

Managing Change as a Minister of the Crown

Hon. George Gair

2010

Managing Change as a Minister of the Crown

Hon. George Gair

A thesis submitted to Auckland University of Technology in fulfilment of the requirements for the degree of Master of Philosophy (MPhil)

2010

Institute of Public Policy

Primary Supervisor: Professor Marilyn Waring

Secondary Supervisor: Dr Grant Gillon

Table of Contents

Table of Contents	i
Acknowledgements	i
Abstract.....	viii
Chapter 1.....	1
My Thesis Research Journey	1
Looking ahead, as seen from the beginning	1
Into what category of research would my thesis be categorised?	2
First identify the thesis subject.....	3
To where should I turn on the paper-work trail?	6
My introduction to “methodology”	8
Subject chosen! Then how to launch into the action?	9
Chapter Subjects Looking Ahead.....	11
Why was “Goals and Guidelines” so important?	14
Ratcheting Up - From Planning To Performing	15
Chapter 2.....	19
Thesis Methodology	19
The What, the Why, the How, the When and the Where of this Thesis	19
The What.....	19
The Why.....	20
The How	20
The When.....	21
The Where.....	22
My search for the appropriate methodology	23
The Question Still Challenged Me: “What Methodology?”	32
Chapter 3.....	37
An Overview and Background.....	37
The Years Leading Up to My Time as a Minister.....	37
The 1960s and early 1970s proved to be a particularly interesting period in New Zealand’s political history.	42
Doing and Experiencing the Political Action - as Seen from the Inside. .	44
What did I hope to achieve in planning, researching and writing this thesis?	45
The Political Action - as Seen By Others	46
Relationships between Minister and Departmental Head	56
Chapter 4.....	58
Scoping	58
An essential early step on the Research Journey.....	58
Education and the Holyoake Influence.....	58
Customs	62
Housing	65
Appointed to Deputy Finance.....	68
Mid-term Cabinet Reshuffle to Energy	73
Health and Social Welfare	81
Transport.....	88

Chapter 5.....	94
Departmental Restructuring in the Energy Sector of Government.....	94
My responsibilities are switched to Energy.....	94
Looking at the problem; exploring the possibilities	95
A quick summary of the energy scene I inherited	95
Functions of the Ministry.....	96
Powers of the Minister.....	98
My thoughts on the Ministry of Energy Resources	98
National Party 1975 Policy Statement on Energy Resources.....	100
The Complexity of the Organisation of the N.Z. Energy Sector.....	103
Criteria for Effective Administration of the Energy Sector	104
Energy Planning.....	114
Chapter 6.....	116
Goals and Guidelines: An Energy Strategy for New Zealand	116
Chapter 7.....	154
Ministry of Energy Act	154
Energy gets special mention in the 1977 budget	155
The Ministry of Energy Bill	159
Energy References in 1978 Budget	163
1978 Departmental Reports to Parliament	166
Ministry of Energy Resources	166
Other 1978 Reports to Parliament also Signalling Change in Energy	169
Chapter 8.....	179
Summary and Conclusions.....	179
Factors Guiding the Political/Administrative Relationship.....	179
Conclusions.....	192
Appendix A	196
Portfolio Responsibilities held by Hon George Gair	196
Appendix B	199
Flow chart.....	199
See A3 insert.	199
References	201

Acknowledgements

I am very pleased to acknowledge the assistance and encouragement I have received from several people in the production of this thesis.

First and foremost my thanks go to Professor Marilyn Waring, Professor of Public Policy at the Auckland University of Technology. As a former Parliamentary and Caucus colleague, and a friend of long standing, I must confess that the idea of embarking upon a thesis came from her suggestion and friendly challenge.

As someone, now into his 80s, who had intentions of writing a book about his experiences and some of the lessons learned during an active career in public affairs and the arena of New Zealand politics, the writing of such a book has been a challenge which a number of historians I greatly respect have put to me - people like Dr Barry Gustafson, Professor Margaret Clark, and my former Caucus and Cabinet Colleague, Hon Hugh Templeton, all distinguished writers and editors themselves.

When Marilyn told me that her father, also into his 80s, had successfully tackled a university degree, it seemed a friendly challenge I should take seriously, and, as a kind of bonus, would it not better prepare me for writing that book I had in mind!

The start of the thesis venture received an unexpected and unwelcome setback. The very month the AUT Approvals Board accepted my application for an M.Phil thesis, I was admitted to hospital for major heart surgery and the whole thesis idea, with AUT's co-operation, was be put on hold until the following year. The two years since my return to better health - 2008 and 2009 - have been focused strongly on the research, the reading, the writing, and the frequent rewriting, which the thesis project has entailed.

Early in this task I was assigned Professor Waring, and Dr Grant Gillon, both former Members of Parliament, as my supervisors. Grant had himself recently successfully completed a D.Phil thesis. . My two supervisors have been particularly helpful, and the plan-and-work routine which we developed proved very appropriate. We met as a threesome regularly. From the meeting a study-and-produce outcome for each month ahead would be planned.

Marilyn's secretary, Suzanne McIntyre, with her helpful and friendly welcome on my many visits to Professor Waring's Office, also helped this older student enjoy his thesis journey.

My task was to do the research and the writing each meeting had set, and make sure the product of my efforts was delivered or mailed to them in time for them to have studied the results of my efforts and comment when next we met. This procedure helped keep the pace on my efforts, gave me the guidance I found so helpful in tackling each progressive stage, and forced me (not, I hope using too strong a word), to keep up the pace.

One feature of my thesis programme with Professor Waring as my supervisor (and I might also add mentor), which I found helpful, especially in the early stages when I was working my way into the appropriate "thesis project mind set", was to attend her quite regular pot-luck dinners with fellow thesis students. The camaraderie engendered by this opportunity to exchange ideas and experiences from our respective thesis journeys with fellow students proved both valuable as a learning feature and excellent for encouragement.

It was so helpful to find one's frustrations and occasional sense of being overwhelmed by the sheer volume of reading to be achieved, and referencing of details to be recorded, was an experience others shared, also.

And it helped an 80-plus year old feel part of a team with the students half or a quarter of my age! One fellow student, Sam Hishamuddin Mohd Hashim, was gracious enough to reciprocate a little assistance I hope I gave him in explaining how the diplomatic, the administrative and the political were related in countries like Britain and New Zealand, by volunteering to get me started on a bibliography section for my own thesis.

The focus theme of my thesis - "managing change as a minister of the crown" - inevitably had both strong autobiographical and historical dimensions. This, in turn, placed special importance on historical referencing. The window of time in which my more important political responsibilities were carried out was largely before, and therefore minus, the influences of the more recent electronic era. Sound tapes and television were fast moving into the scene, but the printed word in its many forms-parliamentary papers, departmental reports, cabinet and cabinet committee minutes-were the most reliable and timely record to examine. The paper work came in mountains, and the catch-up reading challenge was daunting. My memory was capable of making a valuable contribution, but because of its subjective character, triangulation of references across the field of official documents was important.

But to whom and where to turn in seeking this access to the historical and more official and authoritative printed word? It should not depend on the commentaries and observations of the journalists of the day or the self-styled experts who themselves inevitably had a subjective quality to their views of the actions in the arena as seen from the grandstands.

Working from Auckland, with government files best accessed in the "beltway" of Wellington, inevitably presented a problem. But such problems are not beyond resolution, although they do require more effort, and the co-operation of others, to be overcome.

My first thought turned to the Alexander Turnbull Library, now part of the National Library of New Zealand, in Molesworth Street, Wellington. During my time in Parliament, "the Turnbull", as it was affectionately known, was just across Bowen Street from the present Beehive. A number of Parliamentarians had gifted their parliamentary papers and documents to the Turnbull. I was among them. When I ceased to be a minister following the 1984 general election, I gifted some 250 boxes of such paper work to the Turnbull, and when finally retiring from Parliament following the general election in 1990, I added a further 50 plus boxes.

Early in my thesis journey I wrote to the Manager of National Library and explained my position. I had gifted these many boxes of papers and reports to the Turnbull. Could he please help me in setting up a system whereby I could access this information -ideally by phone, or e-mail, or post, from Auckland. I had, over the years, said "yes, go ahead", to a number of research student applications to Turnbull to access my files which they had referred to me for my approval or otherwise. I've never declined any genuine student enquiry, and now I was seeking access for myself.

I was assigned Amy Watling, Research Services Librarian, Manuscripts, Alexander Turnbull Library, as my contact. I very much appreciate the co-operation she has extended to me in my thesis mission. She began by sending me a subject and date analysis of the contents of the 300 plus boxes, and from that I was able to identify the boxes most likely to contain the key information I sought. Amy and I spoke many times on the phone and communicated many times via e-mail. I also paid a couple of personal visits to meet her and assess the searching problem from her end. Both the searching and the digesting the information at my end were considerable challenges. We quickly found the best way to handle our common problem was a kind of "drip feed" process. I'd try to reduce the range of my requests each time.. She could respond more promptly to the shorter more

manageable list. I would endeavour to digest the information when it reached my desk.

There was also much reference material beyond my own boxes with the Turnbull - material of a more general nature which had a bearing on my portfolio areas and my thesis theme - Hansard records, departmental and select committee reports to Parliament, legislation embracing subjects related to those analysed in my thesis, and such related side issues as parliamentary questions and answers where my responsibilities were involved.

It was not necessary to add this burden to my links with the Turnbull in Wellington. For this more general information, still very valuable for its triangulation contribution, I turned to the Takapuna Branch of the North Shore City Libraries. Through the 24 years I served in Parliament, I had nominated the Takapuna Public Library as one of my addressees to receive copies of the paperback versions of Hansard and Parliamentary and departmental papers. One of the Member's privileges was to be able to nominate a small number of addressees to which such material would be sent. This action of mine was taken on first becoming a member for it was important, I felt, that the local library have such information and I knew that, when working in my electorate, I could well need access to such information, also.

I wish to record my sincere appreciation for the help - always given so cheerfully - by Helen Woodhouse, Manager of the Takapuna Library, and the staff of her New Zealand Collection Section who, upon my many requests, went hunting in the backroom files to recover Parliamentary and departmental documents which I would search, paper tag the pages I needed to be copied, and leave in the good hands of the duty staff member to be xeroxed and ready for me to collect on my next so frequent call. NZ

Collection staff members Kirsty Webb, Colleen Christie, Kate Reid and Richard MacGregor all deserve a big "thank you".

I also greatly appreciated the co-operation I received to my requests of the Akoranga Campus library staff of the Auckland University of Technology. In this regard I must mention especially Dr Robyn Ramage, Research and Post graduate Coordinator, and her assistant Donna Jarvis. I needed a memory refreshener on the factors contributing to the 1973/4 oil crisis. Robyn set the pace following that first meeting with her when she quickly responded with copies of articles and commentaries which took me back in thoughts and memory as I knew them to be in those turbulent years causing, and flowing from that crisis.

Donna Jarvis was especially helpful in tracking down a couple of elusive references to endorse my memory on matters that needed appropriate reference, and as this was in the weeks just before the completion of my thesis, she did this so well against my rather pressing deadlines.

For the very professional formatting of the thesis as presented, I am indebted to the services of Lorraine Scott, achieved also against quite demanding deadlines.

My acknowledgements would not be complete - indeed they would be seriously inadequate - without a big thank you to my wife, Fay, and our close family. The time to do lots of things which retirement, and residence in a retirement village, could well have been expected to provide, became inevitably, and seriously, eroded. Things to do around the house and with family, and little outings with my wife and mate of almost 60 years which she would have loved to involve me with, had to take second place while the focus of my so-called "spare time" was heavily committed to escaping to my study and engrossing myself in my thesis project. Now that it is

finally completed, I have no regrets - but I do have a few big catch-ups to achieve fair consolation on the home front! I shall enjoy endeavouring to make amends!

Abstract

During my years as a Cabinet Minister in New Zealand, the relationship between a Minister and his key officials was strongly modelled on the Westminster system as then applied in Britain.

As in Britain, the ministers were the product of the political and parliamentary processes. The leader of the political party with the majority in the House was called upon by the Queen's representative (our Governor General) to form the new Government. All Ministerial appointees were necessarily chosen entirely from members then in Parliament.

As in Britain, also, the key officials to serve each Minister in their portfolios were provided by the career Public Service, the long-serving body of officials who were there to advise and manage the system for successive governments.

The Minister did not choose his departmental head, nor did that departmental head choose his minister.

There were many assumptions inherited from the past which helped to make the relationship work. Policy decisions were shaped by the Minister representing the political side of the equation. Execution and management was carried out by the head official, responsible for the operation of the bureaucratic machine he headed.

In explaining my thesis message - "Managing Change as a Minister of the Crown" - a very strong autobiographical dimension to my experience and comments is inevitable.

In the political setting, the relationship between Minister and Head of Department, though a key factor, is but one of many. All change affects

many people - some positively and beneficially, and some the reverse. The effects of change can be anticipated rather than actually felt. Perceptions can sometimes become bigger problems to manage than realised consequences.

Change in politics invariably reaches out far beyond those obviously and directly affected. Handling change therefore involves making plans for how one can best point the change in a forward-looking and constructive way, and put a socially positive spin on one's efforts and the outcome. If one's efforts are done openly, and one's arguments are well founded, real progress can be made.

One of life's constants is change itself. It affects us all in some measure. In communities categorized as "developed", it can be particularly fast and sweeping. This means, inevitably, that the forms of its infrastructures - from public services to business enterprises - which enable society and the economy to function effectively must adapt, and constructively, to those changes.

From my experience, in facing a variety of problems calling for change in handling portfolio responsibilities, I have found every case is different from the others, and each solution had to be shaped to meet the characteristics of that particular case. The only common denominator I would call the "people factor".

Compounding the challenge, that "people factor" had to be fashioned as appropriate for the personalities with whom I was working, and the characteristics of the problem being addressed.

I did, however, find that there were some common fundamentals in the "people factor" which I address in my conclusion. They helped facilitate co-operation in managing change.

Chapter 1

My Thesis Research Journey

Looking ahead, as seen from the beginning

This thesis is part autobiographical, part historical, as it seeks to identify and explain some of the more important lessons I'd learned from a lifetime largely given to politics and public service of various sorts.

How best could I pass on to those who might follow the more important lessons I had learned? It was quickly evident to me that such a challenge could well be helped by the research, the writing, and the disciplines to be addressed and understood, in writing a thesis.

My challenge would be how best to link and relate personal experiences and the memories they generated, with the reports and commentaries of the times and the histories written since, which had that added, and often unfair advantage, of hindsight!

My task would be how more objectively to position and evaluate my own thoughts against the background of those reports and commentaries and histories!

The autobiographical methodology has been subject to quite an intense peer review, for both my supervisors are former Members of the New Zealand Parliament. Indeed one was a party and caucus colleague during my term as Minister of Energy, and several of the other portfolio

responsibilities referred to in Chapter 4, on Scoping. The other was a minor coalition party whip under MMP, who recently completed a Doctoral thesis himself. Every month I was closely challenged by these two peers.

While my thesis may be unorthodox in many ways, with autobiography, secondary and documentary analysis, and peer review throughout, it is triangulated and rigorous.

Into what category of research would my thesis be categorised?

This question, put to me by the AUT Post Graduate Studies approving body, triggered a rather extended reply on my part. I sought to set out the main factors which needed to be appreciated in commenting on the circumstances, the issues, the arguments, the policies and administrative outcomes, and in drawing conclusions and making judgements.

The key thoughts I shared with the approving body in response were as follows:

1. As a deeply involved participant, my view was inevitably from the inside, looking both to inside and out. I would be describing what happened, the causes and the outcomes. And I would be doing this as a participant in the arena - not as a spectator or critic from the grandstands.
2. I believe that no political topic could be safely viewed as an isolated single issue.
3. The “public” in a political sense could be as diverse and many faceted as the political process itself, and there were a variety of

interest groups to every aspect of public policy, both at the time, and later in retrospect.

4. For many, including some critics and historians, perceptions could shape judgements more powerfully than the historical realities.
5. The “personalities” are also very diverse. Some participants in politics can retain a fair measure of objectivity. Some become emotionally involved to the point where political argument becomes highly personalised.
6. I stressed the importance of motivation and particularly of attitude in the handling of political issues.
7. I also stressed the importance of appreciating that in matters involving the physical and technical, each generation in more recent times has happily accepted the experience of those who have preceded theirs and built on that inheritance, but in matters involving human relationships, the willingness to learn from the past is much less evident. There were too many needless examples in politics of insisting on “re-inventing the wheel”.

First identify the thesis subject

Choosing the subject involved serious thought and discussion with my supervisors. Subjects involving the history of major issues or events could reach out to almost endless dimensions. The subject chosen, therefore, needed to be given boundary lines in both breadth and depth. It is not the purpose of this thesis to survey the literature of this period, or to analyse outcomes of other policies. I will be focused on one case study, though there could have been many.

The focus of the theme was fairly clear in my mind, and my supervisors appreciated this. It was essentially handling change at a ministerial level in government, seen in an autobiographical context.

This would involve many facets such as

- 1) Is the change needed, and if so when?
- 2) What are the problems calling for change?
- 3) What can be done about them?
- 4) Which would be the best course to take?
- 5) How could the chosen course be shaped into a politically, economically and socially acceptable move?
- 6) Who would be the key players to be brought on side to ensure the chosen move for change could be agreed to, or at least seen as achievable?
- 7) Change could involve or affect many others, or their interests, among them
 - i) Politicians, directly or certainly indirectly, at all levels and in all parties;
 - ii) Officials in the relevant, and sometimes even in indirectly affected, bureaucracies;
 - iii) The industries or organisations involved;

- iv) Vested interests of ownership, or manpower, or supply or as customers; and
- v) The perceptions and reactions of interested media and groups with a view and voice.

The task of identifying the thesis subject and setting reasonable boundary lines for it is described in the first section of Chapter 4 entitled “*Scoping, an essential early step on the Research Journey*”.

I wanted to choose the subject, or subjects, which would best help carry the lessons learned from a thesis to be entitled “*Managing Change as a Minister of the Crown*”.

Early in the research process I gave my principal supervisor about 20 possible thesis subject suggestions. In the scoping exercise set me, I believe I found the answer.

By writing short summaries of the responsibilities involved, the challenges each raised and how they were handled, the way through the problem of choosing became clearer.

The seven summaries which made the short list in this selection process, taken in chronological order, were education, customs, housing, finance, energy, health and transport.

My early thoughts were to explore the last three - energy, health and transport - in considerable depth, but my experience over the two years of this thesis journey meant the final product would have greatly exceeded the target length of an MPhil thesis. Even following major sub-editing and extensive summarising and trimming, the subject of energy, taken to the

depth necessary to do the subject justice, will have met the target in terms of length.

To where should I turn on the paper-work trail?

Fairly early on my research journey, I realised that official documents and reports produced at the time were likely to provide the best reference triangulation. By their very nature they did not contain the hindsight dimension which can often unintentionally colour one's memory of past decisions and events. The information relevant to the period I would be analysing preceded the information technology revolution of the past two decades. It was very much still back in the time of the paper-work trail.

I turned to three libraries and their staffs, all of whom co-operated well with my endeavours. The New Zealand Historical Section of the Takapuna Branch of the North Shore City Libraries, and the North Shore Akoranga Campus Library of AUT University were both relatively close and accessible, in a physical sense. The third, the Alexander Turnbull Library, now part of the National Library in Wellington, was not so conveniently located, but phones, faxes, emails, the postal service, and a couple of trips to Wellington helped bridge the distance of separation.

The Turnbull Library's involvement in my paper trail I can source to Sir John Marshall, a former Prime Minister, in whose cabinet I had served. He stressed the importance of preserving records and paper work of those who had played their part in the unfolding of our nation's history. He made the point that the material one had recently been handling might well be readily available in many places at the time or shortly afterwards, but with the passage of time this would not be so, and complete records would become more and more valuable as windows to our history.

I took his advice seriously. Over the years - first on leaving my last ministerial posts, and then when finally leaving Parliament - I gifted to Turnbull Library more than 300 packing boxes of files and papers.

Turnbull's chief librarian graciously agreed to co-operate and assigned Amy Watling, their Research Services Librarian, Manuscripts, to act as my liaison and contact point. I was also given a list of the general categories and dates of the information in each of my 300 plus boxes, but neither I nor my former staffs nor the library had made a detailed indexed analysis of the contents. At times it seemed like hunting for the proverbial "needle in a haystack" challenge.

By sending Turnbull my scoping papers and my suggestions using the library dates as to which boxes would be the more likely targets to focus on, and by developing a "drip-feed" approach, what seemed would prove overwhelming actually become manageable, not just in finding the reports and documents at the library end, but in the major task of reading and digesting at my end.

I had a similar experience in my work with the staff of the Takapuna Library. During my years in Parliament, members were accorded the privilege of receiving a small number of copies of such documents as Hansard in its paperbacked version. I'd nominated the Takapuna Library as one of my addressees, so I knew, somewhere in their files, they had boxes of Hansards and other material, some of which could be useful in my thesis searching.

I also paid many visits to the library to look through their copies of the formal departmental reports to Parliament. From the material available I identified those which bore directly on matters related to energy in the

years immediately preceding my time as minister as well as during my tenure in that role.

There were many hundreds of pages involved. The items on the shelves were only some of the reports I needed to search. It was necessary to extricate from the dustier backroom shelves and the even less frequently explored storeroom filing boxes some of the items relevant to the story I was embarked upon.

My introduction to “methodology”

To prepare me for my thesis challenge my senior supervisor gave me a number of text books to read.

I must confess in reading them I discovered some words which were not in my dictionary, but which were apparently commonplace, almost jargon, in the language of “academia”.

Professor Waring stressed in an early briefing my thesis narrative should be both “reflexive” and “transparent”. To make sure I was interpreting this advice correctly I went to appropriate authoritative sources and found:

Reflexive Research: reflects upon and questions its own assumptions. Researchers must self-consciously reflect upon what they did, why they did it, and how they did it. The values of the researchers become an explicit part of the research process.¹

Transparent²: offers six meanings, four of which were very relevant in this context:

¹ Tolich, Martin and Davidson, Carl, Oxford University Press, *“Starting Fieldwork”, An introduction to Qualitative Research in N.Z.”*)

² *Websters New 20th Century Dictionary of the English Language*, Unabridged, 1965 edition

1. easily understood; very clear.
2. easily recognised or detected, obvious.
3. open; frank; candid.
4. luminous; penetrating.

I had much to learn, obviously, about process, but I realised that embarking upon the thesis journey I had in mind would, viewed against the general pattern of postgraduate theses, present special challenges. Many post-graduate student theses are studies on a strongly focused subject viewed from an objective dimension. Mine would be almost the reverse.

In my supplementary information in support of my application I explained my position to the Post Graduate Board with these thoughts:

From my preliminary study of the literature on thesis planning, preparation and writing, I appreciate my approach will have a strong autobiographical and therefore subjective component. This makes me aware of the importance of my comments and conclusions being presented with sensitivity and fairness.

The subjectivity can be brought into some measure of balance by reference to a number of books and articles which colleagues and well-informed observers have written on the events I will be analysing. As an important and perhaps over-riding element of the “triangulation” process I will have ongoing regard for the wealth of official reports and documentation relevant to the issues I will be considering.

Subject chosen! Then how to launch into the action?

The subject flowed naturally from the concept of “scoping”. It’s an approach identified in the literature on planning and process as an eight-step forward plan.

The scoping brief used these logical stages in respect of each of the subjects in considering the best targets with which to study the predominant issues to be explored in managing change as a Minister of the Crown.

1. When, what, who, why. (Considered in some detail in the first section of Chapter 2 entitled “*Thesis Methodology*”).
2. The political and economic features of the issue.
3. The stake holders in the energy scene at the time I am reviewing.
4. The policy environment and processes in place at my time of involvement with the subject.
5. The range of concerns I faced working into the issue.
6. Actionable list of proposals or recognizable hierarchy of priorities on my assuming those responsibilities.
7. How did non-government elites and other key actors succeed or fail in their attempts to exercise significant power and influence?
8. Chronologically narrate the process from there.

I found this need to grapple with the scoping questions an ideal way to proceed.

First, I separated the three subjects which topped the short list of our choice - energy, health and transport. This I felt was appropriate, as I’d held these responsibilities one after the other, and therefore during different periods in the life of the government of which I was a part. Energy, in 1977 and 1978. Health, from late 1978 to late 1981, Transport, from late 1981 to mid 1984.

Taking each in turn, I set out to answer the scoping questions. This, done in summary form, was initially largely from memory.

One of the advantages of this relatively quickly written summary overview to the questions and the thoughts they raised was that it hastened the process of giving me a better and early view of the size and scope of the research I'd have to address, and the key points to be explored and explained.

Upon completion, each of the scoping exercises was re-visited, inserting reference in italics between most of the paragraphs to identify the research material I'd need to provide or search for relevance to the comments I'd made in that paragraph of the early scoping papers. Some such references were merely a reminder to check dates or names. Some were to review whole reports I'd mentioned and needed to re-read.

Chapter Subjects Looking Ahead

In Chapter 2, Thesis Methodology, I answer the what, why, how, when and where of the thesis.

I outline my search for the appropriate methodology, and I describe something of the frustrations in finding any literature referring to autobiography as methodology, and then found some which dealt more with the circumstances of an autobiographical approach as a group experience.

Chapter 3 provides a brief overview of the background and lead up to the years of my involvement as a Minister of the Crown. There were many and diverse influences in this background. My memory and assessment of the major influences on those years is given together with references from the works of some of the more respected commentators about that period.

Chapter 4, on Scoping, explains why I felt this stage was an essential early step on the research journey. It helped focus the subject and its message, and give form and shape to my plans and how to best to present them.

Each of the short-listed possible thesis subjects is addressed briefly. In this way the great diversity amongst my portfolio responsibilities is apparent.

In education, it was a period of on-going and extensive change.

In customs, the circumstances which arose from the previous year's budget advice made change at my time virtually impossible without serious political, social and economic consequences.

In housing, the change challenge was to rein in the unsustainable pace of construction which had exceeded the funding to pay for it.

In finance, I had the task to trim and prune so that expenditure right across all departmental estimates could be brought back within the caps for which there would be provision.

In energy, finally chosen as the principal focus for this thesis, the changes needed were major. They ranged from complete re-structuring of the Government administration managing energy, to securing the support of the numerous industry groups and enterprises and the wider public interests in re-thinking how New Zealand would have to tackle its energy future in light of our vulnerability in supply of oil fuels, as demonstrated following the 1973-74 oil price crisis.

Chapters 5, 6 and 7, all focus on my chosen subject of energy.

Chapter 5 deals with the plans for restructuring of the energy section of government, and the reasons why.

Chapter 6, analyses the message in “Goals and Guidelines: An Energy Strategy for New Zealand”.

By late in the first year of the thesis project, I was able to report to my supervisors that I’d completed a review of *Goals and Guidelines: An Energy Strategy for New Zealand, public discussion draft*.ⁱ

The review of this document has meant reading and re-reading it chapter by chapter, paragraph by paragraph, many times. The discussion document of some 120 pages, plus graphs and tables is itself in a concentrated form. In this thesis I’ve managed to condense it yet again to about one fifth of its original length.

Summarising it, therefore, has been a demanding task.

I make no claim to be the originator of any of that chapter’s original text other than that which appears in italics - i.e. the document’s title, my introduction as Minister of Energy which is quoted in full, and several current comments injected into the text which are my thoughts on the matter in question which I wished to share with the reader.

I did, however, have an ongoing and close association with the team of departmental officials involved. The document was developed initially in draft form and the first and second endeavours I was unhappy with and were abandoned. They did not deliver the subject in the essential layman’s language and simple layout presentation which I thought to be essential. The technical details, of course, were very much a matter for explanation and presentation by the experts, not me.

Why was “Goals and Guidelines” so important?

I offer three suggestions:

1. The preparing of this document helped the various Government entities think towards a common, forward looking, approach to meeting the future’s needs - in policy setting, in planning, in administration, in presentation, in doing and achieving.
2. The presentation of this document to those within the many elements of such an important and then seriously fragmented industry helped bring debate and relationships into common ground, and helped focus thinking on what was needed and what had to be achieved.
3. The public dissemination of the document helped keep the wider public thinking and views expressed on energy matters better focused, and therefore more constructive.

Those thoughts concerned the wider context, and the challenge at the time. But let me direct them now to this thesis, and its mission:

The importance of the “*Goals and Guidelines*” chapter to my thesis can be identified in several ways:-

- It’s authority is clearly recognised - the Ministry of Energy was putting its best foot forward
- to explain the situation with which the country was faced,
- to put a summary of the facts on the table for public scrutiny,

- to note the range of problems and options before the country in matters energy,
- and to seek debate and feed-back of an informed and useful nature.
- It summarises well the energy scene at the time I took over this responsibility as Minister;
- It identifies the problems which had to be addressed;
- It seeks to focus attention on the options which New Zealand would need to explore in developing a relevant and practical energy policy for the future;
- It urged the need to find common ground between the interests of the few in a particular situation, or in dealing with a particular problem, and the interests and welfare of the many in the wider community;
- It stressed the importance of planning for the longer-term, and the need to keep plans under constant review to better manage what is a constantly changing energy “big picture”;
- It not only invited public response, but stressed the importance of the various elements in the community with a vested interest in energy matters - which is really everybody in their various ways - to work together in identifying the goals we should be working towards, and shaping the best path ahead to reach those goals.

Ratcheting Up - From Planning To Performing

Material retrieved from the Turnbull and Takapuna Libraries covered reports to Parliament from the several departments and the even more

numerous other agencies and authorities with energy related responsibilities, some of which reported through me, and some through various Cabinet colleagues. It also covered references to energy-related matters in budgets and legislation and the many questions, both oral and written, which featured energy matters at Parliamentary question time. Of all this material, I felt two were particularly important subjects to the particular theme of the thesis - *“Managing Change as the responsible Minister”*.

The first, *“Goals and Guidelines”*, helped bring together, and give focus, to the energy issues which would need to be embraced and embedded into future Government policy.

The second, the *Ministry of Energy Act 1977, No.33*, centred on establishing a Ministry of Energy and defining its functions, powers and duties which would hopefully bring cohesion and direction to the Government mechanisms responsible for setting the guidelines and achieving the goals.

The briefing paper from the Commissioner of Energy Resources, R.J.Hogg, dated January 1977, prepared only weeks before my responsibilities were switched from Housing and Deputy Finance to Energy Resources and related portfolios, is another key document analysed.

Chapter 5, *“Departmental Restructuring in the Energy Sector of Government. Looking at the problem; exploring the possibilities.”* is an endeavour to summarise, analyse, assess and evaluate suggestions and recommendations the Commissioner’s very helpful briefing paper set out. Doing this as Minister took time and careful study, but it gave me an excellent opportunity to identify the nature of some of the problems I felt

needed addressing, and how they might be tackled. I wanted to do it thoroughly and successfully, for I knew I'd only have one real chance at pressing for significant change. Quite literally, therefore, the thoughts my mind was working through in tackling this chapter were closely parallel to the thoughts I would have been exploring in my early months as Minister of Energy Resources.

Chapter 7, on the Ministry of Energy Act, addresses the way in which the changes I sought were taken through the processes of legislation and the mood of the House of Parliament in addressing them. I had to take Parliament and the energy sector of the economy with me, if I were to succeed. It was an interesting challenge in prospect!

Chapter 8 offers my thoughts in summary and my conclusions.

The challenges provided by the need for change and the way in which they should be tackled, each present individual and particular qualities which inevitably provide the answer that they should each and always be treated on a case by case basis. There is no silver bullet which will fix them all.

The appropriate answer, therefore, depends on the particular question and the question will be shaped by the special circumstances each question, or challenge, reveals.

