



# **BUSINESS SURVEY**

November 2006

## **Featuring**

Regional Activity Predictions  
Alternative Energy and Energy Conservation: Use and Views

Report prepared for  
**Venture Taranaki**

By  
Red Eye Limited

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## 1.0 Executive Summary

This report summarises the results of Venture Taranaki's six-monthly survey of Taranaki businesses. Its purpose is to monitor the local economic climate and key issues that affect businesses. The survey was sent to 1000 Taranaki businesses reflecting a cross-section by industry type, location and size. A total of 221 businesses participated in the survey

In terms of the NZ economy, the majority of business respondents are anticipating the status quo will prevail (54.5%), 21.4% anticipate deterioration whilst 19.1% expect improvement. This reflects a small but heartening improvement in confidence by local businesses from the last survey undertaken six-months previously.

In terms of industry-specific conditions, the majority of respondents (44.3%) anticipate the economy will remain the same, 33% anticipate improvement whilst 20.4% predict a decline. This is a more positive result than the outcome taken six-months ago. The oil and gas industry appears the most optimistic sector, as well as those in the retail/wholesale industry, restaurant and accommodation industry. Businesses based in New Plymouth are more optimistic than those in Central or South Taranaki.

The majority of respondents anticipated employment levels will remain the same in the coming six months. A total of 24.2%, however, anticipate increasing staff numbers. Businesses operating in the oil/gas industry, as well as manufacturing, construction and restaurant/hospitality appear more likely to be taking on new staff, relative to other industries.

Businesses were also asked for their views on energy conservation and the use of alternative energy. Respondents thought the issue of energy was an important one. Only 2.3% of respondents said it wasn't important.

Approximately 33.6% of respondents said they were totally aware of the energy costs within their businesses, and had systems in place to monitor this, whilst 50.4% said they had a reasonable knowledge of such costs.

A total of 31.7% of responding businesses had energy conservation/alternative energy initiatives in place within their business. Most of these were small, simple, yet beneficial initiatives such as changing light bulbs to a lower wattage and/or replacing them with more energy-efficient types of bulbs, turning off machinery, lights etc when not in use, using timers for heating and use of insulation etc. Approximately 83% of these businesses also did recycling. Paper, cardboard and plastics were frequently cited as products recycled by Taranaki businesses.

However the majority of respondents (60.4%) stated they would consider changing to an energy supplier who used renewable energy – many commented that the move was highly dependent on the cost-benefit of the change.

Furthermore 50.9% of respondents said they were willing to invest/change to more renewable energies but only if the effect was cost-neutral. 27.1% of respondents however were willing to change if costs were up to 5% higher than their current source. A further 7.9% said they would change if costs were up to

15% higher but only a very small percentage (0.9%) would change if costs were 25% higher than their existing source.

Cost-benefit was clearly an important consideration for businesses in any energy conservation/alternative energy decision. The payback/financial return of the investment ranked ahead of Government incentives or a moral obligation to change.

In terms of Government policy, businesses believed that a strategy to encourage adoption of energy conservation/renewable energies should be predominantly based on a carrot versus stick mentality and include financial assistance.

- Virtually all respondents (94.4%) believed the Government should provide incentives to promote use of alternative energy and/or conservation.
- 80.7% of respondents believed the Government should reward low energy users.
- 54.4% of respondents believed the Government should not penalise high energy users. However views on this matter were relatively split; 45.6% stated they should be penalised.
- 93.9% of respondents believed the Government should subsidise alternative energy technologies to encourage use and adoption.
- 91.2% of respondents believed the Government should reward companies who reduce their use of energy.
- A total of 77% of respondents were against a carbon tax.
- Virtually all respondents believed the Government should act on energy conservation/alternative energy use issues. 98.9% felt that 'doing nothing' should not be an option.

Finally, businesses were asked if they would be potentially interested in an opportunity to invest (personally or via their business) in a Taranaki-based renewable energy initiative that had a 15-year payback. A total of 69% indicated they would be.

## 2.0 Introduction

Venture Taranaki is a world-class Economic Development and Regional Tourism Agency founded by the New Plymouth District Council. Established as a charitable trust with a private sector board, Venture Taranaki provides a strategic and focused approach to developing the Taranaki economy. Its purpose is to foster a dynamic and innovative economy which assists regional development, tourism and sustainable wealth creation in Taranaki.

The Taranaki Business Survey has been conducted twice a year since 1999. Its function is to monitor trends, identify key issues affecting the growth of Taranaki businesses and provide timely, accurate and valuable information for Taranaki businesses and stakeholders.

This research report has been independently analysed and prepared for Venture Taranaki by Red Eye Limited.

Venture Taranaki would like to acknowledge the New Plymouth District Council for its support with this initiative.

## 3.0 Methodology

The Venture Taranaki Business Survey is undertaken every six months in May and November. Survey forms are mailed out to 1000 Taranaki businesses throughout the region. Survey recipients were randomly selected from the New Zealand Business Directory Database (UBD), phone directory and Venture Taranaki client database, and considerable effort has been dedicated to ensuring the sample is representative of industry sector and geographic location. The survey questionnaire comprises two sections - a standard economic/business section and a special topic section. The special topic for this survey focused on the practices and views of Taranaki businesses concerning energy conservation and alternative energy.

As at February 2004 there were 8111 businesses operating in the Taranaki region (Statistics New Zealand). The distribution of businesses across Taranaki districts is detailed below:

**Table 1: Taranaki Business Population**

<b>District</b>	<b>Number of Business Operating</b>	<b>Percent of Taranaki Businesses</b>
New Plymouth	5,398	66%
Stratford	730	9%
South Taranaki	2,003	25%

The survey sample is reflective of the sub-regional business distribution between the New Plymouth, South Taranaki and Stratford Districts. In addition to business location, surveys were distributed in proportion to industry type.

In total 221 completed survey forms were received by the close-off date. This equates to a response rate of 22.1 percent. The survey aims to achieve a confidence level of 95 percent (plus or minus five percent) that survey results are representative of the entire Taranaki business population. This outcome is dependent on the willingness of participants to complete and return the postal survey forms. As analysis throughout this report is, in parts, broken down by industry sector and district, it should be highlighted that the 95 percent plus or minus five percent confidence interval is relevant to overall results and not at industry and district level (see appendix for confidence intervals at variable levels). Due to the larger interval at variable level, care should be taken when interpreting some results.

