



EnD-I Climate Focus Biogastimator

EnD-I AG and Climate Focus have developed the Biogastimator that allows you to assess the potential JI or CDM compliant emission reductions from a biogas investment and optimise your investment strategy and feedstock procurement.

The Biogastimator allows the user to estimate the potential emission reduction when generating biogas. The EnD-I Climate Focus Biogastimator has been designed in an interactive and user friendly Excel spreadsheet format that allows you to obtain an estimate that is tailored to the design features of your biogas project. The Biogastimator can handle a wide range of different options and scenarios. It allows you to define a mix of four different feedstocks and contains information on the gas potential of 25 different feedstocks. In addition, the model allows to specify the conditions under which the feedstock is produced or how it would otherwise be used or disposed of.

ADVANTAGES OF THE BIOGASTIMATOR

1. Easy calculation of emission reductions from biogas projects
2. Perfect design tool to optimise use of carbon finance
3. Compliant with CDM and JI methodologies
4. Choice of 25 feedstock options and their combinations
5. Choice of 8 gas usage options
6. Country specific data
7. User friendly interface
8. Results presented in clear tables and graphs
9. Check dimensions of the installation
10. Your desired aid for drafting Project Design Documents

Feedstock choice

The amount of carbon credits of a biogas project depends largely on the feedstock choice. Organic waste material as a feedstock results in considerable amounts of carbon credits by claiming avoided methane emissions. On the other hand dedicated energy crops used as feedstock bring about extra emissions from transport, agricultural machinery use and fertiliser application. These reduce the project's emission reduction potential. When defining the feedstock the Biogastimator helps you specifying the backgrounds of this feedstock in order to make the emission reduction estimations more accurate.

While you can adjust all data inputs, the Biogastimator provides a complete set of default values for all scenarios. This gives you ballpark estimates of emission reductions even if no concrete values are known. EnD-I AG provided the default data used in the Biogastimator.

Additionally Climate Focus has used existing approaches and calculation concepts from approved methodologies for Clean Development Mechanism (CDM) and JI projects.

Question	Value	Unit	Default value
24. How much synthetic fertiliser is applied on the land?	200	kg urea/ha	Default value for all energy crops 200 kg/ha
25. How much biogastimator residue is spotted on the land?	0.5	tonne/tonne feedstock	Default value is 0.500: tonne organic fertilizer/tonne feedstock (maximum 1.0)
26. What type of fuel do you use for agricultural machinery and feedstock transport?	2	litre per km	2 litre per diesel, 2.5 litre per petrol

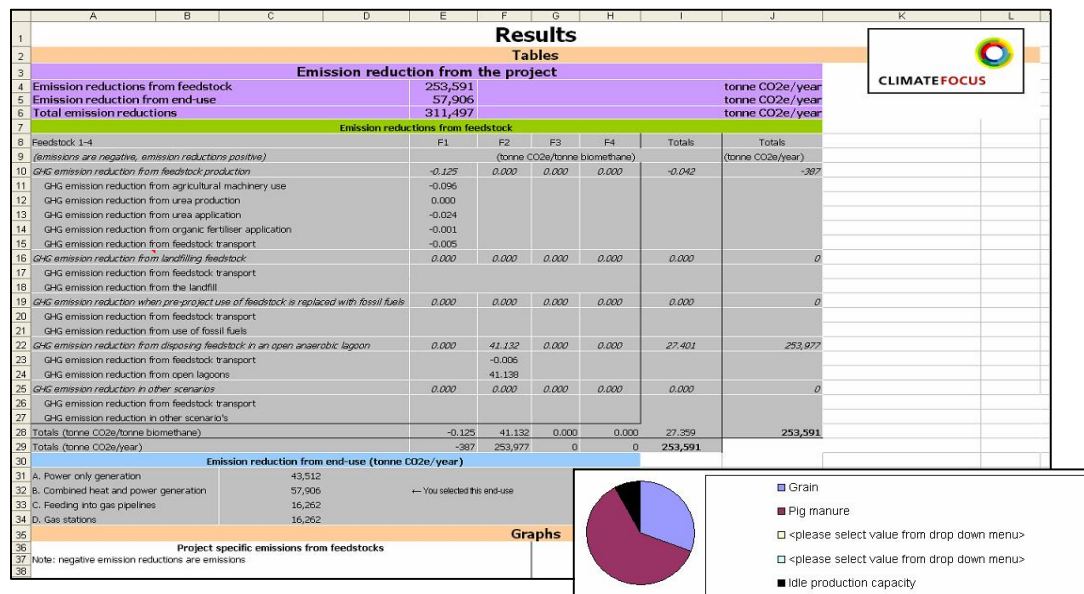


Example

Suppose you design a biodigester in South Africa that uses 14,600 tonne of grain per year and 800,000 tonne of pig manure. The grain is produced specifically as biodigester feedstock and before the biodigester was implemented the pig manure was treated in anaerobic open lagoons. The gas from the biodigester is used for the combined generation of heat and power to replace power from the grid and the heat from coal fired boilers.

Once you entered all relevant information in the input page of the Biogastimator, the result page shows all sources or activities where emissions take place or are reduced. In the example emissions are avoided from the open lagoon, the grid connected power plants and the coal fired heat-only boilers. The Biogastimator will deduct emissions from feedstock transport as well as from fuel consumption and fertiliser use at the grain plantations.

For the example the total emission reduction is 311,497 tonne CO₂e/year. The Biogastimator shows a breakdown of the different emission reductions and emissions, allowing the user to define the optimal combination of different feedstocks in terms of emission reductions. To allow detection of any inconsistencies in the input data the Biogastimator provides feedback on the load factor of the biodigester.



The Biogastimator already covers a vast number of scenarios and combinations. However you may contact Climate Focus to further expand the options and tailor the tool to your specific requirements.

More information

For more information on the Biogastimator and prices, please do not hesitate to contact:

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