

Journal of the Institution of Environmental Sciences

Vol 11 No 2 • March-April 2002

Editor: Robert Fuller • Assistant Editor: Derek Hall

Established 1971 • ISSN: 0966 8411



FEATURE ARTICLES

Survey reveals improvement in environmental career prospects

R.A. Fuller

A recent survey carried out by ENDS Environmental Consultancy has identified a dramatic increase in salaries for environmental professionals in recent years. 'Career Prospects in the Environmental Industry' is based on a review of the job vacancies featured in the ENDS Report over a two-year period from August 1999 to July 2001 covering a total of 2,735 advertised vacancies. The review was supported by enquiries to a number of environmental recruitment agencies.

The result of this survey is welcome news after a period of economic gloom in markets generally and a longer period of apparent under-performance in environmental employment. Some significant quotes from the report are particularly encouraging.

'Salaries for environmental professionals have seen dramatic growth in recent years largely as a result of a shortage of specialist skills, with annual increases of up to 13 per cent revealed by a survey of job advertisements placed in the ENDS Report. Substantial growth in job vacancies featured in the publication confirms the growing demand for environmental expertise in the UK, and it comes as no surprise that organisations seeking to recruit environmentally-trained staff are finding it increasingly difficult to attract and retain good quality candidates.'

'Increasing demand reflects the strong growth and rapid pace of change in a marketplace driven by new legislation and increasing monitoring requirements for emissions, waste and the way in which land is redeveloped. Another factor is the growing mobility in the sector, with environmental professionals changing jobs more frequently than ten years ago, especially in the early stages of their careers, in response to increasing opportunities in the market.'

So where has the growth occurred and which are

the most buoyant sectors of the environmental job market?

'According to the ENDS Report survey, consultancy forms the single largest recruiting sector for environmental specialists, accounting for half of all advertised positions. It is also the most dynamic, with a 28 per cent increase in the number of vacancies posted in the twelve months ending July 2001 compared to the previous year.'

'Apart from consultancy, the survey indicated a notable surge in recruitment by Government and regulatory bodies, as well as the waste industry. Experts in recycling, landfill and sustainable waste strategy were particularly sought after by waste

IN THIS ISSUE

Conviviality *versus* wealthism page 3

Environmental News pages 8-10

Message from Jim Longhurst, the new IES Chairman page 11

Marine conservation by disabled divers page 12

Bibliography of Environmental Scientist, Volume 10 page 14

management organisations.'

'Contaminated land assessment and remediation skills topped the list of requirements by organisations advertising in the ENDS Report, with 11 per cent of recruiters looking for specialists in the discipline.'

'Contaminated land represents the largest single work area for environmental consultants, while local authorities were also actively recruiting in this field in order to meet their statutory obligations under the new contaminated land regime, introduced in England in April 2000 and since then in Scotland and Wales.'

'Government planning policy and tax relief to encourage the redevelopment of brownfield sites have also spurred renewed interest in this sector during the past couple of years. And many companies, including due diligence, property and insurance firms, as well as newly-established environmental consultancies, have been tempted to jump on the bandwagon by offering new services in contaminated land liability – and all are in need of experienced personnel.'

'Salaries in contaminated land are more static than in other environmental disciplines given the low margins typically associated with the work. But Paul Gosling of recruitment agency Allen & York suggests that 'individuals with a specialist slant such as a hydrogeological, civil engineering or geochemistry background are the most desirable, and will have increased earning potential.'

'With 9 per cent of recruiters specifying environmental management as the major skills requirement, it was a close second to contaminated land.'

'However, the current level of demand is not as high as might have been expected in the early 1990s when the concept of environmental management systems (EMS) was initially thrust into the limelight. As Jeremy Money of BBT Recruitment noted, companies have generally proved slow in uptake of the EMS standards ISO14001 and EMAS, but he still sees 'huge potential for growth' in this area. Moreover, the rewards in this sector can be substantial, particularly for environmental managers working in multinational corporations.'

'The ENDS survey indicates a sharp upturn in demand in 2001 for environmental impact assessors and auditors, as well as niche specialists in climate change, integrated pollution prevention and control (IPPC), noise management and sustainability, the link with current or incoming legislation being strongly evident.'

'Increasing demand for EIA specialists has been fuelled by the amended EU Directive on environmental impact assessment, which came into force in March 1999. Dave Wadsworth of geoenvironmental recruitment consultancy RGB Midlands commented: 'With areas such as EIA being relatively new disciplines, there are not many experienced candidates out there who are capable of dealing with all issues from ecology and plant species through to air pollution, noise pollution and water quality issues. Consultants are therefore forced to employ perhaps up to eight different EIA specialists on one particular project.'

'Consultancies themselves note that the new multifaceted disciplines including IPPC and sustainable development often prove to be the most difficult tech-

nical areas in which to recruit suitably qualified candidates, enabling professionals in these areas to command a premium salary. For example, a senior IPPC consultant can reasonably expect to earn up to £10,000 more than a contaminated land consultant with a similar level of experience.'

Whilst the report indicates considerable skills shortages, notably in areas such as asbestos, noise, traffic modelling and radiological and nuclear waste management there is a downside. The increase in demand has largely been directed towards experienced staff and opportunities for graduate entrants have remained difficult. Employers feel their skills may be too 'broad brush' and prefer a minimum of two years post-qualification experience. The large number of environmental graduates produced by the increasing number of courses through the '90s has led to many going into employment outside the environmental field. The reaction to this has been a recent and rapid drop in entrants to the environmental courses, many of which have declined or closed.

Whilst the present assessment is generally encouraging, what of the future? Here, the views expressed are somewhat mixed, varying between cautious optimism and confidence.

'For the time being at least, recruitment consultancies agree that the environmental jobs market is extremely buoyant and remains an employee's market.'

'There doesn't appear to be any sign as yet of recession in the industry,' said Paul Seeley, senior consultant at recruitment agency Eden. 'The number of interviews placed by Eden has increased significantly in recent months, while the number of clients seeking our services is also up on the previous year. There is no shortage of jobs to fill, but there is a shortage of good candidates to fill them with.'

Salaries are soaring by as much four or five times the rate of inflation as a result of these 'basic market forces'.

'On the one hand, the consensus among recruitment consultants and many environmental companies is that because the marketplace is extremely insular, tied to legislation rather than economics, it will stand up a lot better to recession than some related sectors such as civil engineering. But on the other, there is the idea that an ever-expanding marketplace is little more than wishful thinking on the part of its operators, and hard decisions will need to be made in order to balance out the rate of growth in staffing costs and the rate of growth in profits.'


The overview at the end of the Report makes significant additional points relating to professional membership and regional trends.

'Qualification/years of experience: Fewer than a quarter of positions in the survey actually specified degree-level education, although in many cases this will be taken for granted. Unsurprisingly, salaries for all job functions increase steadily with experience, with one notable break point – a significant jump in salary is discernible for positions requiring two to five years' post-graduate qualification. An average of eight years' experience is required for senior management posts.'

‘Technical specialisms: The salary survey suggests that environmental managers in commercial firms are generally paid at a higher premium than consultants with a similar level of experience. Although contaminated land work predominates, low margins result in below-average salaries. This is also the case for asbestos and EIA specialists. Environmental process engineering, geotechnical and IPPC specialists are currently rewarded with the highest premium salary rates in the industry.’

‘Membership of professional bodies: Only 5 per cent of recruiters required a professional qualification, such as IEMA registered auditor, or a chartered membership. However, as the environmental services market matures and competition intensifies, the desirability and market value of professional qualifications will increase. The Environment Agency is among several

organisations to have stated a clear preference for staff to be members of chartered institutions.’