## 4.0 Respondent Profile

Of those businesses who responded to the survey, 66.9 percent were located in the New Plymouth District, 18.4 percent in South Taranaki and 7.4 percent in Stratford. A total of 6.9 percent of businesses operated from branches located throughout Taranaki (or didn't identify a location). These proportions are in alignment with the required representative samples.

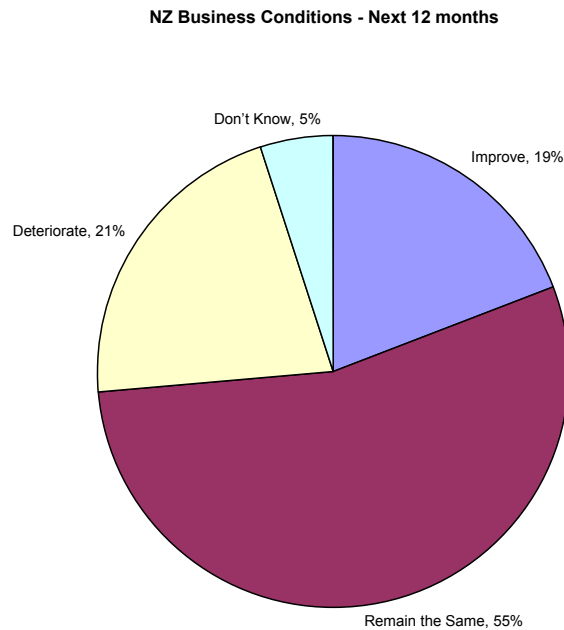
A total of 23.9 percent of respondents considered their primary business operation as 'retail and wholesale trade', while 13.3 percent reported they operated in the 'property, business, finance, insurance services' sector. A further 12.4 percent identified themselves as 'manufacturing' businesses, 9.6 percent in community/Government services and 13.3 percent as building/construction. All other industry sectors each comprised less than 10 percent of respondents.

The majority of businesses (36.7 percent) reported having between one and four staff, 26.9 percent had between five and nine staff, and 18.3 percent had between 10 and 19. The remaining 18.48 percent of businesses have 20 or more people working in the business.

## 5.0 Economic Findings

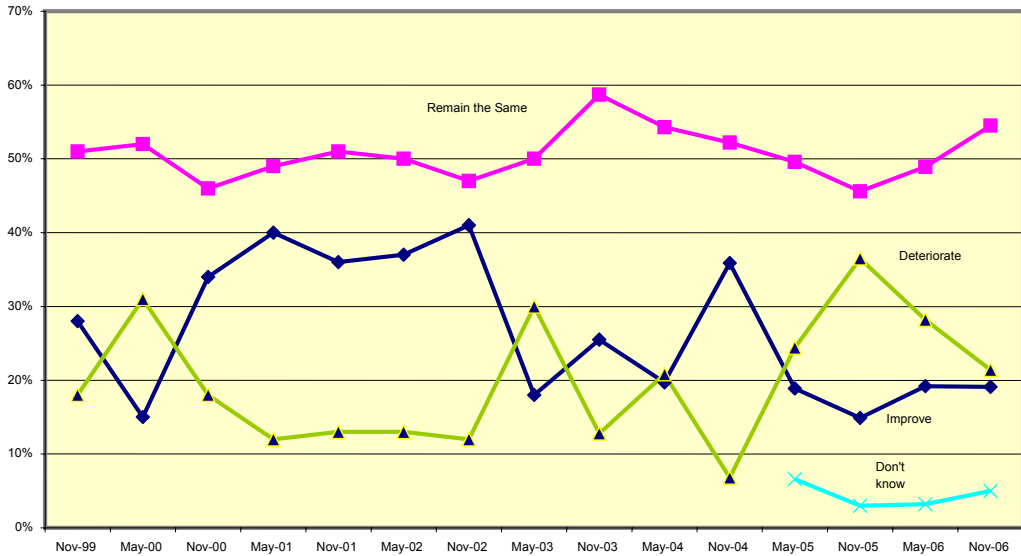
### 5.1 New Zealand Wide Business Conditions

Respondents were asked to predict the general business outlook for New Zealand over the next 12 months. The majority of responding businesses (54.5%) predicted that general business conditions in New Zealand would remain the same. However, a reasonable proportion anticipated conditions would deteriorate (21.4%) and 19.1% believed the New Zealand economy would improve.



This reflects a small but heartening improvement in confidence by local businesses in the national economy, from the last survey (taken six months previously). More businesses believe that the economy will remain stable or improve, and less anticipated a slowing in the economy relative to six months ago. Around 5% of respondents reported they did not know.

**NZ Business Conditions**



When analysing results by district, slightly higher levels of optimism were indicated by respondents based in New Plymouth District (21.1 percent) and Stratford (18.8 percent) on the basis of percentage of respondents anticipating an improvement in economic conditions on a national basis, whilst those in South Taranaki appeared more cautious.

**New Zealand-Wide Conditions: Predictions for the Next 12 Months by District\***

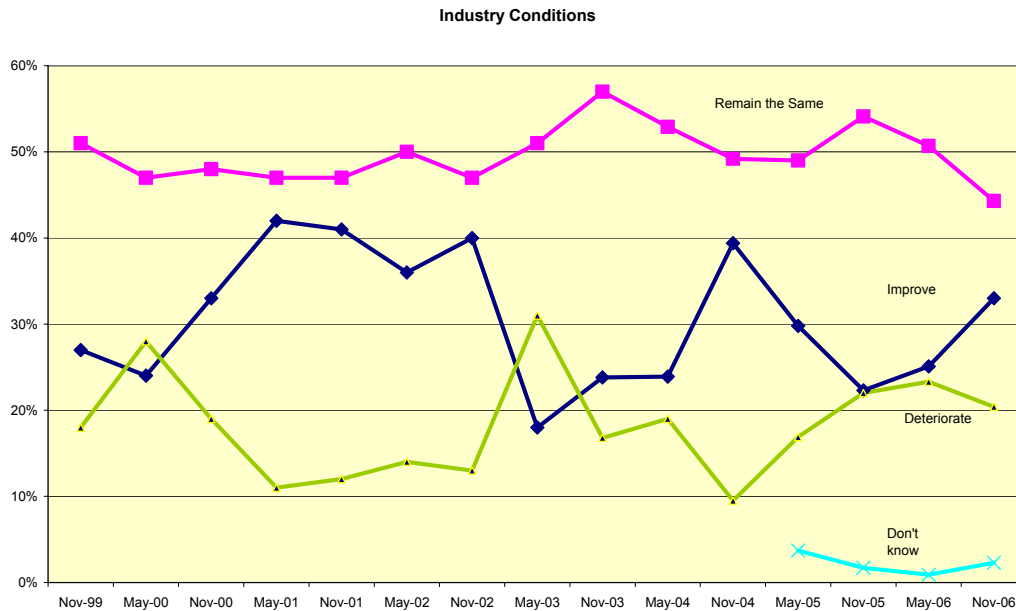
Prediction	NPD	SD	STD
Improve	21.1%	18.8%	7.5%
Remain the Same	54.9%	56.3%	55%
Deteriorate	19.0%	12.5%	35%
Don't Know	4.9%	12.5%	2.5%

