

## **NEWCARBON INNOVATION FOR SUSTAINABLE AGRICULTURE, SOIL REMEDIATION AND WATER / EFFLUENT PURIFICATION**

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NewCarbon Pty Ltd, a South African company working towards developing sustainable economic growth and climate change resilience solutions, has developed an innovative technology to produce biochar in a novel, clean and cost effective way using biomass from forestry, sawmill and municipal garden waste.

The production and utilization of Biochar for agriculture, soil remediation and water/effluent purification, using various forms of biomass as feedstock, has been identified by the Climate Change Directorate of the Government of South Africa to be of potential economic, social and environmental value, through providing sustainable sources of revenue for local communities, and addressing and mitigating the impacts associated with the energy-water-food nexus and Climate Change.

Biochar is a relative new field still in its infancy in South Africa. It has the potential to transform the green economy landscape and has wide application throughout the Southern African economies. Historically biochar has been known as an important tool to increase food security and cropland diversity, more so in areas with generally poor soils, and/or depleted soils, inadequate water supply, and scarce organic resources. These fit the Southern African conditions. Biochar improves water quality and quantity by increasing soil retention of nutrients and agro-chemicals for plant and crop utilization. Biochar has application in effluent treatment and the medical field.

The NewCarbon Innovation will advance the Southern African strategy to move towards lower-carbon economies, create growth and jobs, promote science and innovation partnerships and expertise, provide focused opportunities for environment and food security, enhance science and technology capacity building and address the challenges of climate change.