

EMBARGOED UNTIL 12 NOON MONDAY 21 AUGUST 1995

ENTERPRISE NEW ZEALAND TRUST CONGRESS '95

THE ECONOMY AND THE ENVIRONMENT

**ROGER KERR
EXECUTIVE DIRECTOR
NEW ZEALAND BUSINESS ROUNDTABLE**

**WELLINGTON
21 AUGUST 1995**

THE ECONOMY AND THE ENVIRONMENT

Some years ago, Guy Salmon, then director of the Joint Campaign on Native Forests, made a very interesting statement about some of the environmental consequences of the economic reforms which had been introduced in New Zealand. He said:

... Roger Douglas is the unsung hero of New Zealand's natural environment. Let me briefly list his achievements. He has cut off funding for the uneconomic clearing of native forests by government departments. He has obtained a firm phase-out period for swamp drainage subsidies. He has finally abolished the Land Development Encouragement Loan Scheme, which has funded the clearance of over 30,000ha of native forests since 1978. He has stopped concessional finance for building local authority hydroelectric dams. He has abolished the tax concessions used for land clearance by forestry companies. He is phasing out special tax deals for mining companies. His support for splitting up the Forest Service and Lands and Survey has been crucial to the creation of the Department of Conservation. By corporatising the State-owned enterprises he is setting up a framework which will curb the building of state-protected Think Big projects. Soon he will have State Coal Mines on the same basis as private enterprise, so that it no longer has legal powers to make pre-dawn raids on the pastures of Waikato farmers. In short, thousands of hectares of native forests, swamps, rivers and wildlife habitats are being saved by the dismantling of the structure of state-sponsored carnage. It is Roger Douglas, more than anyone else, who has made this such an exciting time to be an environmentalist.

This was a very perceptive comment by one of New Zealand's most intelligent environmental leaders. It prompts a number of reflections.

When we look back on the policy debates of the pre-1984 period, an obvious question that arises is: Where were the environmentalists when we needed them? To be sure, there were one-off campaigns against some of the follies of the time, such as the construction of the Clyde Dam. But there was little systematic interest by many environmentalists in the underlying policies which were causing so much environmental damage, such as the under-pricing of electricity for political reasons which brought forward the construction of power stations (and then contributed to the glut in energy which motivated the Think Big programme). Where environmentalists were engaged in the policy debate, they were more often than not on the wrong side. Through the 1970s, for example, environmentalists pushed for gas to be used in uneconomic liquid fuels schemes rather than in electricity generation, and supported interventionist approaches to energy conservation such as petrol coupons and carless days. They were generally hostile to markets and prices. The reforms Guy Salmon spoke of owed little to people who styled themselves

environmentalists, although many of those associated with the reforms were as conscious of their environmental benefits as they were of their economic merits.

These stances no doubt reflected the prevailing climate of environmentalist opinion at the time. This tended to be unsympathetic to economic progress, regarding it as synonymous with environmental degradation. To many people it seemed obvious that our environmental problems were a consequence of consumerism, economic growth and the profit motive. Organisations like Greenpeace disliked the market system, and in politics many greens associated themselves with parties favouring heavy state intervention. This green tradition, according to Chris Trotter, continues to argue that:

... industrial society, through its capitalist institutions, inevitably alienates human beings from the natural environment and each other. The consciousness of industrial Man ... is, therefore, fundamentally exploitive, a fact freighted with disastrous consequences for both the natural world and the human species.

Over the last 15-20 years, however, there has been a marked shift in the intellectual climate. Experience around the world and developments in economic understanding have established a number of important lessons.

- First, economic development and environmental progress are much more in harmony than they are in opposition. Richer is usually cleaner. As countries' incomes rise, they can afford to spend more looking after the environment. People are more willing and able to trade off material progress for environmental benefits since both go to improving the quality of life. In poorer countries, relentless pressure on natural resources arises simply from the struggle to survive.
- Second, economic progress is associated with, and fueled by, improvements in technology. These give rise to products and processes that are usually cleaner, quieter, and less harmful to the environment. Advances in technology economise on the use of resources. Market competition spurs businesses to reduce waste and produce more with less. The contrast between fuel-efficient West German cars and the polluting and gas-guzzling Trabants just across the border in the former East Germany illustrated this point.
- Third, market systems are founded on the notion of property rights which are a powerful force for good stewardship and conservation. As St Thomas Aquinas put it:

... private property is essential for human life. ... [E]ach person takes more trouble to care for something that is his sole responsibility than what is held in common or by many. ...[T]here would be chaos if everybody cared for everything.