\* Balance reflects respondents located throughout Taranaki, thus were not district specific. Due to rounding factors, some outcomes may not total 100% with precision.

**5.2 Industry Conditions**

Respondents were asked to predict industry conditions for the coming 12 months with respect to their own industry sector. Once again, the majority of respondents (44.3%) anticipate stable industry conditions in the months ahead. A total of 33% anticipate conditions will improve, whilst 20.4% foresee deterioration.

Although the status quo reflects the assessment of the majority of survey participants, relative to six months ago, an increasing proportion of businesses believed that conditions would improve in the next 12 months, relative to when the survey was undertaken six months ago, and fewer businesses anticipate decline.



The oil and gas industry appeared the most optimistic as well as those in the retail/wholesale industry, restaurant and accommodation industry. Those involved in communications and transport also appeared relatively positive. Those in manufacturing appeared more pessimistic. Agriculturally-based businesses also appeared cautious.

Businesses based in New Plymouth appear more optimistic regarding conditions in their own industry in the coming 12 months.

**Industry Conditions: Predictions for the Next 12 Months by District**

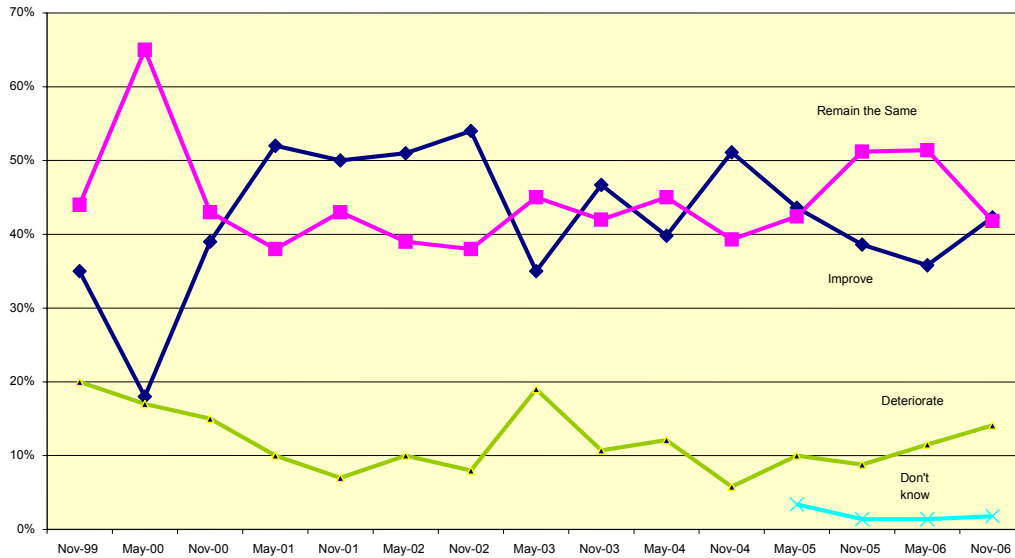
Prediction	NPD	SD	STD
Improve	36.4%	25.0%	20.0%
Remain the Same	42.7%	62.5%	45.0%
Deteriorate	17.5%	12.5%	35.0%
Don't Know	3.5%	0.0%	0.0%

*\*Balance reflects respondents located throughout Taranaki, thus were not district specific. Due to rounding factors, some outcomes may not total 100% with precision.*

### 5.3 Sales/ Customer Levels

Businesses predominantly anticipated sales to increase over the next six months. This outcome is heartening but is possibly also reflective of seasonal sales movements - the survey was undertaken prior to Xmas, thus a period of heightened retail sales, and the tourism season. Approximately 42.3% of respondents indicated sales levels will increase, while 14.1% believe decreased sales are likely.

Sales - Next 6 Months



New Plymouth-based respondents proved most optimistic with regard to sales levels, as 47.9 percent anticipate levels will improve over the coming six months. South Taranaki-based businesses appeared more cautious regarding sales levels.

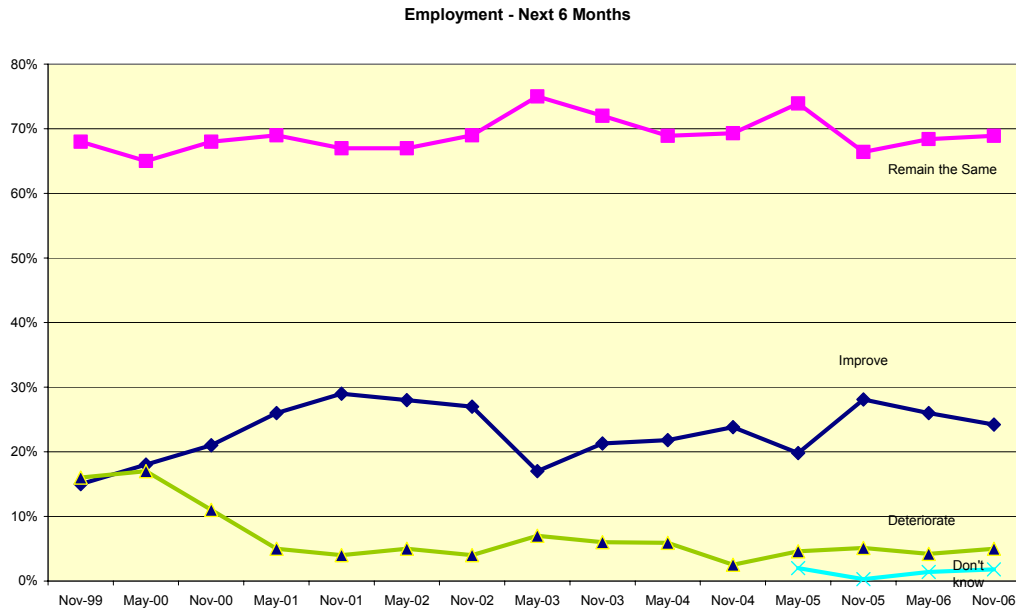
Sales/ Customer Levels: Predictions for the next 6 Months by District

Prediction	NPD	SD	STD
Improve	47.9%	18.8%	27.5%
Remain the Same	39.4%	68.8%	40.0%
Deteriorate	9.9%	12.5%	32.5%
Don't Know	2.8%	0.0%	0%

\* Balance reflects respondents located throughout Taranaki, thus were not district specific. Due to rounding factors, some outcomes may not total 100% with precision.