‘Location: The survey found that environmental jobs in London and South East do not automatically command higher salary premiums as might be expected. Current regional salary trends can perhaps be explained by the rapid pace of development in upcoming cities such as Leeds, Cardiff and Bristol. These areas are attracting many new business start-ups and technology companies and their traditional industrial heritage has left behind a legacy of environmental problems, ensuring they are regional growth hot spots.’ 

■ The full text of the ENDS Report is published in the ENDS Directory 2002 (9th Edition) and can also be seen on the ENDS Web site: <http://www.endsdirectory.com>

Conviviality, wealthism and Bjorn Lomborg

Michael Bassey AcSS

The discourses of wealthism and conviviality

A way of looking at the world that can aid environmental enquiry and speculation about the future is to distinguish two different discourses of human affairs: a wealthist discourse and a convivial discourse.

The mainspring of the wealthist discourse is the creation of wealth. Greater wealth enables people to be more affluent, meaning that they can gain quality of life from greater access to the available goods and services. Satisfaction is measured in terms of money, and prestige is accorded in proportion to the value of possessions and on expenditure on holidays, hobbies, health care and the schooling of children, for example. Wealth creation sets people in competition against each other and this is often seen as the engine of progress. The wealthist discourse is about affluence and advancement.

The wealthist discourse is evident in the deliberations of political parties of both left and right and in most newspapers. It is the driving force of nearly all business. *The Economist* and the *Financial Times* are prominent organs of this discourse in the UK.

The mainspring of the convivial discourse is the creation of conviviality. (I developed this concept from Ivan Illich's *Tools for Conviviality*, 1973 and E.F. Schumacher's *Small is Beautiful*, 1973). Greater conviviality implies that people gain quality of life from being more in harmony with themselves and with their social, cultural and natural environments. Convivial people seek a state of deep and satisfying harmony with their world and through this a joyful meaning to their lives. Looking for harmony with their natural environment they use it for their needs, but try not to exploit it; they strive to conserve the land and the liv-

ing things which it supports and, seeing themselves as stewards, aim to safeguard the land for future generations. Looking for harmony with their cultural environment they savour it, contribute to it and aim to pass it on to future generations. Seeking harmony with their fellows they try to co-operate rather than to compete with them; they endeavour neither to exploit them nor to be exploited by them; they strive to live in concord with them – to love and be loved. Being in harmony with their inner selves they search for understanding of their own rationality, emotions and spirituality, in order to develop their talents effectively; and by trying to use their talents harmoniously in relation to society and environment they experience the joy of convivial life.

The convivial discourse is seen by much of the world as fringe activity – the province of green politics and of journals such as *New Internationalist* and *Resurgence*. Nevertheless it is commonplace, if incoherent, in the everyday lives of most people as they seek harmony in their communities, churches, homes, workplaces, gardens, leisure places, shops and schools. (Bassey 1987, 2002)

In this article I shall demonstrate the power of this dichotomy (and my partisan commitment to the convivial) by using it to analyse Bjorn Lomborg's *The Skeptical Environmentalist*. I believe this is the most dangerous book that this century has yet seen.

It is comprehensive in its coverage of environmental issues and substantial (352 pages of text), authoritative (over 1,700 bibliographic references) and scholarly (nearly 3,000 notes). It is scientific in its searches for evidence and statistical analyses. It is salutary and disturbing because it shows how environmentalists have sometimes exaggerated their case or ignored evidence. It is morale raising because it is wild-

ly optimistic about the global future. Why then is it dangerous?

The message of global optimism will cheer all who are unversed in the issues of environmental concern. The book could become the academic backup for those businessmen and policy makers world-wide who seek to evade environmental issues in their pursuit of wealth and power. They will hold it up to scorn the concerns of environmentalists about damage to the ecosystems of the Earth. They will say, 'As Lomborg has shown, we do not need to worry yet about global warming – but, as he says, we must get richer in order to protect ourselves in the future.' Herein lies its danger for, fundamentally, Lomborg's work is based on two false premises arising from the wealthist discourse.

The first false premise is that ultimately all environmental problems can be tackled successfully if sufficient wealth is available. The second is that wealth creation (i.e. economic growth) can continue indefinitely on a global scale. I reject the first of these on the grounds that environmental problems are largely a consequence of human greed and ignorance and hence need to be tackled primarily by morality and education. I reject the second on the grounds that economic growth, like all forms of biological growth, is inevitably an 'S' shaped curve and at some stage will slow down and then cease. False premises make bad policies.

I take five policy issues considered by Lomborg, summarise his arguments and challenge them in terms of the wealthist/convivial discourses. The issues are:

- population
- food supply
- water supply
- energy supply, and
- global warming.

Population

Lomborg does not consider that the Earth is overpopulated, or is in danger of becoming so.

*We often hear about overpopulation of the Earth... [but] the number of people is not the problem... [One] interpretation of overpopulation focuses on the population density being **sustainable**. If a nation's present population cannot sustain itself in the long term then the nation is over-populated. But to put it mildly, it seems bizarre to insist that a population should be able to support itself from the specific land on which it lives. The whole idea of a trading economy is that production does not necessarily have to take place at the physical location of demand, but where it is most efficient. (p48)*

Is it 'bizarre'? Until the 20th century virtually all localities of the Earth supported the local population with food, energy and other resources. Sometimes the 'locality' was the homestead, sometimes the village, sometimes the region. But these localities were, and some still are, self-sufficient. Trade began with commodities that could not be obtained in temperate climates, such as coffee, tea, and spices, being traded for manufactured goods. Trade moved on to commodities that could be grown more cheaply elsewhere – such as wheat from the American prairies, or manufactured more cheaply

where manual labour was abundant – such as electronic goods from the Far East. Trade also developed in resources located in only certain parts of the Earth – like oil from the Middle East traded for consumer goods, engineering projects and armaments. As a result of such trade many people became more affluent – but others lost their independence and, ultimately, their ability to be self-sufficient. And so, in the long term, their well-being depended no longer on the natural elements of rain and sunshine, but on the human elements of market forces and financial greed.

As with all such issues, it is a matter of balance – of growing some commodities locally and trading for others: a balance that I argue should be assessed in terms of optimum conviviality, not maximum wealth creation.

What is bizarre is to grow apples in New Zealand and eat them in England. Or to bake biscuits in Edinburgh and eat them in London! Transport should be assessed not in terms of money but of resource depletion and environmental damage: transport needs fuel, fossil fuels are finite and burnt fuels pollute. And biscuits should be assessed in terms of the pleasure of making and eating them rather than the cost of making and delivering them.

When Lomborg writes that production should take place where it is most 'efficient' he is using a wealthist concept. Probably he would laugh at the alternative suggestion that production should take place where it is most joyful – but that is how a convivialist would want to see production, meaning that it is in harmony with the environment and gives pleasure to both those who produce and those who use it.

Food supply

Lomborg takes a sanguine view of world food supplies and shows that earlier fears of widespread famine were mistaken.

Although there are now twice as many of us as there were in 1961, each of us has more to eat, in both developed and developing countries. Fewer people are starving. Food is far cheaper these days and food-wise the world is quite simply a better place for far more people. (p60)

A graph (p65) shows the average calories per capita per day consumed in various regions of the world from 1961 to 1998 and comes from FAO data. Over this period these are the changes:

	1961	1998
United States	2900	3800
European Union	3000	3400
NE and N Africa	2000	3000
Latin America and Caribbean	2300	2800
Asia	1900	2700
Sub-Saharan Africa	2100	2200

While an intake of 2200 calories per day is reckoned by most nutritionists to be inadequate, it needs to be recognised that these are average figures – some eating

more and some less. Thus in each of these regions there will be people with inadequate calorie intakes: more so lower down in the table. Notwithstanding these figures, Lomborg insists that

there is no imminent agricultural crisis or any approaching scarcity of food (p109).

