

## Profile



Biolytix processes domestic 'black' waste and greywater (top left) into humus and clear reusable irrigation water (top right). Biolytix Pty Ltd

Dean Cameron's hunch about a self-contained natural waste treatment system has paid off. He may soon make an impact on the Third World's living conditions. Right: From a basic workshop operation, his business has expanded from a staff of 5 to 45 in two years. Turnover is expected to be over \$10 million next year.

Biolytix Pty Ltd



## Making a natural impact

After 12 years following a hunch, Dean Cameron developed a highly efficient natural waste treatment system that's a winner in Australia and could be an answer for developing countries.

Environmental scientist Dean Cameron spent 12 years investigating how nature breaks down leaf litter and human and animal waste. He discovered that natural decomposition occurs fastest and most efficiently on river edges, where debris is moist, but not wet, and surrounded by air. It was this discovery that led him to develop the Biolytix® filter system.

Described as a 'live, wriggling' filter, the Biolytix process uses a blend of worms, beetles and microorganisms to convert sewage, kitchen scraps and wastewater into compost and clean irrigation water. Using only 10 per cent of the energy of conventional septic systems, the Biolytix system is odourless, compact and requires only one service a year. It has been successfully installed in more than 1500 Australian households and major commercial ventures so far, including the 150-person

Dilli Village on World Heritage-listed Fraser Island in Queensland.

After rapid expansion of the business in Australia due to multiple awards and endorsements of the unique, patented system, Dean is now turning his attention to creating a lower-cost version of the product to take to the developing world. He has become committed to the role he believes efficient sewage treatment can play in alleviating disease and poverty.

### What has been your career path?

I am a natural ecologist. While others were out doing their degrees I was in the field studying nature – watching the succession of how cow pats and dead cows broke down in the field.

I was head of drainage at The Melbourne Botanical Gardens and later designed and built the apparatus for

experiments and trials for Melbourne University's Botany Department. I made the first LED lights for bicycles – but didn't bother with a patent on it! Lately, out of necessity, I am developing skills as an entrepreneur and am even a finalist, in partnership with my CEO, in the Ernst & Young Entrepreneur of the Year Award.

### What have been some key moments in the development of the company?

Our first major breakthrough was getting a \$3 million investment in research and development. Then the next one was being on ABC TV's *The New Inventors* – people then seemed to take us seriously and the phone ran hot with orders, people wanting to be distributors and developers wanting to use the system commercially.

In the last year we have won six major awards – this has meant that we get a lot of

kudos and free publicity. In the last financial year we have spent just \$4000 in paid advertising to make nearly \$7 million of sales. Our awards include:

- a Global Environmental Technology Award at the World Expo in Japan. We were the only sewage and wastewater treatment system to win worldwide. The award is given to technologies that have the potential to solve global environmental problems.
- a Queensland Premier's Smart State Award, for The 'Rising Star' in business.
- the selection by the Australian Government of Biolytix in the top six environmental technologies in Australia.
- an Australian Green Plumbers' Award, the 'Judge's Award for Product of the Year'.
- the prestigious Clunies Ross Award, for Science Innovation.
- the Queensland EPA's Sustainable Industries Award, for a sustainable technology.

One of the main issues we need to deal with is our company growing so quickly. We had a \$7 million turnover this year and we expect to turnover \$10–12 million next year. In the last two years we've gone from 5 to 45 staff, as well as recruiting and training 203 sales representatives and installers in Australia, New Zealand, China and Fiji. And we are getting enquiries constantly, both in Australia and overseas. Fortunately we have a CEO, Jill Jordan, who having helped set up over 35 enterprises, has a lot

of experience with getting efficient company systems created early on.

### What's the dream for Biolytix?

We can put people on the moon and yet haven't been able to solve simple global sanitation problems. Many of the Biolytix team and I are passionate about creating a solution for the 2.6 billion people in developing countries that have no sanitation at all. Millions are currently sick and dying from this lack of a sanitation solution.

We're developing a low-cost model of Biolytix – it should be available at the end of next year.

