

PROJECT SUMMARY

Ref No.: MRIC-CRIGS-A05	Title: Sugarcane trash to energy
Local Company: Terragen Ltd	
Collaborating Institution: Mauritius Sugarcane Industry Research Institute (MSIRI)	
Project Leader	
Miss Ariane Prince	Terragen Ltd
Research Collaborators	
Name	Organisation
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TECHNICAL ABSTRACT

Sugarcane trash, consisting of the non-millable part of the biomass present in a field at harvest, represents 6 to 12 tonnes of dry fibrous matter per hectare. It is estimated that trash collected from one third of the area under sugarcane may increase the total amount of electricity currently produced from bagasse by some 40%. Furthermore, trash from one hectare may substitute an equivalent of 3-8t of coal by this renewable source of biomass. All this may only be possible if the whole process is technically optimized for a cost-effective conversion of this biomass. The project will study all technical matter pertaining to the mechanical and industrial operations involved with the collection, transport, processing and combustion of trash. Furthermore, the project will assess the impact of partial or total removal of trash from the fields on the agronomic aspects of sugarcane production and on the environment. The project will benefit from a close collaboration between energy professionals (TERRAGEN/ALBIOMA) and sugarcane scientists (MSIRI).

Key Words: Sugarcane, Trash, Energy, Baling, Shredding, Combustion