

SEEDA Sustainable Business Awards aim to encourage and promote a sustainable approach to business in the South East region through celebrating excellence, significant achievement and through the dissemination of best practice.

COLLINDA LTD.

COMPANY BACKGROUND

Established in 1981, Collinda Ltd. is a distributor of speciality chemicals to a range of industries, including producers of dyes, pharmaceuticals, resins, rubbers and lubricants. It also acts as a sales and marketing agent for companies in both the UK and abroad. The company is small with only eight employees and a total turnover of less than £20 million; however, Collinda prides itself in being "small enough to care but big enough to conform."

It works actively alongside the Responsible Care Scheme of the BCDTA (The British Chemical Distributors and Traders Association Limited), which demands ongoing improvement plans in addition to compliance. The company's Environmental Policy is also central to its operations:

"Team Collinda will strive to leave the world a better place...we will all strive to reduce emissions of chemicals and to educate the public about the benefits and dangers of the chemicals we handle."

Central to Collinda's efforts to fulfil its environmental policy of making substantial improvements to the world's environment is its commitment to participate in saving one million tons of CO₂ emissions. The company gives a minimum of 5% of profit to alternative energy projects, many of which have involved the development of solar powered technology that can contribute to a reduction in global warming.

SUSTAINABILITY INITIATIVES

New Technology and Innovation

Collinda has pioneered the development of solar powered boats.

- In 1992 Collinda sponsored, designed and managed the production of the world's first solar powered water taxi, *Solar Pichola*, which operates in Rajasthan, India.
- The boat project developed further and in 1994 Collinda developed the world's first solar powered ferry, *RA II*. Made in Udaipur, India, the ferry runs every day, saving three tons each year in CO₂ emissions.
- In 1997 Collinda developed *SB Collinda*, which entered the record books as the first boat to cross the English Channel under solar power.

Collinda has no intention to manufacture solar powered boats and encourages others to use and develop its technology further, hoping that its projects will give confidence to the market. There are now more than 1000 solar powered boats in the world, and they are becoming the norm in certain parts of Australia, the USA, and Continental Europe where fossil fuels are increasingly banned on inland waterway systems.



KEY ACHIEVEMENTS

- Minimum of 5% of profits goes towards renewable energy projects.
- Developed the world's first solar powered water taxi, which saves three tons of CO₂ emissions each year.
- Developed the first solar powered boat to cross the English Channel.
- Financed and developed an ultra-light solar powered vehicle with the ability to replace millions of fossil fuelled and pedal rickshaws in Asia. This vehicle could also lead to solar/electric *Pedi-Cab Cycle Taxis* operating in London.
- Collinda has pioneered a means of re-using packaging which has reduced waste to landfill and hazardous tipping.
- Stopped using company cars. Trains are used for long distance business travel – this has more than halved transport costs and reduced CO₂ emissions.

Having stimulated the market for solar boats, Collinda began contributing to the development of land vehicle technology.

- *Original projects involved the production of a small electric car and a tuc-tuc (a small rickshaw taxi used throughout Asia), however these projects were not satisfactory because of the weight of modern vehicles. The global need to reduce vehicle emissions encouraged Collinda to develop the project further.*
- *The latest solar powered vehicle was built for the BBC's Tomorrow's World Programme, and was on display in the Science Museum's Climate Change Exhibition during August 2002 where more than 10,000 people saw it each day. This ultra light three-wheel vehicle has solar panels on the roof, which produce electricity to power the electric motor and to store in batteries. The chassis uses advanced bicycle technology and can carry three people, although it is powered by only one cyclist. The solar capacity amounts to the power of two cyclists, and the motor taking stored power from the batteries can produce five HP, reaching speeds of 30 miles per hour (double city road speeds) and travelling 40 miles before the driver needs to begin pedalling. This vehicle has the ability to replace millions of scooters, auto and pedal rickshaws that operate in Asia.*



During testing, when representatives of Collinda drove the vehicle across Rajasthan, five TV channels filmed the event and an interview with the Rajasthan Minister of Energy was broadcast to up to 30 million people. Demand is anticipated to be 10,000 new vehicles each year by 2010, with each auto-rickshaw replacement saving 10 tons of CO₂ emissions annually.