This does not mean that there are not some basic factors common to most cases. For example:

- Getting to know the real causes of the problem, not just the apparent ones

- Identifying who the key relevant parties might be in causing or hiding the problem and who would be needed to help address the problem and hopefully help fix it
- How best, and who best, to work with in explaining the problem, the need to fix it, the way to fix it, and the social and political problems and/or prospects failure to achieve, or success in achieving, would generate

These, and other examples that could be listed, point to one common factor that could be taken as truly basic. I call this the “people factor”.

Chapter 2

Thesis Methodology

The What, the Why, the How, the When and the Where of this Thesis

The What

All life on earth must learn to live with change. Humanity must do so, has done so, and survives because it has shown its ability to adapt to change.

Politics and public life - key parts of the social form of humanity in today's world - must also learn to live with change.

At times change can be slow to develop, but when it does, it can do so quite suddenly and even violently.

At other times change can be gradual, almost evolutionary, and it can happen almost unnoticed.

In modern societies governments are inevitably involved in the change process: sometimes against their wishes; sometimes as reluctant accepters of the change process; sometimes as the pro-active and conscious initiators of change they see as needed.

The Why

The reasons for change can be many and varied.

Sometimes they are the consequence of, or flow-on from, past events and experiences.

Sometimes they are a consequence of natural events - such as from climate change, from resource exhaustion, or plague - or from past human conflicts, or the failure of social structures.

The 'why' could be sourced in very positive causes. It could develop naturally and necessarily from rising living standards, improved education, huge developments in science, technology, health and the consequential changes to the demographic structures of societies.

Among the many reasons calling for, or instigating, change could be the more self-centred influences of greed, or envy, or lust for power, or wish to influence the views and lives of others.

When seeking a more positive spin on the causes, it could be for such more virtuous motives as wanting to help others.

The How

Just as we see in the What and the Why of change, the How has just as many variables.

To achieve the objective of managing change responsibly in dealing with the What and the Why, the nature of the How must be chosen to reach the desired goal with proper regard for the realities of the particular matter being addressed, and the sensitivities which will optimise benefits and

facilitate the smoothest possible transition towards reaching the desired objective.

The When

As this thesis will make very apparent, the matters to be addressed and analysed relate to my years at the very centre of the actions under review.

This period spanned the last term of the Holyoake Government (1969-72), the relatively short term of the Marshall Government (1972), and the almost nine years of the Muldoon Government (1975-1984).

During those years my executive responsibilities in the New Zealand Government were many and varied, and covered a wide range. Several of the more significant ones were the subject of major change while I was in the positions concerned. The list of executive responsibilities I was assigned and which I refer to specifically in the chapter on scoping were:

- Under Sir Keith Holyoake (1969-72)
 - Parliamentary Under-Secretary to the Minister of Education,
- Under Sir John Marshall (1972)
 - Minister of Customs
- Under Sir Robert Muldoon (1975-77)
 - Minister of Housing
 - Deputy Minister of Finance
- Under Sir Robert Muldoon (1977-78)
 - Minister of Energy Resources
 - Minister of Electricity

- Minister of Mines
- Under Sir Robert Muldoon (1978-81)
 - Minister of Health
 - Minister of Social Welfare
- Under Sir Robert Muldoon (1981-84)
 - Minister of Transport
 - Minister of Railways
 - Minister of Civil Aviation

The more complete list of my portfolio responsibilities as a parliamentary under secretary or as a minister of the crown are set out in **Appendix A**.

The Where

Geographically, my responsibilities were very much New Zealand - in New Zealand and for New Zealand.

However, the influences which triggered the need for a number of the more major changes came from overseas - such as

- Britain, once our biggest-by-far export market, moving to join the European Common Market in 1972
- the first major oil price shock in late 1973
- the international tensions of the long-running cold war
- the gathering strength of Asian markets, and

- the influences of the emerging radical transformation in technology and emerging globalisation.

My search for the appropriate methodology

Early in my thesis planning, my mentors guided me to a range of academic literature to read and consider.

I not only needed to know the direction in which to proceed, but I also needed to be clear about which route to take, and which form of methodology would have greatest relevance.

First I needed to select what I felt would be useful and interesting themes from my personal experience as a Minister. The “been there, done that” factor was real enough, but the lessons learned - to be a worthwhile contribution to the historical literature relating to “my time” - needed to be chosen from quite a wide range.

The work of a Minister and his relationship with bureaucrats offered a wealth of subjects in itself. Over the 12 years I had held executive responsibilities in Government, I had worked across a wider range of portfolios than most, if not all, other politicians before or in my time.

In a number of portfolio areas assigned me, there were clearly problems which had to be addressed. Was the nature of the problem in each case clearly established? Was what should be done about it understood or agreed upon? The answer in most cases was “No”!

I believe history will show that in a number of the major portfolio responsibilities I was assigned, the Prime Minister I was serving at the time was becoming aware that not all was well. Or perhaps I should say more accurately, the presence of problems was becoming clear - but in most

cases what those problems actually were, and their causes, had yet to be clearly or adequately identified.

My success in containing problems, or identifying and then correcting them, was evidently becoming appreciated, for my time in Government shows that I earned a track record of “Mr Fix It”. I didn’t seek such a reputation, for there was more than its share of work and risk in such a challenge, but if it had to be, it had to be.

This was the path that led me to the key theme I’ve chosen for this thesis: “managing change as a Minister of the Crown”.

“Managing change” has many interesting aspects and rewarding lessons to be learned in such matters as: --

- Exploring and addressing the issues;
- Harnessing or re-organising the government departments or agencies to work and co-operate effectively in advancing along the new path ahead;
- Dealing with the personalities involved in all aspects of the problem and its resolution, ranging from those related to the causes to those related to the effects;
- Handling relationships (both helpful and hostile) with stakeholders, their staffs, their owners, their customers;
- Appreciating and allowing for the economic, financial and social implications;
- Guiding the changes through the politics of the times, with proper regard for the public’s perceptions and responses;

- Managing the Cabinet, caucus and Parliamentary processes consequent upon what was happening, why it was happening, and how it was happening.

I believe I learned many valuable lessons through the experience of those years. The lessons would seem obvious, but I regret to suggest many in politics as elsewhere in society can live a lifetime without acknowledging these lessons from past experience in their thinking or behaviour.

It taught me the importance of learning from past experience - not just of my own, but also that of others. There are two sides to the coin of experience: that which works well and positively, and that which works badly and negatively. To make progress you need to understand and learn from both.

It gave me an appreciation that decisions must be made without the advantage of hindsight, and yet in the knowledge that many will judge your decisions in future using the full, critical power of the hindsight then available when they are making those judgments.

Another, and often overlooked key to the equation of problem solving, is the importance of endeavouring to look ahead, so that the actions being taken or contemplated have proper regard for the longer term.

A problem postponed, is not a problem solved. Given time to fester while it's being ignored or hidden, the problem can often and quickly grow from big to huge.

Seeking guidance from my mentors, I focused finally on a number of papers designed to help the thesis writer working in what might best be described as “autobiographical territory”.

The following works I found of interest to the autobiographical methodology I would employ.

Tenni et al (2003) explored some of the issues that arise when one is dealing with data that has been produced by the researcher about their own experience.

In particular, we are interested in exploring the ways that researchers can go about analysing autobiographical data. Many researchers produce data that is autobiographical. Ethnographers produce field notes. Action researchers often write about their own practice. Phenomenologists, sociologists and historians may write narratives that are autobiographical ... Data analysis techniques that work well when dealing with data about other people may not be useful when one is working with one's own data.

In the section headed "*Creating Good Data*" the authors wrote:

Data generation becomes problematic when working with one's own life. The focus on self and our practice, as researchers and practitioners, requires that we reveal, in all its complexity and as authentically as we can, what we do, how and why we do it and what this means about us and the field or context in which we operate.

And later:

The creation of good data in autobiographical research and the generation of rich material replete with issues for analysis cannot happen, unless the researcher is prepared to engage strongly and deeply with what is going on for them as they are immersed in the data gathering and analysis process. This means we need to develop a process for internal dialogue with ourselves.

While I would be dealing with historical data, I recognised that access to my Ministerial papers, to Hansard and to a number of reports, would assist a strong and deep engagement in reliving my experiences.

After commenting on the role of the supervisor in data analysis and the use of theory to challenge one's assumptions about oneself, and also handling personal risk, the authors concluded by suggesting four strategies:

- The importance of creating good data;
- The importance of having an involved supervisor or fellow researchers who can work collaboratively with the researcher during the data analysis phase;
- Using different theoretical constructs to inform the interrogation of the data; and
- The need to take personal risks when working with autobiographical data, noting that the most personal, professional and theoretical learning comes when we take personal risk.

I would have access to all data that was available. I had politically experienced involved supervision. Theoretical constraints of public management and political leadership were implicit in the research, and taking on a thesis in my early eighties was certainly risky!

In an essay on autobiographical writing in undergraduate sociology, Ribbens (1993) commented that sociology undergraduates were generally routinely trained not to use the first person nor to incorporate personal experience in their academic writing. Quoting (Shostak 1988) to give authority to her comment she reported

use of the first person singular within sociological writing is still a matter of controversy and related to debates about objectivity and subjectivity within social science discourses. The persona of the writer of any particular piece of academic writing is traditionally hidden, and a number of devices may be used towards this end.” Then quoting (Becker 1986) she added: “Thus the writer may refer to her/himself as ‘the author’, or by surname, or a passive form of grammar may be adopted that disguises the existence of a person behind any particular action discussed.

Ribbens then gave examples where autobiography was inherently involved - examples from classes and groups she has organised. I read these with interest, but I noted that the subjects followed what I would describe as a group or class experience. Certainly the thesis student would be handling an autobiographical experience, but it was nothing like so highly personalised as my own story would inevitably be.

The balance between objective and subjective, between private and public, between fact and impression - these had relevance, but when they were an analysis of what essentially were group experiences heavily qualifying personal experiences, their relevance to my mission seemed rather distant. Ribbens’ stories related more to the group experiences such as the development of women’s movements, the emerging emancipation of blacks and black women’s groups, things seen from gay and lesbian perspectives, and the problems in Polish peasant life.

In a section of her paper headed ‘Autobiography, Objectivity and Truth-Claims’, Ribbens argued that

perhaps one of the most central issues in the writing of sociological autobiographies (which parallels a variability within the use of the life history approach more generally), centres on a tension between the treatment of the life history or autobiography as an essentially ‘objective’ or ‘subjective’ account. How are

we to regard the ‘truth-claims’ of the resulting writings? Are they to be regarded as falsifiable facts or personally created fictions? Or is there another route out of this dualistic dilemma?

I would certainly need to consider the tensions she outlined. However, the examples she later used to advance her argument involved social groupings in which the student participant was a member of a group. This was not relevant to my role in my own thesis story. It may have been, if my thesis were attempting to describe the role of all ministers in all experiences of change in their portfolios while they were ministers. My story is far more personal, more strictly autobiographical, and directly related to, and arising from, my own experiences on a case by case basis.

The paper then devoted much attention to making links between the ‘individual’ and ‘society’.

Stanley’s (1993) paper, also on autobiography in sociology, focused on the autobiographical relationship with group experience, especially in the feminist movement.

However, her use of Robert Merton’s 1988 writings was significant in what I considered might be my experience in the research process.

The sociological autobiography utilizes sociological perspectives, ideas, concepts, findings, and analytical procedures to construct and interpret a narrative text that purports to tell one’s own history within the larger history of one’s times ... autobiographers are the ultimate participants in a dual participant-observer role, having privileged access - in some cases, monopolistic access - to their own inner experience.

My own ‘history’ as a Minister managing change certainly occurred within the ‘larger history of (my) time’, concerned with issues with significant political and economic implications in which change was happening, or

needed to take place, and I played a part in those changes. I would seek to report on the *what*, the *why* and the *how* of those issues and changes, within a participant observer role, and with privileged and monopolistic access.

Stanley's paper 'Concluding Thoughts' were salutary:

To argue for the epistemological project glossed in the phrase 'sociological auto/biography' ... is most certainly not to anchor the discipline either to individualism or to solipsism. Knowledge-production does indeed differ systematically by social-location: We are social beings through and through, and it is the shared features of 'knowledge' seen from particular vantage-points that such a style of sociological inquiry makes available.

I turned to a further range of papers and references for a review of a methodological approach which might be more relevant to the subject of my thesis and the necessarily highly memoir type/autobiographical approach the writing required. I learned about some highly innovative approaches which some researchers had explored. But reading through their work, the differences between their various approaches and my requirement soon became apparent.

Busse et al (2000) identified four key aspects of autobiographical research methods:

- The subjects researched are protagonists of an autobiographical event in the plot.
- They are authors of a narrated autobiographical story.
- They are contemporary witnesses of a social situation.

- Finally, they are subjects of research in the scientific process of interpretation and theorization.

This case study was applied to a retrospective review of ‘subjects’ to assess the politicalization effects on their life in East and West Germany before reunification, and was carried out shortly following the removal of the Berlin Wall at the end of a divided Germany. The personal involvement factor with the subjects being reviewed was very different from my own thesis mission.

In a final section on ‘Methodological Reflections’, the authors made some points well worth noting.

Qualitative research is characterized exactly by qualifying the classic problem of objectivity. The researcher’s subjectivity and the uncontrolled subjectivity of the researched are not to be excluded from the research process through control, they are to be used as sources of reflection and cognition.

To ask for the extent to which problems between East and West took effect during the group process is not only to ask for the internal group dynamics as such but to ask in how far the group discourse has been determined by the integration of overlapping discourse. From interactively producing a biographical interview up to publication, we were therefore constantly dealing with a construction process in several stages, in which texts are synthesized and resolved interactively, in which the respective purposes and intentions of the researchers were involved in constituting the research subject. Up to now, this factor has only been acknowledged by the newer perspectives of a narrative psychology with regard to the subject; it has scarcely been acknowledged with regard to the part of research.”

The examples later used by Busse et al involved social groupings in which the student participant was a member of a group.

While the research environments of this and the earlier referenced work, and there were multiple participants, it was reassuring to find consideration of processes that I recognised I would experience in my research.

The Question Still Challenged Me: “What Methodology?”

It became increasingly clear to me that the methodological approach I should follow was not a question to which I could give a clear answer - certainly in the academic terms I'd read about. Somehow I had to find a new way to explain the rationale and the *modus operandi* I came to employ.

In simple terms: I had been entrusted with responsibilities as a Cabinet Minister. This was before the restructuring of the relationship between the political and bureaucratic dimensions of the minister/officials relationship effected by the Lange Labour Government 1984-1990. Some of those responsibilities entrusted to me were known to be in some trouble. In few of those cases had the reasons for the trouble yet been found. In some cases even the existence of a problem was not yet apparent. When problems were found or suspected, just what were they? What were the answers to those problems when identified? Were the solutions proposed achievable, and if so, how?

The responsibilities had to be seen in their full depth and breadth, and this took many forms. They involved the time factor - the history of the matter, the current factors related to it and to changing it, and the need to have proper regard for looking ahead. They involved the economic and financial aspects. Often big money was involved - for the government, for the industries or social sectors involved, for the country, for the people, for the taxpayers and the customers of the future.

They often involved legal factors, and the machinery for achieving change - from simple Orders-in-Council to Ministerial directives or to changing the law through the steps of caucus, Cabinet, select committees and Parliament.

They involved wide and complicated political considerations - many of a major nature - for political changes could help or hurt people, political parties, business and professional groups, union leaders, the media and its coverage of events and their influence in shaping public knowledge and perceptions. They involved that vital element to anything in public life, the people factors. Those directly involved such as workers, or consumers, or stakeholders, one's colleagues and political opponents and the key officials and staffs in the bureaucracies concerned or in the organisations with related interests. Then there were the armchair critics, the talk-back hosts and their listeners and participants. At times, and on some issues, church leaders and local body personalities joined the public debate, particularly if they were opposed to whatever actions or initiatives were being proposed.

I learned the value of looking and learning and listening, and, when understanding proved difficult, I would seek the thoughts of others, who were often wiser or more learned in the subject of my study. This did not mean I did not question. I questioned tirelessly for without questions one could not expect to find answers. I received lots of advice, from lots of quarters. Amongst other things, when the course ahead is far from clear, the Minister's thinking must be the bridge between the technical experts and special interests on the one hand, and what is seen as more practical, achievable and in the wider public good on the other.

At first glance one can see a clearly *autobiographical* component in my subject. This is certainly true, but it didn't seem to be the autobiographical approach the journal articles described. The numerous examples the

literature gave me seemed almost invariably to have a group or class dimension. Mine didn't. Certainly others worked with me (and some against me) but the action was essentially initiated and determined by me, personally. I sought advice and got it. Some of it was first class. But at the end of the day it was my decision - it had to be *my* decision. Certainly in many matters I had to seek endorsement or authorisation - by caucus, by Cabinet, and sometimes by Parliament. But it was *my* decision required to take it to the next step, and *my* task to achieve endorsement at that next step.

My thesis methodology would also contain, quite inherently, an element of reflexivity. I would reflect on what I did, why I did it and how I did it. My understanding of the subject, and what I came to learn about it, became part of my life while holding those responsibilities.

Would my research see me as an ethocentrist? Did I impose my own culture or values on others? No doubt my values helped shape my thinking, but it was not an imposition in a personal or ideological sense. No. There was a job to do inside a culture I couldn't change. Problems arose. Those problems had to be addressed and solved. The consequence was change, and "managing change" is what my thesis seeks to explore.

There could have been quite a strong dose of empiricism seen in many of my decisions and actions. I don't propose to argue the doctrine that all knowledge derives from experience, for much in learning is based on the experience or advice of others, or the thinking of those involved in facing those many questions mankind addresses in his search beyond the frontiers of lived experience. That said, I endeavoured to harness ideas from the best lessons I had learned, or learned from the experience of others, both here and overseas, and endeavoured to see them applied.

I certainly learned in the process of managing change as a Minister of the Crown something of the quality of post-modernism, although at the time I was not aware of this expression which I have since found is used extensively in today's literature. In other words, without knowing of the actual expression, I was aware that there is often no one truth in many situations, and there can be many.

Another expression which has much relevance to my thesis but which was new to me before embarking upon my thesis project is the concept of *triangulation*. Essentially this involves the confirmation of an idea or thought expressed as authoritative or factual by having and noting cross references confirming what has been expressed.

I have no difficulty with the need to validate arguments presented at the time or positions I have taken. This I have done where at all possible, and a reading of my thesis I hope makes clear that I have turned extensively to references in official and related documents of various kinds to achieve this objective. As I have used publicly accessible and official documents in most cases to achieve this, I have not felt it necessary to find two detached and unrelated sources as reference points apart from, and to support, my own recollection. At times there was just the single official reference on the public record. To that I added my participant recollection, and the scrutiny of two supervisors, one of whom had been present in the government caucus at the time, both of whom would reflect elements of a systems analysis in their peer reviews.

I would ask, also, that those judging my thesis appreciate that it is written about events in the decade of the 1970s and early 1980s - before the modern technology of computers, on-line data sources and web sites made possible the major storage and referencing of material through the marvels of technology, in the first decade of the twenty-first century. My

dependence upon the “hard copy” or paper work relating to my time in cabinet has made me especially grateful for the co-operation received at such information resource centres as the Turnbull Library Division of the National Library, the AUT University Library, and the N.Z. Section of the Takapuna Branch of the North Shore Libraries.

In summary, therefore, I would suggest my methodology is a mix of autobiographical, empirical, reflexive, qualitative and historical approaches, inside a systems analysis. In trying to classify myself according to the academic language of thesis writing and research, I feel I have been breaking some new ground. There did not seem to be a single category into which I could be accurately placed.

Chapter 3

An Overview and Background

The Years Leading Up to My Time as a Minister

To understand what the chapters in this thesis will endeavour to explain, and the lessons to be learned from the experience they seek to analyse and evaluate, it is first necessary to appreciate the scene from which they grew. Looking back - and helped with the wisdom of hindsight - the decade from the mid-1960s to the mid-1970s can be seen as a gateway in our history through which very considerable change in New Zealand was rapidly advancing.

It is clear now, but much less apparent then, that the size and scope and pace of that change was not as visible at the time as it clearly must have been to have spawned the dramatic events which have helped reshape our society, our economy, our environment, our views and our values in the decades since that time. King (2003) described this period as ‘A Revolution Begun’. He saw New Zealand emerging as a nation finding strength in its own character and achievements sparked a few years earlier by such achievements as Sir Edmund Hillary on Mount Everest (1953), and runners Peter Snell (800 metres) and Murray Halberg (5,000 metres) in the Rome Olympics (1960).

There were many and diverse influences in this background.

- *In international affairs*, New Zealand's tradition at the political level was to have a broadly based bi-partisan approach as to where we stood on issues, and what actions we should take. This situation had been reinforced by the World War Two coalition war cabinet experience and the ANZUS development post-war. Not until the Vietnam war had been running some time did this bipartisan approach unfold. By the general election of 1966 National and Labour were seriously divided as to the merits or necessity to support the war in Vietnam. Labour wanted out. National felt the bigger-picture security required unity with the U.S. and Australia. The Cold War was then, and for many years after, an ever-present problem in the background of many people's thoughts.
- *In economic affairs*, the decade of the 1960s began well, on the back of high prices for our main exports of wool and meat. By the mid-60s the scene had changed. Economic times were becoming more difficult. Britain was slipping away as the bottomless market for our farm exports, and by 1973 had joined the European Community. Our farm exports were facing growing overseas tariffs and foreign countries' producer subsidies.
- *In environmental matters* a new social attitude was emerging, first manifested in a major way in New Zealand with the 'save Manapouri' campaign to protect the Manapouri Lake in a major hydro power expansion. By the 1970s environmental matters had reached the point where a Minister for the Environment became a cabinet rank responsibility.

- *Transport, particularly air transport*, was changing. Long range jet travel brought us much closer to the big, wide world - with both the opportunities and the challenges this presented. Tourism found new size and strength on the back of the advances in longer-range flight. The early moves into containerisation heralded a revolution in *sea transport* and prepared the way for fresh thinking about the way ports should be operated.
- *Communication* in a completely new form was developing. Television brought the world into the living room and played a major part in the American Government's unwillingness to "stay the distance" in Vietnam.
- *Television* also played a major part in New Zealand, and had an interesting but important impact on the politics of this decade. Keith Holyoake, one of the major political leaders of New Zealand through the 20th century, did not adapt well to it. Norman Kirk and Robert Muldoon, by contrast, were able to handle this medium to their distinct advantage. Television at home meant fewer and fewer people attended evening political meetings. The politician-electoral relationship had to find new ways to communicate. And *talk-back radio* emerged, with listeners recycling their grizzles and prejudices to ever-growing audiences.
- *In sport, literature and the arts* New Zealanders were finding a new confidence in their New Zealand identity. But some of the more important *changes in the social and demographic dimensions* were perhaps less visible at the time,

but huge and probably more important in their flow-on consequences.

- There was a slow but remorseless *shift from predominantly rural to predominantly urban* - in jobs, in homes, in lifestyles, and leading inevitably into politics.
- *Mechanisation* enabled farms to get bigger, requiring less labour per unit of output. And in manufacturing, it also introduced a whole new way of doing things, some to New Zealand's advantage, some the reverse.
- *International marketing opportunities, obstacles and competition* brought a transformation in our manufacturing. High volume and low labour-cost production was more the role for other countries. New Zealand needed to focus more on what it could do best, and crank up value per unit and develop niche markets and products. Productivity and value-per-unit were taking on a new significance.
- Improved international communication and transportation gave rise to a growing opportunity in *service industries*. The proportion of blue collar to white collar jobs was changing, with its consequences to our communities, their geography and social structures.
- The late 1960s and early 1970s was when the first of the post-war so-called '*baby boom*' generation was entering adulthood, with the needs and aspirations adulthood can bring. This coincided with the international spill-over influences from

the development of the *protest movement* in the United States, fueled by:

- opposition to continued involvement with the Vietnam War,
 - black American aspirations for equality,
 - the growing voice for women's rights and opportunities,
 - and the frustrations of those in the younger generation who did not accept unquestioningly the traditional values of society structured by class, money and convention.
- *The educational scene* was changing. In New Zealand, a secondary school education became almost universal, whereas pre World War Two it was the favoured minority which had such opportunity. This extension of education through the teen years helped efforts to up-skill the labour force and had its flow-on effect at the tertiary level.
 - The advances of medical science and modestly rising living standards across most of the community placed a greater emphasis on *health and hospitals*.
 - Contraception, more attention to children's health and that of older people had their impacts upon the nation's *demography*. People were living longer; families were getting smaller. The population's median age was getting older.
 - During this period there was a fairly significant development in *the Maori relationship with the rest of New Zealand society*. King described it as the 'Return of Mana Maori'. The Maori

contribution of warriors in World War Two changed the scene. The pre-war attitude which both Maori and Pakeha had generally grown to accept, where the Maori lived with his iwi in a traditional rural location and saw the cities as pakeha was slipping away.

The beckoning of job opportunities, greater confidence in venturing beyond their traditional home areas, and the desire to reach for the opportunities such venturing might give, saw the start of a steady and growing move from country to town. Pre-war, only about 11% of Maori lived in cities. By the beginning of the post-war period, this had grown to 25%. It has been growing steadily since.

The Waitangi Tribunal legislation introduced in 1975 and expanded greatly in the mid-1980s by allowing retrospective appeal claims, with its attempts to settle long-standing grievances between Maori and the Crown, offered a new and more promising path for future race relations in New Zealand.

The 1960s and early 1970s proved to be a particularly interesting period in New Zealand's political history.

Why, or how, can one make such an assertion! The answer lies in the manner in which so many subsequent major and noteworthy events can be traced back to their genesis in that time.

During this period Keith Holyoake achieved his four-term government, and using his “steady does it” approach, won through several major challenges. These ranged from retaining an essentially confident economy following the collapse of wool prices and the early signs of Britain’s move towards Europe, to staying firm beside the U.S. in Vietnam against strong local resistance to the idea. Holyoake had very considerable personal reluctance

about getting involved in the Vietnam War. He achieved a minimum New Zealand casualty rate by ensuring this country's main contribution would be through an artillery unit rather than infantry.

Also during this period, New Zealand adopted the concept of an Ombudsman's Office, the first English-speaking country to do so; abandoned the 6 p.m. closing laws for liquor licensing; and introduced decimal currency.

NAFTA, the N.Z.-Australian Free Trade agreement was signed in 1965 and laid the way for CER (Closer Economic Relations) some 18 years later which remains one of our most important international trading relationships.

Accident compensation was born, built on the principles set out in the Woodhouse Report, and accepted by both major parties. (While a Parliamentary Under Secretary under Holyoake, I was appointed to chair the Parliamentary Select Committee which considered the Woodhouse Report and reported back to Parliament with support and bi-partisan recommendations as to how its principles should be applied legislatively.)

The final year of the 12-year second National Government was led by Holyoake's deputy and successor, John Marshall.

This period in our history also saw a generational step forward in our major political parties.

Labour, having lost the 1960 election, changed its leader from the defeated Prime Minister Walter Nash, to Arnold Nordmeyer, a former Finance Minister. Unsuccessful in defeating Holyoake, Labour changed again from Nordmeyer to Norman Kirk, who re-won the government benches for Labour in defeating the Marshall-led National Government in 1972.

Kirk's premiership was comparatively short, but he brought into parliament a new generation of young Labour members, and made some significant changes in his brief period in office. The passage of the legislation setting up the Waitangi Tribunal and opening up of foreign relations with The People's Republic of China were among the more important moves he made.

Kirk's death in 1974 and his succession by Bill Rowling followed, but nearly coincided, with the leadership change in the National opposition, from Marshall to Muldoon. The 1972 general election outcome when Labour swept National from office was reversed in 1975, when National swept Labour from office in each case by a similarly large majority.

Doing and Experiencing the Political Action - as Seen from the Inside.

My view of these emerging changes in our country was as someone seriously involved in politics and party organisational work from the late 1950s. I entered parliament in 1966 as MP for North Shore, and held a range of ministerial portfolio responsibilities through the 1970s and early 1980s.³ It was a time when New Zealand's political scene presented both challenges and opportunities. It was a matter of how the problems to be addressed were perceived, how they could and should be tackled, and the ways to achieve the desired outcomes.

What I hope to explain in this thesis is that important lessons can be learned, and must be learned, if we are not to repeat yesterday's mistakes today, and rob tomorrow of the wisdom - already paid for by the price of experience - that should be part of our children's inheritance.

³ For details of responsibilities and dates those were held, please refer to Appendix A.

Inevitably, as someone who sought to play his part in the arena of that experience, my story will be written through the eyes of a participant, of subjectivity, but I shall try to identify and reference my thoughts in such a way that those observations are as fair and relevant and accurate as possible, given my direct and total involvement.

It is also fair, however, to make the point that having played my part in the arena where the action really was, I could reach an understanding of what was actually happening, study it far more closely than would be possible from the press gallery in the grandstands, assess the strengths and weaknesses of the issue, and work constructively with those closely involved pressing for improvements.

The objectivity often claimed as the special advantage of those looking on carefully, but not personally involved, can itself be seriously flawed as it cannot provide the first-hand insights of the actual participants. To make the assessments second-hand, as it were, through analysing the comments of others, can itself be just as selective as those presumed to be disadvantaged by being subjectively involved.

What did I hope to achieve in planning, researching and writing this thesis?

Having given so many years to active involvement in political and parliamentary life, and having been entrusted with quite a range of portfolio responsibilities as a cabinet minister, I believe I've learned from my experience some positive and helpful things - and some frustratingly negative also, which are lessons that I could, and should, pass on to those who follow.

Of course times and responsibilities are subject to continuous change, but some features are enduring and ever-present. As the thesis will note, a good example of this is the human relationship factor. Another is the importance of relating the pace of change asked of people, organisations and enterprises to their physical and emotional ability to relate to, and adjust to, that pace. Yet another would be preparing the mind-set of key stakeholders to accept the need for the changes proposed.

Naturally, across the range of responsibilities and experiences I have had as a minister, I had a number of possible candidates for the focus of this research. But my supervisors in this thesis project, Professor Marilyn Waring and Dr Grant Gillon, helped reduce a list of about 20 subject suggestions I put up for consideration to a much more manageable challenge.

The Political Action - as Seen By Others

How did others see the factors which shaped the scene in the decade preceding the election of the third National Government? A very fair question!

In the compass of a thesis I can make no attempt to survey all the literature related to this question, but is appropriate to offer a cross section of comment to give a wider view.

Notwithstanding my personal involvement at the time, I am well aware one can never see the whole picture oneself, nor can one appreciate all the many influences on, or the consequences flowing from, such chapters in our history.

In this section, therefore, I will endeavour to summarise what I believe are some of the more interesting and relevant observations made by a number

of academics, authors, journalists and commentators. Some were made at the time, and some much later modified by, and matured with, the wisdom of hindsight.

Mitchell (1969) devoted a chapter to “*A case study: The Nelson cotton mill*”.⁴

Mitchell uses this example of the cotton mill to explain the approaches which the two major parties, Labour and National, adopted, and why, and in the process helps to set the scene for a better understanding of the state of both parties in the late 1950s and early 1960s.

Each party was going through a period of adjustment and rehabilitation. Labour’s long run in office from 1935 to 1949 had finally produced a weariness in its ranks, and this had eroded public support. This was accentuated by Labour’s unpopular and unenthusiastic support for the militant unions in the 1951 waterfront general election against the Holland-led National Government’s show of strength and leadership.

National, for its part, held well in the early years of the 1950s when economic conditions were fairly favourable, but later in its term things started to turn against them. Holland’s failing health didn’t help, and Labour regained the treasury benches in the 1957 election, helped materially by Walter Nash’s election policy of “Do you want £100 or not!”