I would also like to see the more natural Biolytix system replace septic systems completely. Figures show that 70 per cent of septic systems fail and pollute the environment within five years. There are more than 450 000 homes in Australia on sewerage backlog programs, with their towns waiting to be sewered. Many of these could be sewered with Biolytix – it would cost them half as much and they would also be recycling their water on-site, which could help produce food locally and irrigate parks.

### What has been the key to your success?

Passion, determination and persistence. I believe most people would have given up by now if they had gone through what I've been through – literally working with sewage! In fact most would never have started.

I also haven't been afraid to see things a

## 'We can put people on the moon and yet haven't been able to solve simple global sanitation problems.'

bit differently. While billions of dollars are currently being used to fund engineers throughout the world to improve conventional sewage treatment by just one per cent, I've been blessed with insights to make a breakthrough that could change the way sewage is treated worldwide.

I don't think I'll give up working on this invention until I'm able to treat sewage so that it is good enough for me to drink.

### How would you like things to be different in your industry?

I'd like to see government simply create a level playing field, then get out of second-guessing innovation and just let people vote with their wallets. Legislation is currently stacked towards big solutions, municipal monopolies and grants and funding schemes that favour the status quo and in some cases, even less sustainable solutions like, for example, the reverse osmosis of seawater. Over-regulation seems to be stifling good innovation.

### What could be improved in Australia and the region?

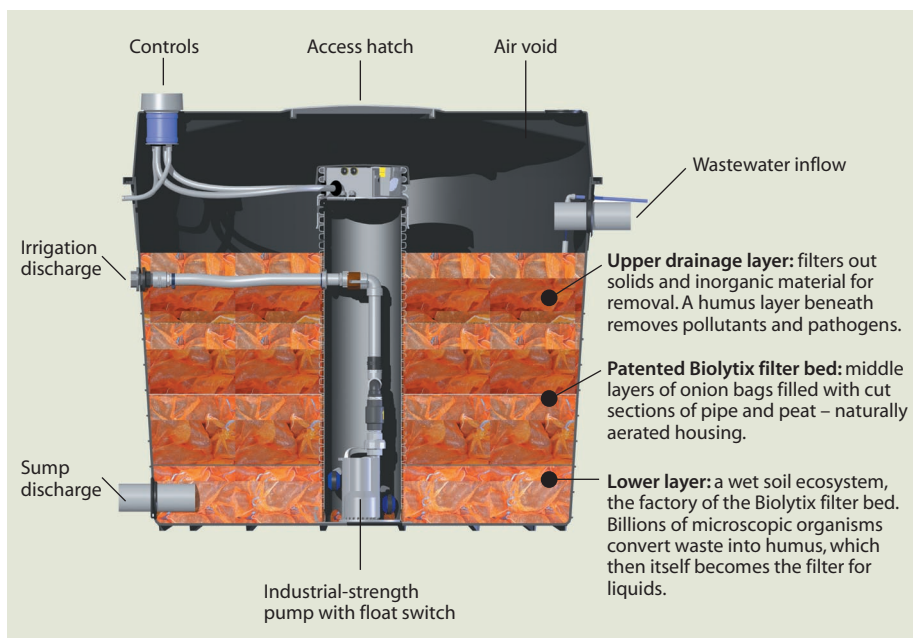
Leadership and vision are our greatest needs. We are living in a fool's paradise where growth and prosperity are galloping along fuelled by fossilised carbon. We are stealing from future generations and at huge environmental cost.

We need to spread the ethic of a 'fair go' beyond our borders and develop ways to live more simply and lighter on the Earth. Safe food must be produced locally with minimal non-renewable energy inputs. A key to this will be low impact energy efficient housing and recycling of water and nutrients through organic waste treatment and recycling.

### What would be your advice to someone interested in developing eco-friendly products or services?

Develop a team around you that have a whole range of talents – to be successful it will need to be a team effort. If there are negative people around you it is best they are not there, it's hard enough with positive people. Enjoy the experience and treat it as a fun game. Don't take yourself too seriously or you will lose heart.

● Rachel Taylor



The Biolytix unit in cross-section. Biolytix Pty Ltd