

Web Seminar 03: Importance of Feedstock in Anaerobic Digestion

**Feedstock in South Africa:
Learnings, barriers and
opportunities**



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 857804. The sole responsibility for the content of this document lies with the authors. It does not necessarily reflect the opinion of the EU.



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GreenCape

- Non Profit Organisation
- Established in 2010
- Work to grow the green economy in South Africa and beyond



Energy Efficiency



Renewable Energy



Green Financing



WISP



Atlantis SEZ



Water



Agriculture



Waste



Resources



Sector Development



Buildings



Energy

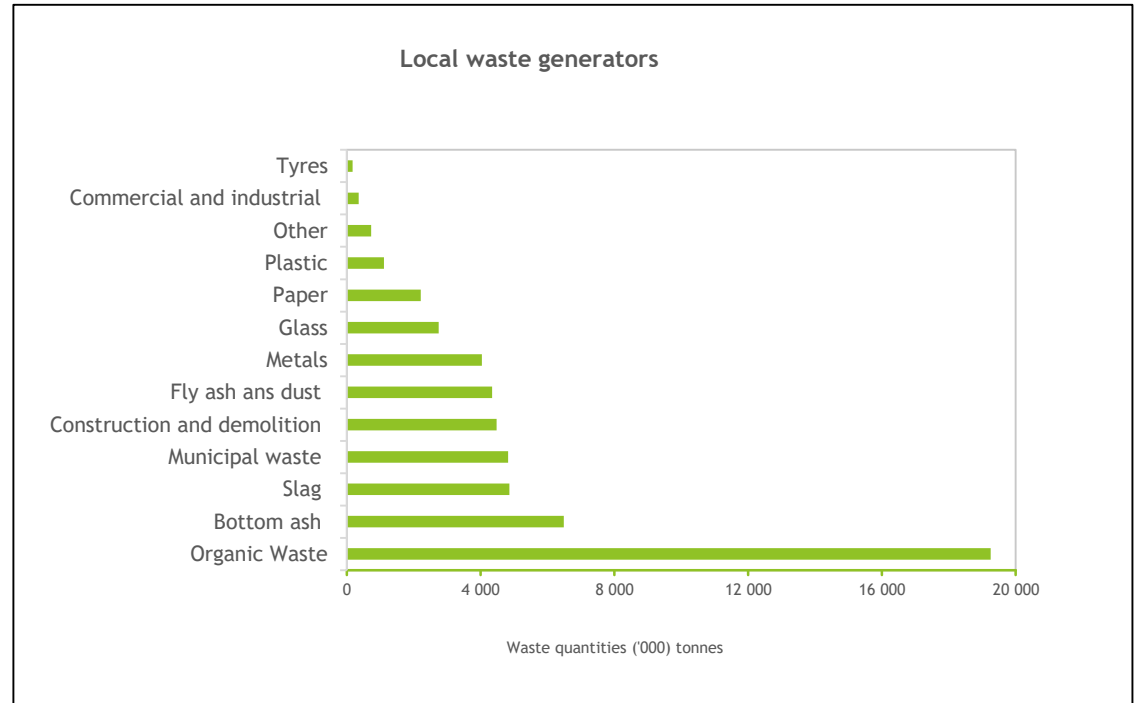


Skills Development



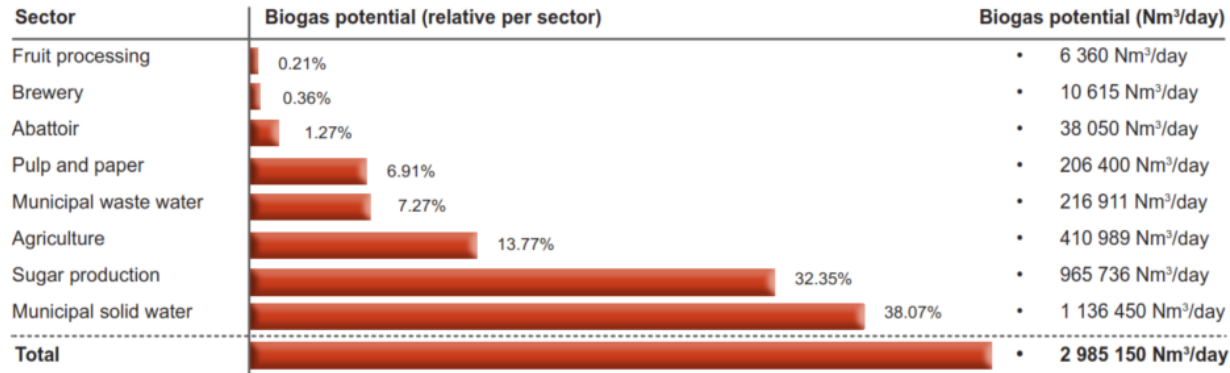
Feedstock potential in South Africa

- In 2017, RSA generated approximately 108 million tons of solid waste according to Department of Environmental Affairs. (2018). South Africa State of Waste Report 2018 (Vol. 10, Issue 2)



