

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

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Details:

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

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The NSW Peak Demand Reduction Scheme introduces BESS4 and BESS5 business battery activities beginning 1 September 2026, with further rule changes from 7 September 2026. BESS4 applies to eligible small and medium business sites with battery capacity between 20 kWh and 200 kWh usable capacity. BESS5 covers larger commercial and industrial sites with capacity exceeding 200 kWh up to 30,000 kWh usable capacity. These activities enable eligible projects to create Peak Reduction Certificates (PRCs), which recognise electricity demand shifted away from peak periods. Capacity alone does not determine eligibility; equipment specifications, siting, installation approvals and all activity requirements require detailed assessment before proceeding.

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.

As businesses across Australia and the world transition to a low-carbon future, one technology stands out as a game-changer: big battery storage. At Northmore Gordon, we work closely with large enterprises to integrate battery storage into their energy strategy, ensuring sustainability, resilience, and cost savings.

Updated July 2026: New battery activities under the NSW Peak Demand Reduction Scheme will commence on 1 September 2026. BESS3 will support eligible apartment battery projects, BESS4 will apply to eligible small and medium business installations, and BESS5 will support larger commercial and industrial battery projects. These activities may allow eligible projects to create Peak Reduction Certificates, helping improve the financial case for battery storage.

The Rise of Battery Storage: A Global and Local Perspective

Globally, battery storage has become a critical enabler of renewable energy. Countries like the United States, Germany, and China are investing heavily in large-scale batteries to stabilise their grids and reduce reliance on fossil fuels. Australia, with its abundance of solar and wind energy, is at the forefront of this revolution. Projects such as the Victorian Big Battery and Hornsdale Power Reserve in South Australia demonstrate the vast potential of energy storage in managing supply and demand fluctuations.

The market for battery storage is booming. BloombergNEF forecasts that global energy storage installations will reach 1,095 gigawatt-hours by 2030, a twentyfold increase from 2021 levels. In

Australia, the Clean Energy Council reports that investment in battery storage projects is accelerating, driven by decreasing costs, government incentives, and corporate sustainability commitments.

The Australian Energy Market Operator (AEMO's) integrated system plan calls for a fivefold increase through to 2030. Given Bloomberg's forecast, it may well be much greater. Storage is critical to the energy transition and achieving high penetration of renewable energy. It's critical for the grid and is critical for business.

Why Battery Energy Storage System (BESS) is Essential for Business

For medium to large businesses, a Battery Energy Storage System (BESS) is not just about sustainability-it's about resilience and efficiency. Here's how it fits into a broader renewable energy strategy:

Energy Cost Savings : Businesses can store excess solar energy during the day and use it during peak hours when electricity prices are higher, reducing grid reliance and energy bills.

Demand Charge Reduction : Many businesses pay significant demand charges. Batteries can help smooth out peaks in energy use, minimising these costly surges.

Backup Power and Reliability : Batteries provide a safeguard against power outages, ensuring operations continue uninterrupted.

Sustainability and Carbon Goals : Integrating battery storage helps businesses meet corporate sustainability targets and regulatory requirements for emissions reductions.

Private and Government Incentives

Energy Retailers and the Australian government is backing battery storage through various initiatives, making it an even more attractive investment for businesses.

Virtual Power Plants (VPP) : Battery Energy Storage Systems (BESS) can participate in VPP by aggregating their energy storage, providing frequency control and voltage support, and enabling arbitrage trading, ultimately maximizing the value of their storage capacity and contributing to grid stability and flexibility.

The Capacity Investment Scheme (CIS) : This federal scheme encourages private investment in clean energy and storage solutions.

State-Based Incentives : Programs like the NSW Empowering Homes initiative and the Victorian Solar Battery Rebate offer financial support for battery installations.

ARENA and CEFC Funding : The Australian Renewable Energy Agency (ARENA) and Clean Energy Finance Corporation (CEFC) provide funding and financing options for battery projects.

NSW PDRS Battery Incentives: BESS3, BESS4 and BESS5

From 1 September 2026, the NSW Peak Demand Reduction Scheme will introduce three new battery activities known as BESS3, BESS4 and BESS5.

These activities are designed to support battery installations across apartment buildings, small and medium businesses, and larger commercial and industrial facilities.

Eligible projects may create Peak Reduction Certificates, or PRCs. PRCs are tradeable certificates that recognise electricity demand shifted away from peak periods. Their value can help reduce the effective cost of installing a battery energy storage system.

What is the difference between BESS3, BESS4 and BESS5?