## 5.4 Employment Levels

Respondents were asked to indicate whether they expected employment levels to change over the next six months. The majority of respondents (68.9%) anticipate employee numbers will remain the same, whilst 24.2% anticipate a need to increase employee numbers within their own businesses in the next six months. These outcomes are very similar to the employment situation of six months ago, when 66.44% anticipated the status quo, and 26 percent an increase. Only 5.0 percent of respondents indicated staffing levels would decrease, with the balance (1.8%) of survey participants reporting they were unsure.



When reviewing employment demand across industry sectors, businesses operating in the oil/gas industry as well as manufacturing, construction and restaurant/hospitality industries appeared more likely to be taking on new staff, relative to other industries. When analysing predicted employee requirements for the coming six months at a sub-regional level, the majority of businesses predicted employment requirements are set to remain the same irrespective of location. However, employment expectations were higher in New Plymouth than Stratford or South Taranaki.

**Table 5: Employment Levels: Predictions for the Next 6 Months by District**

Prediction	NPD	SD	STD
Improve	27.7%	12.5%	17.5%
Remain the Same	66.7%	81.3%	72.5%
Deteriorate	4.3 %	0%	10.0%
Don't Know	1.4%	6.3%	0%

\* Balance reflects respondents located throughout Taranaki, thus were not district specific. Due to rounding factors, some outcomes may not total 100% with precision.

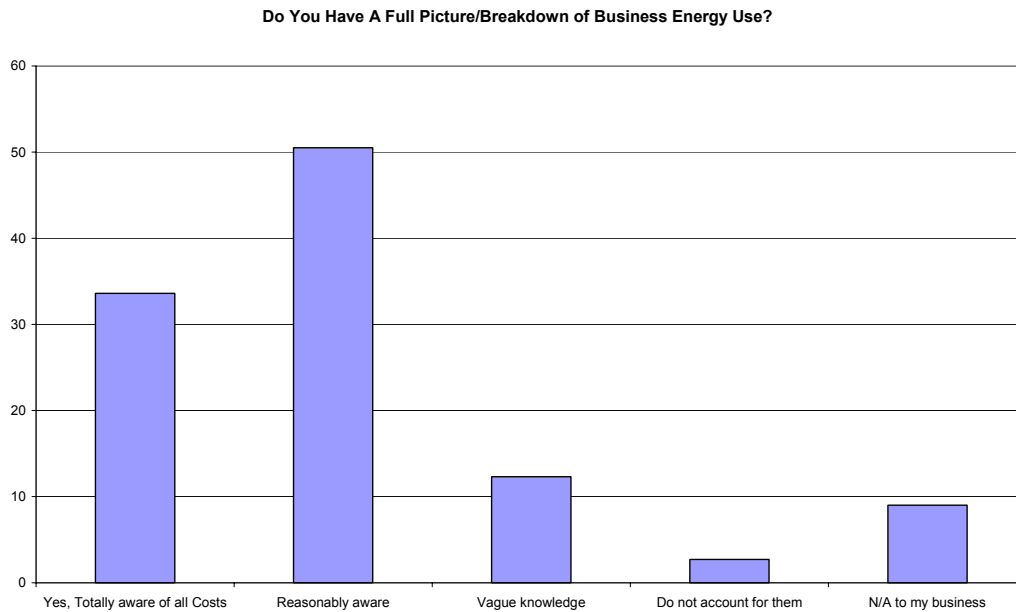
## 6.0 Energy Conservation and Alternative Energy: Business views and practices

The survey also questioned Taranaki businesses on their practices concerning energy conservation and the use of alternative energy, as well as their views on this topic.

### 6.1 Energy Use/Cost Picture

Businesses were firstly asked whether they had considered they had a full picture or breakdown of all energy used in their business - transport, fuels, gas, electricity etc and its associated cost.

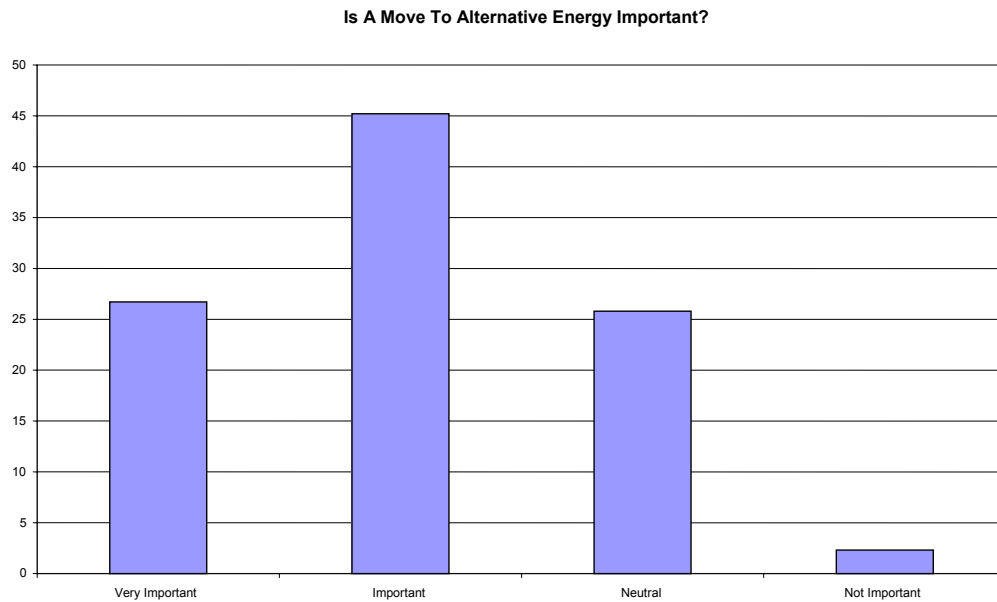
A total of 33.6% said yes – they were totally aware of such costs in their business; however the majority of respondents (50.4%) said they had a reasonable knowledge. Approximately 12.3% replied they had a vague knowledge, whilst the balance reported they did not account for costs in this manner or that it was not applicable to their business.