What he pays scant attention to is that the regional data shows that in some parts of the world the crisis and the scarcity are there now.

The question is how do starving people in an impoverished region get more food?

Lomborg says that starvation

is caused not by a fundamental problem of production but rather by the fact that these people do not have the money to demand more food... the road ahead for the starving in the poorest countries is larger economic growth such that these individuals will also be allowed a decent existence. (p101)

I argue that it is not increased wealth that is needed but increased conviviality. People who are starving need their own land on which to grow food to feed themselves; the knowledge, skills, tools, seeds, fertilisers, and water in order to grow the crops; and security for themselves and their growing crops. This support towards self-reliance is what some of the aid agencies try to fund. In contrast, the wealthist approach is to encourage the growing of cash crops (for example coffee for the legal market or opium for the illegal market), the sale of which provides the cash to buy food and other necessities. Both approaches are subject to the vagaries of climate, disease and warfare, but the wealthist approach, while perhaps raising the quality of life more quickly in the short term, is subject to the uncertainties of market changes (for example coffee being grown more cheaply elsewhere, or a crackdown on drug trafficking) and the cash crop suddenly becoming of little or no value.

Water supply

In a table (p152) Lomborg indicates that 3.7 per cent of the world's population in 2000 live in countries with a chronic scarcity of water, and the predictions are that this will rise to 8.6 per cent in 2025 and 17.8 per cent in 2050.

Nevertheless he is optimistic, basing this on wealthist solutions.

[A]lthough an increasing population will increase water demands and put extra water stress on almost 20 percent of humanity, it is likely that this scarcity can be solved. Part of the solution will come from higher water prices, which will cut down on inefficient water use. Increased cereal imports will form another part of the solution, freeing up agricultural water to be used in more valuable areas of industry or domestic consumption. Finally, desalting will again constitute a backstop process which can produce virtually unlimited amounts of drinking water given sufficient financial backing. (p156)

Blandly he says that we have sufficient water, but *we need to manage water more carefully, price it*

realistically and accept a movement away from self-reliance in food production in the arid parts of the world... [I]t is reasonable to expect that the most water-scarce nations will shift their production away from agriculture and towards more valuable output in services and industry. (p157-8)

Again Lomborg uses a wealthist solution without indicating how the wealth to purchase water will be created. When most countries, with existing wealth and sufficient water, are aiming to expand their 'output in services and industry' what chance does an impoverished and water-scarce country have of successfully entering the market-place? And if it does, how will it survive the uncertainties of market changes?

Energy supply

Lomborg devotes 19 pages of his book to the future of energy supplies: these quotations give the drift of his argument.

The evidence clearly shows that we are not headed for a major energy crisis. There is plenty of energy. We have seen that although we use more and more fossil energy we have found even more. Our reserves – even measured in years of consumption – of oil, coal and gas have increased. Today we have oil for at least 40 years at present consumption, at least 60 years' worth of gas, and 230 years' worth of coal. (p135)

Notice that all of these facts do not contest that fossil fuels which today supply most of our energy are non-renewable – if technology remained constant and we kept on using just fossil fuels, we would some day run out of energy. But the point is that technology does not remain constant and fossil fuels are not our only or main long-term energy source... we know that the available solar energy far exceeds our energy needs and it will probably be available at competitive prices within 50 years... In the longer run, it is likely that we will change our energy needs from fossil fuels towards other and cheaper energy sources – maybe renewables, maybe fusion, maybe some as-of-now unimagined technology. Thus, just as the stone age did not end for lack of stone, the oil age will eventually end but not for lack of oil. Rather, it will end because of the eventual availability of superior alternatives. (p136)

Although Lomborg puts faith in the future discovery of further reserves of fossil fuels, he concedes that these are ultimately finite and so he extends his faith to what others have called 'the technological fix'. He believes that future discoveries will solve the problems for future generations. He looks to them to find cheaper energy resources and hints at 'as-of-now unimagined technology'. Having lambasted the environmentalists for exaggerating some of their perceived perils, he moves into the much more dangerous activity of solving future problems by science fiction.

In effect he wants us to say to our grandchildren, 'Sorry – we're using up all the fossil fuel, but we're sure you can find other sources of energy.' He is, of course, aware of the potential of solar and wind power and,

probably accurately, expects these to become cheaper and more widespread.

But what he seems unable to do is to ask whether we need to use as much energy as we currently do. We know that by insulating our houses we use less energy to heat them, and by driving smaller cars we save fuel, but are there not ways of cutting other energy uses? Perhaps less manufacture of trivial goods, and less transportation of goods that could be produced locally? The convivialist creating joy needs less energy than the wealthist seeking wealth.

Global warming

Lomborg's chapter on global warming at 67 pages is the longest in the book.

This chapter accepts the reality of man-made global warming... [However] an economic analysis of the costs and benefits of an immediate reduction in CO₂ emissions clearly shows that the world as a whole would benefit more from investing in tackling problems of poverty in the developing world and in research and development of renewable energy than in policies focused on climate change. (p259)

Lomborg looks at the consequences of global warming under a number of headings.

Agriculture

As far as agriculture is concerned, global warming will be tough on the developing countries while probably being advantageous to the industrialized world. However, since these changes will be gradual and in all likelihood not make their mark until the middle of the twenty-first century, it is also highly probable that many developing countries will by that time be considerably richer and better developed and therefore more capable of handling the problems... [Also] over time new varieties of crops will be developed which are better able to exploit higher temperatures and higher CO₂ concentrations. (p289)

There are three assumptions here. First that the world will be richer and so able to resource and then implement agricultural change, second that crop technology will fix some of the problems, and third that political systems throughout the world will ensure that changes

are fairly shared and that all benefit. In other words wealth, technology, morality and education need to work together.

Sea level rise

The global water level has risen between 10 and 25 cm over the last hundred years and... it is envisaged will rise by a further 31-49 cm over the next hundred... The increase is predicted to make more people exposed to recurrent flooding. (p290)

Taking IPCC (Intergovernmental Panel on Climate Change) data Lomborg states that a 40 cm rise in sea level would put 237 million people at risk in the 2080s – if there is no change in the level of protection from the sea now.

'But surely,' he says:

it is unreasonable to assume that a much richer world will make no improvement in sea protection

and he goes on to assert that

developing countries will be at least as well off as the industrialised countries are today (p290)

He then quotes a figure that

the total cost of protection is fairly low, estimated at 0.1 per cent of GDP for most nations, though it might be as high as several per cent for small island states. Consequently, it seems likely that rich countries (as almost all countries will be by the end of this century) will protect their citizens at such a low price that virtually no one will be exposed to annual sea flooding. (p290)

Again we have the assumption that all nations will become sufficiently rich to afford to build sea and estuary walls to keep the rising sea out of low lying terrain. They will also need, of course, a political infrastructure that accepts the problem and is strong enough to take the fiscal as well as the engineering measures required.

Human health

Lomborg reports that

the IPCC finds that higher temperatures will cause an increase in death and illness, especially among the old and the urban poor

but he counters this with

the fact that a much richer world will be far more able to afford most people access to air-conditioning. (p291)

He notes suggestions that

Extraordinary General Meeting

Notice is hereby given that an Extraordinary General Meeting of the Institution of Environmental Sciences will be held at 1.00 pm on Wednesday 10th July 2002 at the Grosvenor Office, Grosvenor Street. London W1K 3JP.

