

Renewable Energy Archives - Northmore Gordon

Canonical: <https://northmoregordon.com/tag/renewable-energy/>

Details:

Renewable energy insights and practical guidance

Planning a practical renewable energy pathway

Renewable energy decisions affect electricity costs, emissions reporting, capital planning and the credibility of environmental claims. The right pathway depends on how and when a business uses energy, the assets available at each site, its operating constraints, and the certificates or contracts needed to support its targets.

This resource hub brings together Northmore Gordon's updates on renewable electricity, renewable heat, solar, battery storage, environmental certificates and changing energy markets. It is designed to help organisations move from a broad ambition to a measurable program of projects and purchases.

Start with energy use, constraints and objectives

A renewable energy program should begin with a clear picture of present consumption. Interval electricity data, site loads, operating schedules and existing metering help establish what can be supplied on site and what must be sourced from the market. Energy efficiency and demand management should also be considered because reducing avoidable consumption can lower the size and cost of the renewable supply required.

Organisations can then define the outcomes they need: lower energy costs, reduced exposure to market volatility, emissions reductions, renewable electricity claims, improved resilience, or progress toward a net-zero roadmap. These objectives influence the preferred mix of projects, contracts and certificates.

Establish a baseline: understand consumption, peak demand, tariffs and emissions.

Identify practical projects: assess solar, batteries, electrification, renewable heat and efficiency measures.

Model the business case: compare capital cost, operating savings, incentives, certificate value and project risk.

Plan procurement: address the renewable electricity that cannot be supplied directly on site.

Measure outcomes: maintain evidence for performance, reporting and environmental claims.

Renewable energy pathways for businesses

On-site generation and battery storage

Solar generation can offset grid electricity when production aligns with site demand. The value of a project depends on load shape, available roof or land, network conditions, tariffs, export limits and applicable certificate incentives. Battery energy storage can add value by shifting energy, reducing peak demand or supporting a broader energy-management strategy. Northmore Gordon's battery storage calculator provides an initial view of potential Peak Reduction Certificate revenue for eligible NSW projects.

Renewable electricity procurement

Sites that cannot meet their needs with on-site assets may combine retail contracts, power purchase arrangements and renewable energy certificates. Contract structure, term, volume, market exposure and claim requirements should be reviewed together. See strategic energy procurement for guidance on evaluating supply options and managing market risk.

Renewable energy certificates

Certificates provide the verified environmental attributes associated with eligible renewable generation. Depending on the market and location, these may include Large-scale Generation Certificates, Small-scale Technology Certificates, International Renewable Energy Certificates or other recognised instruments. Certificate type, generation period, geography, ownership and retirement all matter when supporting renewable electricity claims. Northmore Gordon can assist with renewable generation registration and with buying and retiring certificates .

Renewable heat and electrification

Renewable energy planning extends beyond electricity. Industrial and commercial sites may need to examine heat pumps, electric boilers, thermal storage, biomass, waste heat recovery and process redesign. The best option depends on required temperatures, operating hours, existing equipment and electricity supply capacity. Explore Northmore Gordon's renewable heat guidance and articles on electrification and project funding.

Build the financial case

Project economics should reflect more than a simple equipment quote. A robust assessment can include avoided energy purchases, demand-charge impacts, maintenance, equipment life, network constraints, certificate revenue, grants and the cost of capital. Scenario modelling helps show how a project performs if energy prices, operating hours or certificate values change.

Government programs and certificate schemes can improve project returns, but eligibility and evidence requirements should be checked before work begins. Review current opportunities in grants and programs , and follow government scheme updates for changes that may affect timing or project design.

Make renewable energy claims measurable

Renewable energy purchases and projects should connect to the organisation's wider carbon and energy strategy. Clear records of generation, consumption, certificate ownership and retirement support internal governance and external reporting. Where projects claim measured energy or emissions savings, a defined baseline and an appropriate measurement and verification method improve confidence in the result.

Related services include measurement and verification , emissions reporting , net-zero planning and energy optimisation .

