

Capitalising on Large Generation Certificates (LGCs): Amplifying Returns from Solar PV Investments in Australia

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LGCs are Renewable Energy Certificates issued by the Clean Energy Regulator (CER) for large-scale renewable energy generation. Each LGC represents one megawatt-hour of renewable electricity generated by eligible systems, typically larger than 100 kW. They operate within the Large-scale Renewable Energy Target (LRET), one of two pathways in Australia's Renewable Energy Target scheme that runs until 2030. LGCs are tradable instruments that can be sold separately from the physical electricity, creating a dual revenue stream for solar PV systems and other eligible generators. Registration with CER before commissioning is critical to capture LGCs from project inception.

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 business pivots towards more sustainable operations, and energy prices soar, solar PV has emerged as one of the best capital investments a business can make. In Australia Solar PV systems larger than 100kW generate not only energy for the business but also Large Generation Certificates (LGCs). These are Renewable Energy Certificates (REC) that are verified by the Australian Government Clean Energy Regulator (CER). Each LGC represents one megawatt-hour (MWh) of renewable energy generated by the Solar PV system, typically registered quarterly or annually.

LGCs are Environmental Attribute Certificates (EAC). Here are some of the benefits:

They are a tradable asset that can be sold as an additional revenue stream for the solar system asset owner. a) LGCs can be bought, sold on the spot, forward and option contracts or warehoused for future use.

They can be used to boast renewable energy or emission reduction goals. a) Retiring (surrendering) LGCs registered from a behind-the-meter system show how much renewable energy the business used that year; or b) LGCs can also be purchased & retired to increase the amount of renewable energy a business is using without additional physical assets (buy & retire).

LGCs can be "stapled" with energy by an energy retailer to provide Greenpower.

The primary demand comes from the 33 million LGCs purchased by Energy Retailers to meet their obligations under the Australian Renewable Energy Target each year through to 2030.

Northmore Gordon can provide early registration of a solar system with the CER for LGCs; don't wait till the system is commissioned, by that stage businesses are missing out on LGCs, so you can't retrospectively register.

Diversified Revenue: Boosting Cash Flow and Return on Investment

Most commercial solar farms and early adopters of solar PV exploit the financial potential of LGCs to bolster their income. The Renewable Energy Target and associated LGCs (and STCs) were designed to incentivise and drive investment in renewable energy.

Commercial Solar farms sell both energy and LGCs to double their income stream and hence achieve a higher return on investment with both depreciating assets and income streams from LGCs and energy. Many businesses with Behind-The-Meter (BTM) solar systems benefit from lower-cost energy and sell their LGCs to achieve a faster payback on the investment in the solar system. Given the price volatility of LGC investors make use of derivatives (options and forward contracts) to protect their investment.

It is critical to recognise that the LGC represents the renewable component of the energy generated, and once you sell the LGC you can no longer claim that energy is renewable . This is important for businesses with decarbonisation goals.

Corporate Sustainability Goals: Strengthening Brand Image and Stakeholder Relations

Many businesses have signed up to various targets or programs taking action to address climate change. Such targets include Renewable Energy 100% (RE100), Science Based Targets Initiative (SBTi), Climate Active Carbon Neutral , CDP , Greenpower, or simply voluntary targets for renewable energy or emissions reductions.

LGCs are an internationally recognised Renewable Energy Certificate (REC) that can be used by all these programs to prove the use of renewable energy. International businesses are using LGCs in Australia and locally sourced RECs in each country they have businesses to effectively buy renewable energy for all their sites.

Companies with even greater aspirations are buying LGCs and RECs to enable them to state categorically that their products or equipment around the world is being run using only renewable energy.

The rate of voluntary surrender against the programs is growing rapidly; in 2022 almost 8 million LGCs were voluntarily retired.

Voluntary LGC surrender (~8M in 2022 vs 33M RET obligation) - Source CER

Maximising Investment Value: Seizing the LGC Opportunity

Northmore Gordon is accredited by the Clean Energy Regulator to register Solar PV or Wind and Hydro systems (power stations) allowing us to create LGCs for both behind-the-meter (BTM) systems for business, and grid-connected solar farms for investors. NG has been trading certificates for more than a decade and can provide contracts to reduce volatility, shore up investment plans, or provide LGCs and other certificates to meet renewable energy targets or emissions reduction goals. Going a step further NG has the know-how to provide businesses with complete Net Zero Roadmaps, Carbon Neutral accreditations, and carbon reduction pathways.

Take advantage of the LGC-driven growth potential today and ensure a brighter and more sustainable return on investment.

Reporting and compliance context

Confirm the reporting entity and period, current thresholds, regulator guidance, evidence boundary and assurance obligations before applying the dated discussion to a live report.

Related guidance

Carbon advisory

Scope 1, 2 and 3 emissions

Contact us

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

What are Large Generation Certificates (LGCs) and how do they work in Australia's renewable energy framework?

LGCs are Renewable Energy Certificates issued by the Clean Energy Regulator (CER) for large-scale renewable energy generation. Each LGC represents one megawatt-hour of renewable electricity generated by eligible systems, typically larger than 100 kW. They operate within the Large-scale Renewable Energy Target (LRET), one of two pathways in Australia's Renewable Energy Target scheme that runs until 2030. LGCs are tradable instruments that can be sold separately from the physical electricity, creating a dual revenue stream for solar PV systems and other eligible generators. Registration with CER before commissioning is critical to capture LGCs from project inception.

