

## The Future of Environmental Engineering

Environmental engineering in Australia has evolved over the past ten years as a new university course focussing on such issues as water, waste water, waste management, environmental management, pollution control and environmental policy. It predominantly evolved from the civil engineering course in Australia. It has now well become a stand-alone specialised degree. But what does the future hold for the profession? Where is the profession headed? In what sector of society can we make the most contribution? What are the emerging issues for the economy, planet and people where we can contribute the most?

Sustainability is now becoming a way of life. Companies, governments and non-government organisations alike are developing strategies to incorporate environmental and social outcomes in economic growth. Social and economic indicators are increasingly becoming integral in measuring progress. The recent Earth Summit further embeds the notion that environmental sustainability is now a mainstream agenda item.

“Archaeological discoveries of recent decades suggest that even great civilizations, such as the Sumerians and the Mayans, met devastation at least in part by failing to live in harmony with the natural environment. We, too, have tempted fate for most of the past two hundred years, fuelled by breakthroughs in science and technology and the belief that natural limits to human well being had been conquered. Climate change is a prime example of this” (“Towards a Sustainable Future” (The American Museum of Natural History’s Annual Environmental Lecture, delivered by Mrs. Nane Annan New York, 14 May 2002). These words illustrate the importance of why our society needs to take into account the impacts of our activities on the natural environment, not only to protect it for what it is, but also to protect us against the negative outcomes such as climate change and ozone depletion.

Environmental engineers therefore have a significant role to play in helping society achieve these sustainability objectives. My own thoughts are that environmental engineers will have an increased contribution to make as a result of the recent Earth Summit. There will be more enforceable actions as a result of this, and future such summits, for without, we face increasing stress on the planet. The Kyoto Protocol will be signed, even without the US, and targets set will be non-negotiable.

The next fifty years, to me, represent the fifty years in which we will do the most to protect, and restore the environment. We will do so because it will increasingly be more economically unfeasible, and socially unacceptable not to do so. Accordingly, environmental engineers will have the significant task of re-engineering thought processes, challenging accepted wisdom, changing corporate thinking, accounting for the natural environment and remaining resources, increasing eco-efficiency, managing growth and integrating the triple bottom line.

I can imagine, have faith in the human spirit and trust in science.

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