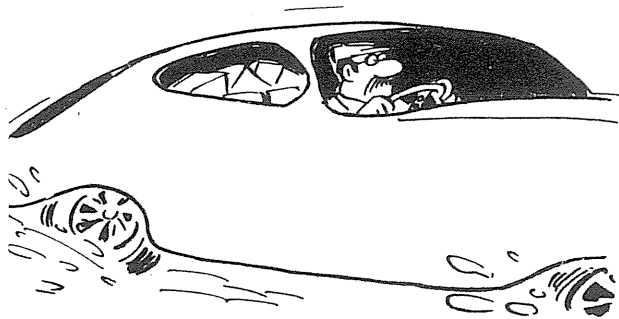


# Energy



Energy consumption has until recently been increasing at staggering rates. Based on past indications the Electricity Department and the Power Boards are planning on the basis that electricity demand is increasing at the rate of seven per cent each year. At this rate there would be within the next 25 years a 500 per cent increase in electricity consumption while the population during that period is expected to increase only 50 per cent. Electricity generation will have to double every ten years to meet this expected increase in demand.

Yet the costs of increasing the supply of electricity are already becoming unacceptable. Hydro-electric power is by far the cheapest power, but we have already used the most economic sites and are increasingly forced to embark on more expensive projects involving greater destruction of the natural environment. The cost of generating electricity by other means is much more expensive, but in order to keep up with demand we have already built oil and coal-fired power stations and are committed to the construction of gas-fired stations. The cost of the proposed thermal power station at Waiau Pa, South Auckland will amount to 20 per cent of the total existing capital investment in power generation. The Electricity Department says that to meet projected demand it is necessary to construct nuclear fission power stations, and the Department is already planning for a start on the first nuclear station in 1982.

For economic and environmental reasons alone we must take immediate steps to stop the increasing demand for energy and stabilise energy consumption at a level which is perpetually sustainable at reasonable cost.

The use of fossil fuels (such as oil and coal) for energy production cannot be continued (let alone increased) indefinitely, and must be stabilised urgently. Successive governments have so far seemed interested only on squandering our energy resources as quickly as possible (for example sale of Mt Davy or Pike River coal to Japan and the sale of 10 per cent of the country's electricity generation to Comalco).

Values Party policies aimed at stabilising population and developing a stable-state economy are necessary pre-requisites for the stabilisation of energy consumption, but must be supplemented by detailed conservation policies.

## The Values Party would

- Expand the Ministry of Energy Resources to co-ordinate the use of all energy sources and to bring down a comprehensive energy policy aimed at: preventing further increase in per capita energy consumption, increasing the efficiency of energy use, minimising the consumption of non-renewable resources and environmental disturbance, and discouraging highly energy-intensive industries.
- Prohibit the construction of nuclear power stations.
- Wherever possible supply energy by primary energy sources rather than indirectly by electricity.

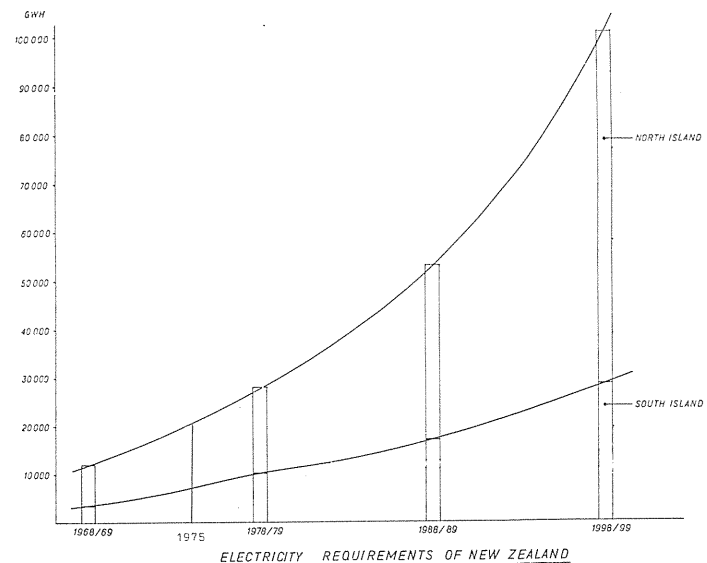
To stabilise energy consumption the Values Party would

## Domestic Sector

- Revise the price of electricity, gas, petrol and oil to domestic users to give a basic allocation at reasonable prices. Consumption in excess of this would be charged on an increasing sliding scale.
- Investigate increased charges for peak period consumption.
- Encourage glide time in working hours.
- Apply daylight saving during summer.
- Investigate the feasibility of putting one Island ahead of the other in time.
- Encourage the supply of heat through direct means by solar energy or by heat pumps.
- Upgrade building standards relating to insulation, and subsidise the cost of insulation and other means of achieving low energy requirement homes.
- Ban certain frivolous uses of energy, such as the heating of domestic swimming pools.