Feedstock potential in South Africa

- A study conducted by EcoMetrix Africa (Pty) Ltd in 2016 concluded that South Africa had biogas production potential around 3 million Nm³ per day.
- This is an estimation of the potential that feedstock holds for biogas in South Africa.





Opportunities for Feedstock

- Dairies & Feedlots
- Food processing (primary & secondary agri-processing)
- Piggeries
- Poultry farms
- Abattoirs
- Wineries and Breweries
- Hospitality



Opportunities for Feedstock



2018:

- Abattoir waste ban
- Liquid waste ban
- Organic waste ban
 - 50% in 5 years
 - 100% in 10 years



2023:

- 50% Organic waste to be diverted from landfill



2028:

- 100% Organic waste to be diverted from landfill



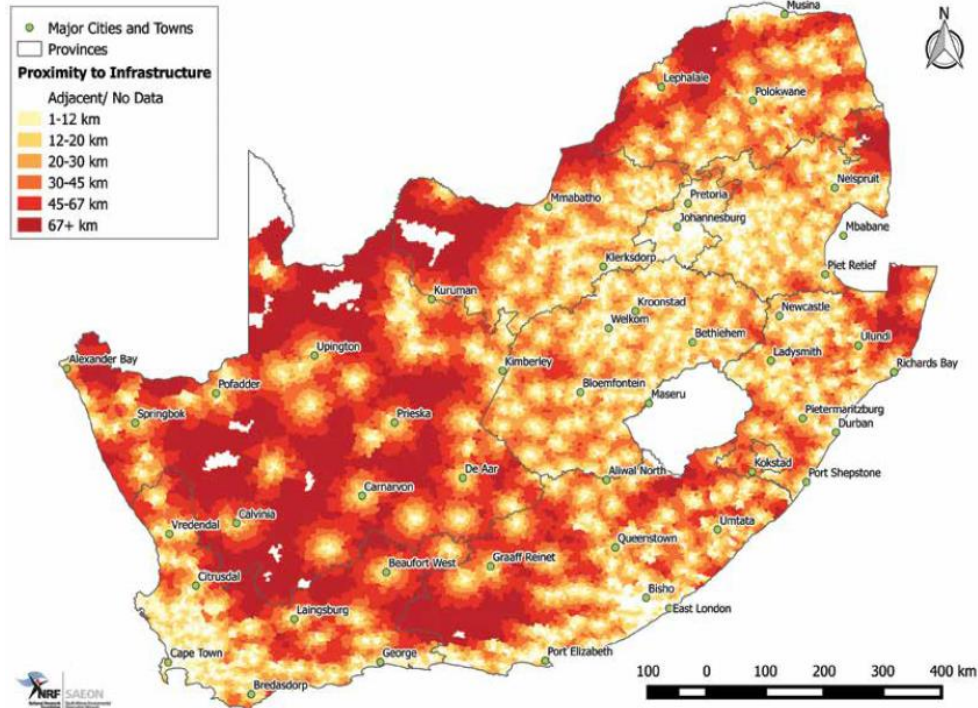


Barriers of Feedstock

- Quality of feedstock – Level of contamination
- Value of feedstock
 - Owner/Generator understanding of it's value
 - Market value
 - Competing technologies/barriers
- Location of feedstock
- Legislation – Environmental Impact Assessment

