

International Climate Initiative

Climate Partnerships with the Private Sector: Decentralised biogas use for industrial processes and transport in Brazil

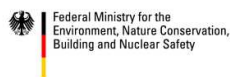
Almost 77% of the natural gas used in Brazil is imported from Bolivia and only 23% is produced along the inland coast. The central and western regions of Brazil, which are responsible for the agriculture and agricultural industries, are not connected to a gas network. So they are dependent on the use of oil for their production processes, with the inherent negative impact on the environment and economy. Brazil is one of the world's largest agricultural exporters: trucks are the most common means of transport and 85% of the harvest is transported to the ports of Santos and Paranagua. These ports are located 2,300km from the country centre, where most of the soybean production (Mato Grosso State) takes place. The required diesel fuel is produced exclusively by refineries on the coast and has to be transported by truck to central Brazil.

This climate partnership aims to elaborate and implement solutions for the energy supply based on biogas in areas without access to the natural gas network. The project focuses on developing the foundations for decentralised biomethane production through biogas plants and establishing strategic partnerships with local and regional companies as well as investors in the Paraná region. As part of the overall project, a "substrate atlas" for Brazil is to be drawn up during the project, with the results of individual studies of various inputs from agricultural production. This is carried out jointly with the Brazilian cooperation partner EcoBiopower and the agricultural research institute EMBRAPA in Brazil. Subsequently, economic and technical feasibility studies will be prepared for two application scenarios in the fields of production of process heat and the use of biomethane as fuel for trucks. Then these scenarios will be presented to relevant decision makers as part of seminars and trainings. At least one of the analysed scenarios is to be implemented in cooperation with substrate suppliers, a potential biogas plant operator, a customer of the biogas/biomethane and a logistic company. The use of biomass will lead to corresponding positive effects on the environment.

The project lays the foundation for implementing a Green Rine/Green Corridor concept in the medium term, with the possible installation of biogas plants along the motorways in the state of Paraná as well as for the large-scale production of biogas for industrial use. For example, 20 biogas plants for decentralised fuel generation with a capacity of 2MW of electricity will lead to annual savings of approximately 120,000 tonnes of CO2 emissions. This project is financed by the International Climate Initiative of the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB).

Country:	Brazil
Implementation:	DEG - Deutsche Investitions- und Entwicklungsgesellschaft mbH, Köln
Private sector partner:	FFE Solutions GmbH
Total project costs:	309,262 €
BMUB-funding:	154,631 €
Project duration:	12/2015 – 10/2017

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INTERNATIONAL CLIMATE INITIATIVE (IKI)



KFW DEG

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