### 6.2 The Importance of Alternative Energy

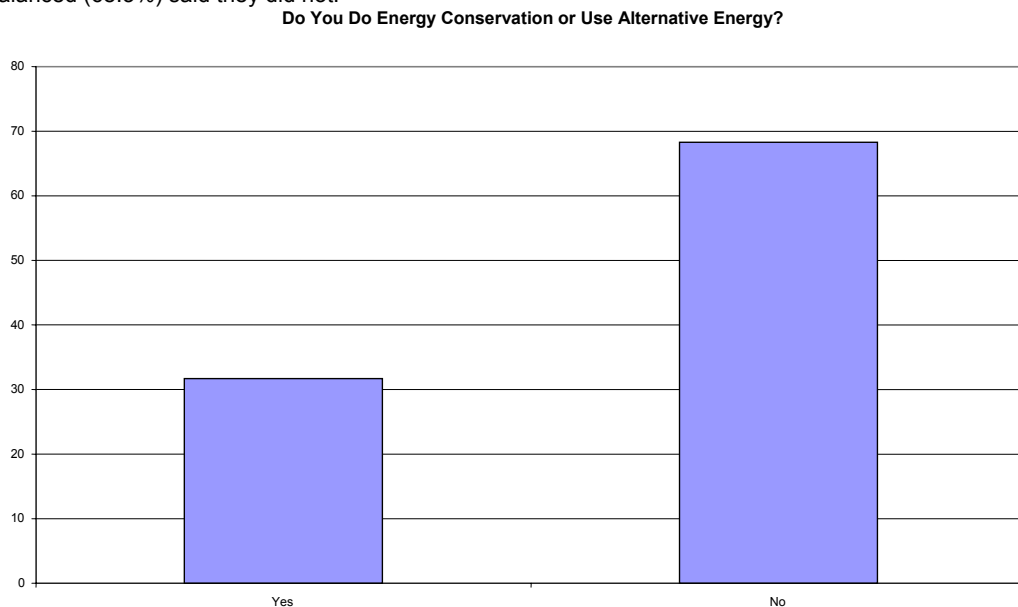
Businesses were asked whether they believed the development, transfer, change and/or move to alternative sources of energy was important.

A total of 45.2% believed it was important and 26.7% said it was very important. Around 25.8% felt neutral on the topic and only 2.3% of respondents said it wasn't important.

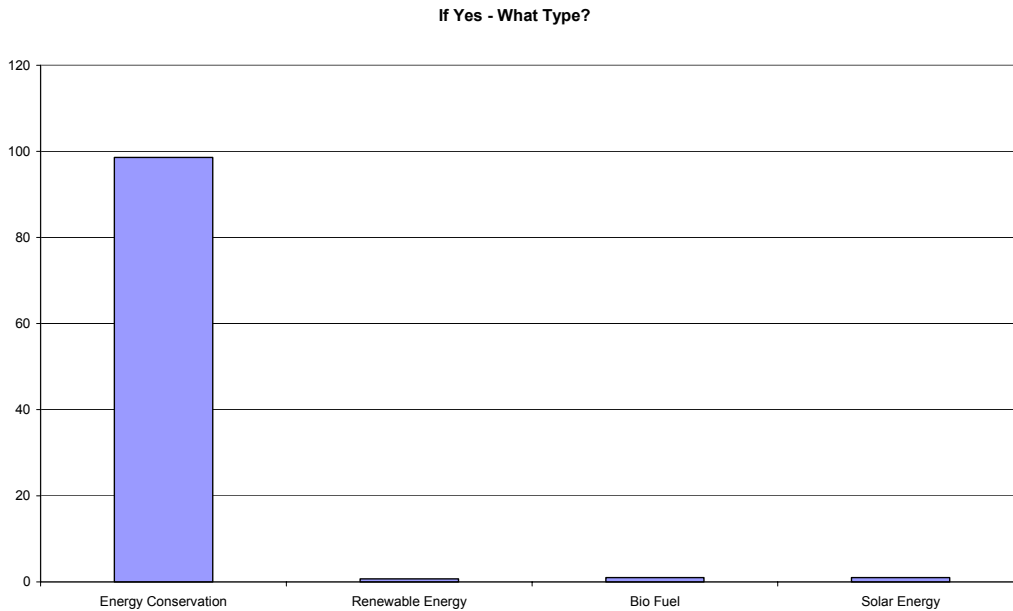


### **6.3 Energy Conservation and/or Use of Alternative Energy: The current practices of Taranaki Businesses**

Businesses were asked whether they engaged in energy conservation practices within their own business, or used alternative/renewable energy sources. A total of 31.7% stated they did, whilst the balanced (68.3%) said they did not.



Of those who did, virtually all respondents (98.6%) had various strategies and initiatives to help conserve energy. Only two respondents reported using renewable energy, three bio fuel and three solar.



## 6.4 Recycling and Energy Conservation Practices of Businesses

A total of 83% of those who had conservation/energy conscious systems in place did recycling. Paper, cardboard and plastics were frequently cited as products recycled by Taranaki businesses, as well as aluminum, steel, cans, old stock etc. The amount recycled varied considerably – with responses ranging from 5% to almost 100% of the stated type of product.

Furthermore most businesses who had strategies in place to conserve/ reduce energy were doing small, simple, yet beneficial things; changing light bulbs to a lower wattage and/or replacing them with more energy efficient types of bulbs, turning off machinery, lights etc when not in use, using timers for heating and use of insulation etc.

