

# Unity Portfolio

100% resource conservation

## The Portfolio

This is a portfolio of Verified Emission Reductions (VERs) from resource conservation schemes - energy efficiency, methane recovery and/or low carbon fuel switches. In each case, the principle is to minimize CO<sub>2</sub> emissions by re-engineering or rethinking processes which are often entrenched and part of the traditional infrastructure. The only way to make the change economically viable, is to find supplementary funding – and that is where carbon financing comes in. A verified carbon credit is created out of the CO<sub>2</sub> savings achieved by the project; through 'offsetting', a company pays for the carbon credits; the sale feeds back to the project and so helps make them viable. It's a virtuous circle.

Often requiring some innovative thinking, our energy efficiency schemes are those which make industrial processes less resource intensive. This would include using carbon finance to make it financially viable for industry to move from the lowest fuel source (often coal) to something less carbon intensive like natural gas.

Another example would be capturing methane – 23 times more powerful than CO<sub>2</sub> as a global warming gas – leaking from disused coalmines, and converting it into electricity through Combined Heat and Power systems. In each case, the essential purpose of the schemes is to maximize the use of existing resources and minimize CO<sub>2</sub> emissions.

# Example 1

## Energy efficient lighting

Country: Jamaica  
Technology partner: Eco-Tec



Jamaica's largest employer is tourism – and the industry is a big user of electricity which comes from oil-fired power stations. Compact fluorescent light bulbs use one quarter of the electricity of traditional incandescent bulbs and last ten times longer. But they are more expensive to buy and/or swap in before the end of the life of the existing bulb.

Through the sale of carbon credits the project is able to offer the energy-saving bulbs at discount prices, undertake a full assessment of the clients needs, and run Environment Days to educate staff – all of which can lead to further savings.

In this way, the project is making real progress in overcoming the financial and behavioural barriers to implementing energy efficiency. It has also paved the way for an ambitious project that has now started to distribute such bulbs to poorer inner city neighborhoods.

# Example 2

## Waste heat recovery

Country: India  
Project partner: Ind Synergy Limited



Near Kotmar, in the Central state of Chhattisgarh, India we are working with Ind Synergy Ltd and a steel plant which was venting flue gases directly into the atmosphere.

The project installs a waste heat recovery boiler which extracts the heat from the flue gases to generate steam. The steam drives a turbine, which in turn generates electricity for on-site use and supply into the local electricity grid. This displaces electricity that would otherwise have been generated by fossil-fuel power stations, coal being the predominant fuel in India.

The project also helps meet India's sustainable development needs. It has created employment opportunities for up to 50 people, contributes to stabilizing the local electricity supply which helps local economic activity, and lower emissions of pollutants such as sulphur and nitrogen oxides.

## Standards

The CarbonNeutral Company has a world leading quality assurance programme covering all elements of carbon measurement and reduction. All emissions reductions sold for carbon offsetting by The CarbonNeutral Company have been verified to quality standards and, as a minimum, have met the requirements of The CarbonNeutral Protocol. Every tonne of carbon sold by The CarbonNeutral Company is guaranteed.