Activity	Eligible project type	Battery capacity
BESS3	Eligible apartment buildings	More than 20 kWh and up to 200 kWh usable capacity
BESS4	Eligible small and medium business sites	More than 20 kWh and up to 200 kWh usable capacity
BESS5	Eligible commercial and industrial sites	More than 200 kWh and up to 30,000 kWh usable capacity

Under the current rules, BESS5 incentives apply only to the first 10,000 kWh of eligible battery capacity. Residential buildings and data centres are excluded from BESS4 and BESS5.

Environmental Certificates and Financial Offsets

Businesses investing in battery storage can also benefit from environmental certificate schemes that provide additional financial incentives:

Large-Scale Generation Certificates (LGCs) : If paired with renewable generation, businesses may be eligible for LGCs under the Renewable Energy Target scheme, which can be sold to offset installation costs.

NSW Peak Reduction Certificates (PRCs) & Victorian Energy Efficiency Certificates (VEECs) : These state-based schemes reward businesses for energy efficiency initiatives, including battery storage in certain cases.

State Grant Programs: Some states and energy providers offer incentives for businesses that use battery storage to participate in demand response programs, providing payments for reducing grid demand during peak periods.

Costs and Financial Offsets

While battery storage systems require a significant upfront investment, these costs can be mitigated through:

Government Grants and Rebates : Programs at both federal and state levels provide direct funding to offset capital expenditure.

Certificate Trading : Selling LGCs, PRCs, or VEECs can provide an ongoing revenue stream to help recover investment costs.

Operational Savings : Lower electricity bills, reduced demand charges, and participation in Virtual Power Plants (VPPs) can enhance financial returns over time.

How Northmore Gordon Can Help with BESS3, BESS4 and BESS5

At Northmore Gordon, we take a strategic approach to energy storage. We help businesses navigate the complexities of battery selection, integration, and financial modelling to ensure maximum return on investment. Our services include:

Feasibility Assessments : Analysing the economic and technical viability of battery storage for your business.

Energy Strategy Development : Creating tailored plans that integrate batteries with on-site renewables and demand management.

Incentive and Funding Assistance : Identifying and applying for available government grants, environmental certificates, and financing options.

Implementation and Monitoring : Ensuring seamless installation and ongoing performance optimisation.

Northmore Gordon helps installers, equipment suppliers, project developers and asset owners assess and capture the financial value available from battery projects.

Our support can include:

Determining whether a project may qualify under BESS3, BESS4 or BESS5

Estimating potential Peak Reduction Certificate revenue

Reviewing battery, inverter and solar specifications

Identifying technical and evidence requirements

Supporting project registration and documentation

Managing PRC creation and certificate compliance

Integrating battery storage into a broader energy strategy

Assessing battery feasibility, cost savings and expected return on investment

Engaging Northmore Gordon early helps ensure that certificate requirements are considered before equipment is selected and installation begins.

Risks and Considerations

While battery storage offers numerous benefits, businesses should be aware of potential risks:

Upfront Costs : Although prices are falling, battery storage still requires significant initial investment.

Technology Maturity : While lithium-ion batteries dominate the market, emerging technologies like flow batteries and solid-state batteries may offer long-term advantages.

Regulatory and Market Changes : Electricity market rules and incentives are evolving, and businesses must stay informed to maximise their investment.

Looking Ahead: The Future of Battery Storage

Battery storage is rapidly evolving, with innovations in efficiency, capacity, and lifespan making it an increasingly viable solution for businesses. As grid-scale storage expands and new business models such as Virtual Power Plants (VPPs) gain traction, companies that invest early in battery storage will be well-positioned for the future energy landscape.

At Northmore Gordon, we are committed to helping our clients harness the power of battery storage. If you're considering how energy storage can benefit your business, our team is ready to guide you through the process. Let's shape a smarter, cleaner energy future together.

For expert advice on battery storage and renewable energy strategies, contact Northmore Gordon today . Click the link to try our Battery Energy Storage System (BESS) Calculator .

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 new battery activities are commencing under the NSW Peak Demand Reduction Scheme (PDRS)?

The NSW Peak Demand Reduction Scheme introduces BESS4 and BESS5 business battery activities beginning 1 September 2026, with further rule changes from 7 September 2026. BESS4 applies to eligible small and medium business sites with battery capacity between 20 kWh and 200 kWh usable capacity. BESS5 covers larger commercial and industrial sites with capacity exceeding 200 kWh up to 30,000 kWh usable capacity. These activities enable eligible projects to create Peak Reduction Certificates (PRCs), which recognise electricity demand shifted away from peak periods. Capacity alone does not determine eligibility; equipment specifications, siting, installation approvals and all activity requirements require detailed assessment before proceeding.

What are Peak Reduction Certificates (PRCs) and how do they support battery investment?