Collective ownership reduced incentives to care for property; as the Russian saying used to go, "Who will get up in the night to look after the sick cow?" Many of the worst environmental problems have been due to the so-called tragedy of the commons. Collective ownership means a conflict of interest for politicians - do they act to protect the government's interest as the owner of a polluting industry, or do they act to subsidise consumers of its products if prices have to rise, or do they act in the interests of those who are harmed by the pollution? To whom can the latter appeal if the government owns the industry, makes the laws, and appoints the judiciary?

- Fourth, market systems embody other valuable incentives as well, in particular prices. Prices signal the relative abundance or scarcity of resources, and guide them to their best use. As prices go up, demand is curbed, people switch to substitutes and new sources of supply become profitable. Economic systems based on prices rather than command and control mechanisms are forward-looking and reflect the interests of future generations: if resources are likely to be more valuable in the future, they won't be used today.
- Fifth, and by contrast, political decision making is much more biased towards the short term, typically the next election. Politicians face much stronger incentives to deliver benefits to present-day voters, often at the expense of the future. Consumption today is maximised at the expense of future consumption possibilities. Resource depletion and environmental clean-up are problems left to subsequent administrations to deal with.

All the problems associated with the suppression of market mechanisms, state ownership and reliance on political decision making processes were graphically illustrated by the environmental record of the former Soviet Union and Eastern Europe. A slogan of the Stalin era was: "We cannot expect charity from nature. We must tear it from her." In the name of material progress, Soviet governments tolerated and encouraged a 70-year assault on nature, poisoning rivers, fouling the air and ravaging once pristine and productive lands. The biggest rivers, including the Volga and the Don, became open sewers. In central Asia the desiccation of the Aral Sea was probably the greatest man-made catastrophe ever. Altogether three-quarters of the old Soviet Union's surface water is reckoned to be badly polluted.

Massive soil erosion meant declining grain yields which changed Russia from being one of the world's largest grain exporters to a country requiring food aid. In some industrial towns, nine out of ten children suffered from pollution-related illnesses such as chronic bronchitis, asthma, allergies and cancer. Life expectancy has been falling, contrary to trends in almost every other part of the world. Chernobyl merely brought home the extent of what has been called ecocide in the USSR. As *The Economist* put it:

Untrammelled power and conceit have produced an ecological and human disaster of biblical proportions. The consequences will have to be endured for generations to come.

We are talking here about a country that had no consumerism (there was nothing to buy), no profit motive (profits were illegal), and no genuine economic growth. Into the bargain, one giant common pool led to environmental ruin. Yet this was a country that was greatly admired by many New Zealand unionists and environmentalists who made common cause with them.

In the industrial countries which relied primarily on decentralised markets to determine the use of resources, the environmental consequences of economic progress have been far more benign. Of course this is not to deny that there are environmental problems in most Western countries, nor that there are often trade-offs between development and the environment. Difficulties still arise where resources are held in common and property rights are not easily specified - as in the case of sea and air pollution - although these are reducing with advances in technology. It should be the concern of all of us to take these problems seriously and find ways of mitigating them and making careful judgments about the trade-offs. On the other hand, it is also clear that many of the supposed environmental threats have been vastly exaggerated.

It is salutary to look back over the record of environmentalist doom-mongering. In Shakespeare's day, the prevailing fear was that London streets would be buried under mounting levels of horse manure. The Reverend Thomas Malthus predicted rising population in Britain would lead to mass famines. The 19th century economist Stanley Jevons wrote a book about the problems of the depletion of fossil fuels, particularly coal.

Nearer to our time, Rachel Carson predicted in 1962 that man-made chemicals might wipe us out within 20 years. In the opening lines of his book, *The Population Bomb*, Paul Erlich told us that:

The battle to feed all of humanity is over. In the 1970s the world will undergo famines - hundreds of millions of people are going to starve to death

The Club of Rome's *Limits to Growth*, published in 1972, predicted the exhaustion of gold by 1981, tin by 1987, petroleum by 1992, and copper, lead and natural gas by 1993.

In the 1970s Stephen Schneider, currently a leading proponent of action against global warming, predicted a new ice age. In the early 1980s, acid rain was supposed to be killing off the forests in North America and Europe; subsequent studies have refuted this theory. In 1984 the UN Environmental Programme claimed that 25 percent of the earth's surface was threatened by desertification; the latest data show no net increase in global desert area. In 1991 Carl Sagan predicted that smoke from torched Kuwaiti oil wells would lower global temperatures, causing droughts and famine in India and "massive agricultural failure" in the United States. And so on.

