

David Pearce

Environmental economist whose market-based ideas caught the changing tide of the 1980s

Stephen Smith

The Guardian, Thursday September 22 2005

David Pearce, who has died suddenly aged 63, was a pioneer of environmental economics - the branch of economics devoted to the relationship between economic growth, environmental pollution and social wellbeing - and a professor at University College London (UCL) from 1983 onwards, becoming emeritus professor in 2004. In his teaching, writing and engagement with policy, Pearce helped reshape environmental policy to address new and growing concerns.

In the early part of his career, in the mid-1960s, economists with an interest in the environment were a rare breed in Britain. Exciting work was being done in the US, especially by the Washington-based research organisation Resources for the Future, and Pearce was one of very few UK economists to follow this lead. In the harsh economic climate of the late 1970s, environmental economists were even more of an endangered species.

The breakthrough came - perhaps surprisingly - with the abrupt conversion of the Thatcher government to environmental activism in the late 1980s. Suddenly there was a receptive audience for new ideas that injected an environmental dimension into the free-market world of Conservative economic policy. Through more than two decades of research on cost-benefit analysis and the economics of pollution and natural resource depletion, Pearce was well placed to provide innovative thinking. Also, he had the skills to communicate his ideas to those at the practical end of policy.

Pearce was brought into the Department of the Environment in 1989 as personal adviser to Chris Patten, then secretary of state, and contributed to the major environment white paper of 1990 - though he was disappointed to find his radical ideas relegated to an appendix by wary mandarins.

He made his most influential contribution, however, from outside the official machine. With two colleagues, Anil Markandya and Ed Barbier, Pearce published his best-selling environmental manifesto, *Blueprint for a Green Economy*, in 1989. It was hailed by this newspaper as a "political event of the first importance". Widely known as the Pearce Report, it was a concise and persuasive statement of the key contributions that economics could make to the reform of environmental policy. It advocated basing policy on the criterion of "sustainability", valuing environmental effects, and making use of market incentives - all recurring themes in Pearce's work.

In the words of the 1987 Brundtland Commission report, sustainable development was "development that meets the needs of the present without compromising the ability of future generations to meet their own needs". Pearce drew on traditional growth theory and on Hicks's concept of income to interpret sustainability as meaning that each generation should pass on at least as much capital as it inherited. Pearce saw this stock of capital in broad terms - including physical capital (machinery and infrastructure), intellectual capital (knowledge and technology) and environmental capital (natural resources). He argued that it was idle to suggest that economic activity should never damage the environment. The notion of sustainability defined the minimum conditions for such damage to be accepted, so as to maintain the inheritance of future generations.

It is a truism that what cannot be measured can too easily be ignored in economic policy-making. One of the priorities for integrating the environment into economic policy decisions was to find measures of environmental damage, and of the value of the environment, that could stand up against the "hard currency" of jobs, marketed commodities and money income. In this field, Pearce made major research contributions on the valuation of noise, waste, global warming, risks to life and health, species conservation and biodiversity. His influence here extended well beyond the UK. He contributed key thinking to the Intergovernmental Panel on Climate Change and stimulated better quality research in many countries through his work on valuation methods for the OECD.

The third *Blueprint* theme - market-based reform of environmental policy - sought to turn the failings of a market economy into strengths. Pearce pointed out that environmental problems frequently reflect misdirected incentives. Polluting is profitable, the market demand for ivory makes elephant poaching profitable, and so on. Market-based policies such as pollution taxes, tradable permits and conservation payments redress the balance by creating new incentives that reflect society's environmental values. Of all *Blueprint*'s proposals, this has probably had the greatest influence on subsequent policy. Britain's landfill tax, the EU's emissions trading scheme and the various mechanisms for international pollution offsets in the Kyoto protocol and other international agreements all have their origins in the groundswell of interest in market-based policies, kick-started by Pearce and *Blueprint*.

Pearce was born in Harrow, north-west London, and went to Harrow Weald county grammar school, then Lincoln College, Oxford, where in 1963 he took a first in politics, philosophy and economics. He held academic teaching appointments in economics at Lancaster and Southampton universities before moving to direct the public sector economics research centre at Leicester University in 1974. Five years later he moved to a chair in political economy at Aberdeen, where he was head of department from 1981 to 1983.

Then he moved to UCL, initially as professor of political economy with a brief to turn around the fortunes of its ailing department of economics. As he arrived, a University of London review of economics teaching had recommended closing the department. As its head from 1984 to 1988, he successfully fought this threat and initiated a remarkable renaissance in the department's reputation.

In 1990, Pearce set up an MSc programme in environmental and resource economics - the first of its kind, and later widely imitated. In 1991, with academic partners at the University of East Anglia, he established the ESRC-funded Centre for Social and Economic Research on the Global

Environment at UCL. The centre built a substantial international reputation for environmental economics research, especially on valuation.

Pearce's achievements brought him wide recognition. He was included in the United Nations "Global 500" Roll of Honour in 1989, was awarded the OBE in 2000 and last July was the first recipient of the Lifetime Achievement Award of the European Association of Environmental and Resource Economists.

Despite his gifts for communication, and his personal warmth, Pearce's trenchant arguments and his fierce intellectual integrity frequently got him into controversy. He would never let his personal views get in the way of honest appraisal of the costs and benefits of environmental policy. In turn, he was exasperated by critics who burnished their "greener than thou" credentials by misrepresenting the economics approach - wilfully, or through ignorance.

Pearce married Sue in 1966 and had two sons, Daniel and Corin. Family life was important to him, but for much of his career he kept up a punishing schedule of international travel. In the mid-1990s the family bought a farmhouse near Saffron Walden, Essex, and Pearce's pleasure in his new family life was evident. He had many plans for his retirement - tending his seven acres, trading pottery in the antiques markets of East Anglia and on Ebay and writing the odd book (or five). But after barely a year of retirement, all this was cut short. An apparently minor illness early this month suddenly worsened. He died on the very day he was diagnosed with leukaemia. His wife and two sons survive him.

• David William Pearce, environmental economist, born October 11 1941; died September 8 2005

guardian.co.uk © Guardian News and Media Limited 2008