The economic and financial pressures were growing, and Arnold Nordmeyer, Minister of Finance, re-introduced blanket import controls at

⁴ Austin Mitchell was a Fellow at Nuffield College, Oxford, following several years lecturing at the University of Otago and then becoming senior lecturer in political science at the University of Canterbury. I met him occasionally during my early years in Parliament but got to know him quite well personally during the three years 1991-94 when I was New Zealand’s High Commissioner in London. He was a back-bench Labour Member of the House of Commons representing Grimsby. In 2010 he was still serving in that role, and Austin and I still exchanged Christmas messages.

the beginning of 1958 and capped the image of aggro and insensitivity with what became branded as “The Black Budget”.

By 1960, the then Labour Prime Minister Walter Nash, was looking for new and positive ideas to present to the public in the run up to that year’s general election.

Mitchell, (1969, 71) explains how in New Zealand history the concepts of protection and free trade, industry and agriculture, and industries using indigenous raw materials and those using imported ones, had long jostled with each other, politically and socially. And the arguments for and against were present to a degree in both major parties, Labour and National.

But by 1960, the emphasis on the merits of local industry using locally sourced raw material, had developed strongly, aided no doubt by the philosophy of men in the public service like J.P.Lewin and Dr W.B.Sutch. Sutch authored several books promoting the idea and was appointed by Labour’s 2nd Government to the post of Secretary of the Industries and Commerce Department

Mitchell (1969, 71-72) wrote:

In the 1960 election, industrial development was to form the major part of Labour’s manifesto and the only real theme of its campaign.

The Government was publicly baptised in the new faith at the industrial development conference of June 1960. This massive five-day conference brought together 100 delegations from interest groups, local bodies and business, together with M.P.s and cabinet ministers, academics and representatives of government departments.

The Industries and Commerce Department's industrial development policy had proceeded with the general support of the Labour Government. Mitchell reported that between January 1958 and June 1960 some 240 new and expanded projects had been approved, the more important in iron and steel, aluminium and glass. The capital investment involved was some \$148 million, with the prospect of larger investment to come, particularly from the eleven major, and secret, industrial agreements signed by the government.

One of these was cotton. As Mitchell (1969, 73) described it, With the welcome mat out, cotton came in from the cold. The Industries and Commerce Department was in the process of negotiating a cotton project with the British firm Smith and Nephew, a firm which had already won a large share of the New Zealand market. Cotton was a product which was deemed appropriate for growing in the Nelson area, and manufacture there based on a locally New Zealand sourced raw material seemed a viable prospect given an appropriate level of protection through import licensing. To be acceptable to Smith and Nephew, they wanted 80 per cent of the market.

Mitchell recounts the complications which developed - in negotiations, in the public announcements, perceptions, arguments, and the political fallout. Nash's dream became a nightmare and a mission not accomplished. Mitchell gave a fascinating insight into just how complicated the issue became. In concluding his detailed analysis of the Nelson Cotton Mill issue, Mitchell made the point that

the main relevance of the cotton mill case is as a study of the decision-making processes in New Zealand. Certain main general conclusions emerge.

For the student of group politics the affair indicates the importance of the ideology and affiliations of the

government party. Labour was committed to industrialisation, declined to consult, and gave the interest groups no leverage. National was less enthusiastic about the objective, had a traditional inclination to management by consultation, and in any case had more affinities - personal, social and political - with the alienated groups. It gave them the leverage of information.

As a reference work, Mitchell's *Politics and People in New Zealand*, provides a useful survey of the political scene, as it covers the decade which presaged the ministerial challenges which are the key focus of this thesis. He identified and documented the differences between the two main parties, Labour and National: their electoral strengths and weaknesses, their traditional and target support groups and how these linked with demographic, social, and economic factors. He also gave examples of the way the mix and the emphasis can change depending on whether a party is in office, or in opposition, and an appreciation that there are forces at work from time to time which pull the parties apart - and others at times which draw them together. He wrote:

Perhaps the biggest force drawing the parties together is New Zealand society itself. New Zealand's politics are economic because there are so few other issues unsettled. Even the economic questions are differences of emphasis rather than absolute divergence. The classes are closer together, the society is open, so that antagonisms are not sharp and the community is not preoccupied with change. (p135).

For the 1960s, I believe this was a very valid assessment.

Another historical summary of the events leading up to the raft of changes in the political scene and its thinking, and the reforms they began in the mid-1980s, is well documented by Roberts (1987).

Roberts, then Professor of Public Administration at Victoria University of Wellington and a member of both the Executive Committee and the Board of the Institute of Policy Studies, worked with a number of leading academics, governmental and state sector officials, and commentators whom I knew personally during my years as a Member of Parliament and Cabinet Minister. With a few of them listed in his foreword and acknowledgements sections, I had had a close working relationship in various roles.

In his introduction, Roberts draws attention to some of the trends which were at work and which had helped to shape post World War II political thinking in New Zealand, especially a preoccupation with efforts to achieve an equitable and expanding economy. There was broad agreement that economic forces were fundamentally important to social progress, but two opposed streams of analysis flowed from this agreement.

One argued that the Adam Smith philosophy could best achieve this by advancing *laissez faire* economics, recognising, however, that an active public sector in basic public services like justice and defence was needed, and supported from revenue raised by equitable taxation. Economic activity was most likely to achieve its full benefits, however, when least impeded by public management.

The other argued that politics could never be separated from economics, that the free market would favour capitalists at the expense of workers, and therefore political policies should redistribute wealth, especially through the provision of services from central government.

Roberts wrote that ‘the politician and the bureaucrat were brought into intimate association with every sector of society’ leading to what he described as an ‘interventionist state’ leading in turn to the consensual state

with a form of polity described as corporatist. Roberts (1987, 5) also argued that the theories of John Maynard Keynes helped increase the scope of interventionist public policy. Intervention was needed to steer the economy in such a way that the worker got a fair deal, that social welfare had real meaning, and that the product of an expanding economy should be fairly shared across the community. In Robert's words:

In the years following the Second World War the practice of extensive intervention in social and economic life became established as a prevailing political orthodoxy. The hardships of depression were fresh and bitter in the minds of voters, and the experience of wartime administration suggested that vigorous government action could encourage social equity and economic development.

Interventionism, of course, had its critics, with Milton Friedman prominent among those who gave rational voice to their criticisms. The essence of Roberts' description of Friedman's case was that it was better that government determine the rules of the game leaving others free to play the game according to those rules.

In the sections of his book, Roberts mapped the forces at work, and the arguments developing, which, during 1984-86, exploded into the biggest rearrangement of a New Zealand government's relationship with the economy in more than a century. Some of the forces at work were external, like the consequences of Britain's joining the Common Market, and the two oil-price shocks of the 1970s. Some were internal but gradual, like the periodic adjustments within departmental structures and in the interface between ministerial authority and departmental responsibilities, or the creation of agencies like the Ombudsman, or the growing urbanisation of the country's society and therefore geography.

Some were internal, and driven by arguments about principle, or accountability, or transparency, or the gathering interest in environmental protection matters, or the claims of Maori reflecting the growing emphasis world-wide on the rights of indigenous peoples, and the political activism of women across the country calling for an end to their discriminatory treatment in most sectors.

Some were technical or scientific, such as changes in energy, transport, communication, health and education. Some were the product of the transition problems following the snap election of July 1984, and the economic crisis it triggered.

All these and related influences played their part, but until 1984, the changes had been relatively gradual. The traditional systems and relationships in the governmental structures had done some adjusting, but gradually, and in many cases somewhat reluctantly.

Two interesting chapters in the book entitled *New Zealand Society* (Spoonley et al, 1994) were also among the literature reviewed. I sensed they had a particular relevance to the period under study.

The first was on '*Social Policy*', by Ian Shirley. Shirley saw the development of political debate in New Zealand:

associated with an amalgam of contradictory ideals and interests: of crusading liberalism with its confidence in individual human progress and self-determination; of traditional conservatism with its emphasis on paternalistic charity and social order; and of democratic socialism with its faith in the benign power of the state to exercise collective responsibility on behalf of the citizenry.

These contrasting philosophical objectives characterised policy debates during the final decades of

the 19th century, and although the state eventually accepted increasing responsibility for economic and social wellbeing, conflict continued over basic values such as liberty, equality, justice and security. (130)

In the experience of the Depression of the 1930s and the Second World War and the social and economic imperatives of post-war reconstruction, Shirley identified the factors which shaped the way the political divide developed in New Zealand. 'It was the Depression which undermined confidence in the private sector to deal with social problems such as poverty and unemployment and, as a consequence, state activism became not only politically viable, but widely expected'. This became evident in many western democracies in the middle of the 20th century. Shirley goes on to explain: "the comparative success of welfare states during the 1950s and 1960s was credited to Keynesian economic management and to what is commonly called the post-war consensus". (134)

By the 1970s, the growing costs of public expenditure on social welfare in the OECD countries averaged 25 per cent of gross domestic product and 60 per cent of total public expenditure. It was a burden which was producing its stresses. Shirley reported that tax revolts and anti-bureaucratic movements emerged and frequent reference was made to the 'fiscal crisis' of the state. He described the philosophical and economic arguments which started to pull against the 'post-war consensus'.

Shirley wrote that the arguments against the welfare state had grown into what became known as the 'New Right' policies, based on the works of writers like Friedrich Hayek and Milton Friedman. The scaling down of the activities and services of the welfare state found voice in the 'Thatcherism' of Britain, in the 'Reganomics' of the U.S.A., and in 'Rogernomics' in New Zealand.

I found it a little strange that Shirley did not mention the pressures of either the Cold War or the two oil price shocks of the 1970s as contributing factors to the economic stresses many western economies were experiencing through this transition period in political thinking taking place across most of the western world. To me, their impact was quite profound.

The second chapter in the *New Zealand Society* which I wish to mention here was authored by Jack Vowles.

Vowles argued that whereas sociological explanations dominated much of the developing influences through the political analysis of the 1940s to the 1970s, by the 1980s there had developed more sophisticated assumptions about the reciprocal interaction between the state and society. "Of central importance is the acceptance that political agents may themselves make choices which lay the foundations for future structural constraint." As an example, he suggested: "an industrial relations system legally established by a particular government may subsequently shape the form of class conflict, the nature of industrial organisation, and the effects of these on subsequent policy outcomes." (170)

Vowles went on to apply his analysis to the history of New Zealand's political parties. He noted the compositions of the two major parties, Labour and National, and observed how they had changed in emphasis from time to time, and each in the process had been shaped in no small measure by the events they had been dealing with from time to time.

In summary, I'd describe his analysis as the parties using their endeavours to win middle ground, and of course that's where the most votes lie, and that's the result that chooses who is going to be the next government. Vowles wrote:

The most successful period for the Labour Party was between 1935 and 1949, when it first held power and constructed the world's first comprehensive welfare state. The length of this period of political hegemony still stands unequalled by any other Labour Party in an English-speaking society.

But since 1949, Labour found winning a hard task. It won in 1957 and lost in 1960. It won in 1972 and lost in 1975. Labour's fourth government re-election in 1987 was therefore a significant achievement.

Relationships between Minister and Departmental Head

The New Zealand political journalist Colin James, in his book *The Tie that Binds* (2002), made an interesting and helpful contribution to the literature on the subject of the relationship between ministers and departmental heads, and particularly the evolving changes over the last 20 years of the twentieth century.

This book is his summarised account of the ideas and experiences of a cross section of ministers, chief executives, other senior public service executives, academics and private sector observers who attended one or more of five forums Colin James chaired for the Institute of Policy Studies and the New Zealand Centre for Public Law. It embraces the major changes introduced in the middle of the 1980s, and also those which followed the introduction of New Zealand's MMP system from 1996.

The importance of this relationship between minister and chief executive is stated firmly, and I believe fairly, in the first paragraph of his introduction:

At the heart of the government, linking political desire to action, is the nexus between ministers and their departmental chief executives. From ministers the line of authority runs back to the people through Parliament. From chief executives the line of authority

runs forward to the staff who deliver the policy and services determined by the ministers (with help). The relationship between ministers and chief executives is crucial to good government. It is the fulcrum on which the levers of democracy pivot.

From my own experience as a minister who has handled many different portfolios and therefore needed to work with a wide range of departmental heads of differing skills, experience and personalities, I accept the validity and emphasis which James puts on this reality of governance.

In a personal sense, it's a question of how two people with very considerable responsibilities manage to work together. Their responsibilities are different, but closely inter-related. Poor performance by either will greatly expand the burdens on the other. And we must appreciate that circumstances shape the pairing between minister and chief executive. They have not chosen each other.

The greater part of *The Tie that Binds* covers the changes that have taken place since my time as minister, and therefore are not directly related to my particular experience as a Minister managing change. They do, however, help to explain the relationship as it then was.

From the 1930s to the 1980s, the relationship between the political and administrative aspects of central government in New Zealand were seen as close mirror-images of the Westminster system as practiced in Britain. The career public service provided the administrative and service support for cabinet and its ministers.

Chapter 4

Scoping

An essential early step on the Research Journey

I found the scoping exercise an excellent way to concentrate my thoughts on the key parts of each section of my responsibilities which might best refresh my memory on the experiences from which I learned so much. Each responsibility had presented markedly different challenges to my management, and therefore how I would have to handle any problems they might present. Needless to say, there were problems aplenty. Some were more obvious than others. Some more pressing than others. Some had long histories and some were just forming. The following sections of this chapter, in summary form, set out the major issues raised in those portfolio areas which shaped the message which I hoped my thesis might carry through to a convincing and meaningful conclusion.

Education and the Holyoake Influence

Sir Keith Holyoake appointed me Under Secretary to his Minister of Education and Science, the Rt Hon Brian Talboys, a post in which I served from the post-election Cabinet changes following the 1969 general election, until the cabinet reshuffle in early 1972 when leadership passed from Holyoake to Rt Hon John Marshall.

This was a turbulent period for education, triggered by several factors.

During the 1960s, Holyoake took a special interest in education. He had received little formal education himself and was anxious that all New Zealand children should have better educational opportunities than he had received in his young years.

He had a firm conviction that a country's proper level of investment in education should be about 5.5% of a country's GDP. In the early 1960s, and for long before that, New Zealand had been well below that figure. Holyoake ensured more money was pressed into education. For a while it seemed that money was almost being force-fed into the system to bring education up to his target.

The Commission on Education in New Zealand, chaired by Sir George Currie, in an interim report published in July 1960 and a full report published in July 1962, made over 200 recommendations for changes to the education system. Many of the recommendations in this report involved putting more money into education, so these were among the early recommendations to be adopted, such as three-year teacher training; higher pay rates; and smaller class sizes. There were also recommendations involving some pruning and reallocating financial resources within the system.

Later in the 1960s, when the less favourable recommendations came forward for attention, the teacher unions were less co-operative. Indeed, at times they became quite hostile. It was about this time that Talboys had taken over from Arthur Kinsella as Minister of Education.

Teacher union protests sought to disrupt the National Party's annual conference at Rotorua in 1970 and I can recall during this tense period between Government and unions that at times the stress levels even had an effect on how our own children were treated by some teachers in their

respective schools. I certainly didn't allow this to influence my behaviour. Both my parents had been teachers. Two of my wife's uncles had been teachers. I had some understanding from this family background of some of the problems and stresses teachers could experience.

Demographic factors

This was a period when the numbers in the younger generation were not only getting noticeably bigger, but there were significant movements within the population.

The post-war baby-boomer generation was advancing through the teenage years. The extension of education into the secondary system was becoming universal, and the average time spent at the secondary level was expanding.

There were also growing influences shifting training from the practical and work-experience approach into the extension of academic preparation. This trend became even stronger in later years. During the 1970s this new approach radically changed nurse training, and progressively down-graded the values the educational authorities and management attitudes then attached to apprenticeships and work-based skills.

State aid for private schools

The arguments for and against such aid, the need for the assistance and the influences such assistance would have on the state education system, were hotly debated from the late 1960s into the first three or four years of the 1970s.

At times it proved to be quite a heated debate. Many on both sides of the argument would brook no compromise. The two main political parties each

became torn on the issue and it took several years for the problems which produced it to be resolved.

The pressures on the state system had also hit the private system. Several private schools were closed - mainly through lack of finance to stay the distance. The Catholic education system, which then provided education for about 5 per cent of all school children, was in serious financial trouble. The problem could not be left to grow.

Common sense and sheer practical realities finally won through. It was in the state's interest to see that the private school system did not collapse, for to take over the cost of meeting the education needs of the private schools' pupils would be a major extra cost to the state. State aid - meeting the basic costs of staffing within the boundary lines of state salaries and class sizes - was a compromise which most of the key stake holders finally felt they could and would have to accept. And so the crisis passed.

Parliamentary Undersecretary of Education

Brian Talboys was a great man to work for. He was not just the Minister to whom I was accountable and there to help, but he showed understanding and sensitivity in generous measure.

He separated off sections of his responsibility and assigned them to me. These were essentially the "bricks and mortar" of the Education Department's property and building programme, pre-school education as it then was, and the relationship with the tertiary sector for their forward funding requirements, which involved working with the University Grants Committee on their five-year forward rolling funding programme.

In addition, as and when circumstances required, I was called upon to assist with other aspects of his broad education responsibilities. This

frequently involved visiting schools and working with boards and committees throughout the country. It was, from my point of view, a wonderful opportunity to learn for bigger responsibilities later.

Customs

When Jack Marshall became Prime Minister in February 1972 (until the general election in November that year) he appointed me Minister of Customs, Assistant Minister of Finance and Minister responsible for several Government agencies and offices listed in Appendix A. In terms of time devoted to the task, Customs and the implications which flowed from that responsibility, took 99.9 % of my time and attention during this period.

Assistant Finance didn't take much time. Muldoon was Minister of Finance and he shared little with me. My usefulness was mainly during the "caretaker periods" when he was abroad. It was a very different situation when I was later (1975-77) appointed Deputy Minister of Finance, a matter mentioned in greater detail later in this chapter.

Customs proved quite a challenge for three very major reasons.

- 1) At that time, imports were an almost entirely Government controlled operation. New Zealand in those days was by no means unique in this - in fact it was almost standard international practice for governments to control what their citizens might import or how they might spend their nation's currency in buying overseas. The consequences were many. Those who had import licences were in favoured positions and effective competition was rare. Price control was a necessary moderating factor. Licensing also favoured local manufacturers in the sense they did not compete in any real measure with overseas manufacturers.

- 2) In his budget in 1971 Muldoon, as Minister of Finance, signalled Government intended to introduce a reassessment of all licences during a three year review. There had been no soft-sell groundwork to prepare for this major news. Many New Zealanders went into panic mode. They saw in a relaxation of licensing a threat to their businesses' existence or their jobs, for they felt they could not survive a removal of the protection import licensing afforded them. The unions also saw a threat to jobs in this proposed review. Hence, in political terms, I was flat out through 1972 trying to put the fires out with all sorts of interests, through the importing and manufacturing industry sectors. There were many manufacturers' staff lunch rooms which I visited and found, when I spoke to staff groups, draped across the walls would be banners proclaiming if you want to have your job next year - Vote Labour.
- 3) This Ministerial responsibility in these circumstances gave me an excellent opportunity to view, from the centre of the maelstrom, the New Zealander's merciful absence of resorting to corruption.

The then customs licensing system had lots of built-in advantages for some who had acquired their licences in years past, to the obvious disadvantage of many others who wished to join the importing game and who couldn't get the licences they sought. One can readily imagine the potential for corruption through payments for favours etc. I am pleased to report that although I received more than my share of abusive letters and phone calls from frustrated applicants, and lots of visits by businessmen and other interests where voices became raised and the table thumped, I never once was approached with an improper suggestion that for an approval of this, that, or the other application, there would be a financial or similar consideration to me personally, or to my political party. During the 10 months I was Minister of Customs, I believe there were only two cases of

very junior officials being found to succumb to the corruption temptation with appropriate court action following.

When our Government was defeated in the General Election late in 1972, there was a 10-day interregnum period between the election day and the day the new Government took over. In that time, life still had to go on. The question arose: how best to handle the approval process in this interregnum?

I remember a serious discussion I had with the departmental head Jack Kean. He was a true top quality public servant in the old tradition. He sensed what I sensed, i.e. the importance of having a 'clean hands' record and outcome of my period at the helm. I learned that in the previous interregnum between the change of government from Labour to National in 1960, there had been some £10 million of rushed licences issued to known Labour supporters of which little was known publicly. I wanted no such thing to be repeated on this occasion.

The plan we devised was simple, but I believe correct. Where policy in a particular area had been made prior to the election, approvals under that policy for applications in the pipeline should proceed as normal. Where applications would involve new policy considerations, those applications should be put on hold until the new minister took over. It was not something I discussed, nor I felt needed to discuss, with my colleagues. As Minister I had made my decisions with the advice of my senior officials available to me. Customs applications didn't go further up the authority chain than the minister's desk. Sometimes, only sometimes, I would question that advice, discuss it with the appropriate official or officials, and, after a genuine two-way discussion, agreement would be reached. I cannot ever remember authorising or approving an application or policy change without a consensus view being achieved with my officials.

Housing

In the forming of the new National Government following the election in November 1975, Muldoon assigned me the responsibilities of Housing and Deputy Minister of Finance. In addition there were several smaller portfolio responsibilities given me listed in appendix A. My Deputy Minister of Finance responsibilities proved considerable, and are listed in this scoping study as a separate item.

Housing periodically features significantly in the country's political history. The leaky-building problem and housing mortgage debt and market prices are such examples in 2010. My time with the Housing portfolio was one such period - and the particular challenge was to contain a problem I inherited which had been irresponsibly hyped to grow out of control.

My oldest generation remember the impact of the first Labour Government's state housing programme. It was an idea which in its time had political clout, and contributed not only to the social wellbeing of many in the poorer classes, especially in the cities, but it also gave a considerable lift to the building industry and provided working opportunities for trades people during the country's slow climb out of the big depression of the early 1930s.

Under the Kirk/Rowling Labour Government (1972-5) there was another burst of government engagement in housing. The group housing programme gathered steam and in the run-up to the 1975 election, the then Minister of Housing, Roger Douglas put extra pressure on this part of the housing sector. A number of the big contracts let in the months leading up to the election had not been backed by assured government funding, although Douglas had committed the work with the contracts signed.

My first big task on becoming Minister of Housing was to pull the construction rate back from a then unsustainable 38,000 housing starts a year to a more affordable and sustainable 27,000 starts - and, what is more, do so without knocking the building industry onto its back. We did not want a deluge of bankruptcies and job-losses. This task involved a major effort to retain the confidence of, and a reasonable rapport with, the leading figures in the building industry. Muldoon left me to it. It was one of my big early challenges as a minister.

How I did it taught me a lot, for I had to get it right, and do so myself. It was not a case of passing the nasties down the line to luckless and vulnerable officials. The minister had to take the knocks, but he could mitigate the harm politically, personally, and to the industry by the way it was done. I had no option but to face the facts with which I was presented, and somehow achieve a solution. I also had to appreciate the sheer necessity of easing the likelihood of a burst bubble consequence which the industry would be just as anxious to avoid as I would be as the minister, or the government.

There was one critical meeting. I remember it clearly. It was on the third floor of Parliament Buildings in an office formerly occupied by Trevor de Cleene when he was a minister in the Rowling Government. It was near the main lifts and not far from the Prime Minister's own offices. It was an office which was big in area and had a presence that many other ministers' offices at that time certainly didn't have. In a semi-circle around my desk sat some dozen or so leaders of the building industry. I shared the nature of the problem and my mission frankly with them. They'd been on a rollercoaster ride for some time. My comments were very unwelcome. The reaction was strong, and blunt. A couple of their leading figures said they and their colleagues would march out of my office and proclaim to the media and the world how totally opposed they were to what I'd proposed

and would see that the Government knew what they thought of me and my mission.

As they were leaving for the door I asked them, please, to pause, and listen to the challenge with which I was presented, and which I had to share with them. They were gracious enough to pause, and listen. I explained: “If you leave this room and attack me publicly as you describe, don’t you realise that it will only oblige the government to defend me publicly and therefore make it infinitely harder for you to deal with the government in future? Why don’t we sit down again and talk about ways in which my essential mission - seen by the Government as a necessity - can be achieved but in ways which will impact on your industry with a minimum of damage. I need your help to suggest ways to meet this challenge in the least harmful way.”

They returned to their seats. We did talk. We agreed to talk again, whenever needed. We would stay in close contact, and take things step by step.

I am grateful to those leading builders who were prepared to face reality in a pragmatic way and so helped to bring the industry along with this least harmful way in which to achieve the downsizing mission.

My relationship with most of the individuals in this group stayed open, frank, and personally agreeable throughout my term in this portfolio

One most important lesson it taught me

It was a lesson I valued and used in a number of quite critical situations in other portfolios later. Essentially it was this: work to win the confidence and respect of the key stakeholders in your portfolio subject area. Recognise their experience and the value of their expertise. This does not

mean rushing to please their every wish. This does not mean agreeing with them - unless you really and literally do agree with them. It means an openness, a candour - gently rather than bluntly offered - and setting out things the way the facts say they are. It can and should be done with tact. A sense of timing and circumstance is also important.

Don't be slow to congratulate if congratulations are in order. Don't try to make obvious political capital out of what you have achieved, or problems you have successfully avoided.

Never criticise your colleagues to the stake holders your responsibilities require you to work with, nor blame your staff by way of excuse. Publicly, you must support your staff. If something has gone wrong, speak to those offending in an appropriate manner, but do so privately, or through the appropriate departmental processes. Remember political respect and effective ministerial authority are earned, not granted from some benign authority, nor achieved through the politically inspired praise of one's supporters or colleagues.

Appointed to Deputy Finance

From the formation of the new Government under Muldoon in November 1975 until April 1977, my Cabinet responsibilities included Deputy Minister of Finance. Muldoon was his own Minister of Finance. He personally held a close watch over the income and revenue side, and gave the whole expenditure side - subject only to the capping numbers within which expenditure had to be contained - to me.

Cabinet Committee on Expenditure

I was appointed as a one-man Cabinet Committee on Expenditure. There hadn't been such an arrangement under the previous government, nor to

my knowledge, under any previous government for quite some time, if ever, and I was tasked to review each and every department's budget estimate application and prune and rearrange them so that they came within the capping numbers which Muldoon's overview master plan had set.

The outgoing government had apparently conducted the expenditure side of things with a fair state of wild-west supervision. On becoming government we found that some of the numbers, especially in areas like welfare and housing where Labour was considered soft and had spent or committed more with thought to winning votes rather than balancing books, were cause for some concern. A number of Muldoon's ministers had never held portfolio responsibilities themselves before. Some were quite intimidated by his manner and demands. There seemed a reluctance by several to sign anything that involved in approving expenditure or authorising requests. I detected this was because they didn't want to cross the boss.

One minister, Hon X, was so intimidated by Muldoon's bossy manner that he seemed to develop paralysis of what I described as his cheque-writing hand. I liked the guy personally but his paralysis reached the point where the secretary of Cabinet came to see me and asked, "what do we do? Hon X won't sign anything and his department is getting concerned. His department fears they'll miss out in what everybody knows will be a fairly tight 'rein-in' budget."

At this time (early 1976) I had considerable respect for Muldoon, but he didn't frighten me the way he did a number of others. My operating manner was to accept the responsibility and carry it out. There'd be difficult things to achieve, and some easier things. Except where policies or procedures required, I didn't think of going back and asking the man who'd given me the job how I should do it. Delegation, to work

effectively, must mean delegation - of both task and responsibility to achieve that task.

I appreciated the Cabinet secretary's concerns, and those of Hon X's head of department, so I told the secretary to leave it to me, and I would endeavour to sort it out. I took an early opportunity to invite this minister to my room for coffee and a chat. I asked a few related and vaguely relevant questions about how he was liking his new responsibilities and then asked him how the signing and approving were getting along. It was then that he confessed to his concern that he might offend the PM by signing something that the PM might think he should not have signed, especially like some things that involved big money. I fixed the problem by telling him, "you just get the papers sent up to me, I'll counter sign them. They can be returned to you and you can then sign them and forward them through the process. If Muldoon kicks up a fuss, you tell him I signed them first." The log-jam was removed, the papers started to flow, and after about half a dozen of such prior counter signings, the referrals from Hon X to me to give him the confidence to sign just stopped coming.

Committee Approach to Task and Expansion

My review of expenditure requests was handled in the manner of a regular Cabinet Committee meeting, with me as chairman sitting behind the table and around the table the relevant officials from the department concerned explaining intentions and answering my questions. Appropriate secretarial staff were present to record and support me in an administrative way. One or more Treasury officers would be present - mainly with a listening brief. The minister whose department was involved was often present but was there as an observer and not as a member of the Expenditure Committee. My committee's answers were not necessarily given, or likely outcomes implied, at the time, although I tried to do that if possible. The more

complicated ones sometimes required revisiting with a further discussion with the key people in the interim.

I had not been long in this role of Chairman of the Finance Committee, having heard only a few submissions, when Muldoon told me he would expand the Ministerial presence at the hearings. He told me he had received comment from Holyoake who was concerned that my mission to contain expenditure could become a contest with ministers united and pitted against me as their opponent. My role would make me unpopular with the whole cabinet which would make the exercise damaging to the Government.

As a result, two Ministers were added to attend with me; Holyoake and Thompson. Holyoake was Minister of State and in that role was very under-employed, anyway. Thompson was Minister of Defence, and perhaps had less pressure on him than a number of other colleagues. Both Ministers were old hands, which pleased me, and I do believe Holyoake's concerns were well founded. In any case, I had no wish to have the Cabinet against me. In reality, it made little difference. From then on, both Holyoake and Thompson attended most meetings, but played a quiet and supporting role rather than seeking to be too actively involved. They left the conducting of the hearings and the questioning largely to me.

Whether Holyoake's advice about the membership of the Cabinet Committee on Expenditure was right or not, I'm happy that advice was given and taken. If I'd suggested that myself, I seriously doubt it would have been agreed to. I was not aware of my work as that committee's chairman for that 18-month period losing me any friends among my colleagues.

Many Budget Requests Needed Heavy Pruning

My recollection is that every vote (i.e. a particular department's total budget package request) except one in that first year had to be cut back, some quite severely. It gave me no pleasure to disappoint applicants in this way, although some cases I felt very much more deserving than others. It was a demanding responsibility, but there was a rich reward in terms of experience and lessons learned. It gave me an interesting insight into the then thinking of departments across the whole range of the Government's administration. I cannot imagine any other ministerial responsibility could have provided this experience so thoroughly.

The one exception I recall making in the cut back exercise was Mining. I could see the way the economy, especially of the northern North Island, was becoming dangerously dependent upon the reliability of Maui gas, including its contribution to the proposed Huntly power station then planned and agreed to but not yet built. It was to be a dual gas and/or coal operation.

After questioning from me as to how we could mitigate the consequences of a problem like an earthquake which broke the underwater pipe line, I suggested and authorised extra funding to clear the soil above one of the coal fields nearby Huntly's proposed power station so that, with a thin soil layer only left above it to protect the quality of the coal from the weather, diggers could very quickly access sufficient coal to fuel the Huntly station on a coal-only basis until the Maui pipe could be repaired or replaced. I have always felt that over-riding tactical and strategic considerations have rated too little as priorities in much of Treasury's thinking and advice. At times Treasury pressures had to be eye-balled, but very few ministers were prepared to do that, especially with Muldoon both PM and Minister of Finance.

Mid-term Cabinet Reshuffle to Energy

Early in 1977, about 16 months after National had been returned to power following the 1975 election, the Prime Minister did a partial reshuffle of Cabinet responsibilities. My responsibilities were among those most affected by the changes.

Although Prime Minister Muldoon did not comment on how well I may have performed with Housing and the expenditure side of Finance, I know I had handled those two problem areas - each going through their own form of crisis at the time - and done so without serious problems for the Government. Nor did I know at the time the measure of the difficulties that my colleague Eric Holland was having with energy, but I did learn later that he had health problems which would have added to his difficulties.

