



Leveraging short-term power purchase agreements for local energy resilience

A case study of Swartland Municipality's
Darling Green Solar Project



Main insights

1

Short-term power purchase agreements (PPAs) offer flexibility and immediate benefits to off-takers (like municipalities) and developers. PPAs allow short-term off-takers to access surplus renewable energy without long-term financial commitments, while developers secure interim revenue during the project's development phases.

2

Adherence to the Municipal Finance Management Act (MFMA) ensures sustainability of renewable energy projects. Following MFMA guidelines helps municipalities or other government entities align their energy procurement with regulatory frameworks, guaranteeing financial sustainability and fostering public trust in renewable energy projects.

3

Multi-phased renewable energy projects balance immediate needs and future scalability. The Darling Solar project's two-phase approach enabled the municipality to meet short-term energy demands while planning for future grid integration and capacity expansion.

4

Municipal-led renewable energy projects can drive local economic development and enhance energy resilience. Projects like the Darling Solar initiative demonstrate how municipalities can use renewable energy solutions to improve energy security, boost local economy, and reduce reliance on traditional power sources.





List of abbreviations

DGU	Darling Green Utility
IPP	Independent Power Producer
MW	Megawatt
MFMA	Municipal Finance Management Act
PPA	Power Purchase Agreement
ROI	Return on investment
SPS	Sustainable Power Solutions



2

Purpose

This case study examines the development of a **1MW solar energy project in Swartland Municipality**, led by Darling Green Utility in partnership with Sustainable Power Solutions (SPS) and TouchPoint Energy.

The project began with a 1MW solar plant, which has been developed and connected to the municipal grid. An additional 5MW is planned for future development, with SPS intending to connect it directly to Eskom.

The Swartland Municipality utilised provisions within the Local Government: MFMA to enable this approach, showcasing how municipalities can incorporate renewable energy into their systems while collaborating with private developers. Short-term PPAs offer municipalities a flexible solution to secure energy during early project stages when private developers have surplus capacity.

This case study highlights how such agreements can reduce reliance on traditional grid energy, and foster collaboration. By documenting the processes, challenges, and outcomes, the study offers insights for municipalities exploring renewable energy projects, particularly those with resource constraints or in need of transitional energy solutions.

The case study is written for:



Public entities – It provides practical insights into how public entities can use the Local Government: MFMA to get renewable energy by adopting short-term PPAs, addressing immediate challenges and fostering collaboration with private developers.



Municipalities – It offers a model for reducing reliance on Eskom and enhancing energy resilience.



Private developers and energy traders – It showcases how surplus capacity can be effectively utilised, creating mutually beneficial partnerships with public entities.

The Swartland Municipality project serves as a roadmap for replicating this approach.



3 Background

Swartland Municipality, located in the Western Cape, is experiencing **growing energy demands due to expanding residential and commercial developments**. As with many municipalities in South Africa, it faces challenges in securing a reliable and affordable energy supply.

To address this, the municipality issued a tender, requesting proposals for the supply of renewable solar energy to the town of Darling through a three-year contract at a tariff lower than Eskom's rates.

Darling Green Utility (DGU) responded to this request and partnered with SPS and TouchPoint Energy as technical representatives to implement the project. The result was a 6MW solar energy project, developed in phases, with the first 1MW solar plant supplying power to Swartland Municipality under a short-term PPA. This agreement allowed the municipality to procure clean energy while supporting renewable energy integration into its local grid. The Swartland Municipality project stands as an example of how municipalities can use provisions within the Local Government: MFMA to enable public-private partnerships in renewable energy.

According to Section 33 of the MFMA, municipalities can enter into contracts that impose financial obligations beyond a financial year, but agreements exceeding three years require public consultation, recommendations from National and Provincial Treasury, and council approval to ensure financial and economic benefits before finalisation.

This case study highlights the potential of short-term PPAs to support energy resilience in municipalities, offering a practical model for other local governments facing similar challenges. By leveraging surplus energy and engaging with independent power producers (IPPs), municipalities can begin integrating renewable energy solutions into their systems sooner, addressing immediate energy needs and contributing to long-term sustainability goals.

4 Short-term PPAs

Why short-term PPAs offer a better fit for public entities

Long-term PPAs, typically lasting 15–25 years, often impose rigid financial and regulatory commitments that can be challenging for municipalities. These agreements require approval from National Treasury and must align with long-term budget frameworks, which can delay implementation. Additionally, municipalities face risks associated with fluctuating electricity demand, regulatory shifts, and evolving energy technologies. A long-term PPA locks them into a fixed agreement, limiting their ability to adapt to new, potentially cheaper, or more efficient energy solutions in the future.

