Call for virtual power plant pilot sandbox participation

Established in 2010, GreenCape is a non-profit organisation that drives the widespread adoption of economically viable green economy solutions from South Africa. GreenCape works with businesses, investors, academia, and government to unlock the investment and employment potential of green technologies and services, and to support a transition to a resilient green economy. Our aim is to be globally relevant in driving the uptake of green economy infrastructure solutions in the developing world.

GreenCape, in partnership with Integrate to Zero and the Global Grids Catalyst, invites interested companies capable of operating Virtual Power Plants (VPPs) ("VPP providers") to apply to participate in a VPP Regulatory Sandbox Pilot. The pilot will explore how private sector VPPs can operate within South African municipal distribution networks, while considering municipal governance, regulatory requirements and technical constraints. The City of Cape Town is collaborating with GreenCape for the pilot to better understand the capacity, flexibility and shared value that private sector VPPs could bring to electricity utilities.

BACKGROUND TO THE PROJECT

South Africa's recent years of loadshedding have left behind a significant amount of underutilised, privately owned electricity infrastructure. Virtual power plants (VPPs) offer electricity distributors, VPP providers, and customers a way to share the value of distributed generation. South Africa has more than 6 GW of distributed generation that can offer additional value beyond load-shedding backup.

A VPP links many small energy resources — rooftop solar, batteries, smart appliances — into one coordinated system. The VPP aggregates and dispatches them together, so they behave like a single, flexible power plant that can support the grid on demand.

A sandbox is a controlled, time-bound space where new models can be tested under relaxed rules and close supervision. It allows GreenCape to trial VPP mechanisms safely, learn quickly, and refine the approach before wider rollout. The pilot will use a sandbox environment to test VPPs.

Although the pilot is limited to the City of Cape Town's distribution grid, its ultimate outcome is to inform electricity distributors and municipalities in South Africa about the ideal framework and model to enable VPPs in their distribution networks. It will also help build a common understanding of the value VPPs can provide to electricity distributors and build trust in their ability to deliver services.

A successful pilot will inform the City of Cape Town and other municipalities what to consider for future VPP use cases, how to contract VPPs, and what potential incentives could share the value of VPPs within their distribution grid. Further benefits envisioned are the increased utilisation of existing renewable energy resources and enhanced grid efficiency, leading to cleaner, cheaper and more reliable power in South African Municipalities.

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Refer to the GreenCape website for director details

Details of the pilot

The successful partners or VPP providers will aggregate and remotely control customer-side assets, such as embedded generation. The VPP providers are responsible for recruiting and contracting their own customers, obtaining consent to control nominated assets, installing the metering, telemetry and control infrastructure needed to measure and verify each response in line with international good practice, and providing evidence and confirmation of the volume of each response.

The primary use case will be to shift customer electricity consumption out of peak periods and into off-peak periods[1] on instruction. Later phases of the programme could include additional aggregated services under the same agreement.

Conceptually, throughout the pilot, instructions for certain aggregated use cases will be issued; once the results have been measured and verified, the VPP providers will receive incentives for the value they created. Incentives will be provided only to the VPP providers that participate in the pilot. The VPP providers are responsible for any further customer interface. Because this is a pilot programme, incentive volumes and values may be adjusted to suit the use case or mechanism being tested; any adjustments will be done in consultation with the panel of participants and partnering organisations and will apply to all participants on the same terms unless otherwise stated. The primary technology to be utilised is residential battery energy storage, but the pilot is not limited to that.

The incentive funding is limited and will be issued to VPP providers through two funding pools:

- Primary use case: Shifting peak energy to off-peak energy use.
- Secondary use cases (but not limited to): Instantaneous dispatching, Voltage control, Ancillary services, etc.

A secondary funding pool may be made available for VPP providers to enable the pilot. This could include technical infrastructure for the VPP to onboard customers, for example City-approved AMI meter, other measurement and control requirements, etc.

A maximum amount of funding per pilot participant will be established, and once that pool of funding is exhausted, no additional funds will be made available.

To understand the capability of the VPP providers as part of the proposal, the following details must be included as part of the proposal under the returnables in the submission requirements:

1. VPP framework, to help us understand how your solution would work. Highlighting the technology, software and general architecture of your solution offering. A technical description of your VPP, to help us understand how your solution would work: the equipment you can control (makes and models), your control software and how it communicates with that equipment, and the telemetry you collect.

[1] Peak and Off-Peak as defined in Eskom Schedule of Standards Prices: https://www.eskom.co.za/distribution/wp-content/uploads/2026/03/20260226-Schedule-of-standard-prices-for-01-April-2026-Public-1.pdf

2. The use cases your solution can solve.
3. Details on how your solution would execute primary use cases (peak-to-off-peak shifting).
4. Details on how your solution would execute secondary use cases; bidders are also welcome to include any potential use cases not listed.
5. Indication of the number of customers you already have signed up or intend to sign up for the pilot. If there are specific geographical areas you will be focusing on for recruiting customers, include details on your focus areas.
6. Please include a paragraph or two that describes the value proposition of your solution to the City of Cape Town/South African Municipalities

Providers are encouraged to describe their full-service offering. Evaluation will focus on the provider's ability to execute the pilot, not on the number of customers or volumes it can deliver, and submissions will not be scored down on the basis of proposed quantities. The final number of participating customers may be adjusted, up or down, depending on the pilot budget.

