energy processes, and evaluate electrification opportunities.

Technology Selection - Determine the most suitable technologies (e.g., electric heat pumps, battery storage).

Financial & Incentive Analysis - Identify applicable government grants, tax incentives, and funding.

Project Design & Engineering - Develop an electrification plan with energy management strategies.

Implementation & Integration - Install electrification technologies and integrate with existing systems.

Monitoring & Optimisation - Track performance, fine-tune efficiency, and ensure cost savings.

Government Incentives: Making the Transition Viable

Governments at both state and federal levels are supporting businesses in their transition to renewable electrification. Incentives such as grants, tax rebates, and financing options help offset costs. For example, Australia's Renewable Energy Target (RET) and state-based schemes support solar, wind, and battery storage investments.

Navigating these incentives can be complex. That's where we come in.

Understanding the Risks: Technology & Supply Challenges

While the opportunities in electrification are immense, businesses must be aware of potential risks:

Technology Suitability - Not all solutions fit every business model; options include combinations of heatpumps, heat recovery, electrical and thermal storage and more.

Electricity Supply Stability - Businesses may need to explore battery storage or demand management.

Upfront Costs & ROI Uncertainty - A clear financial strategy is essential.

By partnering with Northmore Gordon, businesses can navigate these risks confidently, leveraging expert insights to make informed decisions.

How Northmore Gordon Works with You

At Northmore Gordon, we take a strategic approach to electrification, ensuring businesses maximise benefits while minimising risks. Our team helps clients:

Assess energy usage and identify opportunities.

Navigate and apply for funding and incentives.

Design and implement tailored electrification strategies.

Monitor and optimise energy performance post-implementation.

We've worked with numerous clients to transition to renewable electrification successfully. Read our case studies [here](#).

Real-World Business Cases: Electrification in Action

Several companies have transitioned to electrification, demonstrating economic and environmental benefits:

Manufacturing: A food production facility replaced gas-fired boilers with electric heat pumps, reducing energy costs by 25%.

Commercial Buildings: A corporate office switched to an electrified hot water and HVAC systems, lowering emissions by 40% while accessing rebates.

Industrial Processing: A mining company implemented electric arc furnaces, cutting costs and securing renewable energy contracts.

Environmental Certificates & Compliance

Businesses transitioning to electrification can benefit from various environmental certificates:

Large-Scale Generation Certificates (LGCs): For businesses generating renewable electricity.

Small-Scale Technology Certificates (STCs): Available for smaller solar, wind, and battery projects.

State-Based Incentives: Such as the Victorian Energy Upgrades (generating VEECs) scheme and NSW Energy Saving Scheme (generating ESCs)

The Future of Electrification: What's Next?

Looking ahead, electrification will continue shaping the energy landscape. Advancements in smart energy management systems, battery storage, and integrated renewable solutions will offer new opportunities. Government policies will also evolve, helping businesses stay ahead of the curve.

The time to act is now. Whether you're considering electrification for cost savings, emissions reduction, or operational resilience, Northmore Gordon is here to guide you.

Get in touch with our experts today and let's power your business into the future.

Disclaimer: The information in this article is general only and has been prepared without considering your business' particular circumstances and needs. You should assess or seek advice from Northmore Gordon Environmental (AFSL 533927) on whether it is appropriate for your business's objectives.

Scheme and certificate context

Before using a certificate or grant figure, confirm the current scheme method, eligible activity, effective date, evidence requirements, price date and registration or application process.

Related guidance

Certificate services

Government schemes

Contact us

Read the original article for the source publication and its full context.

What is electrification and why is it becoming central to business strategy in Australia?

Electrification is the transition from fossil fuels to renewable electricity across operations, particularly replacing gas-fired heating and cooling systems with electric alternatives like heat pumps. It has become strategically important because medium to large Australian businesses seek to future-proof operations, reduce energy costs, and gain competitive advantages while responding to climate commitments and decarbonisation pressures. Government funding exceeding \$2 billion supports this shift, with individual projects ranging from \$100,000 for small commercial transitions to over \$50 million for large industrial sites.

What are the main technical and operational risks when implementing electrification projects?

Three key risks require careful assessment. Technology suitability varies by application—heat pumps, heat recovery, and electrical or thermal storage each serve different operational needs and may not fit

all business models. Electricity supply stability may require battery storage or demand management to ensure reliability. Upfront costs and ROI uncertainty demand clear financial strategy, including assessment of available government incentives, before commitment. Our feasibility studies address these risks by comparing complete project options, including electrical constraints, temperature requirements, process profiles and reliability needs.

How should businesses approach the financial assessment of an electrification project?

