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Listing of Current Electrical Energy Projects

A. Waste to Energy Infrastructure Projects

White Paper on Waste to Energy Developed and Published by Prof R G Harley, Georgia Institute of Technology; CTO of Xicon Infrastructure Inc USA.

In association with Xicon Infrastructure Inc USA, we are promoting the conversion of municipal solid waste, commercial waste, medical waste, industrial waste, agricultural waste, forestry waste, parks and garden waste to energy. We use a process of high temperature incineration to form a conventional thermal power and heat plant; to generate electricity, industrial process steam and hot water for commercial enterprises with by product being bricks from the ash and captured exhaust emission particulates. This is a clinically clean and environmentally friendly plant. There is no human interface or manual sorting of the waste.

2010 -2011 Projects

1. Turkey Bid Submission: ISTAC A.S. Istanbul Environmental Management Industry and Trading Company 70 MW Waste to Energy Power Plant.
2. Columbia Bid Submission: El Graduia 20 MW Power Plant.
3. Nampower Bid Submission: Using Alien Vegetation as primary fuel.
4. Brazil Bid Submission : Rio Waste to Energy Power Plant
5. In Discussion: Swaziland Ministry of Energy 25 – 50 MW plant in Mbabane, Angola Ministry of Energy, Zambia Ministry of Energy, Tshwane Municipality, and Cape Town Municipality discussions in progress.
6. Under Review : Hybrid Fuel as Primary Energy for Mining and industrial High Capacity Power Generation

B. Going Naturally Off Grid

In association with international and local commercial renewable energy suppliers of solar and wind technology, designs are being prepared to shift domestic, commercial and light industrial load off grid and onto stand alone platforms. The first pilot is planned for commissioning in Nov 2011. This project is being developed in support of the national call for 700 MW to come off grid by 2015.

C. Large Scale Hydro Electricity Generation using Run of River Technology

The rivers of Southern and Eastern Africa have great potential to support run of river hydro power generation. Discussions are in progress with host country ministries for developing joint public- private BOOT models for the power generation and power transmission infrastructure. Associate partners are Xicon Infrastructure of USA and ShunPower of China. The drive towards the vision of worlds lowest cost energy to power an energy intensive industry valley in Southern and Eastern Africa continues.

D. Refurbishment of Old Thermal Power Stations

New refurbishment and maintenance solutions are under development for existing, old thermal power stations; locally and internationally.

Here our emphasis is on boiler health, boiler tube leaks and environmental emission management.