The business of the meeting will be to ratify the proceedings of the Annual General Meeting held on Wednesday 6th March 2002.

Members wishing to attend should advise the Secretariat at least seven days in advance, by Monday 1st July.

with increasing temperatures the potential area of tropical diseases such as malaria will increase but has an answer to that:

combating malaria is primarily a question of development and resources (p291-2)

Again the argument is that wealth resolves such problems.

Economic analyses of global warming

Lomborg uses the IPCC figures based on the hypothetical cost at a time when CO₂ levels have doubled from the present levels – causing a temperature rise of 2.5°C. These calculations include the cost in terms of agriculture, forestry, fisheries, energy, water supply, infrastructure, hurricane damage, drought damage, coast protection, loss of wetlands, forest loss, loss of species, loss of human life, pollution and migration. He summarises the findings:

First, global warming will be costly – on the scale of half a trillion dollars annually. Second, developing countries will be much harder hit by global warming, partly because they are much poorer and consequently have less adaptive capacity. (p301)

Lomborg notes that the IPCC has argued for change in individual lifestyles to reduce global warming. Their position is firmly located in the discourse of conviviality.

Essentially, what the IPCC suggests – and openly admits – is that we need to change individual lifestyles, and move away from consumption. We must focus on sharing resources (e.g. through co-ownership), choosing free time instead of wealth, quality instead of quantity, and ‘increase freedom while containing consumption’. Because of climate change we have to remodel our world, and find more ‘appropriate life-styles’. (p320)

Instead his answer is within the discourse of wealthism: *it will be far more expensive to cut CO₂ emissions radically than to pay the costs of adaptation to the increased temperature. (p318)*

Lomborg’s conclusions on global warming are:

[G]lobal warming is not anywhere near the most important problem facing the world. What matters is making the developing countries rich and giving the citizens of developed countries even greater opportunities... [I]f we want to leave a planet with the most possibilities for our descendants, in both the developing and developed world, it is imperative that we focus primarily on the economy and solving our problems in a global context... Basically this puts the spotlight on securing economic growth, especially in the third world, while ensuring a global economy, both tasks which the world has set itself within the framework of the World Trade Organization (WTO)... To put it squarely, what matters to our and our children’s future is not primarily decided within the IPCC framework but within the WTO framework. (p324)

He seems to be saying, forget the idea that burning fossil fuels contributes to the greenhouse effect of global warming, but keep using them to make the world rich-

er through global trade. These riches will enable our descendants to control the adverse effects of global warming world-wide. Implicit in his view are the expectations that:


- the world-wide industrial-consumer complex will increase global wealth,
- scientists will solve technological problems,
- politicians will manage human problems effectively and fairly, and in consequence
- the peoples of the world will lead long and happy lives.

Optimism and pessimism about the future

I do not believe that wealthism can achieve this for everybody: the world needs conviviality to face the future with confidence.

Rather than seeking happiness from wealth, people can seek it from harmony – with their social, natural and cultural environments and with their inner selves. This puts much less strain on the ecosystems of the Earth and offers its people the possibility of a sustainable future.

Sadly, although Lomborg has helpfully identified some myths and fallacies in what he calls the environmental litany, he has not recognised the ultimate myth of his economic theories: that economic growth can continue indefinitely. In common with many contemporary economists, but not all, he has failed to see the significance of the ‘S’ shaped curve. There will ultimately be a limit to economic growth and perhaps, like the biological growth of organisms, it will lead to a period of sustained maturity. It may have already started to happen in communities which are saturated with consumer goods and luxury services – and where novelty has lost its edge.

Lomborg is a statistician taking an economic stance and as such has failed to take a holistic view of the world embracing wider perspectives. He has not taken into account the hedonism, egotism, greed and lust that can mar human existence if they are not bridled by just laws, moral education and convivial policies. He has not asked the philosophical question which has so many different answers – some wealthist, some convivial: ‘Why are we here?’ 

References

- Bassey M (1987) *A Challenge to the Ideology of the Education Reform Bill*, Inaugural lecture, Trent Polytechnic, Nottingham
- Bassey M (2002) *Research Intelligence* 76, 26-36
- Lomborg B (2001) *The Skeptical Environmentalist: measuring the real state of the world*, Cambridge University Press, Cambridge
- Illich I (1973) *Tools for Conviviality*, Calder and Boyars: London
- Schumacher E F (1973) *Small is Beautiful: a Study of Economics as though People Mattered*, Blond and Briggs, London

■ Professor Michael Bassey is Academic Secretary of the British Educational Research Association. michaelbassey@bera2.demon.co.uk

Sinking and suing

Australian legal experts have warned their government not to ignore threats by the tiny Pacific island of Tuvalu to sue Australia over rising sea waters caused by climate change.

With a population of only 12,000, Tuvalu is slowly sinking because of rising sea levels blamed on global warming. Its Prime Minister, Koloa Talake, has announced that Tuvalu and two other island nations, Kiribati and the Maldives, are planning legal action against major polluting countries and corporations.

Australia would be a major target of an action in the International Court of Justice, and claims are also likely against tobacco, oil and car manufacturing companies. Tuvalu, one of the smallest and lowest-lying nations on earth, has engaged two legal firms, one in the

United States and one in Australia, to draw up options for action against those considered most liable for production of the greenhouse gases blamed for global warming.

Sydney University law expert, associate professor Donald Rothwell, said Australia was an easy target to take to the court because it fully accepted the court's jurisdiction, a position which had been exploited in the past ten years by both Portugal and Nauru.

Tuvalu's threat was seen as a drastic measure, but one that proved the desperation felt by the nation.

As a confrontational step which is very contrary to the so-called Pacific way, it illustrates just how seriously the people of Tuvalu take this threat to their very survival.

Kyoto to be ratified by EU

All 15 members of the European Union have agreed to be legally bound by the terms of the Kyoto protocol on climate change, supporting plans to ratify the agreement before the end of May.

Margot Wallstrom, the EU environment commissioner, claimed that the decision gave credibility to the EU's self-perceived position as world leader in the fight against global warming, and that it would act as a spur to other large industrial powers to follow.

Ms Wallstrom repeated her call for the US to re-enter the Kyoto process and urged countries such as Japan and Russia to ratify quickly so that the 1997 proto-

col could enter into force in time for the World Summit on Sustainable Development to be held in Johannesburg in September.

The EU as a whole is committed to cutting emissions by 8 per cent from 1990 levels between 2008 and 2012.

Kyoto can enter into force only after it has been ratified by 55 countries, representing at least 55 per cent of the industrialised world's 1990 emissions. The US, which produces about one-third of those emissions, withdrew from the protocol last year, making it imperative for Kyoto's survival that most developed countries follow the EU's lead.

Drilling into Alaska

In late February US president George W Bush launched his controversial campaign to begin drilling for oil in an Alaskan wildlife refuge.

The US Senate, which is largely ranged against the Bush proposals, has continued to debate energy legislation. Until now it has not allowed drilling in Alaska's Arctic National Wildlife Refuge (ANWR), which is believed to hold up to 16 billion barrels of crude oil. Republicans have been pushing to amend the legislation to include ANWR drilling.

The Arctic refuge stretches over 19.6 million acres and is home to caribou, polar bears and other wildlife. Democrats and environmental groups oppose drilling in the refuge, preferring an energy policy that emphasises more conservation and stricter fuel efficiency standards. However, the events of September 11 have skewed US domestic debate.

In the current climate Republicans can argue that the strategic interests of the US in developing new oil resources outweigh environmental arguments.