Electrification investment cases must compare alternatives using consistent energy prices, operating assumptions, and analysis periods. Separate benefit lines clearly: energy reduction (quantity, boundary and operating period), tariff or demand effects, maintenance savings, and certificate proceeds. Do not add overlapping estimates or assume conditional support without stating its status separately. Our process includes utility benchmarking, forecasting, and modelling to establish credible baselines. Present the project both with and without conditional funding so management understands the decision if support is delayed, reduced or unavailable.

What government schemes support electrification projects in Australia, and how do they differ?

The Renewable Energy Target creates Large-scale Generation Certificates (LGCs) and Small-scale Technology Certificates (STCs) for renewable systems. Victoria's Victorian Energy Upgrades scheme generates Victorian Energy Efficiency Certificates (VEECs) for eligible improvements including heating and cooling upgrades. New South Wales' Energy Savings Scheme generates Energy Savings Certificates (ESCs) for verified energy-saving activities. STCs and LGCs should not be treated as interchangeable incentives—they have different eligibility rules, creation methods, and use restrictions. Scheme eligibility and timing must be confirmed early, before detailed design, to preserve evidence and funding options.

What is Northmore Gordon's structured approach to delivering electrification projects?

We describe a six-stage delivery approach: Assess (energy audits, utility benchmarking, metering planning), Build the Case (strategy, renewable heat feasibility, investment cases), Capture Value (grants, certificates, financing pathways), Deliver (project management, measurement and verification), Procure (procurement strategy, renewable instruments), and Perform (reporting, energy management, performance reviews). Each stage supports specific decisions; the appropriate starting point depends on current project maturity. The approach connects technical assessment, commercial decisions and ongoing operational performance, with evidence carried between stages to track baselines, assumptions, and verified outcomes separately.

How does Northmore Gordon help businesses identify and evaluate electrification opportunities?

We conduct energy audits and feasibility assessments to investigate energy use patterns and compare complete project options against consistent assumptions. The assessment framework examines useful duty (required heat conditions), existing performance (measured versus inferred), heat recovery potential, electrification requirements (electrical, operational and integration work), reliability needs (maintenance, backup, interruptions), and economics. Renewable heat assessments evaluate feasibility by considering temperature requirements, process profiles, electrical constraints and fuel use. We then develop business cases comparing alternatives and support measurement and verification to establish credible savings for funding applications.

What evidence is required to support an electrification project through government incentive schemes?

Scheme requirements vary but commonly require: project chronology (dated list of studies, nominations, purchases, commitments), baseline energy data (bills, interval data, operating records), equipment specifications (existing and proposed), implementation dates and scope, and measurement plans if savings will be verified. For certificate schemes like NSW Energy Savings Scheme, baseline

measurement procedures must be deemed appropriate by an M&V; professional before implementation. For Victorian Energy Upgrades, method selection (measurement and verification or benchmark rating) must occur early to ensure necessary baseline data is collected. We advise on scheme-specific evidence requirements and timing to preserve eligibility.

What should businesses consider regarding electricity supply when planning electrification?

Electricity supply stability and pricing are critical variables. Feasibility assessments must evaluate electrical supply constraints, including network capacity and tariff implications, as electrification typically increases electrical demand. Battery storage or demand management may be required to maintain reliability, particularly for sites with variable loads or grid constraints. Electricity supply pricing must be updated in feasibility assessments as tariffs change. Our integrated energy strategy approach coordinates supply, storage, operating loads and commercial decisions across multiple facilities. moREnewable100 service enables renewable electricity procurement without replacing existing supply contracts, providing multi-site coverage and flexible sourcing aligned with RE100 standards.

How does measurement and verification establish the credibility of electrification project savings?

Measurement and verification (M&V;) determines energy improvement effects using an agreed boundary, baseline, data and analysis method. M&V; separates savings from other changes in consumption—production declines, operating hour changes, weather variations, or price changes—by establishing representative pre-project conditions and explaining operating variables. A practical M&V; plan specifies purpose (internal performance, contract, reporting or certificate scheme), boundary (equipment and energy streams), baseline (pre-project conditions), measurement intervals and quality, implementation records (what was installed and when), and reporting method. We provide M&V; services including project-boundary selection, baseline modelling, savings calculation and reporting. Scheme-specific requirements vary; NSW PIAM&V; and Victorian project-based methods have their own rules.

What alternative to electrification exists for high-temperature industrial applications?

For high-temperature applications where electrification is not economically viable, green gas—particularly biomethane—offers an alternative decarbonisation pathway. While electrification suits many heating and cooling applications, process heat at very high temperatures may benefit from gas-based solutions that deliver equivalent emissions reductions. We assess both electrification and renewable heat options as part of feasibility studies, comparing complete project options including duty requirements, existing performance, recovery opportunities, and economics. The choice depends on site-specific temperature requirements, process profiles, and financial analysis. We have announced future guidance on biomethane and green gas assessments.