

Rural Electrification

Novis developed a complete concept for the electrification of rural communities.

It is based on a close collaboration with villagers and aims for sustainable development of regions in development.

Small-scale Biomass to Electricity solutions for rural Electrification

Biomass has been identified to be the most viable solution for rural electrification projects.

Novis chooses a 2-stage biogas plant for electricity generation. This proven technology guarantees a stable and reliable process.

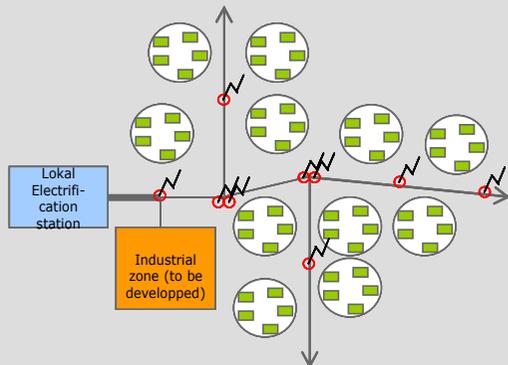
The plant runs on a wide range of materials, from banana stems to peanut shells. The setup is simple and can be composed out of locally produced plastic containers with additional equipment "Made in Germany".

2-stage Digestion

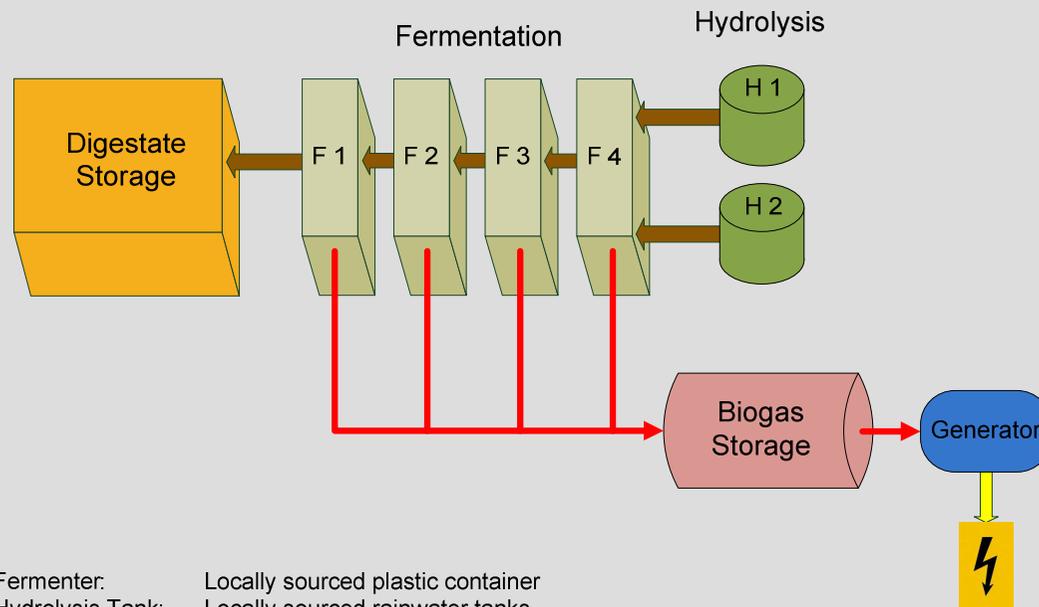
Advantages of this technology:

1. Simple, reliable technology, which can be adapted easily due to its modular design out of locally available plastic containers
2. high biogas yield
3. superior stability of the process due to optimal conditions for the different bacteria
4. suitable for varying and mixed feedstock i.e.:
 - banana stems
 - manure
 - agricultural waste
 - household bio waste
 - ...

Rural Electrification and SIZ[®]



Small-scale 2-stage Biogas Powerplant (30 ... 60 kW)



Fermenter: Locally sourced plastic container
 Hydrolysis Tank: Locally sourced rainwater tanks
 Digestate Storage: Depression lined with plastic sheet
 Biogas Storage: Inflatable gas bag from Germany



SIZ[®] ... Small Industrial Zone (concept for sustainable development on the basis of electrification)

Bagasse
Banana Stem
Bio Waste
Cashew Shells
Cocoa Shells
Cotton Stalk
Dairy Production Waste
Groundnut Shells
Household Bio Waste
Linseed Cake
Maize Stalk
Manure
Millet Stalk
Non Usable Fruits
Oil Palm Residues
Rice Husk
Saw Dust
Sorghum Stalk
Sugar Cane Cups
Sudan Grass
Typha
Wood
...

novis

Energy from Biomass

NOVIS GmbH is realizing strategies and projects in the energy sector. NOVIS specializes in the field of energy production from all kinds of biological waste.

Our installations are producing constant electricity and heat by Biogas (digestion of wet biomass), Syngas (Pyrolysis of dry biomass) and Steam (combustion of Municipal Solid Waste).

We use the best state of the art technologies and adopt the most promising solutions according to the special needs of you. We guarantee success in all our projects by technological leadership and customer orientated consultation.

The technologies we use have proven their efficiency and functionality in more than 1.000 projects worldwide.

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Energy Development Partners

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ENERGY DEVELOPMENT PARTNERS

Small-scale
Electrification
with biomass

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