



City of Ekurhuleni Alternative and Renewable Energy Division

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EE and PV Interventions

Since 2015/2016 FY CoE has installed Solar PV rooftops on 9 buildings to a total of 2,830 kW, building light has been retrofitted to LED and occupational sensors are install.

Municipal gains and impact

- This is to reduce the usage of convectional energy and increase green energy.
- Reduce the use of coal and green house gas.

According to CoE Energy and Climate Change Strategy Energy plan of the City, 10% of energy consumption should be from Renewable energy.



Solar PV Rooftop Plants

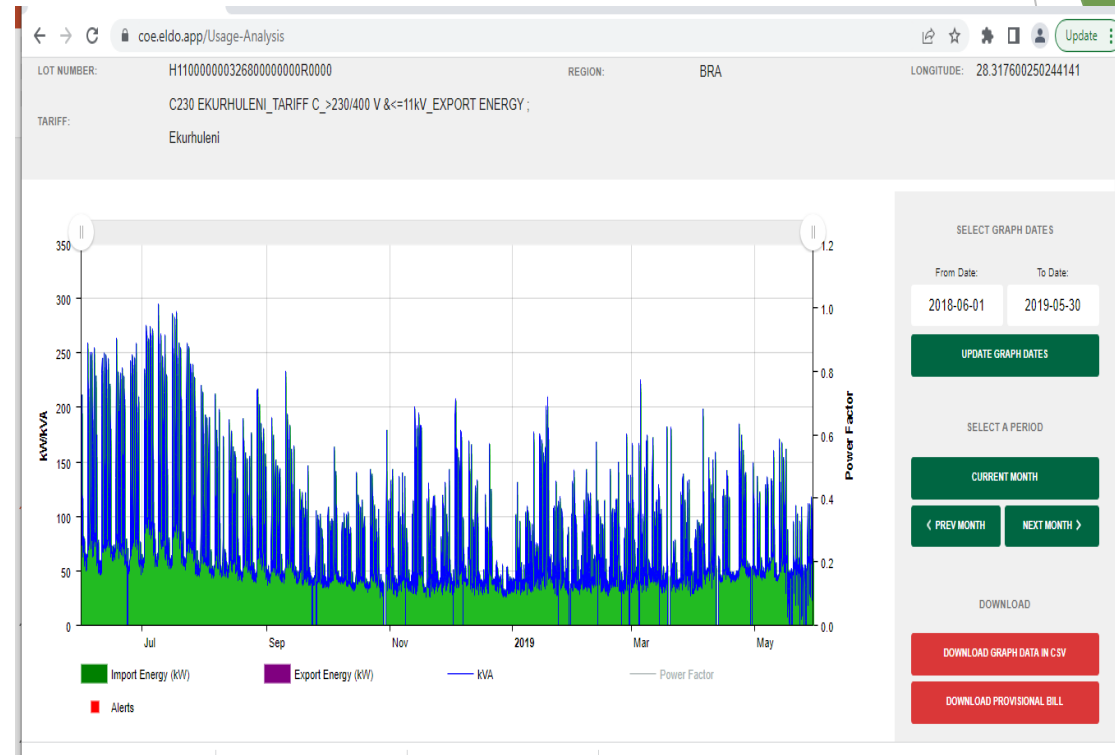
The Department has installed 9 Grid tie Solar PV Rooftop Plants since 2015/2016 FY at different municipal buildings. Targeted this building due to the availability of space at the roof. The breakdown per site is indicated below:

Financial Year	Location	Size	Commission date
2015/2016	Boksburg Civic Centre	250kW	23 June 2016
2016/2017	Springs Civic Centre	250kW	24 May 2017
2017/2018	Alberton Civic Centre	500kW	28 June 2018
2018/2019	Kempton Park Civic Centre	750kW	14 November 2018
2018/2019	Brakpan Civic Centre	250kW	17 May 2019
2020/2021	Tembisa 1 Civic Centre	250kW	30 June 2021
2020/2021	Bunny Park (Benoni)	80kW	30 June 2021
2021/2022	Nigel Civic Centre	250kW	30 June 2022
2021/2022	Swartkoppies multi purpose Centre	250kW	30 June 2022

Brakpan Civic Centre

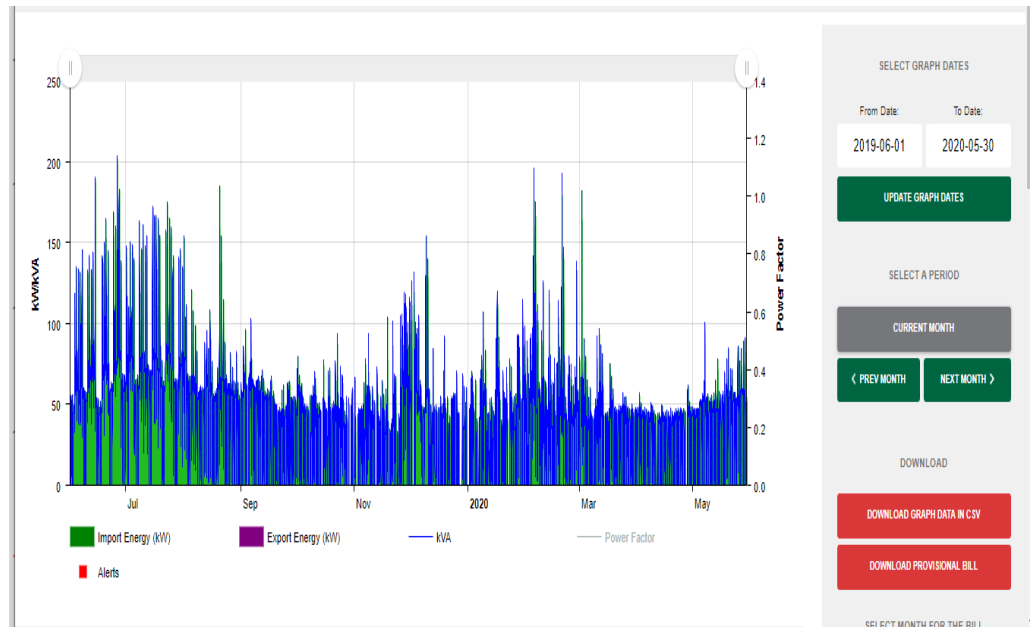
(Before Solar PV installation)

