

JAN 2011 PRESS RELEASE — RENEWABLE ENERGY PROJECT LAUNCHED IN CUBA

UK company, Havana Energy Ltd, has signed heads of agreement in Cuba to form a strategic partnership to establish biomass power generation plants adjacent to sugar mills.

Havana Energy Ltd – part of the Esencia Group of companies - has teamed up with Zerus SA, a company linked to the Ministry of Sugar, to develop a pilot 30MW power plant at Ciro Redondo Sugar Mill, about 400km from Havana, and as a second stage four further power plants. The business will be developed in a joint venture company.



Cuba today has 7% of its energy needs supplied by renewable energy sources, the Cuban government is eager to increase this % via the natural resources the country has and to reduce dependency on fossil fuels.

The chairman of Havana Energy, Brian Wilson, a former UK Energy Minister, said: *‘Having tried for more than a decade to promote closer economic links between the UK and Cuba, I am delighted to be involved in a project that demonstrates the benefits of such co-operation. Cuba has an excellent record both in providing electricity for its people and promoting environmental sustainability. This project will support both objectives. I have the highest regard for the abilities and objectives of our Cuban colleagues...’*

The Ministry of Sugar and the National Electricity Board have a strategy to increase power generation in all its operating sugar mills to decentralise the grid and provide power generation in areas which have weaker supply today.

Nelson Labrada, Vice-Minister of Sugar, said: *“This strategy of using sugarcane bagasse for power generation avoids one of the primary problems with other biomass sources which is supply. Bagasse is the fibrous residual left after cane crushing. In Cuba it is possible via the sugar mills and bagasse based power plants to generate up to 40% of the energy needs of the country today”*.

The capital investment for the pilot plant is expected to provide a return of investment within five years. Andrew Macdonald, director of Havana Energy, who has been working in Cuba for the past seven years, commented *‘our Cuban colleagues have a deep understanding of the renewable sector, they have already registered CDM projects and have pilot projects in most areas (hydro, solar, waste, etc).... this is a very exciting project in all senses; more electricity, more sugar, more sugar by-products and all using renewable resources.....’*

Recent Scottish academic mission to Cuba

Early November saw a mission with leading academics from Scotland visiting Cuba supported by the SDTI and Havana Energy. The scope of the visit was to primarily investigate renewable energy crops, primarily a shrub called Marabu that has invaded over 1 million hectares and secondly to have an overview of the sugar cane industry and the new “energy cane” varieties which have been genetically developed in Cuba and have a very high fibre content.

Julian Bell from the Scottish Agricultural College, commented ‘the intended model of bagasse to produce electricity in Ciro Redondo makes total sense and even better if the brushy wood Marabu can be utilised and therefore also converting more land to agricultural use’

It was noted by the experts that there is a good possibility of utilising this shrub as a secondary biomass for the local power plants and that it has an interesting export potential. Marabu is currently been tested in laboratories in the UK to investigate its properties.



Marabu (Dichrostachys cinerea)

Martin Tangle, Director of Biofuel Centre, commented on the sugar mill biomass plants plans ‘its an ideal process and one of the most efficient sources of renewable energy in the world, the next stage should be incorporating biofuels from the other waste products from the sugar cane’

Peter Hall, Professor of Energy Storage from Strathclyde University with Havana Energy will launch in the spring 2011 a university study project into the design process within the sugar industry. There is also an ongoing investigation reviewing the possibilities of producing activated carbon from Cuban biomass products.

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