## Industrial Sector

- Remove bulk power discounts to industry and charge higher prices for peak period consumption.
- Use subsidies or depreciation to encourage the establishment of industry-based power stations. Excess electricity would be purchased by the NZED and the interchange of energy among industries encouraged.
- Take steps to ensure that consumer appliances operate on a minimum power factor.
- Discourage consumption of goods produced by energy-intensive industries.
- Consider phasing out highly energy-intensive industries.



## Transport

The transport system is one of the principal areas where non-renewable energy sources are used wastefully. New Zealand relies exclusively on fossil fuels. It is obvious that we can make much more frugal use of our resources in this area while at the same time fulfilling people's personal travel needs and the need for efficient distribution of raw materials and manufactured goods.

The Values Party policy on transport is based on the following principles. Transport systems should:

- make efficient use of energy;
- be safe and reliable;
- have the least possible effect on the physical and human environment;
- be planned and co-ordinated.

These factors have sometimes been overlooked in the development of our transport systems.

## The motor car

The uncontrolled use of the private motor car has resulted in steady increases in noise and smoke pollution, in mounting interference with pedestrian mobility, and in increasing congestion on our roads. The car has become the chief symbol of the "rush" mentality in our society.

As a means of transport the car is increasingly inefficient when compared with public transport systems or potential systems. Increasingly in our congested city streets it fails to provide what it was designed for - rapid means of getting from one place to another.

The car creates a major distortion in the economy through increasing use of imported fossil fuel; through the drain on overseas reserves in importing cars and through the diversion of a large proportion of the skilled labour force into non-productive assembly and maintenance of the private car.

In the short term because adequate alternatives have not been developed we will be forced to continue to rely on the private motor car.

## During this period a Values Government would:

- Investigate the development of an automotive fuel from plant sources.
- Encourage local bodies to restrict and prohibit the use of private motor vehicles in inner-city areas.
- Prohibit the importing or assembly of cars which cannot meet satisfactory fuel consumption requirements.
- Introduce rigid emission control standards to control the polluting effects of all vehicles.
- Stop all road widening schemes and motorway proposals in towns and cities, unless such schemes are for reasons of pedestrian safety.
- Limit roads [except for "feeder roads"] to two lane traffic in all new residential areas.

## Public Transport

It is clear that broadly speaking the only alternative is public transport - a mix of rapid mass-transit by road or

rail. Rail especially should never have been allowed to run-down to the degree it has. The energy requirement for transporting freight by road is five to six times greater than by rail, and the pollution is correspondingly higher. The energy outlay for the cement and steel to build a motorway is three to four times greater than that required to build a railway. The land area necessary for roads is estimated to be four times more than for railways.

Public transport is much more efficient in terms of per capita use of materials and energy than any private alternative. It can also be as flexible, provided it is encouraged at the expense of private transport. This is the key to the provision of a sound transport system.

## The Values Party would

- Reconstitute the National Roads Fund so that petrol taxes can be diverted in large amounts to the upgrading or development of public transport systems and not just to new road construction.
- Establish an adequately funded Railways Corporation along the lines of the National Airways Corporation to ensure the application of good management practices in the expansion of the railway system.
- Encourage the increased use of coastal shipping through the national shipping line.
- Subsidise local bodies in the provision of good public transport services.

## The role of Government

Values would give to the Ministry of Transport overall responsibility for coordinating all forms of transport.

The prime consideration in choosing the mode of transport for a particular purpose should be the responsible use of energy resources.

## The Ministry of Transport under a Values Government would

- Co-ordinate regional and national transport systems with regions being primarily responsible for their internal transport needs.
- Periodically review the effectiveness and efficiency of various transport systems.

## Use of energy resources

In the use of fossil fuel reserves recognition will be made of their essentially finite nature and that ultimately we must live without them.

## To ensure the efficient use of fossil fuels, the Values Party would

- Prohibit the export of coal, oil and natural gas.
- Use coal rather than oil in thermal power stations and in industry.
- Stop the use of natural gas in electricity generation, and instead reticulate it for home and industrial use and as a chemical raw material.
- Develop geothermal power sources subject to environmental safeguards, and where possible use such power directly for industry.
- Thoroughly investigate alternative sources of energy such as solar and wind and generation of methane from organic wastes in order to phase out the use of fossil fuels in the longer term.
- Halt further expansion of the Bluff aluminium smelter [Comalco]. Take steps to terminate the present agreement with New Zealand Aluminium Smelters and give it the option of closing down or paying for electricity at a rate equivalent to the highest cost of electricity in New Zealand.

