J Fundam Renewable Energy Appl 2017, 7:4(Suppl)
DOI: 10.4172/2090-4541-C1-030

5th World Bioenergy Congress and Expo

June 29-30, 2017 Madrid, Spain

Bioenergy: Waste to energy – the route to a cleaner environment

Wasim Haskiya
Keelings, Ireland

Farm's slurry and organic waste have been well known and used to generate energy for centuries due to their availability and low cost to process. On the other hand; in the past few decades the world economies have evolved enormously bringing in prosperity and adverse impact to the environment due to excess use of fossil energy and waste generated to generate electricity and run transport. To mitigate the already caused damage to the environment, mankind need to change behaviour and thinking towards conservation, which would path the way to renewable energy through waste to energy conversion. The objective of this presentation is to demonstrate the need for a greater application of waste to energy conversions, which would improve the environment in EU and less developed world cites by reducing GHG's emission and waste pollution, thus increasing energy security and portfolio. According to European commission, transport sector is the biggest energy consumer after electricity generation, and it counts for one fifth of the EU's total emissions of GHG's. Heavy-duty vehicles are responsible for about quarter of CO_2 emissions, and 6% of the total EU emissions. Indeed, in the EU transport emission is the only major source of GHG's that are on the rise. In addition, in 2012 the EU-28 has generated over 2,514 million tonnes of waste between all economies, averaging 1.8 tonne a year per inhabitant, excluding mineral waste. On the other hand, to tackle such worrying figures of increase in demand for energy and the resulted waste generation; bioenergy: waste to energy conversion presents an opportunity to substitute current transport diesel and to be used as biogas for electricity generation. The benefits would be no landfilling, cleaner environment, heavy duty trucks would run on cleaner biogas, thus overall achieving a substantial reduction in GHG's and adding new jobs to struggling economies.

wasim_haskiya@keelings.com

Bio-economics – Making bioenergy projects sustainable and positively impacting on food production in developing countries

Gary S Vermaak
Harambe Sustainability Ventures, South Africa

In developed countries, government subsidies and incentives have done much to make bioenergy production, and in particular biofuels, viable. Developing countries can ill afford to subsidize bioenergy production, especially given the need to feed their own population first and foremost. When one considers that it is in many cases more profitable to produce processed foodstuffs than bioenergy, it is clear that bioenergy projects could be destroying value and having a negative impact on food production. Feed, food and fuel programs provide a way of meeting the demand for food in developing countries while contributing to the supply of electricity, fuels and gas in rural areas. The key is in producing and beneficiating crops at source while using the residues and other waste streams to produce the bioenergy (fuels). Thermal energy produced from the energy plants provides much need cooling, heating and power for the processing of agricultural products, thus creating a closed loop in these projects. The objective of this paper is to encourage the development of agro-processing centers in the rural areas to produce not only food, but also competitively priced electricity, fuels and gas to bring about economic growth and uplift rural communities.

gary.vermaak@burnabygroup.com