

Small Scale Embedded Generation in the Western Cape

The electricity supply crisis in South Africa has largely been stabilised. Municipalities now have space to look at sustainable energy solutions that will provide a reliable and secure supply of electricity into the future. Rapidly increasing electricity prices, significant decreases in the price of renewable energy and the economic impact of load shedding have created a large demand for viable alternatives energy sources. The clean energy revolution presents South Africa with an exciting opportunity to tackle numerous issues linked to the universal provision of safe and affordable energy to all citizens. Traditional energy development can be leapfrogged by transitioning directly to a more sustainable technology, while avoiding the dirty energy legacy of most developed countries.

1.1. An enabling environment for SSEG

Abundant sunshine across the South Africa means that solar energy offers a uniquely positioned solution. The relative affordability (increasingly so) and simplicity, of solar photovoltaic (PV) power means that almost anyone can install a solar PV system on their rooftop. The Western Cape Government and local municipalities have a chance to play a proactive role in the shifting energy landscape and have committed to doing so through the Energy Security Game Changer; contributing to a national solution to the energy issues while boosting the local economy.

1.2. The GreenCape Smart Electricity project - SSEG rules and regulations

The GreenCape Smart Electricity project has focused efforts to create an enabling environment for rooftop PV and other small scale embedded generation (SSEG) technologies in Western Cape, which could lead to the installation of more than 200MWp of rooftop installations in WC by end of 2019/20. The market in installation, operation and maintenance of rooftop PV is estimated at R2bn over the period 2016 to 2019, with the potential to create 3000 medium and low skilled jobs over the period.

To date, the programme has designed a generic municipal SSEG wireframe, raised awareness among municipalities of the likely technical impact on their grids as well as the potential impact on municipal revenue. The project has also highlighted the need for capacity building and support within municipalities. Table 1 displays a list of Municipalities that are allowing SSEG, have NERSA approved SSEG tariffs and are designing their own relevant rules, regulations and by-laws.



Table 1: Small Scale Embedded Generation in the Western Cape

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#	Municipality	Allow SSEG	SSEG tariffs	SSEG policies
1	Beaufort West	Yes	Yes	Council Resolution signed
2	Bergrivier	Yes	No	In progress
3	City of Cape Town	Yes	Yes	Yes
4	Drakenstein	Yes	Yes	Yes
5	George	Yes	Yes	Yes
6	Mossel Bay	Yes	Yes	Yes
7	Oudtshoorn	Yes	No	In progress
8	Overstrand	Yes	Yes	Yes
9	Stellenbosch	Yes	Yes	Yes
10	Swartland	Yes	Yes	Yes
11	Theewaterskloof	Yes	Yes	Yes
12	Langeberg	Yes	Yes	Yes
13	Breede Valley	Yes	Yes	Yes
14	Saldanha Bay	Yes	Submitted to NERSA	Yes
15	Witzenberg	Yes	In progress	Interim policy
16	Prince Albert	Yes	Council Resolution signed	Council Resolution signed
17	Laingsburg	Yes	Council Resolution signed	Council Resolution signed
18	Cederberg	Yes	Yes	In progress
19	Cape Agulhas	Yes	No	Yes
20	Kannaland	Yes	Submitted to NERSA	In progress
21	Hessequa	Yes	Submitted to NERSA	In progress

*Please note this is a live document that is constantly changing For the latest version please visit www.greencape.co.za

In addition, in order to ensure that the national policy does not deviate from the Western Cape approach, GreenCape's small scale embedded generation guidelines have been fed into the national Association of Municipal Electricity Utility's process as the accepted draft national small scale embedded generation regulation to be used by all Municipalities. To ensure that this process runs smoothly, GreenCape is working with South African Local Government Association (SALGA) and Association of Municipal Electricity Utilities to develop a national rollout strategy.