Barriers of Feedstock

- Proximity of the closest infrastructure (of all types) to each location in RSA as reported in 2016 Bio-Energy Atlas





Learnings from existing projects

- 26 projects implemented (GreenCape – non exhaustive list)
- 1 De-commissioned, 1 Not operational, 24 Operational (in some capacity)
- 4 Abattoirs, 3 bovine related, 2 piggeries, 3 poultry farm, 6 food processing, 2 Shopping Malls, 3 land rehabilitation (energy crops on non-arable land), 2 WWTW, 1 Integrated waste management facility



Conclusion

- South Africa holds a high potential for biogas due to feedstock potential
- No project if there if feedstock is not accessible and a good quality
- Learn from past mistakes
- Collaborative effect for successful implementation to add value to feedstock

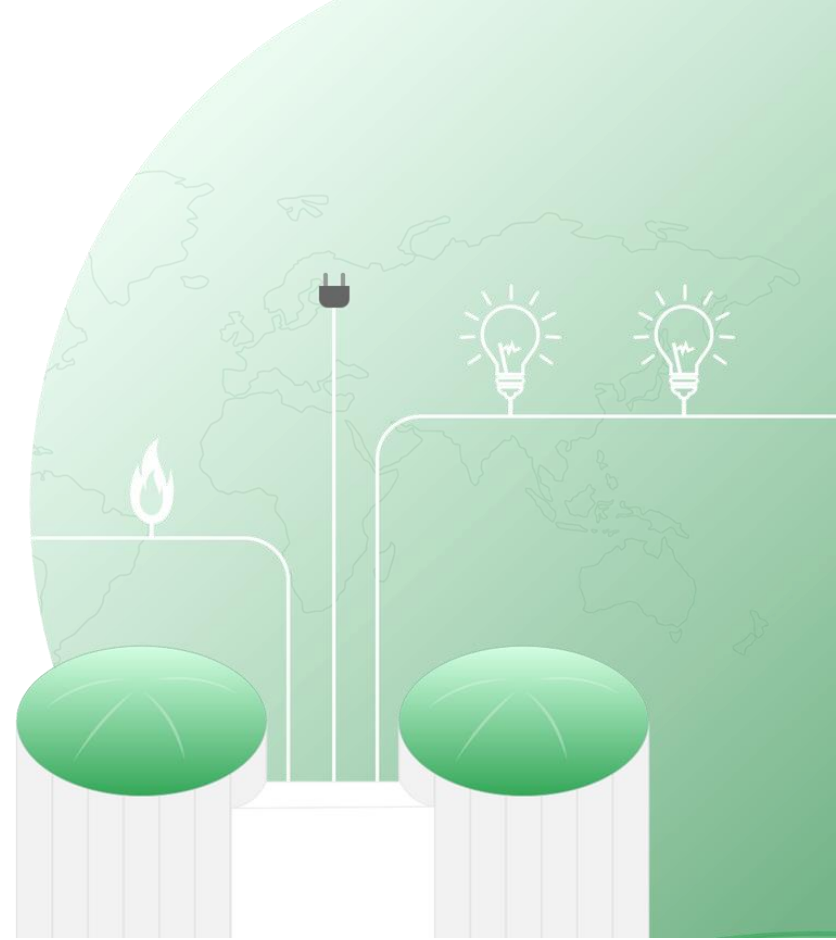
If you are interested to join the DiBiCoo, please contact us or follow us online!

Thank You
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