It is extraordinary how some of the leading doomsayers cling to their beliefs in the face of evidence and scientific reasoning. The story of the famous 1980 bet between Ehrlich and economist Julian Simon has become legendary in this regard. Simon offered to let anyone pick any natural resource and any future date, and he bet that the price would decline by that date. If the resource really became scarcer as the world's population grew, he reasoned, then its price should rise over time.

Ehrlich and two associates picked a basket of five metals - chrome, copper, nickel, tin and tungsten - then worth a total of \$1,000, and chose a ten-year period. If the combined prices of the metals were higher in 1990 than in 1980, Simon agreed to pay the Ehrlich group the difference in cash; if the combined prices were lower, they would pay him the difference.

In 1990 Ehrlich sent Simon a sheet of calculations and a cheque for \$576.07. Over the ten-year period, each of the five metals had declined in price when adjusted for inflation. The drop was so sharp that Simon would have come out slightly ahead even without the adjustment for inflation.

Prices of food and most natural resources have been falling for decades because of entrepreneurship and continuing technological improvements. Despite that fact, Ehrlich, who had predicted that "before 1985 mankind will enter a genuine age of scarcity" including food shortages, now says it will happen sometime in the next century.

The good news is that much of the bad news about environmental trends is wrong. Thus the London pea-soup fog of Dickens' day has virtually been eliminated, and the Thames is cleaner than it was in the time of Shakespeare. Lake Erie is no longer dead. Today 70 percent of the rivers in the United States are considered safe for fishing or swimming compared with 36 percent in 1972. Particulates and carbon monoxide emissions have been declining in the United States for more than 50 years. Ocean dumping of industrial wastes has been reduced by 94 percent. The total forested area of the world's temperate regions actually increased between 1980 and 1990. Overall death rates from cancer are declining, apart from smoking-related lung cancer. Although the world's population has tripled during the 20th century, food is more abundant and cheaper today than at any other time in human history. And as Alan Reynolds, director of economic research at the Hudson Institute, has written:

The world is not running out of energy and never will. The problem is cost. Much of the potential energy remains unfound or unused because it is too costly to develop at current prices. We have recovered only one-third of the oil from existing wells. Heavy oil, shale and tar sands contain something like eight times the 'proven' reserves of conventional oil, and many areas of the globe have barely been explored for conventional oil and gas. If cheaper energy sources start to run dry, prices will rise and alternative sources will be developed.

Julian Simon argues that there is no convincing reason why these trends towards a better life should not continue indefinitely. The key requirements for progress are free economies, respect for property, and fair and sensible rules of the market. Basically what the prophets of doom overlook is the ingenuity of human beings to adapt, economise, conserve, find substitutes, and discover new knowledge to solve emerging problems.

There has been a spate of recent books that have put environmental issues into a better perspective. They include Ronald Bailey's *Eco-Scam : The False Prophets of Ecological Apocalypse*; Richard North's *Life on a Modern Planet*; Wilfred Beckerman's *Small is Stupid*; *Environmental Gore* edited by John Baden, a response to Al Gore's *Earth in the Balance*; *Apocalypse Not : Science, Economics and Environmentalism* by Ben Bolch and Harold Lyons; *Eco-Sanity : A Common-Sense Guide to Environmentalism* by Joseph Bast, Peter Hill and Richard Rue; *No Turning Back : Dismantling the Fantasies of Environmental Thinking* by Wallace Kaufman; *The True State of the Planet* edited by Ronald Bailey, and Matt Ridley's *Down to Earth*. These writings are not anti-green.

As Ridley says:

I am an environmentalist. There are issues I wish we would take more seriously, such as asthma, plastic litter, the decline of frogs and the loss of untouched forest to government-encouraged development. But I wish greens and lawmakers would try to devise real solutions that work with the grain of human nature, rather than whizzing round the world to glamorous conferences crying wolf about impending apocalypse.

Arguably, we in New Zealand have also got some of the environmental issues seriously out of balance. Like *The Dominion*, I would not greatly regret the loss of the kiore or native rat. I regard the opossum menace and the threat to some native birds as clear and present dangers that should preoccupy us more than some of the global environmental problems. No one should have a cavalier attitude to an issue like global warming. But while the greenhouse hypothesis may well be sound in broad outline, the likely extent of warming is still highly controversial, the detrimental or beneficial effects of warming are not well established, and the feasibility and cost of measures to mitigate the problem relative to any benefits are quite indeterminate at this stage. We do not even know if New Zealand would be a net beneficiary from any global warming (in which case countries which are not should pay us to adjust) or a net loser (in which case we should be prepared to incur real costs). All the logic points to a very cautious approach, particularly for a small country which is a negligible factor in the global context and not currently a net contributor to the problem - if indeed there is one.