Aside from the environmental counter-arguments, critics of the president also point to the close connections between the Bush family, Dick Cheney, the vice-president and Donald Rumsfeldt, the defence secretary, all of whom have made millions of dollars working in the oil industry.

New era for wind off the Norfolk coast

Environment Minister, Michael Meacher, and the Minister for Energy, Brian Wilson, have approved construction of a 76 megawatt offshore windfarm at Middle Scroby Sands some 2.5km off the coast of Great Yarmouth in Norfolk. The development will be the single largest offshore windfarm in the UK and consist of up to 38 wind turbines and should provide enough green electricity for 52,000 homes. Work on the development is scheduled to begin next winter for completion by the summer of 2003.

Mr Meacher said he was delighted to

issue the licence under the Food and Environment Protection Act 1985 for the construction of the windfarm.

'It is an important step in the UK's commitment to renewable energy arising from Kyoto,' he said.

'Nevertheless the point of FEPA is to protect the marine environment and prevent interference with other uses of the sea. There have been difficult issues to resolve and we have looked at these very carefully. There has been extensive consultation with interested parties and dialogue with the applicant. I am now

satisfied that the views of all parties have been adequately covered. There will also have to be a rigorous monitoring programme to ensure that the impacts of the windfarm are as predicted.'

Mr Wilson said the development marked a significant step forward for the wind industry. 'Offshore wind in the UK can make a major contribution to climate change objectives, to secure electricity supplies, and to our economic well-being through job creation and exports. I am very pleased that this potential is beginning to be realised,' he added.

Brown goes cool on green issues

The Government has failed to begin this Parliament with an imaginative and creative approach to the environmental tax agenda to match the commitment made in 1997. Few of the environmental tax measures contained in last November's pre-budget report are significantly new, and the Treasury's strategy of 'shifting the burden' of taxation onto environmentally damaging areas has stalled.

This is the main conclusion reached in the latest report by the Environmental Audit Committee, Parliament's watchdog created to audit the Government's progress on sustainable development.

John Horam, the chairman of the committee, said: 'The Government's zeal for environmental tax reform appears to have

fizzled out and the dead hand of the Treasury is in danger of damping further progress.

'It is also particularly outrageous that the Treasury is proposing to keep secret sustainable development reports submitted as part of Spending Review 2002. This will make it impossible for Parliament to hold departments properly to account.'

Other conclusions reached by the Committee include the following:

- The Committee is concerned about the extent to which confusion and inefficiency can result from the growing complexity of policy instruments in the energy sector. The Government might therefore wish to explore the

scope for rationalising these instruments over time.

- The Treasury must take advantage of the widespread consensus among both industry and environmental groups that the rate of the landfill tax should be radically increased, and the Government should not wait until 2004 to do so. To maintain appropriate differentials and prevent incineration becoming an easy option, the Treasury should explore the scope for introducing an incinerator tax.

- The Treasury should, as a matter of some urgency, carry out research on the impact of removing the perverse fiscal incentive to build on greenfield sites.

The ice field cometh

Researchers at Heriot-Watt University in Edinburgh have suggested that geologists have significantly underestimated the amount of methane hydrate trapped in sediment under the oceans. Millions of square miles of sea floor, including large tracts off the west coast of Scotland, will now have to be resurveyed to identify the massive reservoirs that have not shown up on previous seismic studies.

Interest in using hydrates as a major new power source is high because known supplies are thought to be at least double the known reserves of hydrocarbons such as oil and gas. If the Heriot-Watt scientists are correct, this estimate will have to be revised upwards substantially.

Currently, the only way to identify the deposits is to look for tell-tale pockets of gas which lie in layers of sediment below the hydrates, and which can be picked up by seismic surveys. However, the Heriot-Watt team has proved that large quantities of hydrates can form without creating any gas deposits at all, which leaves them almost indistinguishable from the surrounding rock and impossible to discover using current survey techniques. This indicates that areas which up to now have been rejected as hydrate-free may in fact prove to be potentially rich.

The US, Canada, Russia and Japan are ahead in the race to exploit hydrates. Two years ago, the Japanese government, which has no oil deposits of its own, funded a pilot well to retrieve hydrates from the deep waters off its Pacific coast.

Dredging the Channel

A group of six British companies has plans to dredge hundreds of millions of tons of sand and gravel from an area in the English Channel 30 miles offshore, between the Sussex coast and the Pas-de-Calais.

The intention of this project is to satisfy the construction industry's insatiable hunger for building materials for several years to come. But the proposal is arousing concern among marine conservationists and some degree of panic among French fishing communities, who claim the area is a vital fish spawning ground.

Although the dredging would be in British waters, just inside the UK-France median line, it would be undertaken in an area rich in a range of sea life, from scallops to whiting, sole and plaice, which is mostly fished by Dutch, Belgian and particularly French vessels, the latter based along the northern French coast from Cherbourg to Boulogne.

The European Commission and the French Government have few rights to object to the plan if the British Government gives the go-ahead. Seabed mining and dredging is a national prerogative under maritime and EU law. The decision on whether the project will go ahead lies with the Department of Transport, Local Government and the Regions.

Behind the proposal is the UK construction industry's unceasing demand for aggregates – sand, gravel and crushed rock – which is used as raw material in a wide range of construction works.

Demand for marine aggregates has increased significantly in the past 30 years, and they now account for a fifth of Britain's demand for sand and gravel as a whole, but represent a third of the demand in the South-East, and as much as half of the demand in London.

Proposals for the East Channel site are the result. Yet its unprecedented size, containing perhaps 550 million tons of sand and gravel, has raised opposition from some marine conservationists. A private study of the environmental impact, commissioned by the six British companies, known together as the East Channel Association, was expected to be completed in April. A French maritime expert commissioned to contribute to the study, Benoît Caillart, has been quoted as suggesting that if the project went ahead, it would 'seriously damage' fish stocks. He estimated that the 300 French fishing boats operating in the eastern Channel would lose around half their earnings.

In its letter of protest to the European Commission, the French national fisheries committee argued that sand and gravel extraction on such a scale would 'amount to an irreversible change in the environment, which could leave a large part of the Channel virtually sterile of all living resources'. The committee claimed that it was absurd for the EU to claim to manage fisheries on the one hand through imposing tighter and tighter limits on catches and net sizes, while allowing fish stocks to be damaged beyond repair by off-shore, industrial activities.

Sustainable energy: the PIU energy review

The Cabinet Office has finally published the long-delayed PIU energy review. The Chairman of the House of Commons Environmental Audit Committee, John Horam, complained that the report was 'slipped out in response to an oral question on the eve of a Parliamentary recess'.

'This is a deeply unsatisfactory situation. The development of a sustainable energy strategy is fundamental to our whole future, and the Energy Minister, should have made a statement to the House.'

He said the PIU report was intended to respond to the Royal Commission on

Environmental Pollution, which called last year for a 60 per cent cut in emissions by 2050 to avoid irreversible climate change.

'It was meant to set out where the UK should be in 2050 and how we should get there. I find it disappointing that the PIU have stepped back from this strategic aim and fail to set out how aims and targets are to be achieved.

'The main recommendation of the PIU review is that the Government should set a target of 20 per cent renewable energy by 2020. But this is hardly earth-shattering as it simply builds on the 10 per cent

target the Government has set for 2010. My Committee heard only last week that the Danes, for example, are setting a target of 50 per cent renewable energy. Is this yet another area where Britain will trail behind the rest of Europe?