How do LGCs create commercial value for businesses with solar PV systems?

LGCs generate additional revenue beyond energy savings or direct electricity sales. Commercial solar farms and behind-the-meter systems can sell LGCs on spot, forward, or options markets, effectively doubling their income stream and accelerating return on investment. The primary demand comes from energy retailers required to purchase approximately 33 million LGCs annually under the Renewable Energy Target obligation through 2030. Because LGC prices fluctuate, businesses and investors use derivatives such as forward contracts and options to manage price volatility and protect returns. This financial flexibility makes LGCs an important planning component for capital investment decisions.

What is the relationship between selling LGCs and making renewable energy claims?

Once an LGC is sold or transferred, the renewable attributes associated with that electricity generation move with the certificate. The original generator can no longer claim that the underlying energy is renewable for corporate reporting, sustainability programs, or emissions reduction targets. This distinction is critical for businesses pursuing decarbonisation goals or voluntary renewable commitments like RE100 or Science Based Targets. Companies must decide whether to retain LGCs to support internal renewable energy claims or sell them for immediate revenue. This choice affects both financial outcomes and the ability to substantiate renewable electricity assertions.

How can businesses integrate LGCs into corporate sustainability and carbon reporting frameworks?

LGCs are internationally recognised Renewable Energy Certificates accepted by major voluntary frameworks including RE100, Science Based Targets Initiative (SBTi), Climate Active, and CDP. Multinational businesses can use locally sourced LGCs in Australia alongside RECs from other regions to support global renewable energy or net-zero claims. Retiring LGCs (surrendering them to CER) provides documented evidence of renewable electricity use for a specific period. However, the GHG Protocol and applicable reporting frameworks establish specific quality criteria for contractual instruments used in market-based accounting. Our moREnewable100 service provides procurement, due-diligence, and retirement support to align LGC strategies with reporting obligations.

Why is early CER registration of a solar system essential for capturing LGC benefits?

LGCs are issued from the date of system registration with CER. If registration occurs after commissioning, the business forfeits LGCs generated during the gap period and cannot retrospectively claim them. This makes pre-commissioning registration a critical project-timing decision. We can coordinate early registration as part of project planning to ensure no LGC entitlement is lost. The registration must occur before physical system operation begins, requiring coordination between design approval, procurement, installation schedules, and CER submission timelines. Delaying registration

until after system commissioning is a common error that eliminates months of certificate revenue.

How do LGCs differ from other renewable certificate pathways such as STCs and REGOs?

LGCs, Small-scale Technology Certificates (STCs), and Renewable Electricity Guarantees of Origin (REGOs) are distinct instruments with different eligibility, creation, and use rules. LGCs apply to systems larger than 100 kW (with proposed expansion to 1 MW from October 2026) and operate within the LRET. STCs apply to smaller systems under the Small-scale Renewable Energy Scheme. REGOs record renewable electricity attributes under a separate scheme from the Renewable Energy Target and can continue beyond the RET's 2030 end date. CER explicitly restricts double-creation: REGOs and LGCs cannot be issued for the same electricity generation. Certificate pathway selection depends on system capacity, technology, commissioning date, and intended claims. Our guidance on renewable certificate pathways helps distinguish these options.

What evidence and planning is needed to include LGC revenue in a solar investment case?

A credible investment case for solar PV with LGC proceeds requires separate treatment of energy savings, electricity sales revenue, and certificate proceeds. LGC quantity is determined by eligible generation registered with CER; price assumptions should be conservative and documented with a date to reflect market volatility. The case should distinguish guaranteed revenue (energy contracts with retailers) from market-dependent proceeds (LGC sales). Registration timing, CER eligibility confirmation, certificate retirement or sale strategy, and applicable quality criteria from GHG Protocol Scope 2 guidance should be documented. We assist by assessing certificate eligibility, supporting registration, modelling commercial scenarios with and without LGC proceeds, and advising on procurement strategy and due diligence for retirement or sale.

How significant is voluntary LGC retirement compared to the regulatory demand under the Renewable Energy Target?

Voluntary LGC retirement—where businesses retire LGCs to support environmental claims rather than to meet regulatory obligations—is growing rapidly. In 2022, almost 8 million LGCs were voluntarily surrendered, compared to approximately 33 million LGCs required annually under the Renewable Energy Target obligation. This represents roughly 24% of total LGC market demand coming from voluntary corporate sustainability programmes rather than regulatory compliance. This growth reflects increasing corporate commitments to renewable energy targets and net-zero goals. Understanding both obligation-driven demand (which supports baseline LGC pricing through 2030) and voluntary demand (which may be more price-sensitive) helps businesses time LGC sales and plan long-term renewable energy procurement strategies.

What role does Northmore Gordon play in LGC strategy, registration, and commercial management?

We support LGC value capture across project stages. During assessment and feasibility, we evaluate eligibility, system capacity, and LGC quantity projections. Before investment approval, it builds investment cases that separate energy, tariff, and certificate revenue with transparent assumptions. We coordinate early CER registration to preserve LGC entitlements from day one. Through moREnewable100 and broader renewable certificate services, we assist with procurement strategy, retirement decisions, due-diligence on contractual instruments, and alignment with corporate sustainability frameworks such as RE100 and SBTi. We also provide measurement and verification support to establish eligible generation and supply engineering and commercial assessment for scheme compliance.