

A LOOK TO THE FUTURE

Glycerol from microalgae



Microalgae hold enormous potential in global efforts to deliver a sustainable alternative to fossil based fuels

- Produced in solar salt-water ponds
- No threat to drinking water supplies
- Sustainable source of glycerol
- Job security for local communities

CONTACT

If you would like to get involved in establishing a biofuels-related business, or in engaging in biofuels research, or offering training please be in contact with one of the following:

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BIO-ENERGY IN AFRICA

Combined Cooling Heat & Power (CCHP) for remote communities



- Off grid electricity on demand
- Zero carbon emissions
- Heat sterilised water
- Cold storage
- Job security for local communities



Village communities can be serviced with CCHP units using locally sourced biofuels



Capacity building in South Africa, Namibia and Ghana to create sustainable, non-food bio-oil supply chains.
Grant contract: FED/2009/217066

LOCAL BIOFUELS

Jatropha oil for Combined Cooling, Heating & Power (CCHP)



Integration of *Jatropha* into small scale farming provides income for rural communities from the supply of plant oil for fuel or bio-based chemicals

- Environmentally sustainable
- Captures carbon
- Productive marginal land
- Locally sourced & processed
- Job security for local communities



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NEW BIOFUELS

Glycerol for Combined Cooling, Heating & Power (CCHP)



Glycerol can now be burned in a CCHP unit thanks to the McNeil Cycle



- Water-soluble
- Bio-degradable
- Odourless
- Non-volatile
- Non-flammable
- Non-toxic
- High efficiency in CCHP
- Extremely low emissions

Project Partners

University of Greenwich, UK
Goldex 35 (Pty) Ltd, South Africa
Jatropha Africa Ltd, Ghana
Marine Biological Association, UK

Turner & Townsend (Pty) Ltd,
South Africa
University of Ghana
University of Namibia

Associates