'My Committee has just begun an inquiry on sustainable energy and the PIU review. In the course of future evidence sessions, we intend to examine in detail the conclusions reached by the PIU and the manner in which they reached them – including the extent to which the report may have been redrafted at a late stage as a result of political interference.'

£58.6m green-up fund should mean cleaner quarries and fewer lorries

Local communities will have the chance to reduce the impact of quarrying on their environment thanks to a new fund launched by Environment Minister Michael Meacher.

The £58.6m Aggregates Levy Sustainability Fund will reduce damage to the environment from extracting aggregates such as sand, stone and gravel used in construction by:

- improving areas where aggregate extraction has taken place.
- helping to reduce demand for primary materials by research into alternatives, and encouraging recycling and re-use of aggregates through WRAP (Waste and Resources Action Programme)
- promoting new methods for extracting and moving aggregates to reduce environmental damage.

As a result of the recent consultation on the distribution of the fund, £800,000 per year has been made available for a pilot scheme funding local projects through Leicestershire, Derbyshire and Somerset County Councils, all areas of major aggregate extraction. The Minerals Industry Research Organisation has been invited to take part in research into sustainable development, and local groups and councils will develop improvement schemes.

Michael Meacher said the Aggregate Levy Sustainability Fund was another step along the road to achieving sustainable development.

'It looks to address quarrying's impact on the environment in three ways: by improving existing sites, reducing the need for new quarrying and making any new quarrying more sensitive,' he said.

'It is good news, not just for people who live near quarries, but also for those who use roads that become congested with traffic to and from quarries.'

The fund is financed by the aggregates levy, which came into effect on 1 April 2002. Initially it will run for two years, with £29.3m available each year.

The funds will be distributed through the Countryside Agency, English Heritage, English Nature, WRAP, DTI's Construction Innovation and Research Management Programme, DTLR's Clean Up programme and Freight Facilities Grant.

Using existing programmes will make best use of expertise, ensure funds are used quickly and reduce administration costs.

The Aggregates Levy, introduced by the Finance Act 2001, has been set at £1.60 per tonne of aggregates produced and will bring about environmental benefits by making the price of aggregates better reflect their true social and environmental costs.

Some of the revenue from the levy will be recycled to business through a 0.1 per cent cut in employers' National Insurance contributions, to lessen the financial impact on the aggregate extraction industry.

UK condemns Japanese move to increase whaling

Moves by Japan to extend whaling in the North Pacific have been strongly criticised by Fisheries Minister Elliot Morley.

Japan has announced that it intends to extend its scientific whaling to kill an additional 50 minke and up to 50 endangered sei whales.

The International Whaling Commission introduced a moratorium on commercial whaling in 1985-86. Japan is legally bound by the moratorium but exploits a loophole that permits scientific whaling for research. Japan sells whale meat on its domestic market, but this is allowed under IWC rules.

The UK Government is opposed to whaling and strongly supports the IWC moratorium on commercial whaling. The Government thinks whaling is unjustified, apart from some subsistence whale hunting by indigenous people.

Mr Morley said: 'Japan's latest proposal to extend its research programme in the North Pacific severely undermines international efforts to conserve and protect whales and is to be deplored.

'The UK and many other countries are strongly opposed to Japan's lethal scientific whaling activities.

'This latest move by Japan makes it difficult not to conclude that this scientific whaling programme is primarily commercially driven. Whaling does not serve any genuine need, involves unacceptable cruelty and threatens the biodiversity of the world's marine environment. We will continue to oppose whaling and call for an end to this unnecessary and cruel activity.'

Welcome and vision statement

I am delighted to assume the Chair of the Institution in succession to Will Pope and before him John Baines. John having completed his tenure as Immediate Past Chair has assumed the role of Vice President of IES and will provide yet more outstanding service for the Institution. I wish to record my thanks to Will Pope for his inspired, thoughtful and highly effective leadership of IES over the last three years. By his actions he has raised the profile and impact of our Institution beyond that which our size should allow. Initiatives such as Professional Practice for Sustainable Development (PP4SD), Co-ordinating Umbrella Body for the Environment (CUBE), our environmental education relationship with the Committee of Heads of Environmental Sciences (CHES) for the accreditation of undergraduate degree courses, are all outstanding achievements realised during Will's tenure of office. At the end of Will's chairmanship IES finds itself at one of, if not, the most important crossroads in its history. If we take the right turning we will capitalise upon the excellent actions for the last three years.

We can develop and deliver the CUBE agenda. To do so we will have to make certain difficult decisions regarding sovereignty and to cede some authority and freedom of action. The prize though will be a single body to speak authoritatively and effectively for the environment, a voice that will be listened to because of its unanimity. IES members can look forward to the award of Chartered Status, hopefully by 2004, because of the single voice for the environment that CUBE will have.

We can continue to grow our membership through imaginative and appropriate actions, developing opportunities and providing services that members require. The decision to provide a three-year programme of support for the development of the Institute of Air Quality Management will bring new members to IES. We can also campaign aggressively for members in the various public and private sector bodies that employ environmental scientists. Our recent very successful membership drive in SEPA provides yet more encouraging evidence that IES is recognised as a desirable and effective professional body.

We can further develop our pre-eminent position in Environmental Education through our strategic alliance with CHES for the accreditation of environmental science courses. This alliance is defining an IES role in CUBE as a professional body distinctively (but not exclusively) aligned with Higher Education and environmental education. In this respect IES will further develop its learned society activities, as expressed in the principal activities of our charitable status and seek to develop its educative role through the development of our own learned journal.

We can capitalise upon our strong and unique position in sustainable development for professional practice. This is an area where we occupy an influential, indeed pivotal, position within the professional bodies. We must build our capacity to manage the PP4SD agenda. I suspect this is THE professional practice agenda for the 21st century. Our growing relationship with the Professional Associations Research Network (www.parn.org.uk) is one of the strategic partnerships we mean to pursue in order to develop our role in sustainable development for professional practice.

The charitable aims of IES include supplying the public with scientific environmental information, educating the public to assist with informed decision making on environmental matters and to educate members to ensure they have appropriate professional knowledge and skills. Our journal and our proposed learned journal will go some way to meeting these aims but still more work is required to capitalise upon the environmental information and education needs of the public and our members. IES can not do this on its own, it will need to develop strategic partnerships with others and to define its own unique and distinctive contribution.

In all of these areas IES needs to understand and be able to influence European issues and developments in sustainable development, environmental education and the role of professional bodies. I am delighted that Council has recently approved a project to scope out the ways in which this may be achieved.

In order to deliver these initiatives, grow our membership and develop the services members require and to meet

our broader aims and objectives we will have to develop our capacity to manage initiatives. Thus we must further professionalise our own activities and invest our resources in permanent support for our volunteer officers. My vision is that of a full time secretariat, led by Bob Fuller, delivering the initiatives outlined above and supported by the income streams that flow from them. The recent offer from the President of IES of a London office for the Institution is a most welcome start to realising this vision.

However, if we take the wrong turning at the crossroads then we will become increasingly marginalised within the environmental professional bodies and will reduce to an insignificant voice in debates and positions of national and international importance. Our day will have passed.

If we take the right turning we have the opportunity of growing our reputation and that of the environmental bodies as a whole. We will define our own role in the new body co-ordinating the professional environmental bodies. We will be a distinctive voice recognised for our inclusiveness, our professionalism and our learned approach to issues of the day.

By working together this is a realisable vision.

