

Information Brochure For Malindi Project



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Head of the advisory board of Afrisol Energy Ltd
Specially made for Richard Soepenbergh
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Introduction Afrisol Energy Ltd for Soepenbergl Fertilizers BV/GmbH

Afrisol Energy Ltd started in the year 2010 and has continued to grow together with her business partners towards a sustainable future. We contribute to a sustainable future by re-designing the overall energy chain. We do this by sharing, daring and taking action from our office in Ngong. Energy is involved in all company processes and are thus directly influencing the profitability of our clients.

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Our expectation is that in the near future every m3 of manure will pass through a reactor before using it as a fertilizer. The advantage of using manure for energy production are:

- avoiding greenhouse gas emission (avoidance of environmental charges)
- production of biogas (self-supporting)
- utilizing available minerals (as a fertilizer)

Whatever the reason is, manure/digestate is an essential product for a sustainable society. Enough reason to contact us to find out the possibilities at your end. Our approach to waste management is common across all of our operations. However the practicalities of waste management do vary from region to region and even within regions due to conditions. Our common approach is to adopt the waste hierarchy of eliminate, reduce, reuse and recycle. We select final disposal options that include energy recovery.

About us

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Sustainable development in our projects and operations

Through experience we have learned that we must integrate early in our decision-making the interests and concerns of others, including our neighbours. This helps us deliver better projects, securing much needed energy for our customers and creating lasting benefits for communities. Environmental challenges are growing as the world's need for energy increases.

We help to meet the world's growing energy needs in economically, environmentally and socially

In Energy, we innovate continually, creating solutions to waste problems, especially as a result of climate change. Our teams regularly carry out projects such as renewing or building biogas installations or re-thinking the renovation, also as part of life-cycle management.

Mission

To provide renewable Bio-degradable Energy solutions for a greener healthy and wealthy Africa through utilization of locally available materials and God given resources

Core Values

We express our pride and passion by working closely together – with colleagues and customers. We support attempts to improve sustainability of working methods and end results through innovation and creativity. That is how we grow, both as a business and as professionals. Our business principles govern how we operate. We expect everyone working for us to uphold our core values of honesty, integrity, trust, freedom and respect for people.

CSR

Our clients expect sustainable solutions from us so we have to have a deeper understanding of how our actions affect the environment. We call that 'sustainability by design'. And it also drives how we manage our footprint. Afrisol 's ambition is to become carbon neutral during 2012.

We have a clear CSR strategy. The long-term goal is the achievement of our stated ambition to: play an active part in the sustainable development of the societies where we operate by acting responsibly with respect to:

- the environment at large, including mitigating and adapting the effects of climate change;
- our workplace and the employment of people;
- the market, our customers and our delivery of services;
- our business partners and suppliers of goods and services.

We do that by managing great projects and by developing innovative products that realise sustainable living and working environments. We thus operate in the midst of society and directly influence it, and with that comes great responsibility.

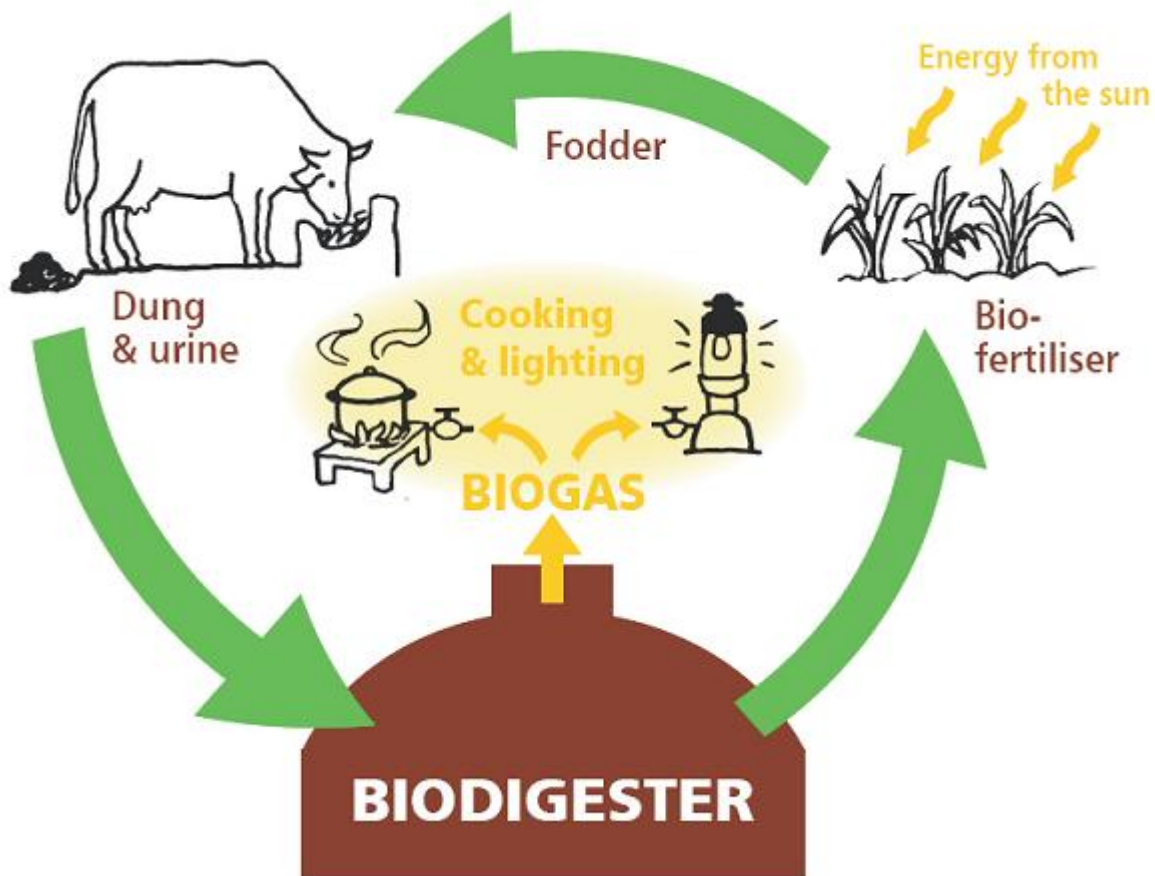
In everything we develop or create, we therefore take into account future generations. Our slogan "Keep our region green" therefore support our pay off and underline how we as a company make a difference. For our clients and for society, by 'Planning, Connecting, Respecting the future'.