Selected commentary from respondents concerning their strategies is detailed below:

*“Energy use is minimal. Turn off non essential lights. Use backs of circulars etc where possible”.*

*“Using sunlight/wind as way of drying rather than electricity (fabrics)”.*

*“Technology investment to improve efficiency of production”.*

*“Conservation, recycling”.*

*“Switched one vehicle so far to LPG”.*

*“Recycle paper, plastic bags etc”.*

*“Take care with power usage”.*

*“Water reuse, heat recovery, new plant more efficient”.*

*“Taken out some light bulbs - chose to have no water cylinder heating”.*

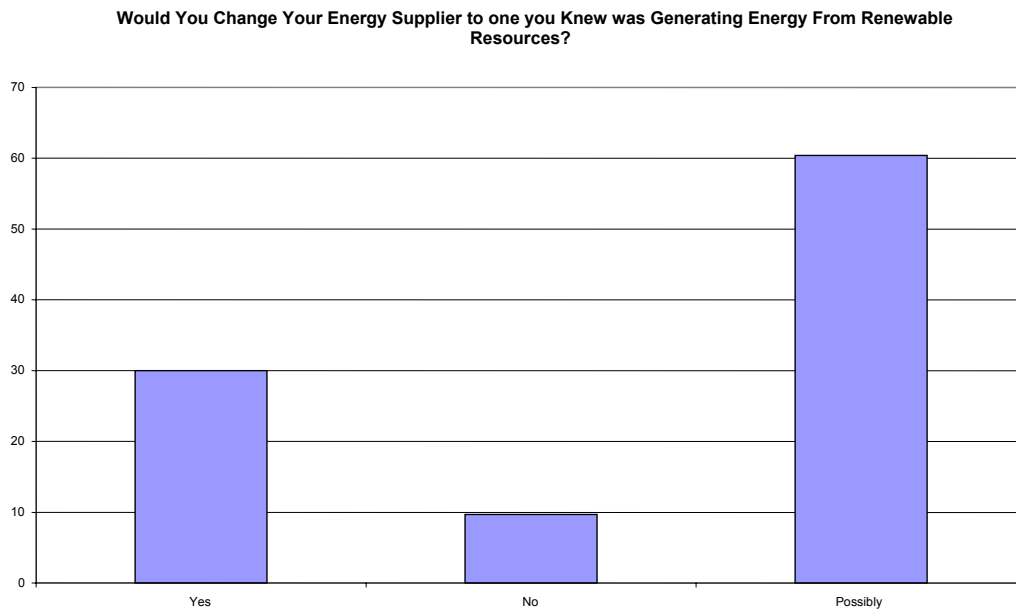
*“Simple measures like signage to conserve power at each switch, timer control, gas monitoring etc”.*

*“Care to turn off any lights etc that are not needed. All computers turned off at night”.*

*"Economise on electricity, petrol, recycle waste".*  
*"Introduced energy saving light bulbs".*  
*"Fuel saving devices/trials. More windows. Batts".*  
*"Solar water heating. Plant not running all day".*  
*Fluorescent light bulbs. Energy saving light bulbs.*  
*"Minimise power use. Would like to be able to get kerb side recycling - at present staff take recycling home".*  
*"Look to utilise our resources efficiently. Use double sided copying etc".*  
*"Raised staff awareness re; power consumption. Advised strategies to reduce power consumption".*  
*"Turn off air conditioner, lights when not needed. Cut down on vehicle trips to Sth Taranaki to one per week".*  
*"Energy saving light bulbs, linen towels instead of paper, recycled paper".*  
*"Reduced petrol consumption in machinery by careful usage".*

## 6.5 Possibility of Changing Energy Supplier

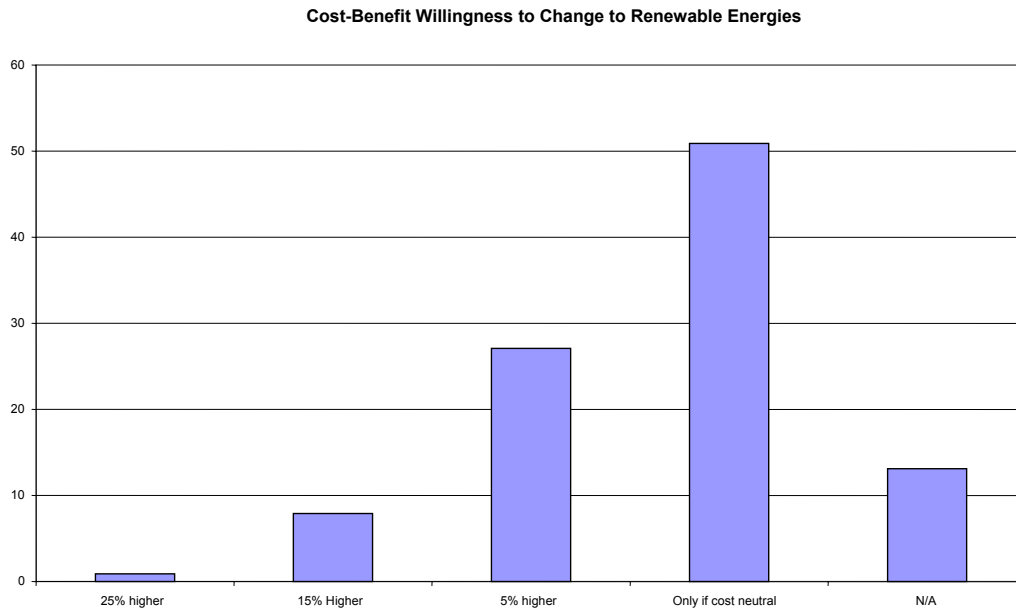
Businesses were asked whether they would change energy supplier to one generating from a renewable source. The majority (60.4%) stated they possibly would and 30% said they would. Only 9.7% stated they would not. Many businesses commented that the move was highly dependent on the cost-benefit of the change.



## 6.6 Cost-benefit of Willingness to Invest/Change to Renewable Energies

Businesses were asked about their willingness to invest/change to a more renewable source of energy based on a number of cost scenarios.

The majority of respondents (50.9%) said they were willing to invest/change to more renewable energies but only if the effect was cost-neutral. A total of 27.1% of respondents, however, were willing to change if costs were up to 5% higher than their current source. A further 7.9% said they would change if costs were up to 15% higher, but only a very small percentage (0.9%) would change if costs were 25% higher than their existing source.