As well as a new Chair, Council also has a new Vice Chair in Professor Steve Martin and a new Chair, Carolyn Roberts, and Vice Chair, Jenny Blumhof, of the Environmental Education Committee. I know that my vision for IES accords well with the views of Steve, Carolyn and Jenny. With Will Pope continuing on Council as Immediate Past Chair, Bob Fuller continuing as Hon Sec and Jim Whelan as Hon Treasurer, IES is fortunate in having a highly effective and engaged set of Officers of Council. We have a great team who can build upon our successes of the last three years. I look forward to serving the Institution as Chair of Council.

I wish to conclude by setting each member of IES a challenge. The challenge I set you is the task of recruiting at least one new member each this year. Doing this together we can make a very big difference to the reach and impact of IES, in turn this supports us in our joint endeavours as the professional body for environmental sciences.

Disabled divers to take part in marine conservation

A project to involve physically challenged people in marine conservation and diving has been set up by a University of Greenwich graduate in Environmental Conservation.

Caroline Walsh, who has spina bifida and has used a wheelchair since the age of 15, has been a keen scuba diver for 11 years. She developed her interest in marine conservation at the University of Greenwich, completing a BSc in Environmental Sciences and an MSc in Environmental Conservation. She is currently doing a part-time BA in law at the university and plans to combine a career in environmental law with her conservation interests.

Access to Marine Conservation for All (AMCA) will initially be aimed at involving disabled people in Britain and Jordan in marine conservation. One of its first

projects will focus on the Aqaba Coral Reef in Jordan, the northern-most coral reef in the world, which has a high conservation value due to its many endemic coral species.

Caroline says: 'My own experience has shown that physically challenged people can actively take part in marine conservation, in spite of their difficulties. Tourism is one of Jordan's most important industries and by raising awareness of the marine environment in Aqaba, we can encourage people to appreciate it and contribute to conserving it in a sustainable way.'

This international organisation was developed by Caroline and Prince Ra'ad bin Zeid, Lord Chamberlain to the King of Jordan and patron of the country's disabled organisations. They met in August when Caroline was on her tenth trip to the country. Jordanian organisations such as the Jordan Projects for Tourism Development are also participating. The Jordan Royal Ecological Diving Society, whose chairperson Princess Basma bint Ali is a cousin of the King, represents the initiative in Jordan.

A leading expert in diving for the disabled, Canadian Hubert Chretien is AMCA's trainer for SCUBA diving instructors. He will train a core of qualified instructors to teach disabled SCUBA diving trainees from next April, if funding is obtained. The courses will be val-

idated by the Handicapped Scuba Association.

AMCA's plans also include the adaptation of existing marine conservation protocols to take physical difficulties of divers into account. They will conduct an evaluation of the health of the marine environment in Jordan and plan to set up webcams to monitor the health of the reef and promote ecotourism via the internet.

Volunteer programmes and two courses in marine conservation, specially adapted to allow disabled people to participate, will be developed in conjunction with the Marine Science Station, run jointly by the universities of Jordan and Yarmouk.

Caroline says: 'I want to share my experience of the marine environment with everyone. Although our focus will be on disabled groups, as that is where our experience and expertise lie, AMCA will be open to all.'

AMCA is currently applying for charitable status. Organisations which have expressed an interest in the project include the Zoological Society of London and Project Seahorse, for which Caroline is a volunteer, working to conserve and manage seahorses and their habitats.

Further information about AMCA is available from Caroline Walsh at a.m.c.a@btopenworld.com; Tel: (020) 8294 1515; Fax: (020) 8294 1616.

Caroline Walsh

New web site and e-mail addresses

The IES has new e-mail and web site addresses:

◆ e-mail:

ies-uk@breathemail.net

◆ web site:

<http://www.ies-uk.org>

New members

The IES is pleased to welcome the following to membership of the Institution:

Dr I. J. Anders	Specialist – Contaminated Land SEPA	Mr I. Nicholl	Student University of Wales, Aberystwyth
Dr D. Bailey	Data Report Analyst SEPA	Ms F. C. Parsons	Senior Geo-Environmental Scientist Babtie Group
Mr A. Cameron	Environmental Protection Officer SEPA	Mr D. K. Robinson	Metals Chemist SEPA
Mr J. Cupido	Environment Protection Officer SEPA	Mrs M. M. Robinson	Waste Data Officer SEPA
Mr N. P. Goody	Principal Hydologist SEPA	Mr I. M. Smith	Associate Director STATS Limited
Mr A. Greenall	Recent Graduate Manchester Metropolitan University	Mr S. J. Snape	Scientific Officer Bromsgrove District Council
Mr J. Haselip	Recent Graduate Manchester Metropolitan University	Mr A. J. Urquhart	Project Manager/Consultant The University of Salford

Rolex awards

Every year the Rolex Awards for Enterprise are featured in the Newsdesk and the details should therefore be known to regular readers. To qualify for an award, a project must be nominated and application should be made initially to the Institution. Nominations for the 11th biennial Awards in 2004 open in June 2002 and further details may be obtained from their Website at: www.rolexawards.com

Regional activity

Those members residing in Scotland will have received notice already of a proposed one day seminar on the principles of sustainable development. This is the Foundation Course developed from our PP4SD Project and qualifies for CPD time. Charges for the course will be very reasonable



as we are proposing to run the event at cost, so the greater the support the lower the price!

The seminar will run for one day during the week commencing 10 June. The day and the venue remain to be determined.

New Council and Committee appointments

The AGM in March and the associated Council and Education Committee meetings heralded a number of

changes in the officers and the introduction of new blood. Will Pope retired as Chair of Council after three years in the post and our new Chair is Professor James Longhurst of the University of the West of England. His opening message to members appears in this issue. The new Vice-Chair of Council is Professor Stephen Martin.

With the retirement of Derek Blair from the Chair of the Education Committee his place will be taken by Carolyn Roberts from the University of Gloucester and the Vice-

Chair by Jenny Blumhof from the University of Hertfordshire. Two new members have joined Council – Duncan Philips and Matthew Ireland and they will represent the interests of our embryo group of air quality managers.

PP4SD

The best news this month is left until last! Our application to the DEFRA for an Environmental Action Fund grant has been successful and substantial funding will now be available over the next three years to develop and carry forward Phase Two of the project.

For the last 12 months progress has been considerably inhibited due to shortage of funds and this welcome infusion of cash will enable us to move forward with our other partners to realise our ambitious programme.

RAF

Forthcoming conferences and courses

27-30 May

Upland Conservation Management,
Plas Tan y Bwlch, Wales

£270

Short Course to develop the skills and understanding required for the effective conservation of upland and moorland habitats.

Details: The Director, Plas Tan y Bwlch, Maentwrog, Blaenau Ffestiniog, Gwynedd, LL41 3YU, 01766 590324

email: plas@eryri-npa.gov.uk

8-12 July

Woodland Conservation Management

Plas Tan y Bwlch, Wales
£345

Short Course to develop & enhance the skills & understanding required for the effective conservation of woodland habitats

Details: The Director, Plas Tan y Bwlch, Maentwrog, Blaenau Ffestiniog, Gwynedd, LL41 3YU, 01766 590324

email: plas@eryri-npa.gov.uk

23-26 September

Management skill for countryside, tourism and heritage staff

Plas Tan y Bwlch, Wales
£690

Short course to promote development in management for countryside managers.

Details: The Director, Plas Tan y Bwlch, Maentwrog, Blaenau Ffestiniog, Gwynedd, LL41 3YU, 01766 590324

email: plas@eryri-npa.gov.uk

24-26 September

Waste 2002 – integrated waste management and pollution control, research, policy & practice,

Stratford upon Avon

The second in a series of international

bi-annual conferences on the management and regulation of controlled wastes

Details: Conference Office
02476 412170

email: info@waste2002.com

7-9 October

Environmental Protection 2002 NSCA annual conference and exhibition

Glasgow

£247-377

Annual conference including sustainable urban management, energy & climate change, industry and environment, transport and air quality,

Details: NSCA, 44 Grand Parade, Brighton, BN2 9QA 01273 878770

email: admin@nsca.org.uk

are you doing your bit?