To maximise the impact these reductions have on global warming, this project is focused in Asia where lightweight transport is accepted and a government favoured solution. Collinda do not hold any patents or rights to the technology and encourage manufacturers to take the product to its next phase.

Working Practice

Although only a small organisation, Collinda aims to make every attempt to minimise environmental degradation from its own operations.

- All paper is used on both sides before being recycled.
- When possible, artificial lights are kept off and natural light used.
- Heating is thermostatically controlled to minimise energy use.
- The use of cleaning chemicals is minimised.
- Staff are recruited locally to reduce impacts of travel.
- Only one company car has been retained and long-distance business travel is undertaken by train. This has more than halved company travel expenses from £17,400 (1985) to £6,800 (2002).
- Visitors are encouraged to use public transport and are given train directions before road directions.
- Health and Safety Policy and Office Risk Assessments are continually adhered to and updated.
- Haulage is arranged through an agency which operates a return-route delivery programme to minimise CO₂ emissions and road congestion.
- Reuse of packaging from chemical substances can be hazardous, but Collinda has pioneered returnable packaging for some products. These large bags can be laundered and re-used and although this represents a cost item to the company, it has prevented 1,600 bags going to landfill and resulted in a reduction of hazardous waste tipping.

Collinda minimises the chance of chemical accidents by adhering strictly to the BCDTA standards.

- All goods are safely packaged, labelled and correctly used.
- All new customers are provided with safety information relating to the product they purchase.
- A safety goods advisor approves all haulage activity.
- No deliveries take place on Friday afternoons, to reduce road congestion and minimise the accident hazard.

CONTACT

Mr Malcolm Moss
Managing Director
Collinda Ltd.
Collinda House
Ottways Lane
Ashted Surrey
KT21 2PL
T: 01372 278416
E: info@collinda.co.uk

For further information about the SEEDA Sustainable Business Awards please contact Tanya Mennie
Tel: 01483 484278, Email: tanyamennie@seeda.co.uk
or visit SEEDA's website: www.seeda.co.uk

Other

- The BBC Tomorrow's World Roadshow solar rickshaw was given to the people of Udaipur for use and testing.
- Collinda provided trophies and prize money to the annual Mole Valley Composting Competition.
- Supports the Groundwork Project in schools by funding educational shows about environmental decline (£500 for each show).
- Supports Sustrans Safe Routes to School initiative to encourage walking and cycling, thus reducing CO₂ emissions.
- Supports the Urban Mines Project, which is involved in recycling and refurbishing goods such as computers.
- Collinda bought and supported an Environmental Consultancy that specialised in EMAS accreditation, but interests in this have now been divested to the Principal Consultant.
- Support and funding of £10,000 has been provided to a project creating a solar powered boat as a demonstration project on the Thames.
- Collinda provides a Forum for knowledge and information sharing relating to renewable energy.



Planned initiatives

- Collinda is investigating the option of purchasing green energy.
- Consideration is being given to developing a Sterling Engine and CHP unit as a demonstration project at Collinda's offices in Surrey. This would provide an illustration of best practice for others to see, whilst providing energy to the offices and exporting the surplus.
- Collinda would like to develop a solar powered canal boat, but is seeking partners for the project.
- Discussions are underway to find manufacturers and further develop Pedi-Cab Cycle Taxis (ultra-lightweight solar powered vehicle) in London.

Awards

- Eurosolar Prize for Transport - 1999 (SB Collinda Channel Crossing)
- Eurosolar Prize for Transport - 2001 (Ultra-lightweight solar vehicle)