## 6.7 Reasons For Change – Rankings

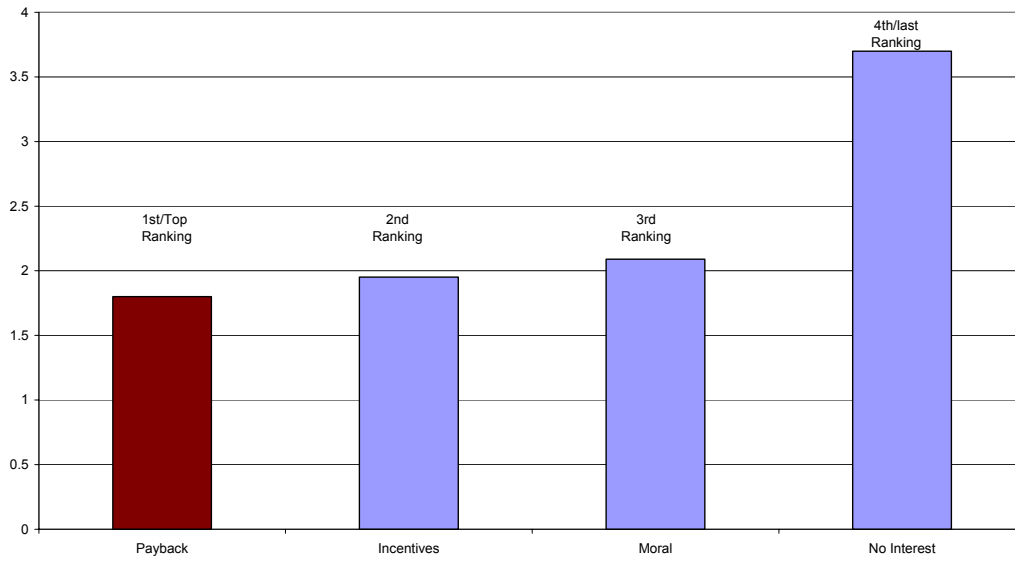
Businesses were asked to rank on a scale from 1-4 (1= most important, 4= least important) the relative importance of four factors in relation to their motivation to change to renewable energies.

The mean score of the rankings are listed below, with the LOWEST RANKING reflecting the MOST IMPORTANT FACTOR.

Factor	Mean Score
Payback of Financial Return on Investment.	1.8
Investment Incentives Offered by Government.	1.9
Moral Obligation.	2.1
Would not invest/no interest.	3.7

The Most Important factor was the payback of financial return of the investment

Ranking - Most Important Factor For Change



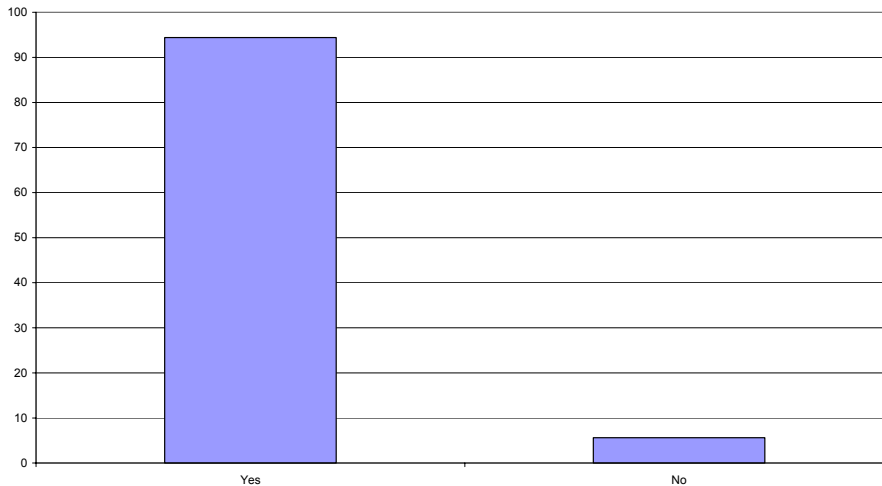
## 6.8 Views On Government Policies and Actions

Businesses were provided with a list of possible Government policies and actions, and asked whether they supported the various options.

- a. **Should Government provide incentives to promote use of alternative energy and conservation?**

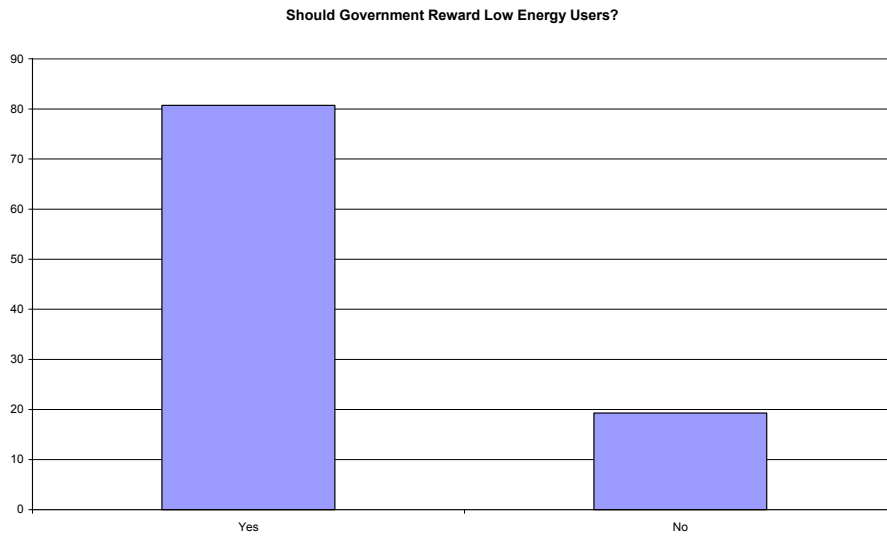
Virtually all respondents (94.4%) believed the Government should provide incentives to promote use of alternative energy and/or conservation.

Should Government Provide Incentives?



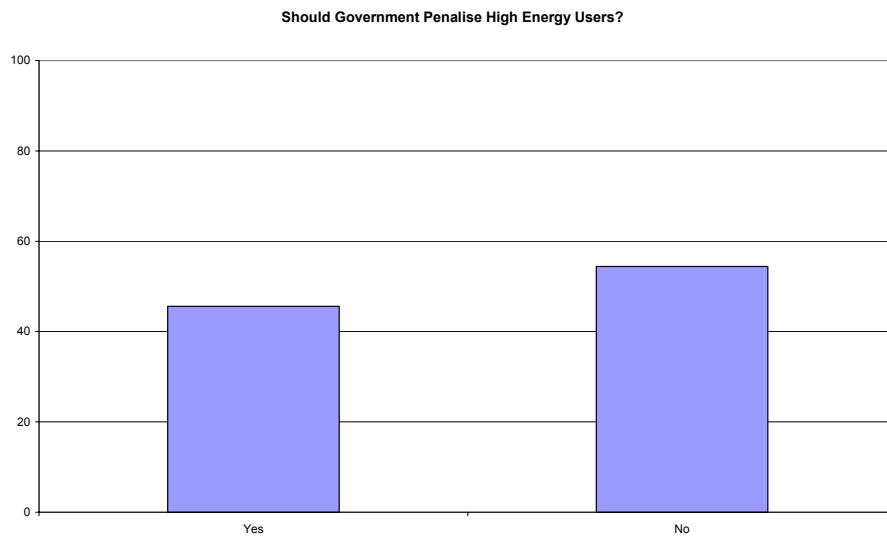
**b. Should Government reward low energy users?**

A total of 80.7% of respondents believed the Government should reward low energy users.