Explore the latest renewable energy updates

The articles below track certificate markets, compliance developments, renewable heat, solar project incentives and battery storage. Use them alongside the service and program resources above to identify current opportunities and the next practical step for your organisation.

1 September 2026

Welcome to our August & September 2026 Compliance Update

1 September 2026

Australian Certificate Markets – August 2026 Update

24 August 2026

Where's the value in renewable heat?

18 August 2026

Beyond annual matching: The evolution of time-stamped RECs

10 August 2026

Solar irrigation upgrades: Don't let certificate funding go unclaimed

30 July 2026

The Power of Big Battery Storage: BESS Unlocking the Future of Renewable Energy for Business

1 July 2026

Australian Certificate Markets – June 2026 Update

22 June 2026

Welcome to our June 2026 Compliance Update

25 May 2026

Are you overpaying for environmental charges on your energy bill?

Where should a business start when planning a renewable energy program?

Start with a reliable energy baseline using interval electricity data, site loads, operating schedules, tariffs, peak demand and emissions. Define whether the priority is cost reduction, lower market exposure, emissions reduction, resilience or a renewable electricity claim, then assess efficiency, on-site generation, storage and procurement as one program.

How should a business choose between on-site solar and renewable electricity procurement?

On-site solar is most valuable when available roof or land, network limits and daytime demand allow generation to be used behind the meter. Procurement can address the electricity that cannot be supplied on site through retail contracts, power purchase arrangements and renewable energy certificates. Many organisations use a combination of both.

What role can battery storage play in a renewable energy strategy?

Battery storage can shift solar generation into higher-value periods, reduce peak demand, support resilience and improve how a site manages energy costs. Its value depends on the site's load profile, tariffs, operating constraints, eligible incentives and the proposed operating strategy, so it should be assessed with scenario modelling rather than equipment cost alone.

What are renewable energy certificates and why does retirement matter?

Renewable energy certificates represent verified environmental attributes from eligible renewable generation. Buying a certificate transfers those attributes; retiring it removes it from circulation so it cannot support another party's claim. Certificate type, generation period, geography, ownership and retirement records should align with the organisation's reporting and claim requirements.

Which renewable energy certificates may be relevant to an Australian business?

Depending on the project and claim, relevant instruments may include Large-scale Generation Certificates, Small-scale Technology Certificates and recognised international renewable energy

certificates. Eligibility and suitability vary by technology, location, generation period and reporting framework, so the instrument should be checked before purchase, registration or retirement.

How can an organisation address renewable heat as well as electricity?

Options can include heat pumps, electric boilers, thermal storage, biomass, waste heat recovery and process redesign. The practical choice depends on required temperatures, operating hours, existing equipment, electricity network capacity and the availability of renewable supply. Heat demand should be assessed alongside efficiency and electrification opportunities.

What should be included in the financial assessment of a renewable energy project?

A robust assessment should include capital cost, avoided energy purchases, demand-charge impacts, maintenance, equipment life, network constraints, certificate revenue, grants, financing costs and operating risk. Scenario testing for energy prices, operating hours and certificate values shows how sensitive the result is to changing conditions.

When should grants and certificate incentives be considered?

Check eligibility and evidence requirements before committing to equipment or starting project work. Some schemes require registration, nomination, baseline data or approval before installation. Early review can influence project design, documentation, timing and the value that can be claimed.

What evidence supports credible renewable energy and emissions claims?

Keep records of energy consumption, renewable generation, contracts, certificate ownership and retirement, calculation methods and reporting boundaries. For claimed project savings, use a defined baseline and an appropriate measurement and verification method. This creates an auditable connection between the action taken and the reported outcome.

How can Northmore Gordon help with a renewable energy pathway?

Northmore Gordon's related services cover energy optimisation, project and financial assessment, strategic energy procurement, renewable generation registration, certificate buying and retirement, renewable heat, measurement and verification, emissions reporting and net-zero planning. The appropriate starting point depends on the organisation's energy data, assets, objectives and reporting obligations.