In the Cabinet reshuffle, Housing and Deputy Finance were passed to others and Muldoon gave to me responsibility for the energy related matters which Eric Holland had been handling. It was a range of portfolios which came like an assortment of bits and pieces: Electricity Department, Ministry of Energy Resources (a very small policy unit which didn't have the clout to make much progress), sections of the Trade and Industry Department with energy-related aspects, pieces of the Works Department which were also energy-related, and part of the DSIR which was likewise involved.

As a result of this disarray across the administration and policy making (or not making) of the energy scene, I thought Treasury was having far too much influence in energy policy making. Treasury's objectives - focusing strongly on budget numbers and the current financial accounts - were frequently at serious odds with what should have been the energy focus on security of the infrastructure, reliability of supply, appropriate forward

planning and decision making with proper regard for the nation's energy needs, both present and future.

Problems Aplenty in the Energy Scene

In addition to the glaringly obvious problem of disarray in the governance and administration of the energy sector, I quickly identified a number of matters which would require early and serious attention by me as incoming Minister.

The \$3 a barrel levy which Treasury had been pressing for some time to place on oil field discovery outputs was causing real trouble between the Government and the oil industry, and had effectively put oil exploration into a state of indefinite stall.

Treasury saw a new oil search as an ideal way of raising income for the Government. As a result of the turmoil following the 1973-74 oil price shock new oil finds would surely have a special appeal to the oil industry. Treasury saw potential new oil finds as a ripe source of new finance. But the oil companies here in New Zealand were determined to fight this all the way.

Should the country be allowed to suffer while this build-up to damaging confrontation took place? I believed it was essential it should not, and finally convinced my colleagues that the proposed levy idea had to be dropped. Repairing relationships and goodwill with the oil industry was something I worked hard at following this needless confrontation.

Why the 1973-74 Oil Price Shock

The reasons for the oil shock of 1973-74 were several, and the literature on the subject is extensive.

Post World War II, there was a significant switch from coal to oil across the developed world, the effect of which was compounded by the growth in many economies.

In a section entitled *Growth of demand and change in the energy balance*, Colitti and Baronti noted that :-

- In the early 1950s, solid fuels accounted for 55% of energy consumption in OECD countries and by 1973 this was only 19%;
- During that same post war period, oil consumption in the OECD rose from 28% of energy needs to about 54%, and natural gas from 11% to 20%.
- The effect on the U.S. was particularly marked. In 1950 oil and gas satisfied 56% of that economy's energy requirement and by 1973 this had passed 75%.
- However, when seen as U.S. dependence on foreign energy sources, the figures were much more dramatic. In 1950 foreign energy sources were of negligible amount but by 1973 had reached 17%, and oil requirements rose from 2.7% to 36.5%.

In Western Europe and Japan the figures were even more dramatic:

- In the early 1950s, domestically produced solid fuels covered 80% and 90% of their respective energy requirements, and by 1973 these shares had fallen to 18.7% and 4.5%. and oil satisfied 61% and 76% of their total requirements.

- Parallel to this, the dependence on outside energy sources rose to 63% in Europe and 89% in Japan, and in the case of oil, dependence rose to 97.3% and 100% respectively.

With dependence on imported oil of this order, one can quickly appreciate how the Middle East political tensions and the growing significant swing in the balance between supply and demand produced such international concerns. The oil rich countries had their markets over a price barrel.

Treasury's efforts to impose a special \$3 a barrel tax on oil production from new fields yet to be developed was not the only oil-industry related matter to resolve.

While the issue stayed centre stage in industry-Government relations, exploration plans stalled and valuable time and effort was being lost.

In the development of the then known resources ready to come on stream within the next very few years - resources in the Maui field off the Taranaki coast - the Labour Government, in the time of Rt Hon Bill Rowling as Prime Minister and Warren Freer as Minister of Trade and Industry and Minister of Energy Resources, had signed up to a "take or pay" agreement with the Maui interests. Under this, there was an agreed formula for the state buying a nominated amount of each year's gas output. If this amount was not taken and used, it had to be paid for regardless.

In the circumstances of the oil price crisis, it is understandable how the parties came to such an agreement. But there were some unfortunate consequences flowing from it, for it encouraged the burning of gas to

generate electricity, and the energy content of the gas can be only partially harnessed by this process.⁵

The Electricity Sector also had its problems

- The arguments for and against the Clyde Dam had to be played through with the added controversy about whether it should be the low dam or the high dam. There was a political twist to this and the impasse was only resolved, legislatively, with the help of Social Credit votes. In the meantime, a few valuable years were lost - lost in the sense that the building project was unnecessarily delayed with consequent production temporarily denied and higher capital outlay arising from the delay.
- Work on the Huntly project was being held up by an argument between local Maori and Government about what compensation the local iwi should receive. There was legislation which offered one percent of the total cost of a power project as a fund to finance compensation claims arising from energy development projects. In this instance the cost of replacing a marae dining room was the big issue. Treasury bucked at the price.

I could see the Maori claim would get bigger the longer resolution of the problem was delayed. The Huntly project would take some years to come on stream, so the small percentage provided for in the legislation could grow to quite a big figure if not resolved quickly. I had to force the issue to resolution - again requiring a Treasury backdown and mercifully commonsense prevailed.

⁵ Technology has improved since the 1970s, but generating electricity is still not a way to get the maximum energy value from a regular flow of gas. Even to partially waste a limited resource seems most unfortunate.

Thermal Power Development - Should It Stop or Proceed

On taking over responsibility for energy matters, I found Treasury was also opposed to further development of electricity from thermal areas on grounds of cost. The matter came to a head when plans came forward for a thermal station at Ohaaki, between Taupo and Rotorua.

I argued that NZ had developed a skills base in this field which had valuable export implications in the Philippines, Indonesia and elsewhere, and we could not afford to let this expertise die. I managed to press the issue until I won and the Ohaaki station was built over Treasury's opposition.

Solid fuels

Prospecting and research made clear that the size of our coal resource was becoming more obvious - particularly as advances in engineering made opencast mining more realistic and therefore made coal burning more acceptable as an economical way to generate electricity. Its particular merit was that coal-fired power stations were not weather dependent like hydro and wind power (which at that stage was an idea rather than an imminent prospect).

Environmental Issues

In the 1970s environmental issues were nothing like as dominant as they have become in the past 20 years, but even then they carried considerable political influence. The debate raised by the Bluff aluminium smelter project and the related Manapouri hydro scheme sparked this issue into strong voice in the late 1960s and early 1970s. Environmental factors were becoming increasingly major issues in a number of energy development projects.

Nuclear Power - Should we consider it, or not?

In planning the possibility of including nuclear energy in New Zealand's energy arsenal, it should be noted that the 15-year forward electricity plan in place when government passed from Labour to National late in 1975 included provision for three nuclear power plants - one on the south shore of the Manukau, one at Makara, and one on the South Kaipara.

Nuclear power - to embrace it or reject it out of hand - was developing then into a major political issue which ran under various scenarios from the mid-1970s to the late 1980s.

A little research reminds one that these three possible sites I remember in the debates were by no means the only possible sites being talked about then. Martin (p100) wrote:

The possibility of nuclear-power generation was first introduced explicitly into the power plan in 1968 and maintained until 1977. In the late 1960s staff went overseas to study nuclear power, and various sites on the Firth of Thames, the Kaipara Harbour, in the Wellington region and on Banks Peninsula were investigated. Meanwhile considerable debate as to the merits of nuclear power was emerging by the early 1970s. In 1975, as a result of increased projections of demand, the Power Planning Committee proposed two 600 MW reactors by 1980, but with an election approaching, both major political parties offered public enquiries. In September 1976, the National Government appointed a Royal Commission to enquire into nuclear-power generation; this was soon followed by a petition to Parliament with one-third of a million signatures opposing nuclear power. By 1977 slackening demand for electricity and the changed climate of opinion led to the dropping of any proposals. The commission's report of May 1978 reflected these changes and concluded there was no need to consider the possibility before the next century.

During the time I was responsible for Energy, the issue was largely parked off field, as the Royal Commission on the matter, chaired by Sir Thadeus McCarthy, was hearing evidence and argument. When the Commission's report finally appeared, it recommended leaving the issue parked until the 1990s for consideration then, if need be. In the event, by that time both major political parties had moved into an anti-nuclear mind-set.

The Importance of Long Term Planning

One of the good things I inherited - and insisted should be passed on to my successors - was the policy of providing annually updated reports on New Zealand's estimated forward needs in electricity for the following 15 years.

The 15 years called for in the plan looking ahead was the time engineers in Works and Electricity departments estimated it would take to design and build any new stations which may be required. This was in the days before the Resource Management Act.

The forward estimates were given at three levels: maximum likely requirement, minimum likely requirement, and median estimated requirement. Prior to my time as Minister, during my time as Minister, and following my time as Minister, successive governments of both major parties, invariably chose the median estimate to chart their forward planning and decision making. However, in the restructuring of the energy sector in the mid-1980s, the long-term look-forward aspect of energy disappeared and the current year's bottom line financial result took centre stage.

At last, real progress

The mess I inherited on becoming Minister responsible for energy matters was so extensive, and so evident, that even the Prime Minister in his role as

Minister of Finance could see that although it may have some constraining effect on his own department, Treasury, there was a certain necessity in my recommended first-steps to the breakthrough for some sanity and recovery of effective control. With his co-operation I pushed the legislation through Parliament and the new Ministry of Energy became a reality in April 1978.

Energy was, is, and always will be, an absolutely fundamental and essential element in any country's infrastructure and its people's welfare and living standards.

Health and Social Welfare

My New Responsibilities

In the Cabinet reshuffle following the November 1978 General Election my responsibilities were totally changed. Every post I had held between the election in 1975 and that in 1978 went to others. Instead, I was given Health and Social Welfare.

These were both major portfolios and between them they accounted for close to 40% of the total Government budget. I was given both these responsibilities together - and without the assistance of an associate minister or parliamentary undersecretary.

These portfolios were politically sensitive at the time. Both had a huge potential to be classified as "problem areas" from a government's point of view. They effectively occupied my maximum attention throughout the three years I held those portfolios.

Social Welfare

In the case of Social Welfare, my principal task was to help keep things running smoothly and make it clear to the sizeable staff that their minister

cared, appreciated their efforts and valued their contribution to the country, and particularly to those who needed their advice, encouragement and support.

The most difficult legislative problem which came my way during those three years as Minister of Social Welfare was to correct a flaw in the legislation covering the national superannuation payment levels.

The National Government, during the previous three years, had scrapped the Labour Government's legislation for its funded scheme launched shortly before the 1975 election and replaced it with a tax funded scheme. The payment level was set to 80 per cent of the then average ordinary time weekly wage measured across a fairly wide range of the employment market.

But a problem had developed. The 80 per cent was being paid at the *before* tax wage, and therefore moved under the influence of tax levels which could be subject to change on a quite frequent basis. It was also higher than intended or promised when the legislative change was made during 1976 and had effectively risen above 90 per cent. The intention had clearly been to base the 80 per cent on the *after* tax average wage.

Pulling back benefit levels is not a popular move and the political consequences can be rather difficult to sell to those adversely affected.

Health had its problems.

I had to deal with far bigger issues and political problems with my health responsibilities.

Muldoon told me in passing Health to me that my predecessor in that role, Hon Frank Gill, had told him that Health had to go to someone else. He

was at loggerheads with the medical profession and if he stayed in Health there would be big trouble.

I do not profess to know all the reasons why Gill may have reached this relationship with the medical profession, but I did know that his attempts to fight any attempt to liberalise the abortion legislation had been aggressively advanced. Indeed he - with a private member's bill he authored and which Muldoon had personally supported - had sought to make securing abortions much more difficult.

Knowing my fairly liberal attitude towards abortion, and aware that Muldoon himself was strongly opposed to me in this matter, it surprised me that he allocated me Health.

But I was not someone to dodge a challenge, and I accepted these new responsibilities without question. Perhaps he gave it to me because of the way I'd managed to contain costs as his Deputy Finance Minister a couple of years earlier. Or did he like giving me the hard ones? Actually I didn't mind. The bigger the challenge, the bigger the sense of achievement - that is, if you manage to get on top of the challenge instead of the challenge getting on top of you!

Was it to be Treasury's way, or mine!

My health responsibilities began with a particular challenge. At my first Cabinet Committee meeting on health - I recollect that it was on a Tuesday morning following my appointment as Minister late the previous week - Treasury presented a paper setting out what should be done and how their targets for health should be achieved. I'd had little time to do more than read the paper and certainly not analyse it carefully and discuss it with my Health Department key people.

I could understand Treasury's desire to do something about health expenditure. For many years, successive governments had tended to adopt the attitude that as each new problem surfaced, more money had to be thrown at those particular problems. It was a case of add on and add on, without reviewing what was being spent on what, or making sure previous allocations of finance were still relevant and being applied effectively.

I had a problem. There is no way I could accept the Cabinet Committee adopting the Treasury's paper and its recommended course of action. It would effectively determine what I could do, and what I could not. It would in effect be making all the decisions and determining all the actions I would need to take, or could not take, before I had a chance to study them adequately and explore their implications and likely consequences. What would they need a Minister of Health for, if what to do, and how to do it, had all been determined by Treasury and decided accordingly?

Somehow I had to stop this Treasury plan of action being approved by the committee. Several of the ministers around the table were recently appointed to the Cabinet. They wouldn't want to be offending their Minister of Finance and Prime Minister who'd only just given them positions in Cabinet. How could I get their approval to an escape from this Treasury strategy - (I could describe it as a trap) - without putting these new colleagues in a difficult position?

I haven't felt driven very often to "perform" before colleagues - but this time I had to. I made it abundantly clear that I couldn't accept the Treasury formula, but I made a major concession to make it possible for them to vote my way. I said I was prepared to accept the Treasury's bottom-line figure. This, I hoped, would buy me the time to achieve the bottom-line figure, but most of all, the freedom to work out how that could best be achieved.

Muldoon didn't raise the outcome of that Cabinet Committee meeting with me as I recall. He certainly didn't seek to correct my approach, and, as Minister of Finance, also he had his own little success. The final figure which his Treasury wanted wouldn't be easy to achieve. It involved a reduction in Vote Health by about 1 % in real terms (i.e. after allowing for inflation) in that first year.

Central to the answer I achieved was the concept of population-based funding. But it was far from a simple process. It required complicated and politically sensitive provisions for demographic, medical, ethnic, geographical, and phasing in qualifications - and much effort behind the scenes. I was grateful for the wonderful co-operation I received from many key people in my department, in the various medical professions and in the hospital boards and their national body. When they knew the problem that not just I, or the Government, was facing, but which the country and its future health services also faced, they co-operated wonderfully and helped make the needed changes possible and largely successful.

My efforts had their sequel: I was called upon to achieve a similar financial result in each of the two years following while I was still Minister of Health. Obviously the pare back process couldn't go on indefinitely, but difficulties notwithstanding, it was in large measure achieved in my time.

Other lively issues in the Health scene in my time

Funding and finance were undoubtedly the major issues during my time in the Health portfolio but they were by no means the only matters calling for the minister's attention.

Other issues included:-

- The ongoing fluoridation debate and how to ensure opponents of fluoridation did not damage the fluoridation programme in any serious manner.
- Handling the early stages of the move from Hospital Boards to Area Health Boards, which I had to manage quietly for two important reasons:
 - First, the need to work constructively and with positive intent with the then existing hospital board system until the transition to population based funding was securely in place; and
 - Second, I wanted public debate about the concept of area health boards kept at a minimum during the months leading up to the 1980 local body elections, lest positions be taken by local body personalities or groups which would later prejudice the chances of a smooth transition from hospital boards to area health boards.
- How to manage numerous “boundary line” problems. By this I mean drawing a line (such as by age) between sections of the population which could qualify for certain treatments and sections which could not, because resources could not achieve 100 per cent coverage of the population. Kidney dialysis was such a case in my time where boundary lines had to be drawn.
- When expensive new technical equipment became available, how much of it could be afforded? Where was it to be located? Where and how could it be used to best effect? At one point we had to allocate funds for a new technology “body scanner” and two new technology “head scanners”. Which centres, which

hospitals, should get them? This would generate one of the biggest challenges: how to handle the disappointments of those who felt they'd missed out!

- How best to handle the many cases which all major systems can experience: i.e. Those whose condition or circumstance can slip “between the cracks” of the divide between their own responsibilities as seen by department “A”, and those seen as their responsibility by department “B”. I was particularly concerned about the number of such instances which seemed to be occurring between the Health Department, the Social Welfare Department and the Hospital Board in Auckland. With the co-operation of the entities concerned, I set up a quango comprising representatives of the three parties involved, and insisted all such “fallen between the cracks” cases which came to notice were referred to that quango with the instruction that the quango find an appropriate “home” for each problem case so referred.
- How to deal with the various, and sometime conflicting, skills and areas of expertise in workloads, professional skills and responsibilities, and training. In some areas, and in some disciplines, the workloads on doctors, nurses, and other professionals were very much more demanding than the workloads elsewhere in the health services.

There were added problems in nursing consequent upon two different systems taking stands, praising the merits of their system and pointing to problems in the other. The old system was somewhat like an apprenticeship - learning on the job. The emerging new system was academic - with diplomas or degrees or the like tackled first as theoretical

challenges and then, on graduation, set to work in the practicalities of nursing. Both systems had their merits. The debate and the transition from old to new took quite a number of years.

In Health, I found a particularly large and disparate range of interests I needed to work with, and endeavour to maintain on “good relations” terms. This range of interests reached well beyond those in the medical disciplines or the departments, agencies and institutions to which they belonged. To list them all would be unrealistically detailed in the scoping for my thesis, but to give a sense of the diversity, they entailed, the medical faculties of universities; medical insurers; the ACC; the pharmaceutical industries; the tobacco and alcohol industries (with a rather different objective on my part); those working in essential services impacting on health such as water, drainage, ambulances and road safety; both sides of the abortion debate; those pitching for the organic, or the vegetarian, or for euthanasia.

As Minister of Health, I was one of the few ministers with a seat at the Cabinet Committee which determined whether or not nuclear-powered or (potentially) nuclear-armed vessels could visit New Zealand, with each visit taken on a case by case basis, under what circumstances and conditions. When I dropped the Health portfolio and assumed Transport after the 1981 general election, I became chairman of that Cabinet Committee.

Transport

Following the 1981 general election I was, to my surprise, relieved of my portfolios in Health and Social Welfare, and instead given the transport package - Transport, Railways and Civil Aviation. I felt Muldoon had done me a great favour, for I’d worked for six years in the aviation industry before entering Parliament, and transport and things related to it had

always been a long held special interest. Transport and its various facets were very much part of the essential national infrastructure for people and their needs in both goods and services, by road, by rail, by sea and by air, in both cities and countryside, for exports and imports, for daily commuting to work and at the very heart of our growing tourist industry.

The transport sector I inherited had lots of problems

In aviation

- Air New Zealand's Erebus disaster was still fresh in everyone's mind.
- The amalgamation between National Airways and Air New Zealand was still "settling down".
- Air New Zealand faced some major financial challenges in its next phase of re-equipping with aircraft which would serve competitively and financially viably on its international services.
- New Zealand needed to negotiate reciprocal air agreements with Britain and Germany before flying beyond Los Angeles to Britain and Europe.

In railways

- The legislation had been passed to set up a corporation structure to replace the then departmental structure by my predecessor Colin McLachlan, but action following the legislation had still to happen.

- There were very strained relationships between the railways management and some of its union leaders, and industrial troubles were boiling near the surface.
- The railways remained dependent upon annual subsidies from the Government and it was unlikely that Government could continue the then level of taxpayer support. Improved efficiencies were urgently needed.
- The upgrading of the North Island's main trunk line with electrification needed a long overdue action plan (and the resolve to go with it) to get things moving.
- Railways staff numbers were excessive. The culture of the whole set-up needed updating and made more efficient and therefore effective.

In road transport

- There was a regime of licensing, permits and control. A permit was required to carry things by road, rather than rail, if the distance involved exceeded 40 miles. The permit system even applied to such perishables and breakables as eggs! The whole structure was having a serious and negative drag on our export industries. The cost in inefficiencies benefited nobody except an equally inefficient railways setup.
- In the case of taxis, the licensing system was also unrealistically excessive and restrictive. Were I longer in the portfolio, I would certainly have introduced a far more flexible and realistic system but I felt the priority I was giving to changes in freight and

exports was a more immediate economic priority in the national interest.

- Alcohol's influence on driving safety ran as a hot topic during the years I was Minister of Transport. The law, and the enforcement of the law, then a responsibility of my department's traffic police, were unfortunately only a part of the answer. An even bigger part is more related to social behaviour and community attitudes, which can be much more difficult to change.

Our ports

- These were a sorry scene. Historical union practices dragged back efforts to improve them, and the introduction of modern shipping practices like the early steps towards containerisation could not operate effectively with traditional work practices which were becoming hopelessly unrealistic.

Of great importance at that time was that Britain had joined the European Common Market⁶ in 1972. New Zealand no longer had a secure and ready-made market for farm produce. New Zealand had to become more competitive internationally, and a vital part of being competitive required more efficient ways in time and money to get products to Northern markets.

I worked closely with my marine departmental employees on a document to reshape the operation and manning of our ports. It was intended that it would be ready and made public before the normal November date for an election in 1984, but Muldoon's move to a snap election in July that year killed my plan. It was a parallel measure to update port administration and

operation in line with my phasing plan with road/rail delicensing. Hon. Richard Prebble, the Labour Minister who succeeded me in these transport portfolios following National's election defeat, saw the merit of what I'd set in place and continued my phasing plan with road/rail delicensing and adopted the proposed port changes I had prepared.

Changes achieved and further improvements set in train

The improvements in the road/rail relationship included a three year phase out of road licensing, and a matching phase out of railways monopoly on cargoes moved any distance.

This needed to be achieved without wrecking the operators involved. It was a matter of getting them to co-operate with the measured steps to reach the objective of delicensing as quickly as I felt the system and the attitudes of involved parties could take it without chaos or a messy and politically damaging public argument. I wanted efficient businesses to survive the radical change and work with me to welcome it, and not resist.

In all aspects of road transport, except taxis. I managed to achieve some progress. The taxis were a deliberate exception because I was concerned that changes in that area would generate a public debate which could detract from the much more necessary reforms in road transport delicensing and improvements in railways which were, for our economy and especially for our exports, of critical importance. Those improvements had to take priority. The taxi review could wait until more pressing needs were met.

⁶ Now the European Community

Problems within as well as without

There is quite a story to tell about even getting my changes through my own caucus. The concept of delicensing did not please Muldoon. But I finally achieved it, although only part of the three-year phasing programme was completed by the time the Government changed following the snap election called by Muldoon in July 1984.

I have a story to tell also about my frustrated efforts to bring in private NZ shareholding money to help finance Air New Zealand's re-equipment. I saw advantages to a company partly owned by government and partly owned by thousands of shareholding New Zealanders. There was no intention that the privately held shares should be other than a minority interest, and therefore no controlling influence, in running the airline and its operations. Despite my efforts, I couldn't get Muldoon to support my plan.

In my time we wrote bi-lateral air agreements with both Britain and Germany, although the extension of the network to Frankfurt did not happen in actual aircraft flights until the Labour Government had taken office.

Chapter 5

Departmental Restructuring in the Energy Sector of Government

My responsibilities are switched to Energy

When the Prime Minister, in the autumn of 1977, made a mini-Cabinet reshuffle, he moved my colleague Hon Eric Holland out of the energy scene and gave him the Housing portfolio, and added one of the lesser cabinet responsibilities as Minister in Charge of War Pensions. Eric had not been well and I believe his health may have had some bearing on the Prime Minister's reshuffle plans.

In the reshuffle, the Prime Minister gave me the portfolios which then embraced most of the energy scene - Energy Resources, Electricity, and Mines. He left Regional Development with me and added Minister of National Development, but I was relieved of the major time-consuming task in budget trimming as Deputy Minister of Finance and chairman of the Cabinet Committee on Expenditure. He merged the Finance side of my previous work with some lesser financial responsibilities which Hon Peter Wilkinson had been handling, and grouped them together in Hon Hugh Templeton's new Associate Minister of Finance role.

Looking at the problem; exploring the possibilities

The energy scene became my ‘baby’. Indeed, it wasn’t so much one baby as a nursery full of young infants all needing attention, all crying out for their meal time at once, and with lots of the infants on bad terms with others. This energy nursery had its screamers and its sulkers, its bullies and its baby introverts, and their admiring mothers also vying for my attention.

I quickly got the message the reshuffle was meant to convey: energy was in disarray! It was too important to the nation and its economy to fail in charting a coherent, realistic programme for its development and conservation, and in doing so building in adequate forward planning to meet the long lead times major construction projects required to win through the approval processes, then to finance, and finally to build on time, and within budget. The 1973-74 oil price shock could be seen as a wake-up call. The challenge was clear.

A quick summary of the energy scene I inherited

In a briefing paper to my predecessor only weeks before the reshuffle, the Commissioner of Energy Resources⁷ brought together some of the key points which helped to show how important energy had become to the New Zealand economy and its prospects, and identified some of the more seriously uncoordinated aspects of control and planning appearing within the energy scene.

As far back as the 1960s, ideas had been proposed for achieving better management and planning within the sector. The first significant step was achieved in 1972, with the passing of the Ministry of Energy Resources Act, creating a new small policy department.

⁷ Mr R.J.Hogg – Jan 1977

The functions of the Ministry of Energy Resources as set out in the 1972 legislation were as follows:

Functions of the Ministry

- 1) The Ministry shall advise the Minister on the development, promotion and coordination of effective policies for New Zealand in respect of energy.
- 2) Without limiting the general functions specified in subsection (1) of this section, the Ministry shall, under the control of the Minister, -
 - a) Promote and coordinate the efficient and economical production, supply, distribution and use of energy within New Zealand, having proper regard to -
 - i) The need to conserve any energy resources; and
 - ii) Social considerations; and
 - iii) Any effects of such production, supply, distribution, or use of energy on the environment:
 - b) Undertake, promote, and coordinate forecasts of -
 - i) The production, supply, distribution, and use of energy; and
 - ii) The total energy resources of New Zealand:
 - c) Undertake, promote, and coordinate forecasts of -
 - i) Demand for energy; and
 - ii) Changes in the patterns of production, supply, distribution, and use of energy; and

- iii) Changes in the total energy resources of New Zealand:
 - d) Develop and maintain a coordinated information service on the production, supply, distribution, and use of energy:
 - e) Keep under review all policies and practices that affect -
 - i) The efficient or economical production, supply, distribution, or use of energy within New Zealand; or
 - ii) The total energy resources of New Zealand:
 - f) Maintain close liaison with and encourage cooperation and coordination among any organisations and individuals (including government departments and government agencies) that are engaged in, concerned with, or affected by the production, supply, distribution, or use of energy in New Zealand:
 - g) Provide such administrative services as the Minister may from time to time direct.
- 3) The Ministry shall be charged with the administration of this Act and the enactments specified in the First Schedule to this Act. (i.e. The Gas Supply Act 1908, and The Gas Industry Act 1958.)
- 4) The Ministry shall have such other functions as may from time to time be lawfully conferred on it.

Powers of the Minister

The Minister may, for the purpose of enabling the Ministry to carry out its functions, give to the Commissioner such directions as he thinks fit.

The Act was amended in 1973 to allow for operations in respect of the Maui natural gas field to be administered by the Minister.

Extensions to Functions of the Ministry:

In addition to the functions set out above the Ministry is responsible for the administration of the following Acts:

Energy Resources Levy Act 1976 - This Act imposes a levy on all natural gas and coal produced in New Zealand.

International Energy Agreement Act 1976 - This Act enables New Zealand to participate in the various activities of the International Energy Agency, including the sharing of available petroleum in a supply emergency.

My thoughts on the Ministry of Energy Resources

It was clear that much had been hoped of the establishment of the Ministry of Energy Resources. Its presence on the scene was effectively supported in a bi-partisan way across the political divide, and it received broad approval from most of the various special interest areas across the energy industry. But the task entrusted the new Ministry was not matched by the clout given it to achieve those tasks. Nor, for that matter, was its resourcing.

The Ministry of Energy Resources was only one of several departments with energy interests, and outside government and government owned entities were a considerable number of privately owned energy related enterprises, some foreign owned. They all had their views and their particular interests which helped shape those views.

The diversity was not just of product - oil, coal, gas (natural and manufactured), hydro, petrochemical, geothermal, etc each having considerable variety within each - but also diversity in their processing, diversity in transport or transmission needs, diversity of source (local or imported), of skills, of industrial law and workers' rights, of lead time to build or acquire, of environmental implications, and of governing laws and regulations.

When energy matters were referred to the Cabinet Economic Committee, several ministers and several departments would often be involved in making a contribution, or certainly having a view.

As I mentioned in my thesis scoping section the Ministry of Energy Resources was a tiny department largely employed to juggle policy. I went on to say:

But as so often happens when there is no strong entity with clear authority in a particular subject, Treasury's influence weighs most heavily. And of course Treasury is tasked to think in money and accounting terms only. (And in the context of money terms, the current year's bottom line - as with many business operations - dominates far too heavily.) As a result, strategic thinking and longer-term planning suffered seriously.

From the outset I could see that to be an effective Minister in the energy scene I would need a department with the resources, the powers and the clout to take an effective lead in energy matters at the tables of real

influence in the structure of government. Clearly a consolidation of responsibilities and authority would be a big step in the right direction, and I planned to that end.

National Party 1975 Policy Statement on Energy Resources

My intentions were assisted by some of the points made in the energy policy released by the National Party Leader, Hon R.D.Muldoon and the then National spokesman on Energy, Hon E.S.F.Holland in the campaign before the 1975 general election - particularly so by the first two paragraphs of the section on Planning and Administration which read:

The importance of energy demands that energy policy is planned and administered by a single authority. National believes it would be in the best interests of both consumers and producers if all forms of energy production, development, conservation and distribution were co-ordinated so that the most efficient use is made of each resource.

1. National will raise the status of the Ministry of Energy Resources so that it has the responsibility for administering our total energy policy and the authority to ensure that the policy is put into effect.”

Other aspects of the National Party Policy Statement which proved useful for pressing my intentions along the path of change included:

Stressing the importance of energy: Energy in all its forms is an important factor in determining the growth of the New Zealand economy and the preservation of our life style.

Stressing the need for vision in planning: National will ensure that there is adequate long-term planning to enable the most efficient generation, distribution and use of New Zealand’s energy resources.

Stressing the need for regular review of policy: National will establish an Energy Resources Planning Commission to carry out and publish regular reviews of New Zealand's energy resources. It will be responsible for recommending various energy policy alternatives.

Helping support my case for issuing Goals and Guidelines: To enable individual and sectional points of view of the direction that energy development in New Zealand should take, the Commission will be empowered and encouraged to seek and receive advice from specialist interest groups.

Showing awareness of environmental implications: A National Government will ensure proper emphasis is given to environmental factors in plans for the use and development of energy resources.

Showing awareness of conservation's importance: National will ensure there is conservation of all energy resources and elimination of wasteful and extravagant energy consumption.

Stressing importance of research and development: National would ensure continuing support for research and investigation into new forms of energy as well as continuing development of existing resources.

In its policies on energy conservation, National would: (1) Develop programmes to eliminate wasteful uses of energy; (2) Aim to reduce New Zealand's dependence on expensive imported oil and oil products; and (3) Review building insulation specifications to provide for a minimum standard.