A short-term PPA allows the municipality to secure renewable energy during the early phases of the project without committing to a long-term financial obligation. Short-term PPAs, permitted for up to three years under the MFMA, enable municipalities to quickly integrate clean energy, mitigate load shedding risks, and evaluate future procurement options before considering long-term commitments.



How do short-term PPAs work?

Project development and contract design

In a short-term PPA, a municipality initiates a procurement process for energy supply, and private developers respond through a competitive bidding process. Once awarded, the selected supplier finalises the PPA, outlining key terms such as pricing, delivery schedules, and duration. These agreements provide a structured framework that ensures compliance with municipal regulations while allowing for efficient integration of renewable energy solutions.

Energy supply and distribution

The developer is responsible for installing and operating the energy infrastructure in line with agreed technical standards. The municipality integrates the energy into its grid to meet local demands or improve supply reliability.

Adaptability for changing needs

At the end of the contract period, the municipality must either initiate a new procurement process or undergo a formal review before considering an extension. Under Section 116 of the MFMA, municipalities cannot automatically extend contracts beyond their original terms without ensuring compliance with financial regulations and competitive procurement principles. If the municipality wishes to continue the arrangement without a long-term agreement, a new tender may be required to reflect current market conditions. This process allows municipalities to reassess their energy needs, explore updated pricing models, and adopt emerging technologies, ensuring alignment with evolving regulations and market conditions, while maintaining transparency and cost-effectiveness.

Benefits of short-term PPAs

Benefits for IPPs and developers

1

Revenue generation during initial phases

Short-term PPAs enable developers to monetise surplus energy during construction or commissioning phases of a project. For instance, the Darling solar plant's early output will be sold to Swartland Municipality while residential properties in the estate are still being built.

2

Accelerated return on investment (ROI)

Developers can quickly recover part of their investment by entering into short-term agreements, which is particularly advantageous for projects involving phased rollouts or smaller-scale infrastructure.

3

Market penetration and relationship building

Short-term PPAs enable IPPs, such as DGU, to build relationships with municipalities and other buyers. These agreements serve as a platform to demonstrate their capabilities, ultimately creating opportunities for larger-scale collaborations in the future.



1

Flexible access to renewable energy

Short-term PPAs offer municipalities an opportunity to quickly integrate renewable energy into their supply without committing to decades-long agreements. This flexibility is crucial for municipalities navigating policy changes or uncertain future demand.

2

Cost-effective power supply

By purchasing power from local renewable sources, municipalities can reduce reliance on Eskom and lower costs by securing additional capacity at more affordable rate. The tender for the Darling project required a three-year contract for the supply of solar energy at a tariff at least 10% lower than Eskom's Megaflex Local Authority Time of Use Active Energy Tariff, ensuring a cost-effective solution for municipalities.

3

Pilot for renewable energy adoption

Short-term PPAs provide municipalities with a low-risk way to evaluate the feasibility and benefits of renewable energy projects. Success stories like the Swartland Municipality's project can pave the way for broader renewable energy strategies and attract additional investment.



5

Lessons for municipalities

The success of the Darling solar project in provides valuable lessons for other municipalities seeking to integrate renewable energy solutions through **innovative mechanisms like short-term PPAs**.

By learning from this project, municipalities can position themselves as leaders in sustainable energy adoption while meeting immediate energy needs and boosting local economies.

1 The use of the MFMA

The MFMA provides the regulatory framework for municipalities to engage in contractual agreements, including PPAs, while ensuring transparency and accountability in financial decision-making. Key lessons include:

- **Understanding procurement processes:** Municipalities must ensure that the procurement of energy aligns with MFMA guidelines. While short-term PPAs may require a competitive bidding process, municipalities are still responsible for ensuring that the terms of the agreement comply with financial management principles. This includes making sure that the municipality's financial commitments under the PPA are sustainable and aligned with their budgetary constraints.
- **Mitigating financial risks:** By adhering to MFMA provisions, municipalities can minimise financial risks associated with renewable energy projects. The short-term nature of the PPA in the Darling project allowed the municipality to manage costs effectively while evaluating the feasibility of a long-term renewable energy strategy.

