

*Forest and Bird launched its energy conservation campaign in November with a seminar entitled **Energy Futures in a Greenhouse World**. The following is an edited version of campaign co-ordinator Keith Chapple's address to the seminar.*

as 'under-utilised plant', but which I prefer to call our 'Energy Retirement Fund'.

Used frugally with an eye to the future, New Zealand has sufficiently spare generating capacity to call upon well into the next century, without constructing any new plant. But if we continue to increase demand, we will gradually eat into and quickly use up our Energy Retirement Fund. This merely brings forward the day when massive expenditure will be required to build more power stations. In effect, we would have gobbled up our retirement fund well in advance of our retirement, and handed our children and grandchildren a huge financial and environmental burden.

## Policy Measures

The present situation won't change itself and neither will it change without some fundamental changes in thinking in some areas, and a series of policy measures or action. I suggest that high priority should be given to a policy measure which actions a comprehensive public education programme aimed at producing an energy efficient New Zealand.

Such a programme should be as well funded as that which has promoted the con-

Different supply authorities will face very different pressures. I suggest that what will be common to all supply authorities is the direction of change toward energy efficiency – it is not the question of if, but when. It is toward this aim the Electricity Supply Association has bought rights to the 'Competitek' service of energy efficiency expert Amory Lovins' Rocky Mountain Institute.

This is an up-to-date and independent assessment of the quality of many thousands of products available for increasing efficiency. It is also a valuable insurance against a final obstacle to implementing energy efficiency – poor information, which makes us vulnerable to fraudulent or less competent sellers.

Thought might be given to a second policy measure which deals, really, in the general area of philosophy. I suggest Electricorp should look seriously at its present management philosophy. I readily acknowledge that Electricorp, as a state-owned enterprise, has a statutory obligation to operate a successful business. But, it also has a statutory duty to be an organisation that exhibits a sense of social responsibility by having regard to the interests of the community in which it operates, and by endeavouring to accommodate

## The Price of Power

**F**OREST AND BIRD MEMBERS often ask why the Society is pursuing an energy efficiency campaign and why do we campaign against hydro electricity schemes. Isn't hydro electricity one of the most benign sources of energy at our disposal?

New Zealand has paid a high environmental price for hydro electric developments. Here are some examples of the problems.

### Forests Lost:

A considerable area of forest in Fiordland National Park was drowned by the raising of Lake Monowai.

### Black Stilt:

Almost the entire Waitaki River system is modified by hydro development. By the 1950s, the black stilt was confined to the Upper Waitaki River and lakes. Since then, braided rivers have been diverted into canals and lakes have been raised, drowning delta feeding areas. The black stilt population has dropped to about 70 and thousands of dollars have been required for artificial breeding and habitat programmes to prevent its extinction.

### Blue Duck:

This rare torrent duck has lost large areas of river habitat, with damming and diversions. The Tongariro power scheme has reduced blue duck numbers on many rivers around Tongariro National Park, the North Island stronghold for the species.

### Geothermal Field Drowned:

Two thirds of the world renowned Orakei Korako geothermal area was drowned under Lake Ohokuri on the Waikato River. It could be revived if the lake level is lowered when the water rights for the dams on the Waikato River are considered.

Despite the wide documentation of environmental problems with hydro-electric developments since the battle to save Manapouri, the Ministry of Commerce has recently come out with a report proposing new dams throughout New Zealand.

The report, entitled *Hydro Resources of New Zealand*, proposes dams on the Mohaka, Rangitikei, Motueka, Buller, Grey, Kawarau and Maitara Rivers, where National Water Conservation Orders are pending or being heard. The report does acknowledge that NWCOs on the Motu, Rakaia and Ahuriri Rivers could constrain their development. 🦋



*In the 1960s forests around the shores of Lake Monowai in Southland were drowned for hydro generation.*

sumption of electricity over the past three years, and aimed at every facet of energy use within New Zealand. It should be aimed at the household and industry but, perhaps more importantly, the electrical supply authorities – for it is at the retail level and the area where the consumer is closest to the electricity industry, that effective efficiency information can be readily absorbed.

or encourage them when able to do so.

I believe the interests of the community lie in an energy efficient New Zealand, and Electricorp can accommodate these interests within its present structure.

Going easy on energy is one of those rare situations where everyone is a winner.

Consumers have more money to spend, the supply authorities act in a socially respon-