- Brakpan is mainly offices with clinic and library.
- More than 1000m²
- Consumption **before** Solar PV installation
- Period from 2018-06-01 to 2019-05-30
- Max kVA 280kVA

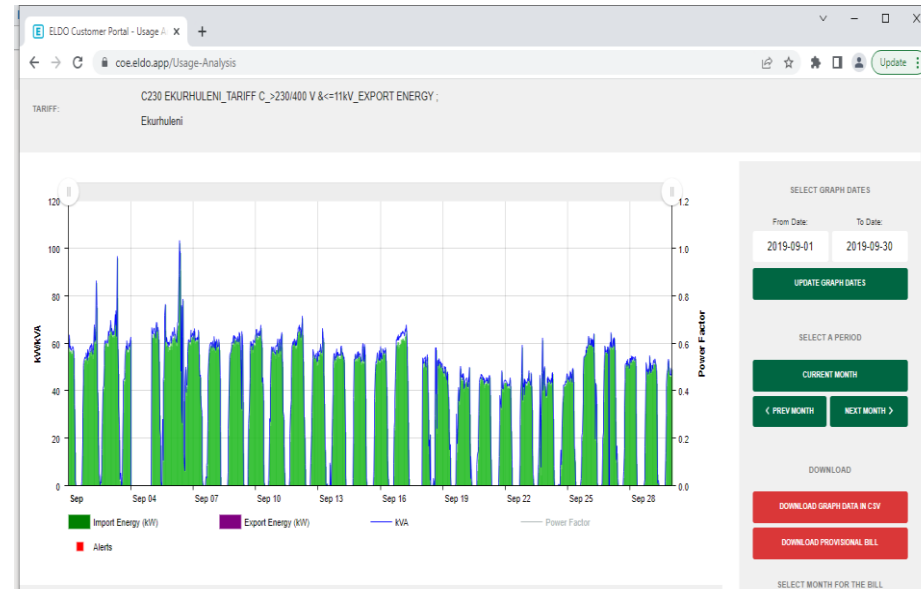
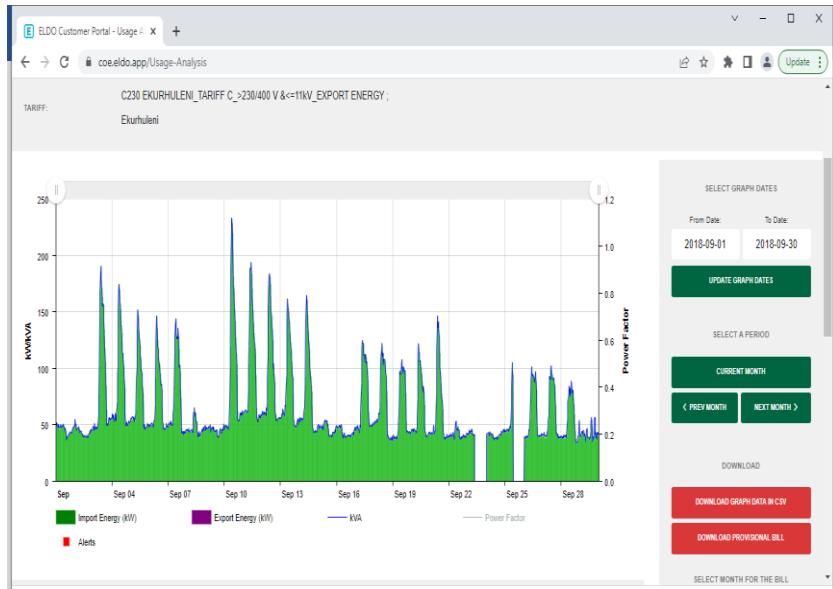


Brakpan Civic Centre (After Solar PV installation)

- Brakpan is mainly offices with clinic and library.
- More than 1000m²
- Consumption **after** 250kW Solar PV installation
- Period from 2019-06-01 to 2020-05-30
- Max kVA 200kVA



September Comparison



Conclusion and Lessons learned

- Before installation, you should consider the safety of the system, the strength of the building or structure and retrofit all the inefficient technology.
- Mounts your panels well and seal the roof well to prevent future damages.
- Have maintenance contract for panel cleaning and install some devised that can chase birds away without harming them.
- Awareness to facility management.

Thank you