2 The strategic use of short-term PPAs

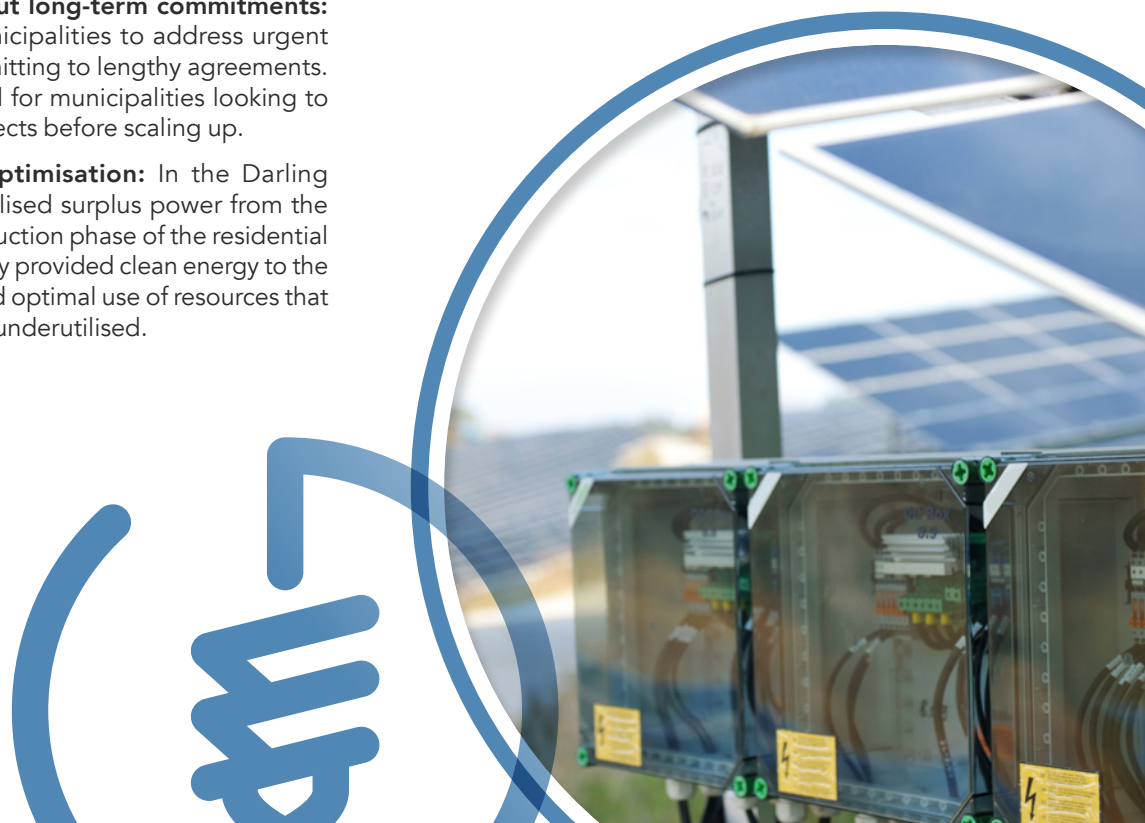
Short-term PPAs offer municipalities a flexible and pragmatic approach to renewable energy procurement. Key takeaways include:

- **Immediate benefits without long-term commitments:** Short-term PPAs allow municipalities to address urgent energy needs without committing to lengthy agreements. This is particularly beneficial for municipalities looking to pilot renewable energy projects before scaling up.
- **Revenue and resource optimisation:** In the Darling project, the municipality utilised surplus power from the solar plant during the construction phase of the residential estate. This approach not only provided clean energy to the municipality but also ensured optimal use of resources that might otherwise have been underutilised.

3 Building internal capacity for renewable energy projects

Municipalities must invest in building internal capacity to effectively manage renewable energy projects and find sustainable solutions for long-term energy supply. This is essential not only for the success of current projects but also for addressing future energy demands.

- **Policy and technical expertise:** Municipalities need staff with the technical knowledge and policy expertise to evaluate renewable energy projects effectively. This includes understanding the technical aspects of project development, navigating procurement processes, and ensuring compliance with financial regulations. Having skilled staff is crucial to securing long-term energy solutions, particularly as municipalities look to transition away from traditional energy sources and explore more sustainable options.
- **Community engagement and support:** Gaining buy-in from the local community is key for the success of any renewable energy project. Municipalities should foster strong relationships with residents and local stakeholders to ensure the project addresses community needs, such as improving energy access or promoting economic development. Swartland Municipality's leadership in aligning the solar project with local priorities, like reducing energy costs and supporting job creation, offers valuable lessons for other municipalities aiming to introduce renewable energy solutions.





For more information and support contact

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