The National Party Policy Statement also had a clear message for the electricity industry: The main points under this heading were:

- The New Zealand Electricity Department will continue to have full responsibility for the technical and operational aspects of electricity generation, and will work within the framework of a policy established by a Minister of Energy Resources.
- National recognises that the supply of electricity must be planned and provided to meet the needs of a growing population and for industrial expansion. This will be done:
 - (1) By requiring the New Zealand Electricity Department to provide sufficient time within the overall planning of new generating stations so as to allow for public debate of proposals without delaying their commissioning date.
 - (2) By regular review of bulk and retail tariffs which will be adjusted to ensure that the New Zealand Electricity Department is able to make some contribution to the capital cost of electric power production. A more flexible tariff will be considered to discourage the wasteful use of electricity as a means of reducing any hardship that may result.
 - (3) By encouraging local or regional development of small hydro schemes to supplement the supply from the national grid.

The policy statement also touched upon thermal power, seeking a full enquiry into resources available; geothermal power, seeking to expand its use for electricity generation and industry; and other power sources, calling for work on solar and wind power. It included Natural Gas, seeking to expand its distribution to a much wider market area and encourage domestic and industrial consumption to focus on natural gas; and Manufactured Gas, offering to continue financial support until decisions

could be made on alternative gas supplies - a particularly important issue for the South Island.

Nuclear Power was put out of play with the statement: “The National Party will not introduce nuclear power generation into New Zealand until a public enquiry into all aspects of this source of energy has taken place and until it is convinced that the technological aspects have been satisfactorily resolved.”

The Complexity of the Organisation of the N.Z. Energy Sector

This is graphically disclosed in the attached chart (see Appendix B) which the staff of the Turnbull Library kindly recovered from my mountain of ministerial papers of 1977.

As a challenge to one’s patience, one can trace the lines and make some sense of it, but it screams aloud the case for significant change, consolidation and restructuring.

In the Commissioner of Energy Resources briefing paper⁸, the Commissioner, by way of introduction, set out three basic points:-

1. In 1977 New Zealand was expected to spend about \$ 540 million on petroleum imports, and an additional \$ 200 million on imported plant, materials and equipment for capital works in the energy sector, principally in the fields of electricity supply, gas field development and coal field development. This foreign exchange outflow would represent about 20 percent of

⁸ Hogg, January 1977.

the total outflow expected for that year, and highlighted the importance of energy to the New Zealand economy.

2. The need for coordination of energy policies had been recognised in New Zealand since the early 1960s arising from the decline of the coal and manufactured gas industries and the discovery of natural gas. The OAPEC and OPEC interventions on oil availability and price (following the 1973 oil supply crisis) added a new dimension and had emphasised the need for the development and adoption of energy policies that properly relate to national objectives. A non-integrated oversight of energy policy with non-expert staff is an anachronism the country could not afford for reasons of security of long term supply, the increasing costs of development of indigenous resources and the economic problems arising from unrestrained demand.
3. To maximise the long-term benefits accruing to New Zealand from the development and utilisation of both indigenous and imported energy resources, it was essential to have effective and efficient machinery for advising the government on energy planning and policy and coordinating the implementation of policy. The basis for this machinery already existed in the Ministry of Energy Resources Act 1972, but some modifications were required to improve effectiveness.

Criteria for Effective Administration of the Energy Sector

This briefing paper was by no means the only one surfacing that year making the case for change and consolidation, but it gave my thinking real hope that there were a number in the bureaucratic structure of the

departments who could be very helpful allies on the path for change. They could see the needs as I felt I did.

The Commissioner of Energy Resources listed eight musts:

- a. Powers of Review must extend over the whole spectrum of demand and supply, from exploration to usage, and the effect of other policies on the energy sector.
- b. Demand Forecasting must relate to individual forms of energy demand and the factors responsible for it in each case.
- c. Coordination of Planning. The development of adequate plans by the different sections of the energy sector both public and private had to be welded into an integrated continuous plan to meet an acceptable level of demand to satisfy economic plans.
- d. The Level of Investment would determine whether development objectives would be met and therefore an overview of annual forward investment programmes was essential. This pointed to the need for review of all relevant expenditure programmes in the government sector and close cooperation with the private sector which would be required to meet individual objectives.
- e. Research and Development. In this area the responsibility must extend to monitoring all energy research and development activities both in New Zealand and externally and to promote the appropriate level and type of activity domestically by the private and public sectors, including university R & D.
- f. Conservation. Centralised development of energy conservation policies had been demonstrated as the most effective way of

restraining demand. To do this successfully in our competitive society the responsible authority must be independent and known to be objective in promoting the government's policy aims.

g. Pricing. Considerably more needed to be done to reform and rationalise electricity and gas tariff structures so that they could be used effectively in meeting the objectives of energy policy for the time being. Additionally a centralised responsibility was necessary to deal with the fixing of all indigenous and retail petroleum prices including gas.

h. Policies Generally. All energy policies needed to be formulated or be vetted by a single organisation maintaining an expert overview of the energy sector. Similarly all government decisions which had energy implications should be made in the light of comment from this authoritative organisation.

Section of the briefing paper listed the mass of administrative functions within government which were related to energy. These needed to be centralised, and a number of them strengthened.

Those identified with an asterisk (*) were at that time already directly or indirectly a responsibility of the Ministry of Energy Resources. The list gives an indication of the sheer spread and diversity of the energy-related responsibilities involved.

- a) *Gas Industry Act 1960 - NZ Gas Council
- b) *Gas Supply Act 1908
- c) *Maui field development - through Offshore Mining Co Ltd
- d) *Maui gas allocation and pricing

- e) *International Energy Agreement (IEA) Act 1976 - oil stockholding requirements and emergency procedures.
- f) Natural Gas Corporation Act 1967
- g) Atomic Energy Act 1957
- h) Geothermal Energy Act 1957
- i) *Energy Resources Levy Act 1976
- j) Petroleum Act 1937 - parts on licensing, government participation, royalties, and instructions on refining
- k) *Administration of government's offshore petroleum exploration
- l) Coal Mines Act 1925 - licensing of all coal mining operations, recovery rates
- m) Quarries Act 1944 - opencast coal mining licensing
- n) *Heating of Public Buildings
- o) Ad hoc committees on energy conservation publicity, fuel technology, industrial development where energy was a significant input
- p) *Collection and assessment of statistics
- q) *Liaison with relevant overseas bodies (OECD, IEA, ESCAP).
- r) *Maintenance of energy production, supply and distribution in New Zealand

- s) Any Coal Mining Corporation Act, or Electricity Supply Corporation Act. (These were then in the planning stage. If not followed through with, other solutions would have to be found to rationalise the relationship of responsibilities between the Ministry of Energy Resources and the Ministry of Works and Development, the DSIR, the Mines Department, the Electricity Department, - possibly the Labour Department, - and the Offshore Mining Co Ltd.)

Restructuring and consolidation were clearly needed - but what were the options for reform? The Commissioner canvassed five quite distinct possibilities:

1. The previous system, i.e. the one in place before the creation of the Ministry of Energy Resources in 1972. This would mean reverting to the system when policy and planning functions would be spread over NZED, Mines, Treasury and Trade and Industry. I remember thinking that to me that would be a huge step backwards. I couldn't imagine anyone wanting to support that idea. It's certainly one I'd fight against every inch of the way.
2. The then Status Quo which effectively meant retaining the Ministry of Energy Resources in a mainly coordinating role, with certain important planning and policy functions, but with some responsibilities still retained by other departments. To me that meant giving up on trying to get the energy scene together and living with a system which I found seriously uncoordinated, largely toothless, and unable to make any real attempt to master the sea of problems all around us.

3. An Expanded Ministry with Operating Departments retained with a non-planning function. This would mean retaining Ministry of Energy Resources as a central Ministry, with prime responsibility for planning, pricing and policy. The other energy departments would have the right to consult on these matters, but they would be primarily responsible for operational and administrative functions, such as investigation, production and supply. They would implement the planning and policy work undertaken by the Ministry. Such a revised Ministry would absorb the existing planning personnel then in the operating departments.
4. An Expanded Ministry with Operating Corporations. This would mean retaining the central Ministry, but further expanding its functions by including the non-operational responsibilities of the trading departments. The departments would then become operating corporations, responsible solely for investigation, production and supply.
5. A full Department of Energy. This would involve amalgamating all the operating departments into a single Department of Energy. This would have a policy and planning unit, as well as the operational responsibilities of the other departments.

Having listed these five possible choices of organisation, the Commissioner then summarised what he saw as the advantages and disadvantages of each possible choice. I give here a summary of his comments. My assessment at the time is in italics.

1. The Previous System

Advantages: There may be some saving in administration costs.

Disadvantages: No integrated oversight of energy policy and planning would be possible. This could lead to each department being more concerned about meeting its own objectives which could well be in conflict with other departmental objectives or endeavours to co-ordinate policy. Duplication of effort with overlapping areas of responsibility would be inevitable.

“Saving of administration costs” listed as an advantage would be the stuff of dreams. It might happen in the Ministry, but the duplication of effort and overlapping responsibilities with the other energy-related departments would recreate the many problems the setting up of the Ministry of Energy Resources five years earlier had been intended to remove or reduce. It would be a nonsensical step backwards.

2 The Status Quo (as at early 1977)

Advantages: A degree of coordination was possible under the then existing arrangements, working through interdepartmental committees, with the Ministry of Energy Resources having general but limited oversight. Because the Ministry was not involved with the promotion of any particular fuel, and because it was not primarily a regulatory body, it had enjoyed relatively good liaison with the private sector.

Disadvantages: According to its Act, the Ministry was responsible for energy planning and policy formulation. In practice no single government body exercised overall responsibility. This made it necessary to work through committees, e.g. the Economic Committee. This could lead to conflict between the Ministry and other government departments, often resolved by compromise and

suboptimal recommendations to government. Planning and administrative overlapping made for uneconomic effort. *This was the departmental position which I inherited and in which I could see so many avoidable problems inherent in the diversity, and lack of coordination, in and amongst the departments and government agencies with energy-related responsibilities. I knew we could do much better and I know I was not alone in thinking that way. But to achieve change would involve using every opportunity to chew ears and twist arms - in other words persuasion by reasoned argument and loads of old-fashioned persistence.*

3. An Expanded Ministry, with Operating Departments retained with a Non-Planning function

Advantages. Such a rearrangement of departmental structure would provide a framework for a more complete and integrated approach to planning and policy formulation, and make better use of planning manpower. The Commissioner then added a point which would please his “political masters” by reporting:

“A structure of this type would comply with the Energy Resources Policy set out in the ‘National Party 1975 General Election Policy’ which stated, inter alia: National will raise the status of the Ministry of Energy Resources so that it has the responsibility for administering our total energy policy and the authority to ensure that the policy is put into effect.”

“The New Zealand Electricity Department will continue to have full responsibility for the technical and operational aspects of electricity generation and will work within the framework of a policy established by a Minister of Energy Resources.”

Disadvantages: Co-operation could be withheld by operating departments and the policy unit could be accused of being an “ivory tower” with no appreciation of operating realities. The Commissioner believed that with suitable Cabinet directives and rotation or secondment of staff from operating departments through the planning authority, these problems could be overcome. *I saw this option could be a significant step forward on the path towards structural change in the Government’s management of energy matters, but I felt it did not go quite far enough, and it did not call upon those government entities with construction, operational and production responsibilities to be as commercially disciplined and focused as they could and should be.*

4 An Expanded Ministry with Operating Corporations

Advantages. This could provide a framework for a more complete and integrated approach to planning and policy formulation, and therefore would also make better use of manpower. The Corporations would be free to act on a commercial basis without the limitations of other regulatory and administrative functions which would be assumed by the Ministry, and there should be less conflict with the general energy objective. Again, the Commissioner wisely made the point:

“A structure of this type would comply with the Energy Resources Policy set out in the ‘National Party 1975 General Election Policy’ ”.

Disadvantages. Co-operation could be disadvantaged if critical information were to be withheld by the Corporations - particularly data on which price decisions could be based, but this potential

problem could easily be overcome if the Ministry were to be represented on each Corporation's Board.

This proposal was getting very close to the model I felt would best meet the challenge to coordinate better, to plan better and to function more efficiently. The changes would not be just shadow dancing or tinkering but had the potential to produce some of the clout I felt was so badly needed in pulling the Government's energy responsibilities together, and giving them direction.

I should note here that although I saw a real advantage in restructuring the government-owned energy producing operations along commercially focused lines with easily identifiable accounts and reporting, I did not contemplate or want such operations to be privatised or pass from effective government control.

5 A Full Department of Energy

(For this option, it was interesting to note that the Commissioner's analysis offered twice as many arguments underlining disadvantages than he saw as advantages. His points below are my summaries of them.)

Advantages: Theoretically this could allow co-ordination of effort at all levels of the organisation, breaking up the hierarchy of single energy departments and rationalising planning and development towards the main objectives. All data should be readily available to the policy and planning sections which should be in direct contact with all aspects of administration and operations.

Disadvantages: Top management would become pre-occupied with the problems of internal administration and with the immediate

problems of operation rather than with energy policy and planning. Liaison between divisions of a large department is often no better than liaison between separate departments. Relationships with such a large department with operational responsibilities could be more difficult to manage with private sector energy interests. The objectivity required, and seen to be required by the wider energy sector and the general public, in policy planning and handling conservation issues, would be difficult if not impossible to achieve.

I was glad to see that the view of the Commissioner did not favour this consolidation of the whole government energy scene into the one super-sized department. To me, that was going much too far, and could well create far more problems than it was designed to solve. The pace, the size and the character of any proposed changes would all have a bearing on the question of whether the change to be sought would be a step for the better, or would be politically, economically or socially saleable, or whether it would become a futile and self-defeating exercise.

Energy Planning

Appendix C of the Commissioner's Briefing Paper made it clear that no matter what restructuring of the bureaucratic establishment was proposed, there was a need to consider the need for a long-term rolling plan, the advantages of co-opting talent and experience from across the sector to embrace the full spectrum of interests and issues, and the need to set a disciplined timetable with deadlines for each step of the planning exercise.

The total energy planning programme proposed was based on established procedures to maintain a 15 year rolling plan for the construction of

government electricity generating units, matched against expected demand. It would be expanded to embrace all major energy forms.

The first requirement was to review resources; secondly establish demand forecasts and identify what must be done to meet them; and finally develop the programmes required with proper regard to energy form, quantity and region to meet the national needs.

To achieve this it would be necessary to set up a suitable committee structure to action these three requirements. Such a committee would include suitably skilled and senior representation from energy producers and distributors (both public and private), appropriate government departments (e.g. Statistics, Treasury and Trade and Industry), and consumer representation (both domestic and industrial).

The Minister of Energy Resources had the powers under his present Act to establish such a committee. The Briefing Paper's Appendix C then offered a timetable across the calendar year for the proposed industry-wide review process.

Chapter 6

Goals and Guidelines: An Energy Strategy for New Zealand

I had not been long in my posting as Minister of Energy Resources, and Minister responsible for those aspects of several other departments which dealt with energy, before I realised that it was not only necessary to bring the various pieces of the jigsaw puzzle together, but it was seriously necessary to give both the stakeholders of the various and disparate entities involved, and the media and the wider public, a pragmatic, informed and comprehensible view of the wider scene, and provide them and the country generally with a sense of direction in shaping the path forward.

The last thing the country needed was a collection of unrelated elements all doing their own thing and not seeing clearly, or even being asked to consider, where they fitted into the wider picture.

I was by no means the only one in the energy scene who could see the need for cohesion, vision and a major effort to bring both industry and wider public into the picture.

The **why** something needed to be done was glaringly obvious.

The **what** should be done helped focus the minds, but historical fragmentation of responsibilities through several departments made

consensus difficult. The fragmentation at the departmental level was mirrored among sector groups and stake holders.

The wider public could be excused for its confusion and its lack of understanding.

The **how** to move ahead depended upon first determining what direction to take - and the **where to** on the map ahead was crowded with competing visions.

Needless to say, the **when** was also glaringly obvious. Yesterday wouldn't be soon enough.

So the buck stopped with the **who**, and as Minister, I knew that had to be me.

The “bringing together” exercise within the departmental scene is outlined in some detail in Chapter 7. This chapter focuses more on the plan for the path forward, and the effort to bring stakeholders, politicians, media and public generally into the game in a positive and helpful way.

As Minister, I took a keen interest in the development of the *Goals and Guidelines* publication. From memory, at least three teams of officials at various stages were involved in its production and I followed its development with a critical eye. I had to be satisfied that it set out the goals and the guidelines to reach those goals in a way which I could defend before any audience, supportive or critical, anywhere in the country, or in the political scene, or to any of the diverse and competing elements of the industry.

The document invited discussion and feedback. But I was anxious it be informed with reasoned discussion and feedback, for if it were otherwise, it

would only blur the goals and sabotage endeavours to shape the necessary guidelines.

Three aspects of the publication I can claim as largely my personal work, or done on my initiative. They are:

1. Insisting such a publicly presented policy plan be produced, and as quickly as possible.
2. The title: "Goals and Guidelines: An Energy Strategy for New Zealand." and
3. The foreword: By quoting the foreword in the section below, I can explain, in my thinking at the time (1977-8), what my hopes were for its publication.

1 May 1978 GOALS AND GUIDELINES – FOREWORD
By Hon G.F.Gair, Minister of Energy.

The publication of Goals and Guidelines seeks to achieve several objectives - all important, and some even vital, in the longer-term interests of New Zealand.

Ever since the 1973 oil crisis, there has been growing public appreciation that energy is an essential feature in our lives. Our jobs, our personal comfort - indeed our way of life and the security of our, and our children's future - depend upon it. That our energy needs can and will be met - without the effort and the price paid to ensure this will be so - is an assumption we can now no longer take for granted.

This growing awareness is welcomed. More people are becoming interested in energy - and concerned to see that those who plan, and those who act upon those plans - are alive to the need to chart a sound course ahead for this country.

This raises many questions: A course to what objectives? And by what route? Have we options? Which are the priorities? Why must some take precedence over others?

In shaping a strategy for New Zealand's energy future, we are concerned with the long-term; we are working with an evolving situation; we are constantly presented with the need to make decisions now, the consequences of which, and sometimes even the need for which, may not become manifest for many years.

Unlike some other areas of Government action where the link between the policy making, the decision taking, and the end result, can be accomplished in a comparatively short time-span, energy matters usually require long lead times between the plan and the performance - in some instances decades rather than years.

There is no question that the authority responsible for formulating the plan, regularly updating it in the light of changing events, and progressively carrying it out, must be the Government of the day. There is also no question, however, that the plan can be formed on a broader basis of public consensus and support, updated more effectively, and carried out more expeditiously and more confidently, if the people and the Government work together in setting the goals and guidelines.

These then, are my hopes for this document:

- that it will be widely read and carefully studied;
- that it will serve as a useful background to a continuing and informed public debate on energy matters;
- that it will encourage thoughtful responses from not only the several special-interest energy groups but also the many citizens interested in and concerned about energy matters;
- that the criticism some aspects may arouse will be constructive and helpful in improving and refining the energy strategy we are now in the process of developing;
- that this document will be seen for what it is - an earnest effort to find a way in which planners and people might join forces to achieve a clearer public appreciation of, and involvement in, the direction of the nation's energy future.

I am aware that the Governments of many countries have talked about their energy policies. Only a handful have so far produced their first attempts at such policies. And I am not aware of any country which has yet managed to do so, with provision for a measure of direct public involvement.

This is no reason New Zealand should not try to do so. It is so important for our future, it is certainly worth the attempt.

As Minister of Energy, I will welcome considered written responses to Goals and Guidelines. The new Ministry of Energy will assist in the promotion and co-ordination of the public discussion on Goals and Guidelines. My aim would be to bring the results together in a form suitable to present to the 4th New Zealand Energy Conference next year.

I am anxious to ensure there be no avoidable misunderstanding about the nature of the document. Its presentation for public debate does not mean that the Government will, or should, refrain from making decisions while, for 12 months or so, the process of public debate and response-gathering and analysis takes place. Some decisions will certainly be required, and must be taken, in that time. Nor does it mean that the Government will not be fully responsible for the decisions made after the responses are received, or that it should or must heed any particular response.

But it does mean that future decisions will be taken with the advantage of knowing the nature of the responses, and clearly those responses of greater merit will weigh the greater in the Government's heeding of them.

In commending this Goals and Guidelines to the reader's attention, I have two groups to thank especially:

First I must thank those who have laboured long, and hard, and carefully, over its preparation. There have been several drafts. There has been much refining and revising. It is certainly not the final word in the making of an energy strategy. But I hope you will agree that it represents a useful beginning.

Second I want to thank my colleagues in Cabinet and Caucus for the way in which they have co-operated with this, I believe unprecedented, endeavour to involve the public generally, and the special-interest groups, in helping shape the Goals and Guidelines for New Zealand's energy future.

George F.Gair

In the remainder of this chapter, I traverse some of the more important themes “Goals and Guidelines” endeavoured to identify and see included in the development of future energy policy.

*** *Importance of the subject (p.1)*⁹**

“Energy consumption is a fundamental part of modern life and provision is important to our economy from both indigenous production and imported supplies.” “Production, distribution and consumption of energy have moulded the shape of our present world.” “International oil supplies provide nearly half our energy and are likely to become increasingly expensive.” Long lead times are inherent in making substantial changes to sources of energy and changes in consumption patterns. “Decisions made, or avoided, in the next few years will directly affect our lives (for better or worse) for decades. Some “hard choices must be made.” With many people and various interests involved and the populace generally affected by the decisions, “broad understanding and support (are) essential.”

*** *Recent Events and Current Outlook. (p.4)***

Since World War II many countries had experienced large increases in population and improved material standards of living ... in important part made possible by growth in the use of energy. At the beginning of this period, more than half the energy used by those countries came from coal. In the three decades following WW II, the major growth in energy consumption came from hydrocarbons - oil and natural gas - though hydro and nuclear had grown substantially in some countries, also.

World oil consumption in 1973 was five times the level of 1946. During those years the cost of producing coal rose much faster than the cost of producing oil. Oil was cheap, convenient, and available. In the 1950s and 1960s the principal oil exporting countries expanded their proven oil reserves. In an attempt to benefit from their increasing exports they combined forces in forming the Organisation of Petroleum Exporting Countries (OPEC). “OPEC’s power burgeoned as consumption moved closer to output capacity until in the early 1970s producer countries were

⁹ Note: unless otherwise explained, all page references in this thesis chapter refer specifically to the *Goals and Guidelines* public discussion draft, and page and graph references are to pages and graphs in that publication.

able to make rapid progress in winning control of oil production and reserves.”

“In 1973 the ‘Yom Kippur’ war was the spark which set alight the energy issue as one of the major problems of our time.”¹⁰ The world energy scene changed dramatically. The Organisation of Arab Petroleum Exporting Countries imposed a selective and partial oil embargo. Uncontrolled oil markets increased prices dramatically. OPEC realised large increases in oil prices were possible. In October 1973 OPEC doubled the price of its oil. Three months later, it doubled the price again.

The oil exporters’ incomes increased at a pace they were not then able to use or manage properly and the disruptions between supply, demand and price contributed to a marked world recession in 1974 and 1975. Oil prices fell in real terms. OPEC oil sales recovered in 1976 and 1977, but surplus production capacity persisted.¹¹

*** Which countries had the proven reserves of crude oil? (p 6)**

The World Energy Conference Survey of Energy Resources (1974) gave the following analysis based on 1972 information

	%
Middle East	54.9
Africa	14.0
Central & South America	9.1
USSR	8.9
North America	7.2
Asia	4.0
Europe	1.4
Other	0.5

The world’s proven oil reserves in 1977 were about 80,000 million tonnes - some 30 times the 1975 rate of consumption.

¹⁰ Egypt and Syria invaded Israel on Israel’s Holy Day of Yom Kippur, October 6)

¹¹ Note: this situation applied when “Goals and Guidelines” was presented, but the document (p 5) forecast a growth in demand which would reverse the then dip in price and force “a price increase of some magnitude.” (Commenting, and viewed with the wisdom of retrospective observation - how right that forecast was! Triggered by conflict in the Middle East, the world was hit by a second oil price shock in 1979.)

*** *Impact on New Zealand (p.9 & 10)***

New Zealand's vulnerability to imported oil prices quickly became obvious in the early 1970s. "Before the 1973 oil crisis, New Zealand's economy was booming. The overseas exchange accounts showed large surpluses and the economy was growing rapidly. "Within twelve months of the crisis, very large foreign exchange deficits appeared and the economy virtually stopped growing." A table (p 9) charting New Zealand balance of payments on current account showed that between 1964 and 1968, the deficit had stayed just below zero, dipping briefly in 1966 to nearly minus \$200 million. In 1969 and 1970, it actually climbed a little into surplus. In 1971 and 1972 it fell below the breakeven and was down to nearly minus \$200 million to rise again in 1973 to a plus of \$200 million. But immediately following the oil shock, in 1974 and 1975 it slipped sharply, first to minus \$200 million, then down to minus \$1,400 million, rising to only minus \$1,000 million in 1976. The direct costs were quickly apparent, but they were quickly expanded with indirect "follow-on" costs producing an inflationary effect through manufactured goods and services and products with a significant transport component. A graph (p 10) showing New Zealand's imports of petroleum and petroleum products sets the scene so clearly. The cost rose from a plateau below \$100 million in 1971-72 and 1972-3 in virtually a steep straight line to over \$500 million in 1976-7 - a five-fold increase in four years.

*** *New Zealand's Energy Use (p.11)***

One PJ¹² is the energy equivalent of...

- 43,000 tonnes of Waikato coal;
- 30,000 tonnes of best quality Buller coal;
- 22,000 tonnes of petrol,
- 24,000 tonnes of heavy fuel oil,
- 280 million kilowatt hours of electricity.
- Natural gas is sold in units of one hundred megajoules (MJ).
(Ten million MJs equal one PJ).

¹² Each form of energy has its own unit by which it is measured: Coal, the tonne; electricity, the kilowatt-hour; oil the litre. To compare energy forms, it is necessary to use a single unit applicable to all. Under the metric system, the unit of energy is the joule. This is a very small unit of energy, so multiples of it are used. Dealing with quantities required by a whole country, the most suitable multiple is the petajoule (abbreviated to PJ). The PJ is a thousand million million joules.

During New Zealand's early development, wood from our native forests was the principal source of energy.

With the development of steam power, coal became the more dominant source of energy and coal remained the main source until well after World War One.

In the 1920s oil and hydro electricity made small but rapidly growing contributions to the total energy supply, and by the 1930s this was much more significant. The growth of coal at this time had stalled.

From 1924 (when detailed figures first became available) to 1973 (when the first oil price shock hit), New Zealand energy consumption showed that:

- Coal slipped from 75 PJs to 60;
- Electricity (hydro and geothermal) increased from 0.5 PJs to 55;
- Imported oil had ballooned from 10 PJs to 201;
- and indigenous oil (with 7 PJs) and natural gas (with 13 PJs) were only starting to register in 1973.

* *A changing scene (p.11)*

During the 1970s the New Zealand energy scene changed again with the contribution from the Kapuni gas/condensate field. By 1977 this single energy source had grown to provide 25.5 percent of the country's total primary energy. Kapuni condensate provided 15.5 per cent of NZ's oil requirements. Without Kapuni net oil imports in 1976 would have had to be some 30 to 40 per cent higher. Kapuni condensate had a high wax content. It was suitable, therefore, mainly for power stations. Heavy oil use for electricity generation was declining, so some of Kapuni's output was then surplus and could be exported.

The Kapuni field was known to be too small to support long term needs and later history showed how Maui gas became available to help meet developing electricity requirements. For many years New Zealand's predominantly hydro-based electricity system had been supplemented by a

few small thermal stations. (P 12). When the more obvious dam sites were already harnessed, capital costs of further stations became more expensive.

From the late 1950s thermal stations, by then becoming financially more competitive, were introduced. Wairakei geothermal, Meremere coal-fired, and Marsden oil-fired, were added to the system, especially useful when reduced water flows hindered hydro production. With the completion of the 600 MW New Plymouth gas/oil fired station in 1977, output from fuel-fired stations was effectively doubled.

The trend to thermal was to be further accentuated by the development of the 1000MW Huntly power station (under construction at the time of the Goals and Guidelines publication) designed to burn either Waikato coal or Maui gas.

But the energy scene has proved itself one of constant change and evolution. The move to thermal was inevitably vulnerable to future fuel costs and security of supply.

*** *Consumer Energy Demands (p.13 and Table 2b)***

As a growing country, there had been a steady increase in the demand for energy. Goals and Guidelines puts numbers on the size of the growth, and the skew in the growth as between the various energy sources in the half century 1924-77:

- Coal slipped back from 59 PJs in 1924 to 38 in 1977;
- Oil grew significantly from 5 PJs to 151 in 1974 then plateaued at 153 to 1977;
- Gas produced 2 PJs in 1924, grew slowly to 1964 and doubled to 12 PJs by 1976;
- Electricity began at 1 PJ in 1924 and climbed steadily to 68 PJs by 1977

An analysis of the figures shows that while gas made significant inroads into industrial and commercial oil market needs, the reduction was partly offset by increases in oil for transport. And it was in the transport sector that public awareness of energy problems was particularly evident.

*** *Inter-fuel Substitution: What Were The Possibilities? (p.14 to p.16)***

When you need energy, you need it! It's essential for so many things. But what sort of energy? It comes in so many forms. It is also used in many different ways. Availability, cost, long-term reliability, can be critical to the choices which must be made.

Goals and Guidelines deliberately raised the question of interchangeability between energy forms as an issue to be addressed. It would be important in charting the nation's longer-term vision for energy to ensure that, in putting the jig-saw puzzle pieces together, New Zealand did not close off future, potentially more favourable options, or incur unnecessary costs, or use precious resources recklessly.

There was a need to open the mind in the public debate on energy's future to the importance of working through the selection of possible choices in a consistent and thorough way.

Among the points this section made was that heat production from stationary plants is a major opportunity for fuel substitution. But even in this, there could be important exceptions where a particular form of energy was necessary and the quest for substitution unrealistic.

Further examples of this were covered. Steel from iron-ore at NZ Steel Company's plant required sub-bituminous coal. A switch to alternative fuels would require a complete change of process. Smelting of aluminium, and lighting, were seen as the special province of electricity.

In 1976 over half of all energy consumed was used in transport, including international transport. Aircraft required a clean-burning oil fuel. In sea and land transport, substitution of one fuel type for another was technically possible, but the practical difficulties would be huge.

However, looking outside domestic, commercial and transport sectors, there was believed to be some opportunity to replace oil in other industries. About 35 per cent of 'other' industries used oil, as in farming, construction, fishing and forestry - all requiring primarily a liquid fuel. But in 65 per cent of this 'other' industries category, it was estimated that over half could be replaced by natural gas, or liquefied petroleum gas (LPG), if these were available.

In circumstances where ash was not a serious problem, the use of coal was seen as an alternative, but the rising cost of coal through the middle of the

20th century - followed later by anti-coal environmental arguments in the last decades of the century - made this less and less acceptable.

At the time *Goals and Guidelines* was produced, coal use was becoming more and more confined to large institutions like hospitals. Coal's use in the domestic sector was declining. Quite efficient coal-fired heating appliances were available, but most domestic coal use was still confined to open fireplaces with "a very low output of useful heat, and a high output of smoke." Clean Air Zones were raising major obstacles to the coal market.

The mid-20th century also saw the growing use of electricity to fuel space and water heating. Alternatives there could be natural gas and LPG, but the cost of installing these fuel forms in buildings not originally designed to take them meant that refitting costs almost invariably ruled out this possible course of action.

Natural gas use, particularly in the domestic market, was growing steadily in the regions in which it was available, but reticulation costs inevitably slowed the pace at which it could develop.

New Zealand's transport sector was almost wholly dependent on oil. Electric trains and trolley buses operated in only small local areas. Electrification of the North Island Main Trunk was being talked about but was still years away.

