

BRONKHORSTSPRUIT BIOGAS PLANT (PTY) LTD

This is an EEP S&EA funded project. This project brings to Southern Africa and specifically South Africa a number of firsts e.g. Biogas, Independent Power Producers etc. The Bronkhorstspruit Biogas Plant is a 3.5 MW commercial Biogas electricity generator which is sited +-40km east of the city of Tshwane.



Project Summary

To bring the first commercial biogas plant to closure Bio2Watt had to convert a number of sceptical stakeholders which resulted in a prolonged development, the complexity of the transaction and especially the absence of a clear framework for small independent power producers just added to the delays and the legal costs, as legal agreements had to operate within the existing regulatory framework which was not always clear even for officials in charge of implementing them, the assistance provided by the National Energy Regulator of South Africa and the Department of Energy was important in this regard.

Amongst the key and most difficult hurdles were:

1. The wheeling agreement with the Metro which in its current form had never been done before
2. The first private deal where a large industrial demonstrates its commitment to sustainability by purchasing a percentage of its power from BBP rather than from the utility or a municipality
3. Being the first commercial/industrial scale biogas plant in South Africa in an environment where funding institutions were not familiar with this technology
4. Waste being used as a resource, where a culture of dumping at landfills has always been the easiest way to dispose of waste.

The plant has an initial life cycle of 20 years. It is an independent commercial enterprise that will contribute in diversifying the South African energy mix from coal, which today still forms over 90% of South Africa's total electricity generation capacity. It will also create long term permanent employment in peri-urban South Africa which currently experiences high levels of unemployment. The plant also serves as an important business model within South Africa because of its innovation and its ability to bring new sustainable commercial practises to finality despite a non-existent supportive regulatory framework.

Key enabling factors and bodies

This projects most important accomplishment has been the outstanding goodwill and co-operation received from a diverse set of stake holders. The stakeholders have been extremely diverse but have all helped in moving this project to fruition. The early stage support received from EEP S&EA was particularly helpful.

Measurement

The primary success has been the launch of the plant however equally important has been the interest generated within South Africa and the potential to expand this one plant into a new emerging industry within Southern Africa. Bio2Watt has been asked to attend and showcase the Bronkhorstspruit Biogas Project at various national forums in order to pave the way for a smoother process for entrepreneurs wanting to start similar projects. Bio2Watt is also a founding member of the newly created South African Biogas Industry Association, SABIA