

## Engineering profession's contribution to sustainability:

*An Interview with John Elkington*



John Elkington (see inset) is well known globally as the originator of the concept of Triple Bottom Line. Elkington is one of Europe's leading authorities on sustainable development and on 'triple bottom line' business strategy. He is a widely published author

and in 1989, was elected to the UN Global 500 Roll of Honour for his 'outstanding environmental achievements'. I had the pleasure of first working with John in 1998 when we were both involved in presenting at five sustainability conferences around Australia. Indeed it is his latest Australian conference tour titled Boards, Brands and Business Models: Beyond the Triple Bottom Line in early April 2003 that led me to interview John on how the engineering profession could contribute to sustainability. An abridged version of the interview is presented below.

**Terence: What is the general worldview on environmental and social sustainability, post the Johannesburg summit?**

**John:** There are two ways to read what happened in the build-up to and at the World Summit on Sustainable Development in Johannesburg. The simple reading would be that a great deal of effort was invested and that the event provided a typical UN jamboree-style context for conversations that might not have happened otherwise (including the extraordinary, but fairly shallow, partnership announced there between Greenpeace and the World Business Council on Sustainable Development). The political impact was disappointingly weak - and the fact that someone like Robert Mugabe could get a standing ovation while starving much of his country made one wonder what planet many of these people were on.

But there is also a somewhat more complex, somewhat more optimistic reading to be taken. This is the way I see it. Since 1999 we have been working through the third great wave of societal

pressure on business, with the focus this time around on globalisation and governance, both corporate and global. That third wave has peaked, I believe, and the third downwave has begun. Paradoxically, however, downwaves are when most of the important work is done. And the buildup to Jo'burg spotlighted the emerging agenda. In a word, it's all about ACCESS, access to clean water, to affordable energy, to drugs for HIV/AIDS, TB and malaria, to finance, to a wide range of technologies. We are already seeing the big pharmaceutical companies struggling with the drugs dimension of this new agenda - and many other sectors of industry are going to be embroiled before long.

**Terence: How do you think the engineering profession could contribute to social and environmental sustainability?**

**John:** It's fairly clear, isn't it? Whoever ends up paying for all of this, there will be a huge demand for new infrastructure. But the interesting thing is that much of this infrastructure will be radically different from what we have seen in the past. And that's where engineers come in; these people are trained to provide solutions. The question they need to ask themselves, however, is whether the solutions they have been trained to provide will be sustainable in an equitable world of 8-9 billion?

**Terence: What key skills do engineers need to gain to understand to work within the context of sustainable development?**

**John:** One critical skill will be to engage key stakeholders early enough in the design and planning stages to ensure that the right solutions are engineered. Wherever they work, engineers will also need to contribute to the development of business cases for more sustainable solutions. This may mean moving somewhat upstream of where most engineers currently operate. Security isn't going to go away as an issue, so all new infrastructure is going to have to be designed and engineered with potential terrorist disruption in mind.

© Net Balance Foundation Limited

## Engineering profession's contribution to sustainability: *Continued...*

New pressures, most strikingly climate change, have the potential to trigger major discontinuities in the way that clients see their needs, for hardware and for software. When markets change, they can sometimes change very fast indeed. Remember what happened when the ozone hole was discovered; chemical companies and aerosol fillers were side-swiped because they had assumed that governments would protect their flanks, slowing the demands for change. Once it was clear that the ozone layer was being eroded, there was no way governments could protect these businesses. It's often said that the best way to predict the future is to help create it. Engineers need to be involved - and to be seen to be involved - in working through some of the great challenges we will all face in the 21st century. A world of 8-9 billion people is going to be interesting, hopefully not in the sense of the old Chinese curse, but if it is to be even moderately sustainable into the 22nd century it is going to have to be phenomenally well engineered. That's something the Victorians understood. Do we?

**Terence: Thank-you John.**

*Previously published in an edited format in Engineers Australia – February 2005*

*Written by* Terence Jeyaretnam,  
Director, Net Balance Management Group  
Director, Net Balance Foundation