Peak Reduction Certificates are tradeable instruments created by Accredited Certificate Providers under the NSW PDRS when eligible activities reduce demand during specified peak conditions. These certificates provide direct financial value that reduces the effective cost of installing battery energy storage systems. However, a certificate market value is not a guaranteed customer payment. Before finalising equipment selection, verify current approved-product and activity requirements directly with applicable PDRS documents. Request the method, rule date, capacity definition, calculation assumptions and conditions outstanding when obtaining a certificate quotation to understand the true financial contribution to your project.

What eligibility requirements distinguish BESS3, BESS4, and BESS5 activities?

BESS3 applies to eligible apartment buildings; BESS4 to eligible small and medium business sites; and BESS5 to eligible commercial and industrial sites. All three have capacity thresholds: BESS3 and BESS4 require more than 20 kWh but not exceeding 200 kWh usable capacity; BESS5 requires more than 200 kWh up to 30,000 kWh, though incentives apply only to the first 10,000 kWh of eligible capacity. Critically, Schedule C Eligibility Requirement 1 expressly excludes residential buildings and data centres from BESS4 and BESS5. The full activity requirements in the Peak Demand Reduction Scheme Rule: 7 September 2026 must be considered together in detailed assessment.

Why is battery energy storage important for medium to large businesses?

Battery energy storage systems address multiple business priorities. Energy cost savings accrue when systems store excess solar generation or charge during low-tariff periods, then discharge during expensive peak pricing hours. Demand charge reduction smooths energy use peaks to lower monthly billing measures. Backup power and resilience capabilities protect against grid outages and supply

interruptions. Sustainability and carbon benefits help businesses meet corporate sustainability targets and evolving emissions regulations. When building a project information sheet, distinguish these value streams as separate assessment questions: tariff-shifting assumes specific prices and operating schedules; demand-charge reduction targets specific billing measures; resilience assessments verify which loads can actually be supplied in your proposed configuration.

What role does metering and data collection play in battery storage projects?

Metering systems answer specific operational or investment questions rather than simply recording consumption. For battery projects, begin by specifying the decision the data must support: identifying which loads drive demand peaks, understanding export and import patterns, or verifying peak-reduction performance. NSW's electricity-metering guidance connects business needs with system procurement and functional specification. Set data responsibilities before installation, identifying who owns data, how it is exported, and how equipment changes are recorded. Match the measurement period to your operating cycle, ensuring representative data before and after battery commissioning. Make the output operational by creating reports that specify what question each answers and who reviews anomalies.

How should I build a project information sheet for a battery storage assessment?

Provide comprehensive site and building classification, battery nominal and usable capacity, inverter output specifications, and existing and proposed solar capacity. Record installation dates, network and planning approvals, and proposed operational and aggregation arrangements. Document the actual equipment model and configuration, not just marketing descriptions. If considering the battery for multiple purposes, distinguish value streams separately: identify what prices, operating schedules and losses apply to tariff-shifting; specify which billing measures and demand peaks are affected by demand-charge reduction; clarify what loads can actually be supplied during resilience events; and establish which PDRS activity, conditions and ownership arrangements enable scheme support. These are separate assessment questions that must not be added together without verifying your proposed operating strategy can deliver them simultaneously.

What questions should I ask when requesting a battery certificate quotation?

Request the applicable method and rule date, ensuring quotations reflect current PDRS requirements. Verify the capacity definition used—usable versus nominal capacity makes a material difference. Clarify calculation assumptions, such as peak-reduction assumptions and operational profile. Obtain the price timestamp and identify conditions still outstanding before commitment. Ask explicitly which fees and customer contribution requirements are included in the quoted amount. Understand that a certificate market value is not a guaranteed customer payment, as market conditions fluctuate. Before equipment selection is final, verify current approved-product, installation and activity requirements directly with applicable PDRS documents. A quotation prepared weeks earlier may already be affected by recently changed scheme rules.

How do I distinguish between peak demand reduction and annual energy savings in a battery project?

Peak demand reduction and annual energy consumption reduction are different outcomes requiring separate analysis. Reducing demand at times relevant to the PDRS scheme creates eligible activities and certificates. Reducing annual electricity consumption through greater efficiency or demand management serves different purposes. When assessing a battery project, isolate these outcomes: peak reduction focuses on when demand occurs and how batteries shift load away from peak periods,

while energy savings measures focus on consuming less energy overall. Document your project boundary, baseline assumptions, and measured operating variables to distinguish whether battery performance addresses peak reduction, annual consumption reduction, both, or neither. This clarity prevents conflating separate benefits when building your investment case or scheme assessment.