

ADEME



Agence de l'Environnement  
et de la Maîtrise de l'Energie

Club ADEME  
International



SAGE ENGINEERING



 South Africa



**Intervention time**  
2019 - 2020



**Engaged workforce**  
10 people

**Thematic**



**Prestations provided**

Services  
Engineering/Design Office

**They said it...**

*The waste management organisation in Tshwane must become a general reference, environmentally speaking, but also socially speaking and energy-wise.*

## Assistance in the development of a waste managing policy

*The Tshwane (Pretoria) municipality, incorporated into the Gauteng province (which is the main economic actor in South Africa), has a population of around 3 million inhabitants.*

*SAGE Engineering's servicing consists in answering the municipality's needs in terms of technical assistance as well as providing advice concerning how to manage their 2,5 million tons of municipal waste which are currently discharged in a landfill space of the province.*

*Following the initial diagnosis phase of 2019, SAGE Engineering ensures that the municipality correctly implements Tshwane's strategy in improving how to manage their waste. The service provided by SAGE Engineering includes :*

- Assistance in defining the pricing policy of waste management
- Identifying and sorting of the various types of household waste present in Tshwane
- Re-organising land in terms of Waste Pickers' work areas and administration (informal sector of waste collection)
- Certification of the landfill activity in relation to the "Carbon Tax"
- A study of the optimisation of discharge management of waste; bio gases and leachates

## Collaborators

Izibani Consultancy / South African firm created in 2017. It aids SAGE Engineering in illustrating its competences in waste management throughout the region. This is mainly done thanks to the knowledge of South Africa's inner workings it has accumulated during 30 years of participating in various large and leading projects combining French and South African companies.

PROVADEMSE / In charge of characterising different household forms of litter.

In order to gain additional insight during the total duration of the project, SAGE Engineering has also included a certain number of renowned French companies which have shown interest in enabling development in South Africa in relation to these activities.

In addition, SAGE Engineering mainly works with the city of Tshwane, however it also enjoys the benefits of having precious contacts in the Gauteng province as well as in the Johannesburg municipality due to the possible plurality of this project.



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## French collaborators



## Foreign collaborators



## Follow up in France

- Sale made by French companies of services and export equipment (short-term biogas treatment, as well as long-term waste treatment equipment) ;
- Enactment of long-term cooperations and partnerships between French companies and the South African public sector, which is the beneficiary of the project (France Africa 2020 summit, presidential visit) ;
- Possible replicability of project due to that fact that South Africa disposes of nine metropolitan municipalities: Tshwane (including Pretoria), Johannesburg, Ekurhuleni (previously known as East Rand), Ethekewini (including Durban), Cape Town and Nelson Mandela (including Port Elizabeth), as well as more recently Maugeng (including Bloemfontein), Buffalo City (connected to East London) and Msunduzi (Pietermaritzburg).

The current waste management crisis unfortunately extends itself throughout South Africa as well as in neighbouring countries.

- Appraisal of expertise and French know-how in waste management;
- Illustration of French diplomacy and values through its aid to third world countries.
- Implementation of the idea of an environmentally sustainable city

## Follow up in South Africa

- Modernization of the infrastructures,
- Increase in service life of stockage centers as a consequence of waste recovery and recycling
- Formation of the project's 'ecosystem', which will serve as the foundation for many coalitions between various French and African actors
- Improvement of market conditions in South Africa, favourable for FDI and local investment ;
- General improvement in waste management organization in response to the training of personnel

## Environnemental impact

- Limited carbon footprint of the waste management operations
- Waste treatment done with solutions respectful of environmental sustainability guidelines.
- Overall improvement of the work conditions; safety conditions and healthcare of the Wastepickers



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With more than 130 members, the Club ADEME International assists the SMEs in its network in the development of innovative projects and international partnerships. The objective is to participate in the dissemination of French knowledge, by supporting the private and public sector in the ecological and energy transition sector in order to meet global environmental and climate challenges.

**More information : [www.clubinternational.ademe.fr](http://www.clubinternational.ademe.fr)**

