

# energy

Advanced **New Earth Energy** Systems

New Earth Group is one of the UK's leading providers of waste treatment facilities and is developing complementary operations in the waste to **energy** sector. Waste treatment and fuel preparation services are provided by New Earth Solutions whilst New Earth Energy focuses on energy production.

# renewable

*Converting 'ready to use' fuels with high biomass content from contracted waste streams into syngas*

*Production of syngas and renewable electricity from advanced thermal conversion technologies*



## NEW EARTH GROUP

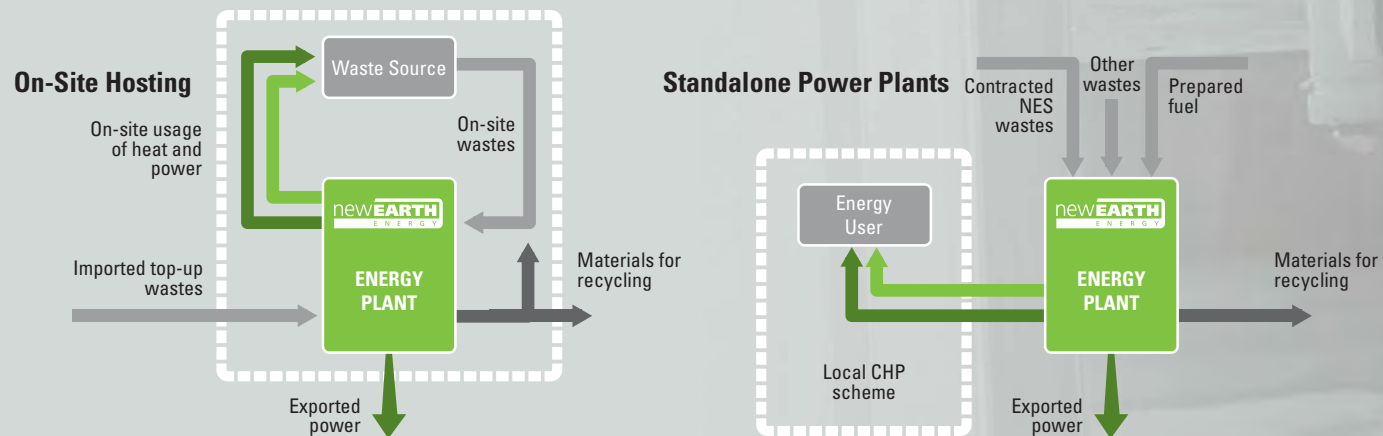
The New Earth Group has developed a recognised brand, is established as a credible operator in the waste treatment market, and is positioned to exploit the rapidly developing energy recovery market. Strong and compelling market dynamics exist for both the waste

treatment and renewable energy sectors. Landfill diversion targets, rates of landfill tax, concerns over energy security and renewable energy targets and price subsidies will further enhance the economics for waste treatment and waste to energy companies.

## TECHNOLOGY

New Earth Energy is targeting the production of syngas from 'ready to use' fuels with high biomass content derived from waste streams using emerging advanced thermal conversion technologies. The associated production of renewable electricity will use proven spark ignition reciprocating engine technology.

New Earth Energy will benefit from the production of a 'ready to use' fuel produced by sister company New Earth Solutions from locally sourced waste streams using mechanical biological treatment (MBT) technologies developed and operated by New Earth Solutions.



# efficient

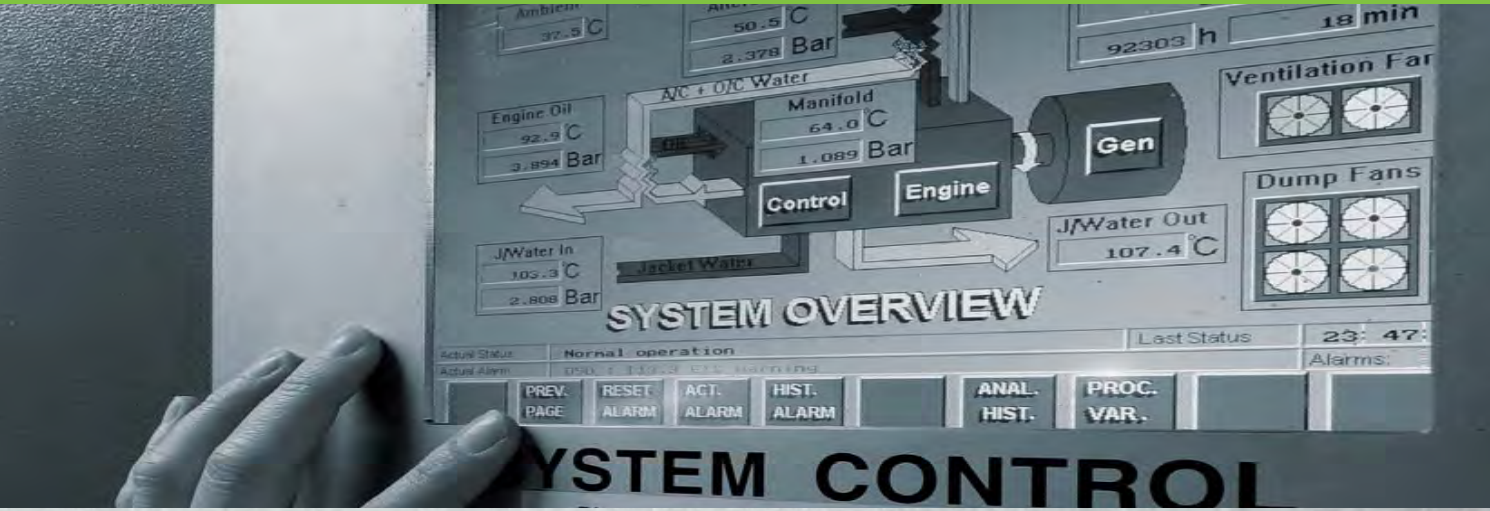
Advanced **New Earth Energy** Systems

New Earth Energy is targeting the **efficient** production of renewable energy using advanced thermal conversion technologies. The production of a syngas from 'ready to use' fuels derived from waste is at the heart of our process and we are seeking to retain the flexibility to benefit from the production of renewable electricity or renewable heat under an emerging new economic framework.