While still feeling the pain of the first oil price shock, New Zealand was of a mind to look for alternatives for oil for road transport. LPG, methanol and compressed natural gas (CNG) were all considered to be fuel forms which could make a contribution. It was estimated that if a reasonable proportion of the fleets of high-use vehicles such as taxis, petrol-powered trucks and buses were converted to LPG or CNG, something like 10 per cent of our imported oil imports could be saved. It was further estimated that similar savings of imported oil could be achieved when the methanol plant to be built using Maui gas came into production making a mix of petrol with methanol available.

*** *Efficient Consumption and Conservation (p.17 to p.26)***

Both resource development and distribution of energy was largely handled by substantial organisations with the advantages of expertise in their respective fields and large scale operation.

In contrast to this, energy consumption was generally decentralised, with consumers usually far less able to measure and assess the merits of the options which might be available to them, with focus on one kind of energy only, and likely to assess energy costs as only an aspect, and possibly a minor aspect, of their living or production costs. Production and consumption of energy were, however, complementary parts of the energy economy.

From this consideration, *Goals and Guidelines* articulated ‘energy truths’.

1. “The worth of improving the efficiency of energy consumption is equal to the cost of expanding energy supply.”
2. “The type and amount of energy required by consumers is largely determined by their existing stock of capital equipment.....(e.g. factory boilers and domestic heating systems).....which can be changed only slowly.”

Both these truths highlighted the importance of having a well-informed consumer base.

Goals and Guidelines then discussed seven ways (in the political and economic climate of the time, i.e. 1978) in which this could be advanced:

1. Pricing Policy

“A forward-looking and consistent pricing policy should be at the core of overall energy policy.” The previous pricing history in New Zealand had been largely governed by ad hoc responses to events at any particular time.

The oil crisis had changed that thinking. Readers were reminded that in 1976 a Government energy pricing policy announcement listed the principles which should be embodied in such a policy:-

1. ensure the co-ordinated development of New Zealand’s energy industries;
2. encourage conservation of all forms of energy;
3. encourage exploration, research and development’;

4. “ensure the national security of energy supply;
5. “comply with wider Government policies for economic, social, industrial and regional development and the environment;
6. “ensure the prudent use of known energy resources;
7. “allow promotional margins for indigenous fuels to encourage their best use as an alternative to imported energy; and
8. “ensure that, at reasonable cost, balance exists between the different energy forms in the various markets.”

2. Performance Standards

“Performance standards in the form of New Zealand Standard Specifications and Codes of Practice are guidelines for both the production of consumer equipment, and a basis for informed choice by consumers.” *Goals and Guidelines* then explained the value of this approach with the new standard for the insulation of dwellings and the attention to be paid to the thermal performance of structural and insulating materials. Other examples discussed were the attention being given to fuel consumption rates for motor vehicles, and lighting levels and energy performance of commercial buildings.

3. Guidance to Consumers

An energy conservation campaign had been introduced on the heels of the 1973 oil price shock, and there was evidence that the growth demand for energy had moderated somewhat as a result.

Reference was then made to several of the organisations pressing ahead with their particular energy savings campaigns: the Coal Research Association of New Zealand, the Electrical Development Association of the Electrical Supply Authorities’ Association, consumer advisory services in the oil and gas industries, and the Ministry of Works and Development’s Energy Advisory Service. The establishment of the new Ministry of Energy would help bring co-ordination and focus to these efforts.

4. Financial Incentives

Even with the best energy pricing structures and a high level of consumer knowledge, *Goals and Guidelines* conceded that “substantial differences will remain between what is most desirable from the point of view of individuals and what is in the best interests of the country as a whole.” By way of example, it cited the division of responsibility between the owner of a building, who bears the capital costs, and the tenants, who bear the energy purchase costs. Those operating in a “cost plus” environment have little incentive to minimize energy costs.

It then discussed non-price financial incentives which could be used to help bring private self-interest and the national interest closer into line. Examples cited were:

1. “accelerated depreciation for taxation purposes;
2. “provision of loan finance (with market or concessional interest rates);
3. “direct grants;
4. “remission of taxes on approved equipment;
5. “changes to price control regulations; and
6. “import licensing concessions.”

5. Regulatory Controls and Disincentives

In 1978, limited regulatory controls had existed for many years. Examples given were the requirement to have acceptable levels of insulation on electric water heater cylinders and controls to limit the use of public lighting. To these a new and important control had just been added to ensure all new houses were adequately insulated. The discussion document acknowledged that controls raised important matters of principle. The benefits of limiting conspicuous or unnecessary consumption had to be weighed against the consumer’s wishes, providing he was paying a full and fair price for the provision of that energy being used. Regulatory controls on a continuing basis would need to be used with “considerable discrimination.”

6. Other Issues

Several aspects of general Government policy could have a bearing on energy matters. Government was a major owner and user of office buildings and housing. What examples does it set, particularly when electric heating can be avoided by use of gas or coal? In development of investment policies could more cognisance be given to opportunities to achieve progress with energy-producing and consuming plant and equipment? Transport policy could be much involved with this.

7. New technology

Goals and Guidelines reminded the reader that research and development programmes offered important opportunities for progress in energy production and savings. Energy cost reductions using sophisticated process control equipment, technical progress in areas such as heat pumps and solar water heating, were given as examples. It also suggested that sponsorship of equipment development at the pre-commercial or prototype stage, where there was a good possibility of substantial energy benefits, could usefully amplify and complement the existing Development Finance Corporation's Applied Technology Programme.

*** *New Zealand's Energy Resources (P27 to P52)***

This chapter sought to give the reader an overview of the size and nature of the country's then known energy resources:-

Oil Resources

The only significant then known oil resources were in the Kapuni gas field discovered in 1959 and the off-shore Maui gas field discovered in 1969. Drilling had taken place in various places since 1865. Some 200 holes, mainly shallow, had been drilled, but Kapuni was the first find seriously worth exploiting. In 1977, Kapuni condensate provided about 15% of the nation's oil requirements. The Maui field was scheduled to begin producing in 1979.

The oil deficiency was the nub of the immediate energy problem facing New Zealand. Oil was the energy source we had least of, but used most.

By 1977 on shore exploration by private interests had largely ceased so the Government initiated its own onshore exploration programme with six

licences which were transferred to the Government's new petroleum company, Petrocorp Exploration Ltd, when it was formed in March 1978.

The bright light in the search for oil had been off-shore Maui, where subsequent drillings at Maui 2, 3 and later 4, produced gas and condensate from the same zones as Maui 1.

Of the several areas where further drilling was being attempted, only the Great South Basin then showed promise, but the technical and financial challenges were too great for the resources at the time.¹³ The basin lies in the "Roaring Forties" and is subject to some of the roughest wind and sea conditions in the world. Most of the basin exceeded a water depth of 500 metres, and the nearest land was 150 kilometres from the closest prospective structure. Oil recovery in such circumstances had not then been achieved anywhere else in the world.

Oil Refining and Oil Transport

The Marsden Point oil refinery, owned by the New Zealand Refining Company Ltd, was opened in 1964. It produced New Zealand's needs for heavier products like bitumen, fuel oils, bunker fuel and marine diesel, and about 70% of the country's then motor gasoline and automotive diesel fuel needs. In 1978, the refinery made no contribution towards aviation fuels, kerosene, solvents, chemicals, lubricating oils or gasworks naphtha.

New Zealand's energy needs were heavily dependent upon imported crude oil and semi-refined feedstocks shipped to Marsden Point in large oil tankers. Distribution throughout New Zealand was mainly by small coastal tankers augmented by rail and road tank trucks. Plans were developed at that time to build a white product delivery via a pipeline from Marsden Point refinery to Auckland.

The oil companies operating in New Zealand supplied crude, local and other feedstocks to the refinery, importing as much of these products as was needed to meet the nation's requirements. The refinery had future plans for expanding in the major "white" product market, i.e. motor spirits, jet fuel and automotive diesel. New Zealand's oil product needs were strongly weighted towards the light or "white" products, necessary

¹³ During my time as Minister of Energy I helicoptered out to the Sea Hunt Group drilling platform Kawau #1A to see for myself and learn about the problems at first hand. Among our family possessions there is a small bottle of Great South Basin condensate, recovered in the drilling searches there, and presented to me as a treasured souvenir.

especially for transport, an area where there were no ready substitutes for the “white” product.

The country’s needs for heavier fuel oil told a different story. This side of the market was being penetrated by natural gas, coal and wood waste, where locally produced products could therefore ease the pressure for imports.

Natural Gas

Before World War II the tiny Moturoa gas field was supplying some of New Plymouth’s gas needs. The first significant natural gas find was made at Kapuni, near Hawera, in 1959. In 1977 Kapuni’s recoverable reserves were estimated to be 580 PJ. The Maui field was discovered in 1969. Its reserves were estimated to be more than 10 times those at Kapuni. In 1977 New Zealand’s total gas reserves were estimated to be 6000 PJ, which was nearly 100 times the then annual consumption rate and met one-sixth of the country’s then primary energy needs. Gas would clearly be a key factor in future energy planning.

When the Kapuni Gas Purchase Contract was signed in 1967, studies showed the highest commercial return would come from supply to thermal power stations. Later studies showed that longer-term national interests would be best served by building pipelines to Auckland and Wellington to develop the field predominantly for reticulation to industrial, commercial and domestic consumers.

Maui Gas

Early studies of the Maui field showed that the cost of development would be huge, and could only be justified with a high rate of gas offtake and thus an assured substantial cash inflow.

The then demand for electricity called for a large thermal power station. The New Plymouth power station was already under construction with the intention of using Buller coal.

Maui gas prospects changed the scene. With no other significant market then available to support the development of the Maui field the answer lay in turning Maui’s primary use to fueling electricity generation. New Plymouth was redesigned to take gas instead of coal as its fuel.

The financial deal around Maui was completed in July 1973 - just two months before the oil price shock in the aftermath of the Middle East War. Under the agreement, the Government bought a half-share in Maui for \$30 million, and the field was to be developed by Maui Development Limited, a 50/50 joint venture between Government and the Shell, BP and Todd petroleum companies.

To make the investments viable and ensure an adequate cash flow, both Maui and Kapuni agreements were negotiated on a “take or pay” arrangement. Contracted quantities would have to be paid for whether taken or not, but gas paid for but not taken (known as “pre-paid” gas) in any given year could be taken without further payment in subsequent years.

In developing the Maui field, the task was seen to be too big for a single production platform. Originally planned for completion by September 1978, *Goals and Guidelines* anticipated this would slip back to April 1979. The timing for the building of a second platform was to be decided in 1979.

The new planning which lifted gas to a primary energy source for generation of electricity made the economics of gas operation more competitive with rival fuels. One consequence was that the prospect of nuclear generation in the forward planning was pushed much further into the future.

*Liquified Petroleum Gas*

Liquified Petroleum Gas (LPG) can be extracted from natural gas. It consists of propane, butane, or a mixture of the two. Propane had been produced at Kapuni since 1973 and reached 7,000 tonnes in 1977. The plant was capable of producing 20,000 tonnes of propane and butane a year.

Maui Development Ltd studies suggested that the Maui field had a potential to produce over 400,000 tonnes a year.

LPG was seen as having a number of potential uses:

- * replacing petrol in large fleet operations of petrol-powered vehicles;
- * replacing diesel fuel in industrial and commercial applications;

- * substituting for coal and imported oil as a feedstock for gas manufacture;
- * substituting for diesel and kerosene where a clean fuel is required and natural gas is not available.

*Manufactured Gas*

Once this was an important industry in New Zealand, but by 1977 it had slipped away to the point where it only supplied 0.4 per cent of the country's energy requirements.

The then surviving manufactured gas works were in the smaller North Island centres which lacked access to natural gas, and in the South Island.

The small works with no prospects of becoming economic were being offered financial assistance to close. Larger operations serving bigger towns were being assisted with continued subsidies.

The future of gas manufacturing in Christchurch, Dunedin and Invercargill was seen to depend on the introduction of new feedstock. Naphtha, then imported, was too expensive for continued use, and coal, suitable for gas manufacture, was no longer available at a price and in quantities for long-term operation. LPG as a feedstock for manufactured gas, or for direct use to replace manufactured gas, was being considered.

*Petrochemicals*

As part of its work on energy, the Government had arranged a study to be made of possible viable uses of Maui gas in the production of petrochemicals. The study focused on two possibilities - nitrogenous fertilisers and methanol.

Methanol could be used in small quantities in the chemical industries but there was a much larger potential use in blending with motor fuels. There would, however, be major costs involved in vehicle conversion and changes to the distribution system which might well prove insurmountable.

Nitrogenous fertilisers were not used widely in New Zealand. A viable project would require large-scale production which would have to be mainly export related. There were five detailed studies underway when "Goals and Guidelines" went to press.

Coal

Coal was New Zealand's major source of energy for 100 years until the 1950s. By the 1880s most of the coal fields had been discovered and their development set underway. Coal supplied industry, transport, households and provided the feedstock for the manufactured gas industry.

It reached its peak production of about 3 million tonnes per annum in 1960, and following that slipped steadily backwards to 2.3 million tonnes in 1977.

The reasons for coal's decline are explained by "Goals and Guidelines" as:-

- * the conversion of shipping and railways from coal to oil;
- * the rise of electricity, oil and natural gas which were preferred because of:
 - (i) lower costs of both fuel and associated equipment;
 - (ii) convenience and cleanliness;
 - (iii) regularity of supply with few interruptions to production, and few industrial disputes or transport delays; and
 - (iv) the uniformity of the competing fuels. (Coals come in many different types making maintenance of uniform standards of quality sometimes difficult and expensive to achieve.)

Coal is New Zealand's largest known fossil energy resource - estimated to be 1,180 million tonnes (26,000 PJ). The "measured" reserves in 1977 were 211 million tonnes (5000 PJ). More work would need to be done to bring "indicated and inferred" coal reserves into the "measured" category. However, even then present knowledge showed that coal had the capability to play a "substantially expanded role over a long period in New Zealand's energy future".

Coal Exploration

The Ministry of Energy estimated that the longer-term objective to discover the full extent of New Zealand's coal resources would take at

least another 15 years and cost about \$60 million. Not only money and equipment would be needed. There was also a lack of skilled people to supervise, analyse and interpret the further investigations which were needed.

New Zealand's largest known coal field was in the Waikato. Its sub-bituminous coal comprised 40 per cent of the total reserves. Substantial quantities were in thick seams shallow enough to be recovered by opencast mining. These Waikato opencast mines dominated New Zealand's coal production.

Most of the remaining Waikato reserves would be too deep for opencast mining by then conventional technology.

When *Goals and Guidelines* was published, first steps were being taken with the construction of two new mechanised underground mines in the Huntly area. These would have a designed output of 1.2 million tonnes a year (Huntly West) and 600,000 tonnes a year (Huntly East). There was also an open-cast mine being developed at Waipuna which would produce between 300,000 and 600,000 tonnes per year.

These developments were planned to provide about 1.5 million tonnes a year for the Huntly power station, with the balance for industry. The initial development of these mines was estimated to be \$90 million, and production was to begin in 1978.

Some of the Waikato's untouched underground reserves had unusually thick seams at depths exceeding 300 metres. Some European deep mining methods have been helpful in devising ways to develop these resources and the publication also speculated on the possibility of major opencast operations being technically possible in future.

The Buller and Grey coal fields on New Zealand's West Coast were the only source of bituminous coal, especially prized for its high calorific value and coking characteristics. These fields had suffered the most severe declines in production levels.

In Southland, the principal production was Ohai sub-bituminous coal, similar to that of the Waikato. This was supplemented by lignite from the Mataura field. The size of the Mataura field was being investigated and the document acknowledged there had been speculation that it could contain over 1000 million tonnes of open-castable coal.

*Coal Extraction Rates*

In opencast mining, over 90 per cent of the coal can often be recovered, whereas in underground mining, such an extraction rate is almost impossible. Coal has to be left in the ground for various reasons, the most important related to the safety of miners.

Thick barriers of coal must be left untouched between the different sections of a mine to isolate explosions or fires, and coal must be left to support the rocks above the coal where miners work.

In 1977 the national average extraction rate for underground mining was about 37 per cent. Once a seam had been worked in this manner it was difficult and dangerous to attempt further coal recovery unless it is by opencasting.

In Europe some techniques have been developed to bring underground extraction rates up to 70 per cent, but this has been with coal seam configurations evidently rare in New Zealand. A trial using European methods was planned to take place in the Huntly West mine.

Very thick coal seams present special problems, and with the best conventional technology extraction rates can in these cases fall as low as 10 per cent.

New Zealand mining had seen a steady decline in its skilled manpower. This would have to be reversed if the coal industry was to achieve a significant recovery.

In planning for coal exports, transport costs were a major consideration. This meant only the bituminous coal of the West Coast had a practical export potential as other types of coal had too low an energy content per tonne to ensure a guaranteed net return for New Zealand.

*Hydro Electricity*

As *Goals and Guidelines* stated so confidently: "Hydro-electricity has a long history in New Zealand. Since its first generation in 1888, in Reefton, it has become, and is likely to remain, New Zealand's most valuable energy resource."

By 1977, hydro-electrical power generating output in an average year was some 63 PJ (17,500 GWh), and the Ministry of Energy estimated the country's potential was four times this amount.

At Table 4.B the document described the location of the country's undeveloped hydro potential - some 19.9 PJ, or 5520 GWh per annum, in the North Island, and some 92.9 PJ, or 25,800 GWh per annum, in the South Island, giving a national total of some 112.8 PJ, or 31,320 GWh per annum.

The table listed some of the particular characteristics and problems many of these possible projects might encounter if they were to be developed, but the problems listed were as seen in the mid 1970s, and the three decades since then has seen the environmental standards and the hurdles to development they raise climb almost exponentially, to be crowned by the challenges in the Resource Management Act.

-- Advantages of Hydro:

Hydro is a renewing resource, available in perpetuity. A very high proportion of the available energy is converted to electricity, which is the most valuable and convenient energy form for a wide variety of purposes. No chemical or thermal pollution is produced. The operating cost of hydro is low, and capital costs are comparable with those for other energy forms. Except for particularly difficult sites, hydro provides the cheapest available source of electricity. New Zealanders have a great deal of experience in developing hydro.

-- Difficulties with Hydro:

The supply of hydro is limited by availability of water flows, and rainfall is subject to long and short-term variations. Water storage capacity to modify flows is important. Lakes and storage areas are subject to silting and unless corrected can reduce a hydro station to "run-of-river" capacity.

There are also environmental and social impacts. Land may need to be inundated, waterways diverted from natural channels, and free flow of water is replaced by the slower movement of water in lakes, canals or tunnels. Fluctuating river flows and artificial manipulation of lake levels can bring shoreline problems, although the agreement reached on guidelines for Lakes Manapouri and Te Anau showed these could be effectively dealt with.

Agricultural and tourist interests may consider themselves adversely affected.

TOTAL POTENTIAL HYDRO RESOURCES - ANNUAL ELECTRICITY OUTPUT¹⁴

	GWh	PJ
Existing and under construction	23,806	85.7
Total additional large-scale scheme potential	31,320	112.8
Total additional small-scale potential estimate	3,000	10.8
TOTAL	58,126	209.3

Geothermal

Large scale exploitation of geothermal energy began in New Zealand with the Wairakei power station, commissioned in 1958, the first in the world to produce electricity from geothermal hot water. [A much earlier station at Lardarello in Italy used natural steam.]

Wairakei maximum output was 160 MW, only a very small part of New Zealand's total electricity generating capacity of 4625 MW, but as it ran almost continuously near maximum output, its annual energy output of 4 PJ (1200 GWh) was of much greater significance than its capacity would suggest.

When *Goals and Guidelines* was published, a further power station was scheduled for the Broadlands field, and the estimated potential for electricity generation from geothermal energy was some 25 PJ per annum, equal to about seven stations the size of Wairakei.

Geothermal production has its problems. Wairakei manages to extract only 10 per cent of the energy from the ground and convert it to electricity. Geothermal technologies were said to be improving, and the rate of energy capture was expected to be steadily improved together with reduction of discharge problems by reinjection of waste water and its chemical pollution problems deep underground.

Plans for the 1978-79 fiscal year forecast lifting the then drilling programme from four to six wells per annum to 14 to 16, and associated scientific investigations and geophysical exploration were also to be stepped up.

¹⁴ Table 4B *Goals and Guidelines*

*Alternative Technologies: (P53 to P64)*

“Goals and Guidelines” included, in summary form, observations of various alternative technologies which should or could be considered in future forward planning.

--- Nuclear:

The Planning Committee on Electric Power Development in New Zealand in its 1968 forward plan included a nuclear power station to be commissioned in 1977. With the discovery of the Maui gas field this was dropped and replaced with plans for the Huntly coal/gas fired power station.

With the extension of the planning period from 10 to 15 years in 1974, a nuclear power station was again included, this time for commissioning in 1988. In subsequent years forecasts of electricity demand growth were reduced, and consequently in the 1977 power planning report nuclear power was deferred beyond the 15-year planning period.

Two reports on nuclear power were produced to help clarify issues and better inform the public debate which was then developing on nuclear issues. In 1975 the Labour Government appointed a Fact Finding Group under Sir Malcolm Burns, and in 1976 the new National Government, in compliance with a manifesto undertaking, appointed a Royal Commission under Sir Thaddeus McCarthy.

--- Solar:

Solar radiation provides a low intensity supply with marked variations related both to time of day and climate. Natural systems perform this function through plants (biomass), wind and hydro.

Solar water heating as a supplement to electric water heating was by 1977 becoming quite commonplace, particularly in countries with high sunshine levels and high electricity prices. Less progress had been made with solar space heating and cooling. More progress at less cost had been achieved in improved building design and ventilation.

Generation of electricity from solar radiation was mentioned as a subject for intense research, particularly in the United States. There were two main lines of approach: one by using photo-voltaic cells, and a second by using mirrors to concentrate solar energy onto boilers.

--- Biomass:

In 1978 there was talk and research going on with a view to developing the best methods of turning plant matter into energy, but at that stage there was still much more work to be done before the best opportunities would be known.

Potential sources of raw material were varied - from annual crops like sugar beet and potatoes to fast growing trees like radiata or poplars, or ocean growing plants like kelp.

Research, at that time, was focusing on three possibilities:-

- * Converting carbohydrate-yielding crops to ethanol by pretreating with enzymes to convert starches to sugars.
- * Converting woody materials into ethanol by acid hydrolysis or enzymatic digestion followed by fermentation.
- * Pyrolysis of biomass to convert to a fuel gas followed by catalytic conversion of the gas to methanol.

The economics of biomass posed problems, also, for use of land with agricultural use or potential would compete with food production, and as a substitute fuel for diesel engines or aircraft the then scientific knowledge suggested this was not likely to be achievable.

There were attractive possibilities suggested in conversion of city waste.(or burning it to produce steam for industry or electricity generation), but in the then state of planning, it was estimated that it would be late in the century before significant progress could be expected. A major rise in oil prices could possibly hasten the process.

Oceans

For New Zealand, surrounded by oceans, the potential here could be important in the long term, but in the 1970s the technology and the likely costs seemed well beyond us. The Ministry of Energy was, however, keeping a watchful eye on trial experiments taking place abroad in places like the USA, USSR and France.

Wave power, tidal power, the power of currents, and harnessing the temperature differences between the sun heated upper ocean layers and the much colder lower layers, were all theoretical possibilities, but such studies as had been made at that time suggested costs would make the outcome cost per unit very much more expensive than coal, or even nuclear.

Combined Cycle Electricity Generation

A significant breakthrough in power generation technology in the 1970s was the development of the combined cycle generation process.

Conventional thermal power stations burned fuel in a boiler to raise high pressure, high temperature steam, which was then expanded in a steam turbine which in turn drove an electricity generator.

In combined cycle stations the fuel is burned in a gas turbine and the hot exhaust gases from the gas turbine are then passed into a boiler where steam is raised to drive a steam turbine. The gas and steam turbines drive one or more generators.

The advantage of combined cycle operation is higher efficiency and lower cooling requirements. Some 43 per cent of the energy value can be achieved against 36 per cent or less in a good conventional station. But there is a disadvantage. Only a clean fuel like natural gas or light oil can be used to power the station.

As Minister of Energy I was particularly interested in the potential for New Zealand in combined cycle operation for I could see that our conventional plants were harnessing only in the low 30 percent range of the energy value of natural gas being converted to electricity whereas the combined cycle process had the potential to lift that to the high 40 percents.

Cogeneration

This concept is designed to produce useful heat and electricity from the same plant, known in the industry as a “total energy” scheme.

This type of project was quite common in large industrialised countries. In New Zealand, it is much less common, but a good example, quoted in “Goals and Guidelines”, was at the Tasman Company’s plant at Kawerau. The report mentions that the possibilities for extending this concept were

then under a study being financed by the Energy Research and Development Committee (NZERDC).

*District Heating*

Yet another idea not often considered in the public debate on energy were the savings possibilities in supplying heat (usually as steam or hot water) through the use of larger scale operation which could be considerably more economic than a number of smaller individual plants.

There is an initial disadvantage in the district reticulation costs, but once this is factored in to the comparisons the advantages swing quite strongly in its favour.

By 1978 Western Europe had many such schemes operating successfully, especially in Denmark, Sweden, West Germany and the USSR. The introduction of district heating schemes in areas of existing buildings was often difficult and expensive, so it was important to focus their potential towards new developments where reticulation could be planned for inclusion from the outset of the construction stage of the buildings their heating would be designed to serve.

The document reported that the NZERDC had recently funded a study which showed the possibility of setting up district heating schemes in the Gracefield and Otahuhu industrial areas which could be economically viable.

*** *“Goals and Guidelines”: (P65 to P69)***

This chapter set out the specific points of information and concern the document sought to share with the industry’s key stake holders and the wider public with a view to making progress identifying the objectives and the path ahead in shaping national energy policy.

The reality was that New Zealand, seen through the eyes of the late 1970s, was comparatively well provided with such energy resources as coal and natural gas, and both hydro and geothermal were capable of considerable expansion, but in liquid fuels our resource base was seriously inadequate.

But with a prescience well confirmed by the story of the following three decades, towards the end of the century “Goals and Guidelines” predicted importing oil to provide a large proportion of the nation’s energy supplies

would be an increasingly expensive dependence and a resource far from reliable in either supply or price.

-- ***“The Goals”***

- 1 to ensure that energy supplies are adequate, now and in the future, to enable the community to continue to meet its economic and social objectives.*
- 2 to ensure energy in its various forms is produced and used in the most economic, efficient and reliable manner.*
- 3 to reduce the nation’s dependence on imported energy.*
- 4 to ensure a balance between the adverse environmental affect of energy developments and their benefits.*

Before each numbered goal, there was a summary of why that goal was listed.

-- ***“The Guidelines”***

Then followed the 11 main guidelines, each again prefaced with a brief mention as to why it was listed.

1. International: join with other nations to work toward an improved international energy situation.
2. Public Understanding: promote public understanding and acceptance of the need for conservation and efficient production, distribution and consumption of energy.
3. Organisation: achieve an organisation of the energy sector capable of the most efficient production and distribution of the various forms of energy.
4. Planning: establish arrangements for developing energy plans which ensure that they are consistent with broader economic and social objectives.

5. The Future: ensure that a long-term view is taken in evaluating projects involving the consumption of energy resources, giving preference to the use of renewable resources.

6. Environment: ensure that effective procedures are used to evaluate the environmental impacts associated with energy development.

7. Exploration: encourage exploration to determine the nature and extent of the nation's energy resources.

8. Research and Development: promote research and development into new techniques for producing and conserving energy.

9. Pricing: achieve a pricing structure for energy that encourages conservation and the use of the most economic energy form.

10. Substitution: facilitate and encourage the use of coal and natural gas where they can replace oil and electricity.

11. Transport: reduce the nation's, and particularly the transport sector's, dependence on oil.

*Towards an Energy Strategy: (P70 to P98)*

This chapter set out the reasons why each of these "Guidelines" had been selected as a basis for present and future policy.

1. International: * New Zealand could not isolate itself from future world events.

* The price we paid for imported energy would be a prime factor in determining our future living standard. International cooperation would give some support to continuing security of oil supplies.

* Much of our technical knowledge came from abroad and the international pool of expertise would be even more important in respect of longer-term developments.

* New Zealand valued its membership of both the Organisation for Economic Co-operation and Development (OECD) and the associated

International Energy Agency (IEA). [In the emergency measures following the 1973/74 oil crisis, IEA members agreed that if any of them suffered a serious curtailment of their oil supplies, all remaining supplies would be shared equitably.]

2. Public Understanding:

It was essential New Zealand's energy policies be integrated with the nation's overall development aspirations. This was important for several reasons, among them:

- * Public understanding and support would be needed when the lives of a number of New Zealanders could be affected, e.g. by a decision about the siting of a hydro dam, but when the building of the dam would bring necessary resources for the benefit of the wider community in jobs and living standards.
- * In the case of firms choosing industrial equipment requiring a significant energy input;
- * Public understanding throughout the community would be essential to achieve effective conservation measures.

Although the "Goals and Guidelines" did not make this point, I, as Minister of Energy, also hoped that a well-informed public would help encourage better bi-lateral political support and also support among the key players in the diverse sector interest groups for the important measures which would be needed to meet the challenges I could foresee in the nation's energy future.

3. Organisation:

The formation of the Ministry of Energy would help achieve better government co-ordination and administration. It would be possible to take a wider view in decisions involving a variety of energy sources and their distribution methods.

A review of the Government's hydrocarbon interests led to the formation of a comprehensive organisation in the Petroleum Corporation of New Zealand Ltd (Petrocorp). It had three subsidiaries embracing then existing state interests in:

- * Natural gas distribution (The Natural Gas Corporation of New Zealand Ltd.)
- * The state share in the Maui gas field (Offshore Mining Company Ltd); and
- * Onshore petroleum exploration programme and off-shore partnership ventures (Petrocorp Exploration Ltd.).

Petroleum products were processed and distributed at the wholesale level by six private companies controlled by overseas principals. The companies competed and operated nationally and co-ordinated internationally for supplies. Government administration in this area was in regulation and price control measures.

Liquified petroleum gas (LPG) which could become available in significant amounts when Maui was in production would require a new market network, most likely in association with then existing market outlets supplying imported fuels.

Gas distribution was done by a mix of public and private undertakings. Both manufactured and natural gas had a combination of territorial authorities, energy authorities (also distributing electricity) and private companies. As with electricity, gas distribution differed fundamentally from oil and coal in that the distributing organisation required a monopoly of supply in an area to avoid the duplication of costly distribution systems.

Electricity was distributed by both special purpose and territorial local authorities, widely varying in size and make-up of their loads. These differences meant administration was complicated and equity to all consumers was difficult to achieve.

Goals and Guidelines recommended that the energy sector should be organised to achieve efficiency (by appropriate choice of size, ownership and control), reduced dependence upon imported fuel, and the minimizing of environmental damage using appropriate techniques.

4. Planning:

The essence of planning was described as the anticipation of future events by developing a scheme for coping with them to ensure the nation's broader economic and social objectives could be achieved.

Energy planning must be a continuing process to meet changing times and evolving circumstances, including patterns of energy consumption, and long lead-times were needed in setting goals where major and costly projects could be involved.

Energy planning had three levels

- Each energy industry;
- The energy sector as a whole; and
- The energy needs for the nation's future.

“Goals and Guidelines” identified the electricity industry as one which clearly appreciated these requirements for long-term planning. Formal arrangements which begin with the demand estimates of each supply authority had existed for over 20 years. These forecasts were processed through a series of three planning committees to produce a 15-year rolling plan for the future development of the electricity supply system.

Looking back over the 30 years since my time as Minister of Energy, one of the subsequent changes about which I have greatest regret and criticism is the way in which this rolling forward planning for electricity was dropped from the “must do” list during the organisational and privatisation changes of the 1980s and 1990s.