The attention and demand for power generation from renewable sources will therefore only increase in the coming years.

Production of Biogas in Kenya

For plants with digester volumes ranging between 8m³ and 124m³ we spend 8 weeks to construct no matter the nature of the soil texture. For plants with multiple digesters with volume sizes ranging from 200m³ to over 1000m³ and above, the maximum construction period can be determined during data collection. In any case, it shall not exceed 6 months.

Biogas plants provide multiple benefits at the household, local, national, and global levels. These benefits can be classified according to their impact on gender, health, poverty, employment, and environment.



Process

Combining manure with grease traps, food waste, green waste, and more, our digesters maximize gas output and expand the opportunity for earning additional waste disposal revenue.

Process of Afrisol



Afrisol explains (**ADVISE**) the farmer about the potential of the biogas plant, then will determine where the plant will be installed (**DESIGN**). Then the plant is built (**BUILDING**). Finally Afrisol trains farmers to use (**AFTER SALES**).

Benefits of Biogas

Benefits for women:

Women express great satisfaction with biogas, particularly with the instant cooking it allows. Not only are time and labour for the collection of traditional cooking fuels and cleaning of cooking pots greatly reduced, but biogas is also much quicker and easier for cooking. Biogas is smokeless and does not require constant attention or blowing on the coals, as the use of wood fuel does. Women can put a pot on the burner and do other activities while the food is cooking. This workload reduction provides opportunities for women to embark on other activities, varying from earning additional income to extending childcare or self-development.

Benefits for health:

Noticeable improvements in the respiratory health and reductions in eye problems have been reported since the inception of the biogas programme. In some cases, older women who were no longer able to cook over an open fire were able to cook again with biogas. Better hygienic conditions are achieved through improved manure management and sanitation through toilets attached to the biogas plant. The concept of latrine and biogas promotion in one package originated from the perception that both applications share the same target group (women and children), have similar benefits (comfort, hygiene, and time-saving), and have comparable promotion aspects.

Financial and economic benefits:

The primary impact of biogas plants on poverty alleviation is the reduction of the economic and the financial costs expended on fuel for cooking and lighting, as well as the improvement of food security through increased agricultural yields. Users of biogas plants often manage to stay away from the poverty trap. Biogas addresses environmental limitations in such a way that it offers farmers a means to carve a living. By returning bio-slurry to the fields, depletion of nutrients and organic matter in the soil is reduced, as is pressure to expand and clear land for agricultural purposes. Biogas is produced on a sustainable basis, as the carbon dioxide associated with its combustion is reabsorbed in the process of growth of the fodder and food for animals and men, respectively. Therefore, by displacing traditional and fossil fuels, changing traditional manure management systems, and reducing the need for chemical fertiliser, biogas reduces greenhouse gas (GHG) emissions.

Team

The project management team ensures that the biogas facility is installed according to plan. The time span of the project depends on the number of digesters and volume to be installed. Our team is on site to do everything required to install the digesters, from building the tanks to equipping the digesters to installing the generator. We can do all of the work, or we can leave certain elements to the customer. Our tried and tested techniques and experience enables us to bring the best management to your project. Whatever you need to make the project work for you.

"We like to share our knowledge and experience but also our enthusiasm with our customers and the people from our network because to us being entrepreneurial means sharing, daring and taking action".

Afrisol Energy Ltd. led by a highly ambitious, industrious and hard working Chief Executive officer, Amos Nguru. Amos is a Bachelor of Science graduate from Jomo Kenyatta University of Agriculture and Technology (J.K.U.A.T) he has several working years in management position and renewable energy sector.



Foundation

Afrisol Energy Ltd builds biogas installations for Orphans homes and schools. We work together with Dutch donators and funds. Our projects contribute to an integrated regional development in the areas of health, welfare and education by saving on energy costs. Your donations are always welcome. You can donate money for one or more projects currently going on in the Nairobi area. If you are living in the Netherlands, you can make a tax deductible donation.



Advisory Board

Afrisol can advise on all aspects involved in the development, construction, optimization and operation of your biogas plant. We are every day engaged in many biogas plants and thus have a wealth of experience in all aspects relevant to the development, financing, construction and operation of biogas plants. The core of our business is the knowledge and expertise in the production of biogas. In other words, how do you get from a biogas plant biogas continuously possible quality at the lowest possible cost. That is what it is all about. The installation should run full load, 24 hours a day, 7 days a week so it will keep our region green!

Personal statement by Chris Veening, head of the advisory board Afrisol Energy Ltd

Some Pictures that can be used for communication purposes
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