Article	Author	Volume	No
Educational Paradox		10	1
Professional Practice for Sustainable Development		10	1
Designating Air Quality Management Areas in the UK: Process and Progress To Date	Nicky Woodford	10	1
Sustainable Development and the Rare Birds Index 1999		10	1
Developing Sustainable Practice In Africa – Undergraduates At Work	Carolyn Roberts	10	2
£500,000 Boost Announced For Biodiversity Initiative		10	2
Outcry As US Reneges on Kyoto Treaty		10	2
Chemicals in the Environment	Professor Jane A. Plant	10	2
Climate Change Report Confirms Need For Urgent Action		10	2
Sustainable Development Professionals: Who Needs Them?	Conference Report – Professor S. Ali Khan	10	2
Climate Change Agreements Concluded		10	2
Moving Towards Sustainable Construction	A.J. Vetter, Robert Weston & Stephen Martin FIEnvSc	10	2
Fear of Flying?	Professor Derek Hall MIEnvSc	10	2
Confidence in Chemicals	Professor David Taylor	10	2
Moving Towards Sustainable Construction – Part 2	A.J. Vetter, Robert Weston & Stephen Martin FIEnvSc	10	3
Biological Techniques for Contaminated Land: Case Studies	Joanne Kwan MIEnvSc & David Barr	10	3
Who is Going to Earth Summit 3?	Derek Blair MIEnvSc	10	3
Pausing after Foot and Mouth	Professor Derek Hall MIEnvSc	10	3
£30m Road Haulage Clean-Up Announced		10	3
Boost for UK Drive to Curb Greenhouse Gases		10	3
Traffic Levels Fall		10	3
Land of the Free...	Professor Derek Hall MIEnvSc	10	3
European Commission Approves PIP Replacement		10	3
Beaches ‘Safer and Cleaner than Ever’		10	3
Earth Centre’s Buildings – Taking the Past into the Future		10	4
Foot and Mouth Disease	Nigel Titchen	10	4
£215m Emission Trading Scheme is World First		10	4
Improved Quality of Drinking Water		10	4
Recycling of Domestic Waste Continue to Rise		10	4
Slow Growth in Traffic Due to Foot and Mouth Outbreak		10	4
Wildlife Conservation Unit Gets Charter Mark		10	4
Offshore Oil and Gas Industry Publishes Sector’s First Sustainable Development Strategy		10	4
Career Profile – Nicky Woodfield, Co-ordinator for the Air Quality Management Centre at UWE	Nicky Woodfield MIEnvSc	10	4
Sustainable Energy	Professor John H. Lawton	10	4
Alien Invaders: Grasping the Nettle	Dr David Dent	10	5
Rural Transport System ‘Must Provide Safety and Choice’		10	5
The Behaviour of Fine Particulates (PM10) in Thunderstorms	David Holmes	10	5
Task Force Identifies Next Steps to Recovery from FMD		10	5
JRC Contribution to Climate Change Research & Policy		10	5
The 2002 Volvo Environment Prize		10	5
UNED/WHAT Merger		10	5
Personal View: How 11th September Changed Our Attitude to Travel and the World	Dr Derek Hall MIEnvSc	10	5
A Model for Professional Accreditation of University Environmental Courses	Derek Blair MIEnvSc	10	5
New Directions in Managing Rural Tourism & Leisure		10	5
Vaccination Against Foot and Mouth	Lord Soulsby of Swaffham Prior	10	5
A New Umbrella Body for Environmental Institutions		10	6
The SIGMA Project: Sustainability in Practice	Mark Barthel, Christopher Sheldon & Stephen Martin	10	6
Fishery Policy: The Case for Change	Dr Joseph Horwood	10	6
Waste Minimisation Clubs in the UK: Key Issues for Possible Future Developments	Paul Clarkson & Professor Paul S. Phillips	10	6
Hedgehogs Behaving Badly		10	6
Policy Commission on the Future of Farming and Food: IES response		10	6

Moving? Changing jobs?

Remember to let us know promptly with your new address, telephone number, etc. This can avoid loss of communication, wasted postage and unnecessary complications.

Write to:

IES
PO Box 16
Bourne
PE10 9FB

Tel/Fax: 01778 394846

E-mail:
ies-uk@breathemail.net

IES ties

IES ties are available exclusively to members. They are dark blue or dark green polyester with a gold woven IES logo.

Please mail me ☐ ties.

Colour:

☐

Blue

☐

Green

Ties cost £6 including postage

(UK only: add £2 for overseas orders.)

I enclose a cheque for £ made payable to 'The Institution of Environmental Sciences'.

Name:

Membership No:

Address:

.....

Send orders to: IES, PO Box 16, Bourne, PE10 9FB.

Your reputation could be dead in the water

Organisations invest heavily in developing their reputation - but a single environmental incident can destroy it in minutes. Good management of environmental responsibilities reduces the risk, helps safeguard corporate integrity and often makes a tangible contribution to cost management

BASEC, a UKAS accredited body, can help with certification to ISO 14001 and EMAS. During the assessment process BASEC will assess the client's identification and resolution of problems and risks associated with disposal of hazardous material, and the liabilities arising from spills and contamination of land and groundwater. In addition BASEC puts great emphasis on the evaluation of methods to minimise energy, water and material usage, in order to reduce operational costs.

What price your reputation?

BASEC, 23 Presley Way, Crownhill,
Milton Keynes MK8 0ES

Tel: 01908 267300 Fax: 01908 267255

e-mail: mail@basec.org.uk web site: www.basec.org.uk



Diary dates for 2002

10 July	Education Committee	10.30
10 July	Extraordinary General Meeting	13.00
10 July	Council	13.30

Credible ISO14001 certification



BASEC

23 Presley Way • Crownhill

Milton Keynes • MK8 0ES

Tel: 01908 267300

Fax: 01908 267255

Web Site: www.env-basec.org.uk

Occasional papers available now from IES

Waste management

- From waste to woods – planting trees on landfill
- From waste to woods: trees on landfill and their place in landscape
- Enhanced landfill strategy
- Waste minimisation: the long term benefits
- European study on EISs of installations for the treatment and disposal of toxic and dangerous waste
- Mercury fall-out from crematoria

Education and training

- Environmental courses undergo a quality assessment
- Student environmental declaration
- On-line information systems in environmental sciences courses
- Global environmental charter and network for students

Business and industry

- The tourism challenge
- The tourism debate and environmental scientists
- Enjoying environmental science as a career
- The Brent Spar and the best practical environmental option

National and local government

- Transport policy, environmental pressures and the new UK government
- Local Agenda 21 – making it work

Price: £5 per paper including p&p
(£3 per paper for members)

Contributors

The *Environmental Scientist* aims to provide a forum for members' contributions, views, interests, activities and news, as well as topical feature articles. Articles up to 3,000 words should be submitted to the Editor, *Environmental Scientist*, PO Box 16, Bourne, PE10 9FB, three weeks prior to publication in the last week of January, March, May, July, September and November.

Views expressed in the journal are those of the authors and do not necessarily reflect IES views or policy.

Advertising

Advertisements should be submitted to reach the Institution by the 7th of the month of publication.

Rates: £50 (half page); £25 (quarter page); £12.50 (eighth page). Full page adverts at £100 can only be accepted under special circumstances, subject to space being available.