5. Future:

The inclusion of a longer-term perspective in energy decisions was vital. Within a clearly defined and regularly revised energy development programme the future consequences of current options become apparent.

Even a resource as large as the Maui gas field had a limited life and could be used only once. Plans needed to be of sufficient perspective to effectively assess the future energy situation including realistic allowance for its inherent uncertainties.

Cost-benefit analysis and the “scenario” approach helps evaluate future options. The New Zealand Energy Research and Development Committee had used this approach for studies forward to the years 2000 to 2025.

6. Environment:

Our economic and social objectives could be met only by adequate supplies of energy. The environmental implications of future energy supply patterns had to be seen as part of overall development.

The essentially regional nature of projects had often led to the net benefits to the wider community being understated. There had been a widespread view that the environmental considerations must be given in blunt “yes” or “no” decisions, rather than seeing them as questions of degree and design.

New Zealand had a well-established system of environmental impact assessment and reporting, but most projects, especially the larger ones, went through several stages of approval. A range of considerations can be contested at one stage, then re-opened and the process repeated at subsequent stages.

7. Exploration:

To know the nature and extent of our energy resources was an essential component of effective energy policy development and on-going review.

Oil, gas, coal and geothermal resource assessments were based on geological investigations and drilling programmes. Past work had been fairly patchy and often not carried to completion.

Coal exploration had been intermittent and concentrated on the shallow, easy-to-mine coal; on high-quality resources, and on immediate requirements. A more extensive programme to determine the coal resources had begun and was expected to take a decade, or longer.

Oil exploration had a long and largely disappointing history, but the importance of oil to the economy meant we had to continue our efforts.

Natural gas had not been a primary objective in exploration, and its discovery had tended to be a consolation prize in seeking oil.

Geothermal energy potential had not been fully explored and the 1977 Budget advised of funding being made available to upgrade the geothermal programme.

Hydro-power was the major resource about which most was then known.

8. Research and Development:

Priority areas for work in this field included:

- improving efficiency in the production and use of energy, (e.g. higher coal recovery rates and more fuel efficient cars);
- using alternative ways of supplying and consuming energy, (e.g. large wind turbines and solar heaters);
- an orderly adaptation of our life-style to one more in line with the (then) new high price of energy (e.g. by adjusting to using less oil in transport).

9. Pricing:

Energy prices had far-reaching effects on consumer and producer behaviour.

In terms of energy strategy, two features were most important:

- The first was the way prices carried consistent information to all potential buyers and sellers.
- The second was that the community could influence the levels at which prices were set to reflect the community's own aims. Imported fuels, for example, could be made more expensive to use by applying customs tariffs and/or excise duties.

In the 1970s New Zealand's energy prices were all influenced by the Government. Price controls of various forms covered gas, petrol and coal, while the electricity bulk tariff was set directly. In addition, there were taxes and levies that increased the price of oil products, coal and natural gas. Subsidies had been applied to coal and electricity in the past, and still affected the price of manufactured gas.

10. Substitution:

"Goals and Guidelines" reminded the reader that the country's then balance of payments problems made import substitution one of our major economic goals. The most important short-term objective in the energy

sector was to find substitutes for oil consumption. Secondary and long-term objectives were:

- to substitute renewable for non-renewable resources;
- to use the premium energy form, electricity, with discrimination; and
- to promote increased capital investment for more efficient energy use.

These objectives were more readily implemented in large-scale stationary heat applications (e.g. factory boilers) where the merit order of energy use was coal, natural gas and oil, with electricity being used only for the most specialised purposes because of its relative expense.

In the small scale heat market (principally households) the merit order was natural gas (where it was available), solar water heating and electricity. Coal made a contribution in this market with existing installations, and would continue to do so with newer high efficiency applications becoming available.

Capital investment could also be used as a substitute for energy consumption, i.e. installation of insulation. A series of support policies then in place were mentioned including:

- pricing policies, tax incentives and interest-free loans,
- 100 per cent immediate tax write off covering cost of wide range of equipment,
- refund of the 10 percent sales tax on capital equipment on all plant eligible for such concessions.

11. Transport:

“Goals and Guidelines” stated bluntly: “New Zealand is highly oil-dependent.” Oil consumption occurred mainly as a fuel for vehicles. In fixed plants where mobility was not a factor, use of substitute fuels might well be possible, but this could involve the cost in money and time of replacing the investment previously made in the equipment employed. Oil-fuelled transport did not occur merely on the roads. It applied in construction, farming, fishing, and forestry industries, all of which needed petroleum for mobility.

As an agricultural and pastoral produce-exporting nation almost half a world from major markets, we had to be conscious of the importance of oil-based transport for our future.

The use of LPG and CNG was discussed but both were considered potential substitutes for oil in only fairly restricted circumstances, largely confined to large vehicle fleets or areas where product distribution costs would not be prohibitive.

Both methanol and ethanol had some substitution possibilities, but changes to vehicles, particularly with methanol, could prove expensive.

Greater hope for savings lay in conservation measures, like buses for urban transport, and a focus on smaller and more fuel efficient vehicles, then assisted by a sales tax reduction for smaller cars.

Chapter 7

Ministry of Energy Act

The new Ministry of Energy Act proposed a reconstruction of the energy-related departments and Government entities intended to bring cohesion and direction to policy setting and management.

The key factors driving this move included:

1. The 1973 oil shock and its flow-on consequences lifted the intentions of the Act from a desirable reform of the bureaucracy to a “must do” and urgent upgrade.
2. The intention to effect such change was clearly indicated in National’s 1975 general election policy.
3. The concept of better coordination and management of energy matters had been talked about back in the 1960s, but other priorities had kept it on the proverbial “back burner”.

On appointing his first cabinet, the new Prime Minister Rt Hon R.D.Muldoon brought the three most obviously energy-related portfolios - Energy Resources, Electricity and Mines - directly under one minister, Hon E.S.F.Holland. The post-1973 oil shock price freeze on petrol and other energy sources which the Kirk/Rowling Labour Government had put in place was replaced by a new pricing policy more clearly related to the actual costs of supply. Subsidies were continued in several areas like manufactured gas.

An early 1977 minor cabinet reshuffle saw Holland's energy responsibilities passed as a package to me.

Energy gets special mention in the 1977 budget

In keeping with the new focus being given by Government to energy re-organisation, the 1977 Annual Budget gave a five page mention to energy matters. The introductory section stated¹⁵:-

Massive increases in oil prices in recent years have resulted in radical changes throughout the world in attitudes towards energy. For a country at present heavily dependent on imported oil as a primary energy source, we must be concerned that it will become increasingly more expensive and its supply unreliable.

New Zealand's annual import bill for oil is now approaching \$550 million. By way of comparison, this is about equal to our export receipts from dairy products.

The extent of recent increases in the capital costs of energy production and distribution are a further indication that energy costs will continue to rise in real terms. Electricity generation and distribution alone is expected to require a continuing annual capital outlay in the next few years of approximately \$300 million per annum - or about \$100 per head of our population.

The Government's energy strategy is directed towards reducing the importance of imported oil in our energy requirements and the accelerated development of indigenous energy resources. This is to be supported by an expanded research and development programme and the intensification of investigations into New Zealand's potential to provide energy from indigenous sources. This strategy should help to ensure that sufficient energy will continue to be available to meet our economic and social needs.

¹⁵ 1977 New Zealand Government Budget Address

We have already introduced a comprehensive energy pricing policy and various conservation measures. A decision was taken earlier this year to divert a substantial and increasing quantity of Maui gas from electricity generation to industry and households.

The forthcoming merger of the three energy departments is another step which will strengthen the Government's ability to plan, implement and continually update the comprehensive energy policies the country will need in the future. We cannot wait until the new Ministry of Energy is firmly established and as a consequence the following very important measures will be implemented to promote further our energy objectives.”

The Budget then gave a list of early initiatives. They included:

- Energy Research: Total provision to be more than doubled - over \$1.1 million.
- Development of Indigenous Energy Resources: Comprehensive programmes to be introduced urgently to better advise as to what resources the country does have.
- Accelerated Geothermal Investigation Programme: Investigation drilling rate to be increased from 4 to 6 wells a year to 14 to 16 wells a year.
- Accelerated Coal Exploration Programme: Building on the programme to prove coal resources initiated in the South Island the previous year, a highly successful programme for coal exploration in the Waikato was nearing completion that year. Decision had been taken to extend this exploration programme to cover the whole North Island.

- Onshore Petroleum Exploration: In the previous two years Government had worked with several oil companies in offshore oil exploration. Nothing had been done for some years onshore. Government had therefore decided to bring the functions of Offshore Mining Company Limited and Natural Gas Corporation together under a new company and expedite drilling exploration in North Canterbury, the West Coast, Hawke's Bay, Manawatu and Taranaki.
- Local Hydro Schemes: Local hydro schemes of up to 50 megawatts each were to be encouraged. After discussions with the Electrical Supply Authorities' Association a number of measures had been decided upon to provide incentives and funds to stimulate this type of development.
- Incentives for Energy Conservation in Industry: To improve the country's conservation performance on the previous year's initiative for an immediate 100 percent write off of approved expenditure on existing industrial energy using plant, the scheme was to be extended to new plant using indigenous fuels other than oil or electricity.
- The previous year a 10 percent sales tax had been introduced on machinery. This budget made provision for a refund of this tax where the machinery in question qualified for immediate write-off under the taxation incentive mentioned in the previous paragraph.
- Finance from the Development Finance Corporation was available to firms which wished to convert oil-fired boilers to coal, or which installed new coal-fired boilers. The Corporation's lending facility would be extended to plant and equipment which qualified for the immediate write-off, also.

- Domestic Use of Natural Gas: With Maui field gas becoming available, the Government had decided to encourage domestic use of natural gas where it was available, or when it became available. The major features were:
 1. grants to the supplying authority of \$200 for each new mains connection to new or existing homes where at least two of the major gas uses - cooking, water heating, and space heating - were involved;
 2. a temporary reduction in the tariff on imported gas cookers for domestic use; and
 3. interest-free loans of up to \$400, repayable over four years, to assist in the purchase of gas appliances for cooking, water heating and space heating.
- Home Insulation: New minimum levels of insulation in all new homes would be required after 1 January 1978. To assist this policy home insulation interest free-loans for \$400 repayable over a four-year period would be put in place.
- Sales Tax on Petroleum Products: Stressing the need to reduce dependence on imported energy sources, from mid-night on that budget night a 1.5 cents a litre was to be levied on fuel and heating oils, marine diesel oil and kerosene. (Provision was made for refunds on oil products exported or used in international transport. The tax did not apply to motor spirits, automotive diesel oil, white spirits, naphtha or bitumen.)
- Sales Tax on Energy Intensive Appliances: From mid-night on that budget night new or increased sales taxes were to be imposed on

several energy intensive appliances in domestic, commercial and industrial use. The new tax rate on domestic, industrial and commercial air conditioners incorporating refrigerating units would be 30 per cent, and on domestic tumbler and cabinet clothes driers 20 per cent. (In a full year these increases were expected to yield \$20 million.)

- Car Pooling: The Government would provide financial support (up to \$70,000 in 1977-78) to support a car pooling scheme proposed in The Ministry Of Energy Bill by local bodies between the North Shore and Auckland.
- Energy Conservation Publicity: Provision in the budget was being made for \$175,000 to be spent on conservation publicity and Government would seek strong support from the energy sector in these efforts.

The Ministry of Energy Bill

As Minister of Energy Resources, I had the privilege of introducing this Bill to Parliament for its first reading on 22 July 1977. A great deal of work by many people had gone into its preparation, and with this step I felt at last real progress in improving the Government's instruments for handling this aspect of its responsibilities was being made.

Quoting from my speech in introducing the Bill:-

In establishing this new ministry, the Government is ensuring that New Zealand's energy resources will be properly developed and used. We need to know much more about our energy resources. We also need to be quite sure that New Zealand and New Zealanders obtain the greatest benefits from the ways we use energy.

By bringing together the responsibilities for producing energy and for anticipating the energy needs of the future, the Government will be able to ensure that development proposals are fully co-ordinated among all sources and types of energy..

The New Zealand Planning Council, the Commission for the Future, and the New Zealand Energy Research and Development Committee have all indicated the advantages New Zealand could expect from a careful consideration of our resources, the options available in the future, and the choices that should be made now.

These advantages apply equally to the energy needs of our industries, primary producers, and all consumers; they affect almost every aspect of New Zealand's way of life.

I am sure that the formation of a single ministry has the support of both sides of the House and of the many others who are concerned about the present and future use of energy in New Zealand.

The major features of the Bill are:

- * the establishment of a new Ministry of Energy, which is to absorb the Ministry of Energy Resources, the New Zealand Electricity Department, and the Mines Department;
- * the prescription of the functions of the ministry, which concern energy, in particular, but also draw attention to its mineral responsibilities;
- * the provision of power for the Government to form or participate in companies undertaking activities related to energy or minerals;
- * the transfer of the responsibility for pricing petroleum and coal from the Department of Trade and Industry to the Ministry of Energy;

- * the transfer of the responsibility for geothermal energy licensing and related matters from the Ministry of Works and Development to the Ministry of Energy; and

- * the transfer of the assets and liabilities, and rights and responsibilities, of the Natural Gas Corporation to a company wholly owned by the Government, on a date to be appointed by the Governor-General.

These provisions will enable the new ministry and the Government to develop a range of co-ordinated policies, and to ensure that they are followed.

Consultation with electricity and gas distribution authorities and with private sector producers and distributors of other forms of energy will, of course, be continued.

The Bill does not introduce new policy, but provides the authority necessary for the development of a new Ministry of Energy and a merger of the Government's petroleum and gas operations. The new organisation will enable the Government to ensure that the policies needed in the future are developed quickly and soundly and put fully into effect.

In concluding my introduction I explained that it was not proposed to send the Bill to a select committee. I reminded the House that there were very relevant precedents for this. Neither the Bill which created the Ministry of Transport nor the bill which restructured the administration of social welfare had been referred to select committees either, and for essentially the same reason. There were no new powers created in the Ministry of Energy Bill but rather it was a restructuring of existing powers already in place under other provisions.

The Ministry of Energy Bill covered 18 pages divided into four parts and 29 sections. The Bill also had four schedules. These covered a further 18 pages and listed the 22 other acts of Parliament and their relevant sections where powers were being transferred or consolidated.

The Debate in the House of Representatives:

Looking back over the Hansard record of the debates at the various stages in the passage of the Bill, I cannot but observe how relatively subdued and uneventful they proved to be. There was a little low-key argument about whether the bill should go to a select committee or not, and the inevitable parliamentary quibbling between Opposition and Government on such aspects as whether pricing policies were protective or punitive, how far the consultation process had gone in the preparation of the changes the Bill would effect and was that consultation adequate; and the then fractured state of the coal mining industry, and if it would be better to take pricing of energy away from Trade and Industry;

Questions were raised as to why the power construction industry of the Ministry of Works was not included in the changes. The decision was deliberate. The MoW's electrical construction division would continue to work under contract to the new Ministry of Energy, as it then did under contract to the Electricity Department.

The Opposition asked if the Government was pre-empting the passage of the Bill through Parliament with its moves to advertise the position of head of the Ministry before it existed in law. When this question was answered in the debate more than 200 applications had already been received.

Some 7,000 employees worked in the departments directly involved, so questions were raised as to how would their careers might be affected, and what the views of the Public Service Association and the State Services

Commission might be, and if there were plans for machinery procedures during the transitional period;

M.P.s wanted to know if the information normally found in the annual reports to Parliament of the departments being merged would still be available each year to Parliament and were assured that the new Ministry of Energy would cover all those areas of information in its own annual report to Parliament.

There were answers to all these questions or comments - none pushed too vigorously, none suggesting there was any real disagreement with the Bill's intent and content.

The over-riding and important reality was that the Opposition agreed with the Bill's purpose. In one of my several replies to Opposition points made I was able to remind the House that the energy component of Labour's 1972 election policy referred to co-ordination and strengthening in the energy sector and yet the country had waited three years, between 1972 and 1975, for the Labour Government to honour the energy part of its policies.

The Bill was read a third time and passed without divisions at any stage of its passage on 5 October 1977. The new Ministry of Energy and the provisions of its establishment Act came into force on 1 April 1978.

Energy References in 1978 Budget

Budget references in the 1978 budget built on the major policy announcements made in the 1977 Budget aimed at reducing New Zealand's reliance on imported oil and at accelerating the development of indigenous energy resources.

Government was discussing with Maui partners the feasibility of producing liquid petroleum gas (LPG). This was seen as potentially able to meet 10 per cent of the transport sector's fuel requirements. Preliminary assessments suggested Maui gas could be used to make methanol which, blended with motor spirits, could meet 15 per cent of requirements. A Liquid Fuels Trust Account would be established to finance development of new indigenous fuels. It would be funded by a levy of 0.1 cents a litre on motor spirits and automotive diesel.

The 1978 oil import bill would reach \$500 million - still too high in the Minister of Finance's view. He advised the Government, from mid-night Budget night, would increase motor spirits duty by 3 cents per litre - estimated to raise \$65 million per year.

To encourage use of motor cycles instead of motor cars, and encourage vehicles with lower fuel consumption, the 40 per cent sales tax on all motor cycles would be restructured. Motor cycles above 250cc would stay on the then current sales tax rate of 40 per cent. Those 125 cc or less would be reduced to 20 per cent and those above 125 cc but not above 250 would be reduced to 30 per cent.

To encourage use of natural gas by households, the gas connection and appliance loan scheme would be expanded to all forms of natural gas and products derived from it, and the interest-free loan to assist with purchase of gas water heaters would be increased from \$100 to \$200.

To encourage use of indigenous natural gas and LPG a grant of 25 per cent of qualifying expenditure and, in the case of a taxable entity, an immediate write-off of the balance for tax purposes would be available for approved schemes for reticulation of new subdivisions; a reduction of gas distribution losses; the purchase of certain LPG storage vessels; and

purchase by South Island undertakings of gas-reforming plant and gas storage tanks in anticipation of a supply of Maui products becoming available.

The Government was expecting the development of a substantial South Island market for Maui LPG. To assist, a subsidy on transport of LPG to the South Island would be introduced at a rate of 5 cents a litre. To maintain the profitability of underground coal mining, the Energy Resources Levy would be removed from underground coal mining production from 1 June 1978.

To complement the energy conservation tax incentive, the Budget advised that the scope of the present incentive would be widened to include expenditure on additional equipment needed to produce electricity using heat currently wasted during processes using indigenous fuels, and a purchase arrangement would be established to buy such surplus electricity so generated.

Present incentives would also be extended to cover refurbishment of industrial and commercial lighting installations and their control equipment. Grants up to 50 per cent of the cost of professional assistance (with a maximum of \$1,000) would be made to assist small firms investigating and designing conservation projects. An additional \$50,000 would be provided to the Standards Association for working on energy-related standards. A pilot programme on energy use specifications for Government buildings would be introduced. The tariff policy would be reviewed to ensure it did not encourage manufacture of plant, equipment and appliances less energy efficient than equipment available overseas. The new Ministry of Energy would be working with industrial associations of energy-intensive industries to initiate programmes leading to energy efficiency.

The 1978 Budget also announced a subsidy scheme which would be developed to encourage the re-refining and re-use of lubricating oils.

Funds would be made available for a start to be made on a programme of insulation for all suitable Government-owned houses and other buildings. To further promote the insulation of existing private homes the interest-free loan available for this purpose would be increased from \$150 to \$200, and for new homes from \$400 to \$500. The home insulation assistance scheme would be extended by providing interest-free loans for purchase and installation of approved solar water-heating systems. Interest-free loans of up to \$500 for a 4-year period would be available.

1978 Departmental Reports to Parliament

Reading through the various energy-related departmental reports to Parliament for the year to 31 March 1978, which was the very day before the new Ministry of Energy formally came into being, I sensed a more positive and more constructive attitude running through them all.

Ministry of Energy Resources

As the newly appointed Minister of Energy, in my introduction to my old department's submission to the House, I wrote:

I have the honour to present the sixth and final annual report of the Ministry of Energy Resources.

The 1977-78 year was a year of notable advances in energy planning and policy development with, in particular, major Government initiatives being announced in the Budget of 21 July 1977.

The basis of the new policies is recognition that future energy supplies must come increasingly from our own resources. Accordingly investigations into geothermal,

coal, hydro, and petroleum resources have been accelerated. In addition funding for energy research and development, including studies into the use of less conventional resources such as solar, wind, and biomass, has been substantially increased.

After referring to some of the policy and planning changes achieved during the previous year, my introduction reminded Parliament of two major organisational changes in the energy sector:

First was the announcement of the Government's decision to merge the three principal departments with energy responsibilities: the New Zealand Electricity Department, Mines Department, and the Ministry of Energy Resources, into a single department: the Ministry of Energy; and to transfer to it certain energy responsibilities of other departments.

Second was the establishment of a new limited liability company, the Petroleum Corporation of New Zealand Ltd., with three subsidiaries: Offshore Mining Co. Ltd., the Natural Gas Corporation of New Zealand Ltd., and the Petroleum Corporation (Exploration) Ltd. The latter, as the name implies, will undertake petroleum exploration including the Government's programmes and obligations in this area.

I then noted that in the formulation of energy policies there had been a valuable opportunity for greater understanding of the crucial decisions about energy demand and supply we faced in the years ahead, and how the Royal Commission on Nuclear Power Generation had provided, amongst other things, a forum for a searching public debate on the nuclear option.

I concluded my introduction to the final annual report of the Ministry of Energy Resources with the reference again to a project which I felt was so important in efforts to develop a national consensus for the way ahead with these words:

The publication shortly of 'Goals and Guidelines - An Energy Strategy for New Zealand: Public Discussion Draft' will provide a starting point for public discussion on energy matters generally. I believe the development of a flexible, fully co-ordinated energy policy that reflects as closely as possible the consensus of New Zealanders, is one of the greatest challenges facing us today.

The Sixth and Final Ministry of Energy Resources Report to Parliament then gave an overview summary of the many aspects of the energy scene as it was passing its responsibilities to the new Ministry of Energy. Among the more significant information updates it contained were the following:

Energy Pricing Policy: Industrial natural gas prices now averaged 75 per cent of those of fuel oil, compared with the target of 85 per cent (a discrepancy caused by the 1.5c per litre sales tax on fuel oil in the 1977 Budget); and coal prices for the large industrial user had now reached 60 per cent of fuel oil, compared to the target of 68 per cent.

Comalco: Negotiations on future pricing were concluded satisfactorily in December 1977. The base price for electricity had been increased substantially and a revised escalation formula introduced.

Natural Gas: The Government had approved the building of two pipelines - one from Oaonui to Kapuni to take Maui gas to Kapuni for treatment, so expanding the country's treatment capacity, and another from Te Awamutu to Kinleith. Further pipelines were to be considered.

Maui Development: Adverse weather and unforeseen engineering difficulties had required the postponement of first delivery until April 1979. Drilling of production wells was well underway and offshore pipelines completed and tested. The on-shore pipeline to Huntly was virtually finished.

Oil Industry: Total petroleum consumption in New Zealand in 1977 was actually down by 2 per cent on 1976. This occurred principally through a 43 per cent reduction in power station fuel oil consumption, largely achieved by untreated Kapuni natural gas being used at New Plymouth and Stratford power stations throughout the year.

Geothermal Energy: Commenting on the Geothermal Energy Amendment Act 1977 which had taken effect on 1 January 1978, the Ministry report reminded readers that it embraced three essential principles of Government policy: (1) ownership of geothermal bores and the management of geothermal fields should be retained by the State; (2) a landowner required a licence to investigate for geothermal energy on his property, whereas previously a licence was only required to use geothermal energy; (3) the Act made provision for approving fixed rentals and product pricing.

Other 1978 Reports to Parliament also Signalling Change in Energy

New Zealand Electricity Department: As the outgoing Minister of Electricity and incoming Minister of Energy I had the opportunity of presenting a statement to Mr Speaker by way of an introduction to the 31 March 1978 and final report of this department to the House.

This gave me the opportunity of recording the country's appreciation of the work done by the staff of the NZ Electricity Department, to be absorbed as a new department of the new Ministry of Energy, and to refer with appreciation to the outgoing department's predecessors which had served New Zealand so well over nearly three-quarters of a century -first as the Hydro-electric branch of the Public Works Department, then the State Hydro-electric Department, then the New Zealand Electricity Department.

I also paid tribute to the Electrical Supply Authorities Association which handled the distribution side of the electricity industry. At their annual conference I had raised the possibility of reorganisation by reduction in the number of electrical supply authorities. I invited association members to consider the advantages of working closely with neighbouring authorities to secure the advantages of amalgamation without surrendering their present status and identity. In suitable cases amalgamating gas with electricity retailing was also a possibility. I was able to report to Parliament that the executive of the association had responded positively and was now making relevant recommendations to Association members.

My statement also referred to the recently released Report of the Royal Commission on Nuclear Power Generation, chaired by Sir Thaddeus McCarthy, and mentioned three of its main conclusions:

1. There was no satisfactory case for New Zealand to immediately commit itself to a nuclear power programme. On present evidence the country appeared to have sufficient indigenous resources to enable it to meet its reasonably projected needs for electricity into the next century.
2. New Zealand should continue to keep in touch with developments overseas and extend its experience and understanding of nuclear technology.
3. Because change will almost certainly call for alterations to any long-term plan of electricity production, another major review should be made by at least 1985.

Committee to Review Power Requirements: Summary observation - As a result of milder weather, significant price increases and lower economic growth in the past year, consumption had not risen as fast as anticipated.

Supply increased by 1.7 per cent, industrial and commercial consumption by 1.6 per cent, and household consumption increased by 0.4 per cent.

The Committee concluded its summary with this advice:

The committee considers that the most likely forecast of generation falls between the upper and the lower forecasts, but while the emphasis in power planning is to minimise the risk of power restrictions and extensive generation from oil-fired thermal plant, the upper forecast is closer to what should be taken for capacity planning purposes in view of the uncertainties involved.

The Planning Committee on Electric Power Development in New Zealand:

Summary observation - the “most likely” forecasts of electricity during the planning period ahead enabled several new generating proposals to be deferred.

The shortfall in expected use of Maui gas was to be alleviated by placing maximum emphasis on generation of electricity from natural gas. (Remember the government was committed to the “take or pay” arrangement with Maui partners as a result of the previous Labour Government’s contract with them.)

The Planning Committee repeated its advice of the previous year when it said “New Zealand’s energy strategy must include a policy of developing indigenous self-replenishing resources first....” It advised it had weighted the many associated factors and was of the view that a policy of continuing development of hydro and geothermal resources was to be preferred.

This year’s plan featured an important item in calling for provision for a new inter-Island D.C. link. This was brought about by the renegotiation of the contract with Comalco, where automatic expansion of the aluminium

smelter would not take place, plus the heavily reduced demand estimates for the South Island. By installing extra transmission capacity between the Islands, the surplus South Island generation could be used in the North Island enabling fossil-fuel reserves to be further conserved.

The Planning Committee advised the Clutha and Ohaki (Broadlands) developments were approaching committal decisions. Preliminary work was in progress at Clyde and Cromwell for the Clutha Dam and the geothermal field had now been proven for the Ohaki station.

Mines Statement: The Mines Department statement presented to the House in 1978 embraced the Mines Statement for the year to 31 December 1977 and the accounts of State Coal Mines for the year to 30 September 1977 - perhaps a small but obvious example of how planning and management would be easier when co-ordinated under the new Ministry of Energy.

There was a downturn reported in mineral prospecting, and conflicts over land use between mining groups and conservationists appeared to be intensifying.

Coal: There were 70 mines, 33 underground and 37 opencast, in operation during 1977, the same number as in 1976. However, due to reduced sales, production for the year in 1977 was 2.36 million tonnes, down almost 120,000 tonnes from 1976. Of the total production, 27 per cent was underground and 73 per cent opencast.

Ministry of Works and Development Statement: This statement includes two divisional reports with strong energy implications; Annual Report of the Mechanical and Electrical Engineering Division, and particularly the Annual Report of the Power Division.

The Ministry was deeply involved in investigation, design and construction of civil engineering and building works for the New Zealand Electricity Department. By the time the 31 March 1978 report was tabled

- * all major design tasks had been completed for the Huntly Power Station and construction was two thirds advanced;.

- * concrete lining and finishing work in the 19-km Moawhango Tunnel had continued with the objective of filling the Moawhango reservoir by the end of 1978, thus completing the first three stages of the development;

- * for the Rangipo station, power installation design continued and was completed for the underground caverns. Roof excavation for the powerhouse cavern and downstream surge chamber was largely completed. Excavation for the upstream surge chamber was finished and concrete lining well advanced. 2.7 km of the 8 km headrace tunnel has been excavated and work was under way on the 3 km tailrace tunnel. Construction of the Rangipo diversion dam in the Upper Tongariro River continued with a quarter of the concrete already placed.

- * Work was in progress to provide additional volume in the surge tank for the completed Tokaanu station.

The geothermal programme update advised that the first of the initial six wells at Ngawha Springs in North Auckland had been drilled; two further wells had been drilled at Kawerau, one of which was productive; and a well was completed at Lake Rotakawa near Taupo to provide energy for

the proposed sulphur extraction works. Drilling work at Broadlands to assist with the plans for removing silica and arsenic from waste water continued, and pilot trials of injection into the deep formations of waste water which had not been treated or exposed to the atmosphere were most successful. The 150 MW station there would be built in two stages, the first being for one of 80 MW. The steam supply for the first stage had already been developed.

As part of a scientific exploration investigation a 600 metre well had been drilled at Upper Atiamuri, and a similar investigation programme was planned for Ruahine Springs, near Lake Rotoiti.

Assistance from the Ministry of Foreign Affairs with the bilateral geothermal aid programmes in Indonesia and the Philippines continued through the year.

For Gas Turbine Stations the Otahuhu gas turbine station civil works were virtually completed and maintenance workshop building was programmed for completion in 1979. The Stratford workshop was under construction. This complex was designed for a major overhaul of gas turbine units from Stratford and Whirinaki stations. The Whirinaki workshop building was to be commissioned in 1979.

In the Upper Waitaki hydro programme the Pukaki high dam was completed in 1977. The Ohau A power project was 55 per cent completed and commissioning was planned for early 1979.

The Pukaki Canal was now 80 per cent complete, but a shortage of skilled manpower slowed progress on Ohau B and Ohau C.

With lake control structures at Te Anau and Manapouri completed and in operation for more than a year, demobilisation of the site establishment

there and dismantling of the Manapouri hydro village was well advanced. Restoration and landscaping would be finished during 1978.

For the Upper Clutha, work was proceeding on a major rebuilding of Cromwell township. This involved building 995 houses, relocation of industries, creation of a new commercial area, new water and sewage schemes, resiting the Cromwell Bridge across the Clutha River, and realigning state highways within the Borough. Preliminary works for the Clyde Dam were approved by Government in May 1977 and initial excavation work commenced. During the year to March 1978 the Lindis Pass road upgrade was underway and contracts let for the Clyde by-pass road. Establishment work at the Clyde Dam site and the Ministry of Works and Development Clyde railhead were also underway.

The MWD statement to Parliament also recorded that statutory processes were leading to delays. The National Water and Soil Conservation Authority had granted water rights for the Clyde Dam in December 1977, but, at the time of the report to Parliament in 1978, 17 appeals had been lodged for hearing by the Town and Country Planning Tribunal¹⁶.

Report of the New Zealand Gas Council

As Minister of Energy, one of my responsibilities was to serve as Chairman of the New Zealand Gas Council.