A minimum of one VPP provider is required to enable the pilot, and a maximum of four will be chosen to participate. Appointment to the pilot does not give any VPP provider an exclusive right to provide VPP services in the City's distribution network.

LOCATION

City of Cape Town (specifically the City of Cape Town's distribution grid).

Key dates

15 November 2026 – Submissions close
30 November 2026 – Appointment of panel of participants
December 2026 – January 2027: Set-up and testing
February 2027 – September 2027: Incentive run
These dates are indicative and may be adjusted based on the pilot's success.

GENERAL INFORMATION

1. Any submissions after the closing date and time shall **not** be considered.
2. GreenCape reserves the right to cancel the pilot submission process without notice at any time and not make any appointment on this project, without attracting any liability of whatsoever nature to any party at all.
3. Each VPP provider must include in its proposal a confirmation that it does not and will not have any actual or potential conflict of interest in submitting its quotation (see Declaration of Interest Attached as Annexure B to this call).
4. Functionality assessment will be based on the following criteria:

Based on the proposal received

5.1. Compliance: Equipment alignment to City of Cape Town's SSEG requirements process
5.2. Measurement and Verification ability
5.3. Dispatch and controllability confidence
5.4. Portfolio readiness
5.5. Ability to execute primary use case
5.6. Ability to execute secondary use cases

5.7. Team and delivery capacity

5. The awarding of this project or any part thereof to a bidder will be communicated in writing by GreenCape, but shall be subject to a service level agreement, non-disclosure and other terms as may be determined by the funder(s), which the successful bidder will be expected to enter into with GreenCape.

6. The successful proposal submitted by the bidder(s) will form part of the service level agreement and may not be amended at any time after acceptance unless agreed to in writing by GreenCape and the service provider.

7. The appointed bidder will be expected to comply, amongst others, with the following:

8.1. any applicable health and safety rules and regulations, including, but not limited to, the provisions of the Occupational Health and Safety Act No. 85 of 1993;

8.2. registration and good standing with the Commissioner for Compensation for Occupational Injuries and Diseases and having the necessary employer's liability insurance in respect of its employees/agents in line with the provisions of the Compensation for Occupational Injuries and Diseases Act No. 130 of 1993, as amended; and

8.3. to have acceptable insurance policies in place in line with general industry standards, in respect of at least the usual risks of public liability and health and safety, as well as any other required to sufficiently cover its liabilities in respect of the services (if any) which policies it shall provide to GreenCape upon request

8.4. to comply with legislation relating to corruption, bribery, prevention of terrorism funding and any other legislation which may be applicable to it (which is also applicable during the bidding process).

8.5. provisions of the grant agreement in terms of which subcontractors/service providers must be appointed (if any).

9. GreenCape will have no contractual relationship with individual customers, and the VPP providers will have no contractual relationship with the City of Cape Town.

SUBMISSION REQUIREMENTS

Interested organisations are invited to submit a bid for the outlined scope of work that should include the following:

1. Proposals for the work, broken down by activity
2. A brief work plan that outlines the proposed approach and activities that would be taken to achieve the required scope of work. The work plan should include:
    - the proposed activities to achieve the required scope of work
    - the timeframes for each activity
    - a brief description of the proposed approach in line with the requirements highlighted in the scope of work,
    - a risk register and mitigation plan that addresses any key project risks.
    - CVs of proposed team and team structure/organogram
3. Company profile, indicating previous projects with similar requirements
4. Tax Clearance Certificate
5. Company Registration Certificate
6. Declaration of Interest
7. BEE credentials with certificate or affidavit as relevant
8. Letter of good standing from the Compensation Fund in South Africa (COID)

9. Proof of required insurances

GreenCape reserves the right to request further due diligence documentation from the bidders.

Please email the above documentation to VPP@green-cape.co.za by 15 November using the reference: VPP Pilot. Please note that a failure to submit any of the required documentation could result in the bidder being excluded from the tender process.

For any queries related to this call, please email: VPP@green-cape.co.za
Please also share your interest in receiving further communication and clarifying notes on the call for applications.

Annexure B: Declaration of Conflict of Interest

Any legal person/s having a relationship with persons employed by The GreenCape Sector Development Agency or any of the funders listed in this RFQ may make an offer/s in terms of this invitation to bid. In view of the possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons connected with or related to The GreenCape Sector Development Agency or any of the funders listed in this RFQ, it is required that the bidder or his/her authorized representative declare his/her interest as required below.

1. Have you previously provided services/products to The GreenCape Sector Development Agency or any of the funders listed in this RFQ?

YES NO
If yes, please furnish further particulars:

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2. Do you have any relationship (family, friend or otherwise) with employees of The GreenCape Sector Development Agency or any of the funders listed in this RFQ?

YES NO
If yes, please furnish further particulars:

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3. Were you previously employed by the GreenCape Sector Development Agency or any of the funders listed in this RFQ?

YES NO
If yes, please specify further details of previous employment:

4. Please provide details of any other positions that you currently hold that could be of relevance to assessing conflict of interest for purposes of this project (e.g. directorships, partnerships, trusteeships, shareholdings, etc.):

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_____

I am aware that in the event of not accurately declaring any of the above, The GreenCape Sector Development Agency is entitled to terminate the agreement and take any further action it deems necessary.

I hereby confirm that all the information provided above is true and correct.

SIGNATURE	DATE
FULL NAME	CAPACITY