FISH HOEK VALLEY RATEPAYERS & RESIDENTS ASSOCIATION

(Incorporating Fish Hoek, Clovelly and Sun Valley)

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Web : https://www.fishhoekratepayers.com/ Facebook : www.facebook.com/FHVRRA/

TO:

https://www.capetown.gov.za/ layouts/15/WebFeedback.SharePoint/webfeedback.aspx?id=%200ce0c5b6-1341-4e75-80c6-a32c87046ccc

SUBJECT: INNOVATIVE SUSTAINABLE ENERGY SOLUTION

DUE DATE: 14 JUNE 2019

1. **DISCUSSION**

For cleaner, sustainable, renewable energy using smart street poles, smarter metering, molecular solar thermal energy storage, demand balancing, mini-grids using the Internet of Things while the City fights in the courts for the right to procure electricity from Independent Power Producers. The form is here (copied below):

http://resource.capetown.gov.za/documentcentre/Documents/Forms,%20notices,%20tariffs% 20and%20lists/Innovative%20Sustainable%20Energy%20RFI_Proposal%20Template.pdf

- 1.1. Please describe your solution and how your organisation would address some or all of the points outlined in the RFI.
 - Include proposed uses and / or services to be delivered
 - List which assets your solution would repurpose (this can be one, some or all)
 - If it is a new application, explain how it will function with current infrastructure or processes

We are making two suggestions for the City to include when evaluating this RFI for the production of an associated tender. The asset associated with:

1st Suggestion: is a day-night sensing switch; and

 2^{nd} Suggestion: is to upgrade the pre-paid meters in businesses and residences.

With the latest proposed amendments to the Electricity Regulation Act #4 of 2006, anything with an installed generation capacity of below one (1) MW will not need to be registered, arguably not connected to the national grid (use-of-system agreement), which would be a great pity. Multiple small scaled electricity generators (SSEGs) have the potential of lowering the City's reliance upon the ever increasing price of Eskom's power. However, smart meters are needed to manage this. Although an equitable reverse charging mechanism needs to be agreed (SSEGs are expensive, especially if reserve capacity is built-in), this reverse tariff could be at the Eskom tariff to the City (to which the City adds between 28% and 35% onto the residential electricity tariff) and be more reliable due to no single point of failure, including Eskom's grid. A smart meter could stop the flow coming from the residence or commercial building (disconnect) so that the City's Electricity Department could work safely on the line.

1.2. Does your solution require additional in-kind City resources (e.g. staff time, technology, access to other City-owned assets, etc.)?

1st Suggestion: No - As the City's Electricity Department already has a night shift, we recommend that existing staff time involves using a check list to see which lights are not working instead of switching the lights on during the daytime and checking. The day-night sensing switches will not allow the wasteful use of electricity during daylight hours.

2nd Suggestion: No - Smart pre-paid meters will allow the City to remotely switch off (disconnect) any sources of electricity that feed the City's electrical grid thus saving the expense of notifying everyone affected. This will also improve the safety of any electricians needing to work on electrical lines in the area.

1.3. Please provide a list of what you think the City would be responsible for versus what your organisation would provide.

The City will remain responsible.

1.4. Explain how your proposed solution benefits the City and residents.

1st Suggestion: It is just wasteful to turn-on lights during daytime. Testing for burnt-out lights should be conducted at night time only.

2nd Suggestion: Being able to remotely switch-off smart pre-paid meters from sources of electricity that feed the City's electrical grid provides saving the expense of notifying everyone affected. This will also improve the safety of any electricians needing to work on electrical lines in an area of unregistered, or small scaled electricity generation (SSEG) not switched-off.

- 1.5. Has your solution ever been implemented before? If yes, please list where your solution has been implemented and the results of each deployment.
- 1st Suggestion:

2nd Suggestion: Enbaya Prepaid Meters (Pty) Ltd¹ can remotely disconnect the connection to the grid, called unit separation by Smart Energy International, ² and bring load back onto the grid in a phased fashion after load shedding. MidCity Utilities ³ can switch off certain appliances, such as everyone's geyser during peak demand periods.

- 1.6. Would you need to partner with any other organisations or firms to deliver your solution?
- No City tenders will be needed to deliver both solutions.
- 1.7. Based on your understanding of the context and areas of interest, what challenges or areas of concern do you have?

1st Suggestion: A changed mind-set would be required of the City.

2nd Suggestion: The City needs to consider that all pre-paid meters are a sunk cost. Get over it and install proper smart prepaid meters.

1.8. Do you have any additional information you would like to include in this RFI?

No thanks

¹ <u>http://www.prepaidmeters.co.za/resources/articles/smart-metering-its-functionality</u>

² <u>https://www.smart-energy.com/industry-sectors/energy-grid-management/remote-disconnect-and-prepayment-metering/</u>

³ <u>http://www.midcityutilities.co.za/home/</u>

1.9. What would the high-level financial model of your proposal look like?

See the tender submissions.

1.10. What is the timeline for the implementation of your solution?

As quickly as budget allows

1.11. Would you be willing to partner with the City and would there be a cost involved? Please give detail of the costs, ensuring that you consider the financial and other regulations and Acts governing municipalities.

Examples of Financial and other regulations and Acts governing municipalities:

- Municipal Finance Management Act
- Municipal Systems Act

No, not-applicable

Submit here:

https://www.capetown.gov.za/ layouts/15/WebFeedback.SharePoint/webfeedback.aspx?id= %200ce0c5b6-1341-4e75-80c6-a32c87046ccc

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DATE	6 June 2019