SWAZILAND ENERGY PROJECTS

Illovo (Ubombo Sugar Limited) Biomass Plant

Ubombo Sugar Limited (Illovo) in Big – Bend has a 40.5 MW installed capacity biomass plant. This biomass plant uses bagasse, cane tops and sometimes wood chips to generate electricity. The company also has a 1 MW hydropower plant. The company uses most of this electricity for its operations. Depending on the availability of excess generation the company normally exports between 10 – 15 MW of electricity to the national grid.

Wundersight Solar PV Installation

Wundersight is a private company that has developed a 100 Kilowatt solar Photovoltaics power plant that is located at Siteki, at the Buckswood House. The company exports all of the electricity to the national grid. This solar installation is also used as a pilot project since the company is currently preparing to develop an 850 kW solar PV power plant at Matsetsa, in the Lowveld of the Lubombo region. It is believed that this power plant will benefit from any improvements that would have been identified as necessary from the 100 kW plant at Siteki.

ETHANOL BLENDING PROJECT

The Ethanol Blending programme entails the blending of regular 95 unleaded petrol with up to 10% fuel grade (anhydrous) ethanol. The ethanol will be sourced from local ethanol producing companies such as the Royal Swaziland Sugar Corporation and USA Distillers to produce ethanol blended petrol, (E10).

The eco-friendliness of such a fuel stems from the fact that the ethanol is produced from molasses, a by-product of sugarcane, a renewable source, and
thus the reduction greenhouse gas emissions. This is in line with the SE4ALL Initiative of doubling the share of renewable energy in the local energy mix.

Cabinet has recently approved the Intended Nationally Determined Contributions (INDCs) for Swaziland to the United Nations Framework Convention on Climate Change (UNFCCC). Among its mitigation commitment in the INDCs is that the country will introduce ten percent ethanol blended fuel by 2030. In addition, Swaziland’s sugar sector is currently developing strategies to ensure that the sugar industry adapts to the sugar market reforms which will come into effect in 2017. Diversifying into ethanol blending is one of the strategies supported and recommended by the sugar sector.

The Ministry, in conjunction with the Royal Swaziland Sugar Association (RSSC), conducted a pilot programme on blending ethanol and petrol which was successful. The pilot programme was conducted only in the Lubombo Region using government and RSSC vehicles only. In readiness for the roll out programme in the country, a vehicle testing facility at the Central Transport Organization (CTO) premises in Mbabane has been constructed that will be used to measure the performance and monitor the emissions of Government vehicles while using the blended fuel. Six officials based at CTA have been trained on the operation of a dynamometer and diagnostic instruments. Furthermore, standards for blending of unleaded fuel have been developed with the assistance of the Swaziland Standards Authority (SWASA), into national standards. The Ministry has also drafted a Petroleum Bill with the assistance of the Commonwealth Secretariat, the sugar sector and oil companies where the mandatory blending of ethanol was highly recommended and thus incorporated.