

AGRICULTURAL COMPETITIVENESS SUBMISSION APRIL 2014

SUGAR CANE BASED RENEWABLE ENERGY PROJECT: AN ETHANOL POWERED ELECTRICITY GENERATOR

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This is a project to develop a *regional* renewable energy facility based on sugar cane culture where some of the crop is devoted to ethanol production which in turn becomes the fuel source for electricity generation to provide energy security at improved financial and environmental costs. This will be an energy source able to supply to the area grid 24 hours a day independent of weather conditions. This is a project to develop small scale renewable energy electricity generators able to be linked in any community in much the same way solar generators are being used but with the guarantee of supply reliability not available from other renewable sources such as wind or solar.

This renewable energy scheme utilises established infrastructure and well developed and proven technologies bringing to the Bundaberg sugar cane industry a much needed extra income stream and an alternative product to market. There is also the flow on effect to other local industry and the local economy when a community can offer energy security that is competitively priced with a low carbon footprint and long term benefits. It will be a positive stimulus to quality employment growths attracting new business to the community.

This is a project designed to make the sugar cane industry more competitive by making use of the renewable energy potential available from sugar cane to reduce its own running cost, firstly by providing its own fuel supplies for all production activities (internal combustion engines and electrical devices) as well as developing an alternative saleable by-product.

Ethanol, appropriately modified, is now able to fuel modified diesel and turbine engines in addition to petrol styled engines that generally power our cars.

When we use this fuel to generate electricity we have available a source of supply for motor vehicles when electric propulsion systems start to dominate. So this project is also a long-term investment in motoring energy security. We have an energy supply that will transition seamlessly the energy requirements of changing technologies which will give our communities a distinct competitive advantage. We have here a renewable energy source that is capable of fueling our transport needs as it evolves in the future from internal combustion engines to electrical devices.

This is a way for a community to control its energy needs quickly and efficiently.