Regrettably it is also the case that many approaches to policy originating from environmental sources are still misdirected. The interventionist Alliance programme would certainly be highly damaging to the economy, and, for that reason and others I gave earlier, I suspect it would be damaging to the environment as well. Specific policies such as progressive pricing for water and electricity are not only bad economics. Because many consumers would not face the true marginal costs of supply, progressive pricing would encourage excessive consumption and resource depletion and hence be bad environmental policy as well. It would also be an unfair policy, because those with a low personal demand would not necessarily be on low incomes, and because some of them would also be able to enjoy windfall gains by on-selling to others who would otherwise have to pay higher prices.

Similarly, the so-called 'precautionary principle' which some claim is relevant to an issue like global warming is bogus economics. Most economic decisions involve risk. There is no general rule which says you should err on the side of caution : not to take

risks may be the biggest risk of all. Risks must be assessed and managed on a case by case basis.

With some notable exceptions, environmentalists are often still not there when we need them on a range of issues where good economics coincides with good environmental policy. Economists, not environmentalists, were the driving force behind the highly successful ITQ regime for fishing - a textbook example of the environmental benefits of secure property rights. In the coastal shipping debate, only the Maruia Society to my knowledge, and then only late in the day, recognised the environmental benefits of deregulation and weighed in in favour of it. As far as I know, no environmental organisation has taken up the issue of over-production and inappropriate decisions about land use resulting from the distorted pricing structures in the dairy industry, which is not only an economic cost to the country but is also creating discharge problems in areas like Southland. And environmental support for better pricing policies and more commercial approaches to infrastructural industries such as electricity, water and roading, which would have large environmental as well as economic benefits, is, at best, muted.

On the other hand, we need to worry about the costs that excessive environmental regulation may be imposing on the economy. The total public and private costs of meeting environmental regulations can be very high - in the United States in 1990 they were estimated at more than US\$90 billion per year, well over New Zealand's national income. There is no doubt that the Resource Management Act has increased the costs of doing business for many industries in New Zealand. A commentator in the *Australian Financial Review* recently made a sobering point. He said:

Even by introducing the most modern and best practices, it would be out of the question to obtain approval for many of our existing roads, dams, railways or mines. Irrigation schemes ... would generally face impossible barriers and the commercially viable building of new pulp and paper mills, chemical plants, abattoirs and many other factories would, frequently, be ruled out.

Without these assets built in the past ... our standard of living would be vastly lower. If we don't keep building sensibly, future generations will suffer.

No one argues against sound environmental regulations. The debate needs to focus on the form such regulations should take. Insights from recent economic inquiry, particularly the so-called free market environmentalism literature, have provided a foundation for major improvements in policies affecting the use of environmentally sensitive resources. Recognising that the vast majority of resource use decisions are made privately in a decentralised market economy, these insights point in particular to a set of policies which harness the power of appropriate prices, private ownership

(and the incentives for care that accompany it), and tradable ownership rights to influence environmental outcomes. Taxes and subsidies are seen as often superior to regulations in correcting for external effects. In this way, people are encouraged to think carefully about the value they put on resources and make careful trade-offs.

By contrast, preferences expressed through the political system are frequently much less reliable. An anecdote illustrates the problem clearly. A Russian being tested for his suitability for membership of the Communist Party was asked what, if he had two ploughs, he would do with them. One, he said, he would keep, and strive earnestly to raise the levels of ploughing productivity; the other he would give to the party.

After a similar answer when asked what he would do if he had two cows, he was then asked what he would do if he had two shirts. He became embarrassed and tongue-tied. "Why can't you answer this question?" his examiners said. "It's exactly the same as the earlier ones."

"But comrades," he said, "I do have two shirts."

The politicised approach to public participation, tribunal hearings, contingency valuations and all the other apparatus of political and regulatory decision making tends to reflect individual preferences in inaccurate ways, closes off options, imposes blanket solutions and often has unintended consequences. In the environmental area, as in many others, it should be a mechanism of last resort, not first resort. Stronger forms of environmental regulation should be reserved for areas where they are strictly necessary, such as those characterised by serious information problems and third party effects which cannot be dealt with in other ways.

Against the background of the failure of command and control approaches to economic and environmental management and a better understanding of the strengths of market processes, it is not surprising that a party like the Progressive Greens has appeared on the political scene. Both rising income levels and environmental enhancement contribute to the goal of improving the overall quality of life. Market-driven economic progress is essential to environmental progress. If these insights from worldwide experience are being absorbed in New Zealand, that represents very considerable progress in the political debate.