Tailored solutions to individual project or customer requirements

# process

A modular and scalable integrated waste to energy process solution to meet customer requirements

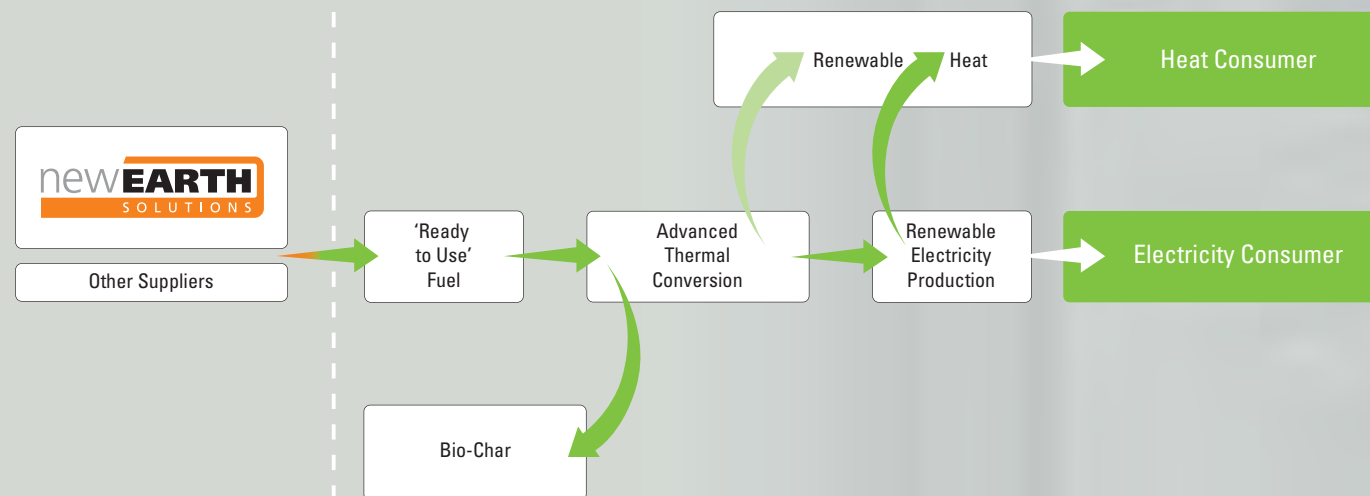


The New Earth Energy process is capable of delivering a range of scalable biomass and waste to energy solutions using advanced thermal conversion technologies. This allows New Earth Energy to tailor solutions to individual projects or customer circumstances.

New Earth Energy's modular approach can be used to develop solutions that match local circumstances, such as availability of waste streams to create our 'ready to use' fuel, local energy requirements for electricity and heat, and geographical constraints.

New Earth Energy facilities will complement those of New Earth Solutions. There is scope for synergies and operational benefits from the Group undertaking waste management and energy recovery activities at integrated sites. Through the thermal treatment of

waste controlled by New Earth Solutions, the level of landfill diversion that can be offered to Local Authority and commercial customers by the Group is significantly enhanced, as well as generating renewable energy.



# challenging

Advanced New Earth Energy Systems

The waste management industry is faced with the enormous responsibility of achieving escalating and ambitious recycling and landfill diversion targets, whilst adapting to meet more demanding legislation and safeguarding the environment. At the same time, the energy industry is obliged to achieve **challenging** targets for the production of renewable energy.

*Waste is a resource that can be used to deliver multiple policy objectives at national and EU levels*

# targets

*Strong policy support to achieve an ambitious environmental agenda*



**Strong policy support exists for the diversion of waste from landfill and the production of renewable energy to achieve national (UK) and EU policy objectives**

■ The EU has set an objective of diverting 65% of biodegradable municipal solid waste being landfilled by 2020 with interim targets of 25% by 2010 and 50% by 2013

■ The EU has set an objective for 20% of its total energy use (electricity, heat and transport) to be generated from renewable sources by 2020. The UK Government has been allocated a target that 15% of the UK's energy requirement be provided from renewable sources by 2020. Current UK performance is 1.4% (2006).



- **A modular and scalable integrated waste to energy process solution to meet customer requirements**
- **Production of syngas and renewable electricity from advanced thermal conversion technologies**
- **Strong policy support to achieve an ambitious environmental agenda**
- **Converting 'ready to use' fuels with high biomass content from contracted waste streams into syngas**
- **Tailored solutions to individual project or customer requirements**



New Earth Energy is a specialist business dedicated to delivering sound technical and environmental solutions to the UK's energy problems.

Driven by the outcomes of the Kyoto Protocol on Climate Change, New Earth Energy is pursuing projects that employ innovative processes designed to recover energy from waste and to mitigate its impact on the environment.



**NEW EARTH SOLUTIONS GROUP LTD**

**Key House**

**Ebblake Industrial Estate**

**Verwood**

**Dorset**

**BH31 6AT**

**Telephone: +44 (0)1202 812300**

**Fax: +44 (0)1202 829283**

**[www.newearthenergy.co.uk](http://www.newearthenergy.co.uk)**