In my report for the year ended 31 March 1978, I reported that natural gas sales had increased year on year by 15 per cent. This increase was down a

¹⁶ My late Uncle Harry Gair - one of my father's older brothers - who'd been a clothing retailer in the town of Cromwell for many years and was then still a resident of Cromwell at the time, living in the family home there in Sligo Street, became rather cross!. I clearly remember one occasion when I stepped down from the platform at a public meeting in Clyde which had been discussing Dam issues in that town, he was in the audience and was one of the first to rise and tell me what he thought of those "crazy plans" to build a high dam and flood what was Cromwell's main street. Needless to say that branch of "family relations" went through some strain for a number of years following my championing the case for the High Dam to Otago Central audiences.

little on the previous year - a levelling which reflected the tightness in supply for the time being of treated gas from the Kapuni plant.

The situation would be improved by a Government decision that the Natural Gas Corporation would progressively increase quantities available under the contract with Maui.

The manufactured gas industry was facing difficulties with rising costs and declining sales. During the year Masterton Borough and Timaru City Councils had accepted financial assistance to close their operations. Several councils were seeking assistance and actively exploring Kapuni and Maui LPG as an alternative to coal and imported naphtha as gas-making feedstock.

Report of the Natural Gas Corporation of New Zealand

This last annual report of the Natural Gas Corporation of New Zealand established in 1967 was made in 1978. The report took the opportunity to outline some of its history since founding 10 years earlier. In recent developments the report advised that the Corporation had

introduced the extraction of liquified petroleum gas in the form of propane, and had made provision for expansion into butane as demand grew. It had extracted natural-run gasoline (white spirit) which was being supplied to east coast undertakings as a feedstock, and was currently trialling the use of this material as a motor vehicle fuel when combined with methanol.

The negotiation of a deal with the New Zealand Electricity Department for the burning of unprocessed Kapuni gas in the New Plymouth thermal power station, in lieu of imported oil, and pending the delivery of Maui gas, had greatly improved the corporation's financial circumstances. Gas so burnt would be replaced from the Maui field in the years ahead.

The report concluded on this note:

The corporation looks forward with confidence to its role as an operating subsidiary of the Government's newly formed Petroleum Group of Companies.

Report of Department for Scientific and Industrial Research (DSIR)

The increasing importance of energy matters to New Zealand was reflected also in the work of the DSIR.

It had been deeply involved in assisting the work involved in the two major investigations into the place of nuclear power in New Zealand following the 1973-74 energy crisis. These were the Sir Malcolm Burns's Fact-finding Group which reported in late 1976, and the Royal Commission chaired by Sir Thaddeus McCarthy, which heard submissions in 1976 and 1977.

The need to learn much more about the size and nature of the nation's energy resources meant energy research and development received much greater attention. This led to a nearly four-fold increase in the rate of geothermal investigation and drilling, and to the launching of a Government onshore petroleum exploration programme.

At the end of 1977 there were 23 petroleum prospecting licences in operation covering just over 500,000 sq kms of land, territorial sea and continental shelf compared with just over 600,000 sq kms at the end of 1976.

Off shore it was a challenging year in the Roaring Forties for drilling in the Great South Basin. At Pakaha-1 the Sea Hunt Group with 40 per cent Government finance drilled to a total depth of 3359 m (subsea). No petroleum of significance was discovered. At Kawau-1A again drilling by

the Sea Hunt Group with 40 per cent Government finance drilled to 3795 m (subsea). Testing proved the existence of gas and small amounts of condensate, but in non-commercial quantities. These drilling efforts were up to 240 kms from shore.

On shore: Drilling of two wells (Aratika-2 and Aratika-3) near Lake Brunner in Westland produced no significant discovery with similar disappointment at Moturoa.

Maui: Although particularly bad weather caused unplanned delays to work at the Maui-A field, the work was progressing well with both the drilling platform and the offshore gas pipeline.

In conjunction with the old Mines Department (which became part of the new Ministry of Energy immediately following the period covered by the DSIR's March 1978 report), DSIR were involved in coal prospecting, coal geology and characterisation/ classification of New Zealand coals. Over 250 new holes were drilled in the Waikato region and major drilling was carried out in the lignite areas of Southland.

I have included brief references to quite a number of the 1978 departmental reports to Parliament which had relationships with energy. These, and the references made by the budget that year, have been included in this thesis chapter because they help to show how coverage of energy was developing in scope, in content, and in the emphasis being placed on more cohesive planning and increased action.

There was a positive quality or mind-set which was starting to show through. Energy was becoming more important in the establishment's thinking and the public's expectations. And talk and more talk was clearly not enough. Actions were needed - and at last actions were becoming more evident, and being treated more urgently.

Chapter 8

Summary and Conclusions

Factors Guiding the Political/Administrative Relationship.

Professor Matthew Palmer (then Dean of Law at Victoria University) described three constitutional conventions which guided the relationship between the political and the administrative arms of government.

- * individual ministerial responsibility;
- * collective cabinet responsibility;
- * public service loyalty, neutrality and anonymity¹⁷.

It was in this environment that I served as a Minister of the Crown and therefore it is against this background my account of my experiences and the lessons learned should be weighed and evaluated.

Major factors in effecting changes since my years in office have included:

- * The Official Information Act 1982.
- * The State-Owned Enterprises Act, 1986.
- * The State Sector Act 1988;
- * The Public Finance Act 1989;
- * The Fiscal Responsibility Act 1994;

¹⁷ James, *The Tie that Binds* (7).

* The introduction of MMP in 1996.

The impact of some of these measures did not emerge in a significant way for some time in the case of the Official Information Act. The impact was much more immediate in the case of several of the other measures, and in the case of MMP is still evolving with the formation of each new coalition government.

I stress to make the point, however, that notwithstanding the changes that have occurred subsequently, the lessons I learned from my experience still have much validity, for the human relationship factor still, and always will, remain a critical element in making systems and management function effectively - and especially in managing them through the process of change.

So what have I learned about managing change?

That's a fair question, but it doesn't have a straightforward answer. And why? Because every challenge in managing change is different from every other, and has its own special characteristics.

Let me, in summary fashion, explain from the responsibilities referred to under "Scoping", in chapter 4, and analysed in much more detail in exploring my experience with "Energy" in chapters 5, 6, and 7.

Education:

The decade of the 1960s saw many changes in education, triggered by a variety of causes. Two of the more important were the post World War 2 "baby boom" influence on school populations, compounded by healthy aspirations to improve literacy and learning across the growing generation at all social and economic levels; and the Rt Hon Keith Holyoake's keen influence to lift spending on education as a percentage of GDP, and the

rather uneven adoption of the recommendations in the Currie Commission report - grasping the more generous proposals in the early years and leaving the more restraining or less popular ones until later in the decade.

This approach to the priorities had been interpreted by teacher unions and many elements of the then education administration infrastructure as a opportunity to do some welcome “cherry picking” and leave the harder parts until later. When that is done, the initial uphill rise is welcomed, but the following downhill produces its tensions and resentments.

The lesson from this experience is surely that it is better to explain the whole story as effectively and openly as possible from the outset, so that the welcome pieces, and the not so welcome, are both recognised and understood from the beginning.

Customs:

My experience as Minister of Customs in the Government of Rt Hon John Marshall would surely rank in my memory as one of my most frustrating challenges.

I inherited a tightly managed licensing system across almost the entire importing field. Application for a permit to import, and administrative review of each case against the then licensing structure using clearly detailed and compulsory procedures, ruled the day. Those with importing or “Made in New Zealand” protection privileges wanted to hold firmly to the then status quo.

The unwillingness to contemplate change was like a brick wall in the mind-set across both the bureaucratic structure administering approvals and processes and the then existing importing and manufacturing sectors of the business community.

The Minister of Finance, Rt Hon R.D.Muldoon, in his Budget in 1971, had advised there would be a reassessment of all import licensing during a forthcoming three-year review. But it was an intention indicated without the ground being prepared adequately and the longer-term intentions sold effectively. It was interpreted as a threat to the existing manufacturing and importing establishment - particularly manufacturing - with very inadequate public relations and presentation. It came as a surprise - and to many a very unwelcome one!

There had been no remotely adequate preparation for such a review. It immediately grew into a conflict between the defenders of the then status quo, and the knight in shining armour carrying the torch of change who disappeared from the battlefield after his first and very temporary appearance. The result: I spent my time in charge of Customs trying to put out political bush fires sparking all over the countryside.

The lesson learned should come under the heading of: “how *not* to do something”. History tells us that later governments were more aware of this problem. “No surprises” within the government, and Holyoake’s campaign message to the faithful of “tell the people, trust the people”, were strategies that gained a considerably wide, and at least publicly expressed, endorsement.

I believe my experience and frustration during this period played a big part in my approach to promoting and selling the need for change in later portfolio responsibilities.

Housing:

The change challenge I faced under this heading as Minister of Housing can be summarised in one sentence: How to pull back the rate of housing construction to better match the funding available?

In the run up to the 1975 general election, the Labour Government had allowed its Housing Minister to authorise group housing projects considerably larger than the funds they were providing. Of course the real cost catch-up wouldn't happen until after the election!

Housing output was approaching one third higher than financial provision for it.

It was naturally a major disappointment to the building industry to be told to "pull back". It was a course the industry felt it had to fight. The question was how!

From my point as Minister, it was a question of how to give the building industry a dose of necessary medicine with a very nasty taste, and do so without a damaging political fallout for the Government, and without serious damage to the building industry and associated supply and service industries. A phasing down, a gradual application of the brakes, was called for, but it couldn't be too drawn out because the bills would still have to be paid. With too much delay, penalties would compound the money problem.

In chapter four I refer to "one critical meeting" I had with the building industry executive. Of course it was not the only meeting I had with them - as a group and as individual builders. I had quite a number of meetings, and I had to handle my message and my relationship with those key contacts extremely delicately, and laying out facts and reasoning from my perspective in a sad, sorry, disappointed and consoling way.

Mercifully, the key stake holders I found to be mature, reasonable men, who could see the problem - unpleasant though it might be for them to address. The "people factor" in addressing this challenge for change was hugely important, with far more spoken quietly behind the curtains than was addressed publicly from on stage.

Finance:

My Deputy Finance responsibilities were held concurrently with Housing. In this role my task as the pruner and trimmer of budget requests was not unlike my need to pull back and contain expenditure in Housing - but the setting and the stake holders were very different. In Housing, the important communication relationships were principally with the industry's leaders.

Describing it as "communication relationships", I mean this in its wider sense. It involves question and answer, listening and learning, proposing and counter proposing. It involves accepting some ideas and rejecting some and importantly knowing which to accept and which to reject. It involves learning when best to make a point and when best to pause and hear the other fellow's. It involves oral and written communication. It involves the visual and the body language. It involves knowing when to step forward and stand your ground, and when to withdraw, or when to step aside. It involves when to be visible, and when to be invisible.

In handling funding restraints and budget pruning as Deputy Finance Minister, my key contacts were colleague ministers and senior departmental staffs. I had to play the part of trimming hopes and dashing dreams, and do so as good naturedly and sensitively as possible, remembering always that although the outcome of my efforts would be measured as simple money cutting, the implications involved policies, plans, people's jobs, public services, and social, economic, and community well-being issues.

In their own special ways, these implications had strategic as well as financial consequences. I had to have regard for the outcomes, and not just the outputs of my imprint on the budgeting reviews I was making.

I do not believe I would be exaggerating to say that from each of my successive responsibilities I learned valuable lessons of what, and how, and when, and why, which proved useful in tackling the next responsibility.

There is a phrase which has entered the language in recent decades which might help to explain this process of building on lessons learned. This phrase is “institutional memory”. In other words, the body of knowledge acquired through experience in a certain company, or industry, or discipline. It is knowledge learned rather than taught. Indeed one might say, knowledge which cannot be taught but which can only be learned through experience. But there is an important proviso, i.e. that experience must be understood, evaluated, and remembered, to avoid the condition described so well by a further wise phrase in our language: “Re-inventing the wheel”. What a futile exercise that can be!

Energy:

The challenges in the change process I needed to manage in Energy were yet again as different from those I’d tackled before as chalk from cheese. If they looked rather similar, they certainly weren’t in scope or character.

The root of the problem, or the plural “roots” would be much more accurate, were partly international (as a consequence of the first oil price shock of 1973-74), partly a consequence of changing technologies and resource development, and most certainly and in large part a result of the lack of cohesion and effective structure in the Government’s management, control, and planning. There was an essential need to bring a very disparate range of entities and interests together in a better understanding of the problems, the options, and the course to follow.

Appendix B, headed “Organisation of the Energy Sector in New Zealand”, and which I feel would have been much more appropriately headed

“Disorganisation of the Energy Sector in 1977”, gives some idea of the organisational problem which had to be addressed.

So many and so varied were the interests and affected parties which had to be “brought on board” in the nation’s efforts to repair the problems, restructure the sector, and give a sense of unity and purpose to the way ahead, that I believe nothing short of a major rethink and understanding - not just by Government, but also by the many and scattered elements of the sector - was essential. And to be really effective, a widespread understanding by the media and the public was also required if the challenge was to be met and mastered.

It was with a compelling belief in the importance of working with informed interests and participants, and of reaching out to Mr and Mrs New Zealand to appreciate what was needed to be done, and how, that I came up with the idea of “Goals and Guidelines, an Energy Strategy for New Zealand”.

The country’s energy problems were serious - and were starting to hurt in many places and ways. The political mandate as a policy intention to address energy organisation within government had been set out in the 1975 National Party election manifesto.

Labour, when in Government from 1972-75, had talked in similar fashion. But by 1977 there had been lots of talk by both Governments, but no adequate action. I worked on raising push to shove through the middle of 1977, and with the able help of key people in the relevant Government departments and in energy-related commercial activities, the change process got started.

Expectations were raised, but they had to be informed and focused. Again, this is where “Goals and Guidelines” and the responses it generated proved

so helpful. With an informed public, a Government can make a lot more progress than with an uninformed or inadequately informed one.

The slogan “Think Big” became the flag standard for the National Government’s energy programme following the 1978 General Election and the response to the second oil price shock of 1979. This slogan appeared after Hon Bill Birch had succeeded me as Minister of Energy and I had moved to Health and Social Welfare. Although produced shortly after I left Energy - and all credit to Bill Birch for promoting the concept - I do believe the changes I achieved, and others which I had introduced and were on their way, provided the building blocks upon which “Think Big” could achieve its credibility and strength.

Health and Social Welfare:

My move from Energy to Health and Social Welfare was another major change, not just in subjects, but in the nature of the challenges I faced.

Where as in Energy, the whole Government infrastructure needed rearranging and co-ordinating, the structures in both Health and Social Welfare were quite well-functioning entities. They certainly had their full share of problems, but the structures themselves had good people in key positions, both in relevant departments and in the hospital board system which then spanned the country. I also found well-motivated people in the medical disciplines and the social service organisations and networks then in place.

Social Welfare, a major problem which had surfaced in the situation I inherited was the link between the commitment to peg national superannuation at 80 per cent of the average ordinary time weekly wage which had been unintentionally operating to match the before tax figure instead of the after tax figure.

A legislative change to correct this was required. It was achieved without too much anguish because by the time Parliament had changed the payment figure from before tax to the intended after tax, the before tax figure had climbed over the nearly four years since the Act had first been introduced to something over 90 per cent. It was apparent to all but the most stubborn superannuitants that this was not a fair deal for the taxpayers who had to finance it.

Health is a portfolio which, by its very nature, will always carry its full share of problems. During my three years, however, there was a major one I had to address in my first few days in the job. The Health section of the Scoping chapter (chapter 4) backgrounds the problem in some detail. Essentially it arose from two factors; the first, the Prime Minister's resolve (Rt Hon R.D.Muldoon), in his capacity as Minister of Finance, to trim the Health budget for the forthcoming year by 1 per cent; the second, Treasury, the Department over which Muldoon had direct control, provided a detailed proposal to me as Minister of Health, and tabled at the first Cabinet Committee meeting responsible for screening health policy and performance, as to how they believed that should be achieved.

The chapter 4 report advises how and why I accepted the first factor (1 per cent cut in real terms) and in so doing managed to avoid accepting the second.

In analysing the problem I was now presented with, I found that health funding policy was a mess. In fact it hadn't existed as a clear, rational and balanced policy for many a year. Rather it had reduced itself to a question of accepting what was done the previous year as each year's starting point and then throwing more money at those places where politically difficult wounds were starting to surface. Over time, past distortions grew, imbalances became exaggerated, and health funding policy became a

nonsense. Out of this growing mountain of problem and unevenness, commonsense called for a new start and a fresh approach. And from this, the concept of population based funding was born. It required qualification, of course. Weightings up or down were built in for such factors as age, ethnicity, geographical isolation, specialist services, and a timetable for phasing in the changes.

Sudden changes would produce real problems in many places, and divide the health sector into warring tribes. To achieve the radical changes I had in mind, I had to work hard to keep the peace among the various factions and win support with sensitive and reasoned presentation of the case for change, and the how to achieve it.

In money terms, the new proposals would bring winners and losers. Changes had to be handled sensitively, and backgrounding, explaining, keeping a finger on the pulse for sensing reactions, were all part of the exercise.

I was greatly helped by the quality of the key people in the key places. They could appreciate the problem. They could see the fairness trying to be achieved in the proposed changes. The targets were in most instances achieved.

My thesis refers in several places to the “people factor”. In handling this sea change in Health financing, the “people factor” proved to be a vital ingredient. The 1 per cent cut in real terms was achieved, and achieved again in each of the following two years. The financing approach of earlier days of throwing money at the problems and hoping they would go away had built in so many distortions that there was scope for these reductions without adversely affecting health standards.

Population based health service funding proved a major change at the time, but its essential qualities have been maintained notwithstanding quite a number of administrative and policy changes in the years since my time in Health, and I believe they have done so, because its essential components are based on commonsense and fairness.

Transport:

The Transport, Railways and Civil Aviation group of portfolios I held for the three years 1981-84 were also notable for the major changes managed in that time.

In the case of aviation, the period covered the settling down of the merger between National Airways Corporation and Air New Zealand, and the aftermath of the Erebus Crash, both matters which had occurred shortly before I became Minister of Civil Aviation. In my time as Minister we embarked upon a major re-equipment programme and extended our international operations to Britain and Europe.

In the case of ports and maritime matters, the maritime division of the Transport Department developed a major review of port operation and management which was timed to be published and circulated shortly before the 1984 general election. Our efforts in this regard were frustrated by Muldoon's call for the snap election in July, so the publication surfaced after Labour had become Government. Perhaps I could take some satisfaction in finding that the port recommendations developed but not promulgated in my time as Minister were adopted and applied by my successor, Hon Richard Prebble.

The legislation to change the management of railways from departmental to government-owned corporation had been passed by Parliament before I

took over the portfolio, but the setting up of the corporation became my responsibility.

It was in road transport the changes began with me, and turned a tightly regimented, railways dominated, land transport scene into a much more efficient and cost competitive one. To cope with the magnitude of the influences flowing from the change I arranged to have the change phased in with three steps over three years. Again, the 1984 snap election took place when the phasing change had only been partly completed, but again the Labour Minister following me continued the initiatives I had launched.

The management of change during this period in my Cabinet experience involved a wide and diverse range of interested parties - from the parliamentary and party political to departmental and commercial, from business associations and farmer lobbies to unions and local bodies, from motorists and public transport operators to their passengers and the media. The whole community was affected. It was important to work as openly, as fairly, and as patiently as possible.

The more diverse and wide ranging the matters involved, the more important it becomes to manage change in ways that come as close as possible to what an informed public could be persuaded to accept. And to achieve that level of information out there in the public domain needs a well-reasoned presentation of the case for making the change, and this needs a good working relationship with the media and the leading voices associated with the major interest groups affected.

As those who have done this and achieved reasonable success would say, I'm sure, it's no easy task. It's a great challenge, which can produce its full measure of frustration, hurt and disappointment. But by not giving up,

keeping one's cool, and appealing in the right way to the key people and groups, progress can be made, and the challenge met and mastered.

Conclusions

What conclusions should I arrive at having been involved in such a range of very different experiences over more than a decade in Managing Change as a Minister of the Crown?

There are a number of lessons I learned. Some may be obvious. Some less so.

1. There is no formula which will fit every case. Every case had its own particular features and the reasons requiring changes to be made are largely different in each case.
2. The response to the need for change also varies with each case because it must be shaped to answer the special needs of that case.
3. When the nature of the answer needed is determined and planned, the action to implement it must be determined by the best way of achieving that answer in the circumstances of each case.
4. In the course of handling the management of the change process, some aspects of an earlier case may have relevance, and experience wisely applied can help. Sometimes the experience may point to what may work, and sometimes point to things to avoid raising or doing.
5. The only feature which had a notably common feature I found to be what I would call "the people factor". Every case involved dealing with people - those with you in the action, those who will be affected by your intentions, those who won't be but imagine they will be,

those with voices representing stakeholders, the media in its widest sense, those in the political and legal arenas. On some issues of change, the list is almost limitless.

6. Just as every cause for change, and the nature and manner of the change, can differ one case from another, so in dealing with people I found that every person can present features of response and behaviour different from his neighbours, or his workmates, or his business partners - or even his marriage partner.
7. Individual personalities may or may not be important in the wider scene, but in those close to you, working with you or against you, and those with important parts to play in the change process, finding ways to get the best performance and co-operation - or alternatively ways to minimise the opposition to your endeavours - are worth special attention.
8. My experience in managing change as a Minister of the Crown has been confined to New Zealand -with a democratic governmental structure, a legal system based on the British model, mercifully free from rigid class groupings, corruption and divisive religious philosophies, a geographically small country, a generally literate and relatively small population, with a mix of ethnicities and by international standards a good record in race relations, English speaking, and still retaining some of the innovative and valuable qualities of a colonial pioneer society with a help-thy-neighbour, do-it-yourself, can-do attitude, and Jack's-as-good-as-his-master approach to life. Common sense, fair play, and a sense of humour still count as social and personal virtues.

9. My own experience tells me that one of the fastest ways to destroy your case and generate hostility to one's intentions is to wrap them when presenting them to the public with the packaging and language of the fundamentalist approach. The pragmatic, the reasonable, the sales pitch devoid of overstatement or excessive hype, fits much better with the average New Zealander. The ideological, the excessive, the obviously exaggerated, are seen as unwelcome intrusions in "God's Own".
10. Reflecting on the "people factor", I offer a list of thoughts which I believe served me well, particularly in dealing with key people close to the action, either in one's own departmental or political team, or among the key interest groups closely linked to the changes you might be endeavouring to achieve. They are thoughts, I confess, I no doubt did not live up to in every circumstance, or in full measure, and all of which I realise must be tempered, applied and timed by circumstance:-
- Show respect, and expect respect.
 - Show trust, and expect trust.
 - Speak courteously, and expect courteous speech in reply.
 - Find the things they feel are important. Don't downgrade them or belittle them, even if you must disagree with them.
 - Win their support on the things you feel are important, and seek their advice on how to achieve those things.
 - If you must disagree with them, always do so graciously.

- If you must correct them, do so privately.
- Never - unless there is a very good reason for doing so and which fortunately I can't recall ever having to do - never, never criticise or belittle your officials in public.
- You want their loyalty. You, as minister, have to earn that loyalty.
- They're human beings - with wives, families, personal feelings, worries and responsibilities, too.

The essence of my conclusions boil down to essentially this:

- Speak to, and work with, people the way you would like them to speak to, and work with, you.

That way you will maximise their value to you in your endeavours to Manage Change as a Minister of the Crown. The “people factor” will often prove the key to your chances of success.

Appendix A

Portfolio Responsibilities held by Hon George Gair

During the latter years of Rt Hon Keith Holyoake's Government from the restructuring of the Executive following the General Election late in 1969 to the National Party's leadership change in January 1972:

- Parliamentary Under Secretary to the Minister of Education
- Parliamentary Under Secretary to the Minister of Science

During the period Rt Hon John Marshall was Prime Minister from the Party's leadership change in January 1972 until National's defeat in the general election late in 1972:

- Minister of Customs
- Assistant Minister of Finance
- Minister in Charge of Publicity
- Minister In Charge of the Public Trust Office
- Minister in Charge of the Government Life Insurance Office
- Minister in Charge of the State Insurance Office

- Minister in Charge of the Earthquake and War Damage Commission
- Minister in Charge of the Weather Office

During the full period when the National Party was Government under Rt Hon Robert Muldoon as Prime Minister, from immediately following the general election late in 1975 until Nation's defeat in the snap election in July 1984.

From late 1975 to early 1977:

- Minister of Housing
- Minister of Regional Development
- Deputy Minister of Finance

From Early 1977 to April 1978

- Minister of Energy Resources
- Minister of Electricity
- Minister of Mines
- Minister of National Development
- Minister of Regional Development

From April 1978 until after the general election late in 1978

- Minister of Energy
- Minister of National Development
- Minister of Regional Development

From late 1978 to the reshaping of Cabinet following the 1981 general election.

- Minister of Health
- Minister of Social Welfare

From late 1981 until the snap election in July 1984

- Minister of Transport
- Minister of Railways
- Minister of Civil Aviation

In none of these responsibilities did I have assistance in the form of a Deputy or Assistant Minister or a Parliamentary Under-Secretary.

Appendix B

Flow chart

See A3 insert.

ORGANISATION OF THE ENERGY SECTOR IN NEW ZEALAND on 1977
(or what I would better describe as the "Disorganisation of the Energy Sector in 1977")

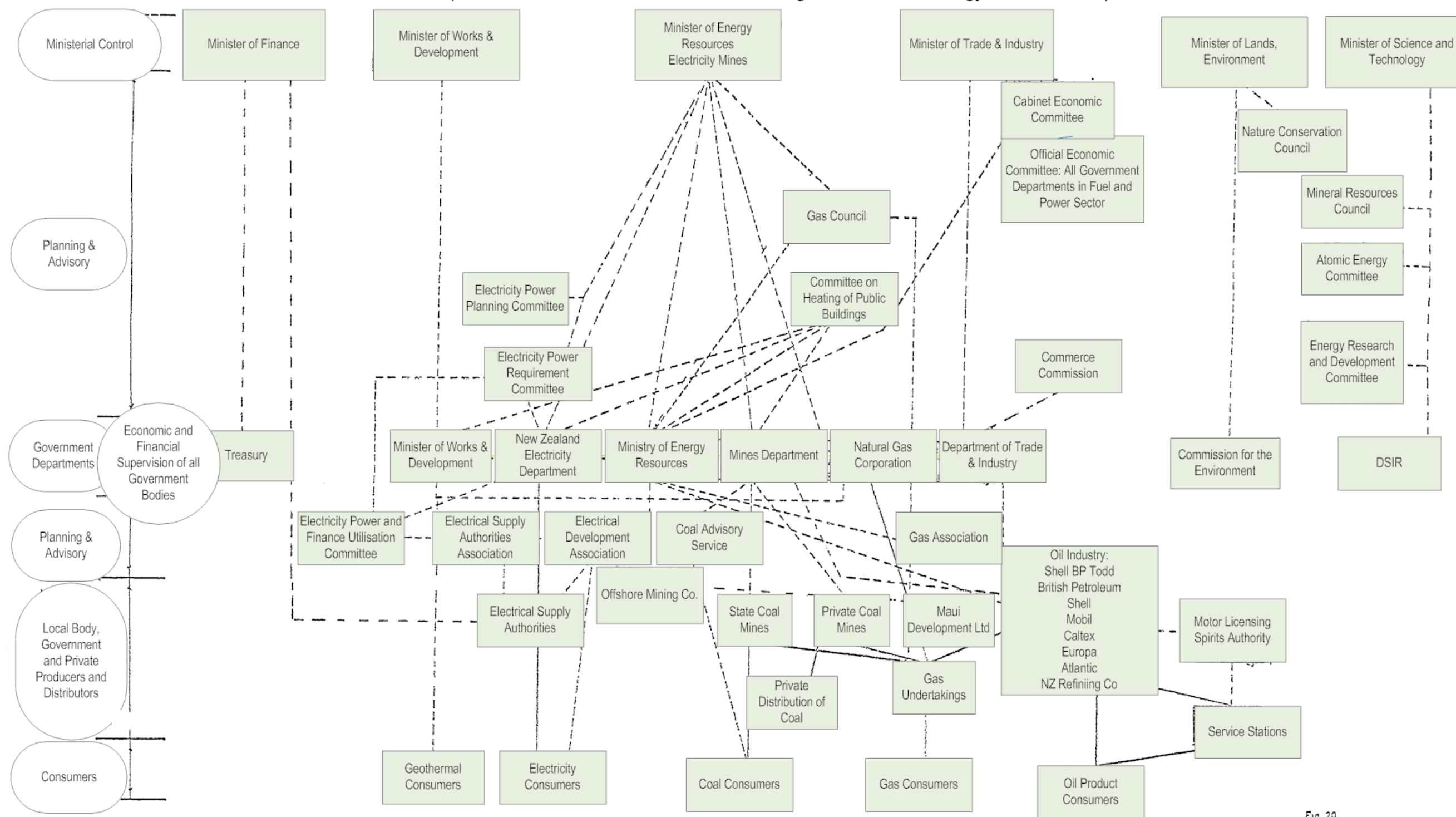


Fig.20

References

- Becker, H. (1986). *Writing for social scientists*. Chicago: University of Chicago Press.
- Busse, S., Ehses, C, & Zech, R. (2000). Collective research in autobiography as a method of the science of the subject. *Forum: Qualitative Social Research*, 1(2).
- Colitti, Marcello. and Baronti, Paolo. *Energy Policies of Industrialized Countries*, paper presented at the First Arab Energy Conference, Abu Dhabi, March 1979
- Gair, G. F. (2004). Muldoon and Cabinet. In M. Clark (Ed.), *Muldoon revisited* (pp. 55-57). Palmerston North: Dunmore Press.
- James, C. (2002). *The tie that binds: the relationship between ministers and chief executives* Wellington: Institute of Policy Studies, Victoria University of Wellington.
- King, M. (2003). *The Penguin History of New Zealand*. Auckland: Penguin Books.
- Martin, John E. (1998). *People, Politics and Power Stations*: Dept of Internal Affairs, History Unit.
- Merton, R. (1988). Some thoughts on the concept of sociological autobiography. In M. W. Riley (Ed.), *Sociological Lives* (pp. 17-21). Newbury Park: Sage.
- Mitchell, A. (1969). *Politics and people in New Zealand*. Christchurch: Whitcombe and Tombs.
- New Zealand, M. o. E. (1978). *Goals and guidelines: An energy strategy for New Zealand*: Minister of Energy.
- Ribbens, J. (1993). Facts of fictions? Aspects of the use of autobiographical writing in undergraduate sociology. *Sociology*, 27(1), 81-92.

- Roberts, J. (1987). *Politicians, public servants and public enterprise: restructuring the New Zealand government executive*. Wellington: Victoria University Press.
- Shirley, I. (1994). Social policy. In P. Spoonley, D. Pearson & I. Shirley (Eds.), *New Zealand society: a sociological introduction* (2nd ed., pp. 130-145). Palmerston North Dunmore Press.
- Shostak, A. (1988). Personal sociology: Making a case for the autobiographical voice. *Sociological Viewpoints*, 4(2), 1-30.
- Stanley, L. (1993). On auto/biography in Sociology. *Sociology*, 27(\), 41-52.
- Tenni, C, Smyth, A., & Boucher, C. (2003). The researcher as autobiographer: Analysing data written about oneself. *The Qualitative Report*, Vol 8, No. (March). Retrieved from <http://mams.rmit.edu.au/ax33gbi56nuy.pdf>
- Tolich, M., & Davidson, C. (1999). *Starting fieldwork: An introduction to qualitative research in New Zealand*. Auckland: Oxford University Press.
- Vowles, J. (1994). New Zealand society. In P. Spoonley, D. Pearson & I. Shirley (Eds.), *New Zealand society: a sociological introduction* (2nd ed.). Palmerston North: Dunmore Press.

ⁱ *Goals and Guidelines: An Energy Strategy for New Zealand, public discussion draft*