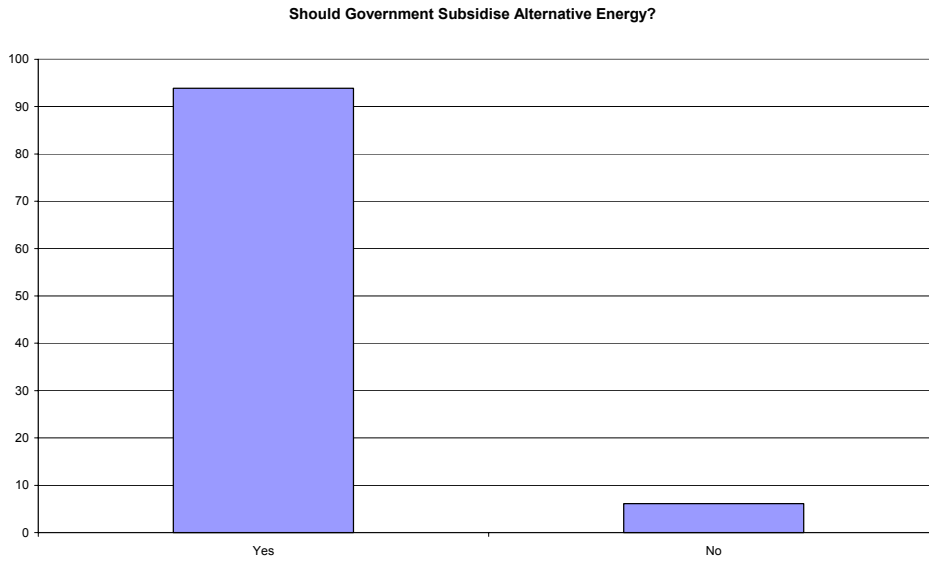
**c. Should Government penalise high energy users?**

A total of 54.4% of respondents believed the Government should not penalise high energy users. However views on this matter were relatively split; 45.6% stated they should be penalised.



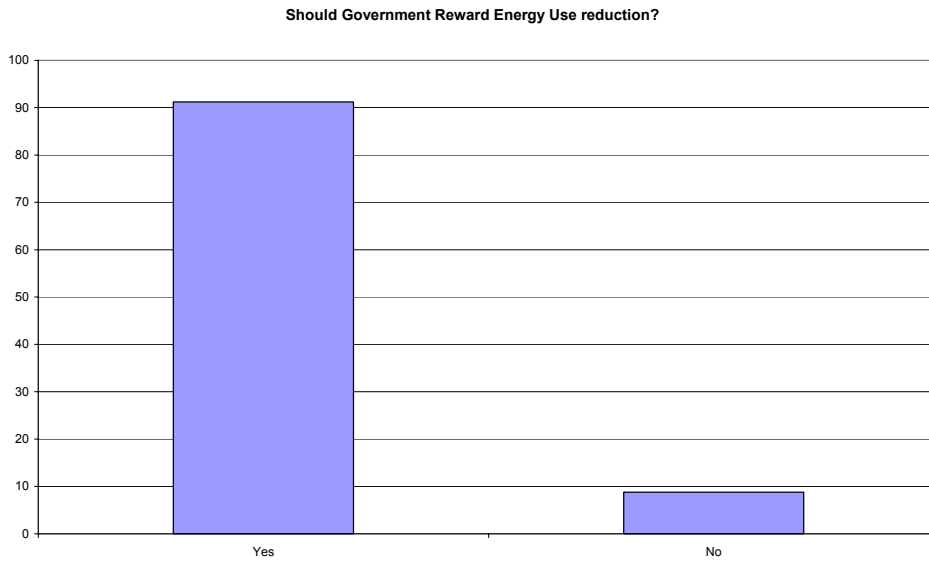
**d. Should Government subsidise alternative energy technologies?**

Approximately 93.9% of respondents believed the Government should subsidise alternative energy technologies to encourage use and adoption.



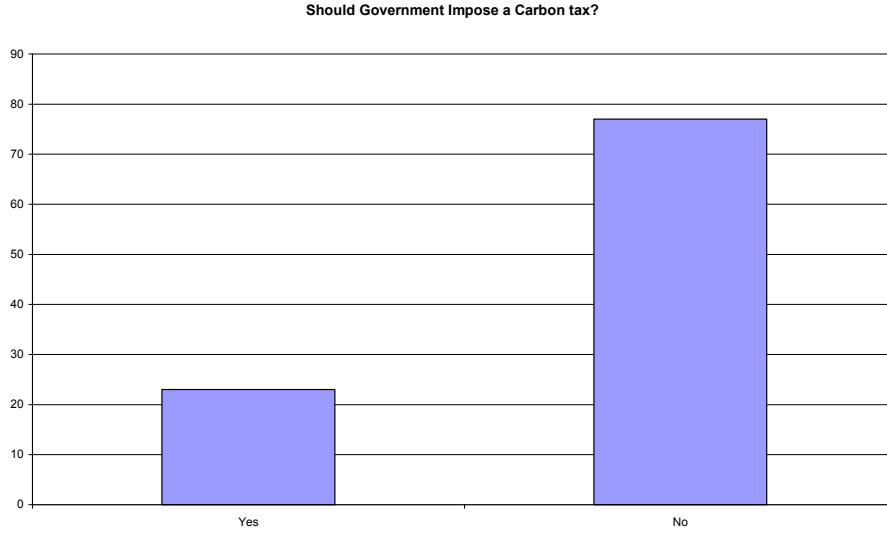
**e. Should Government reward companies who reduce energy use?**

A total of 91.2% of respondents believed the Government should reward companies who reduce their use of energy.



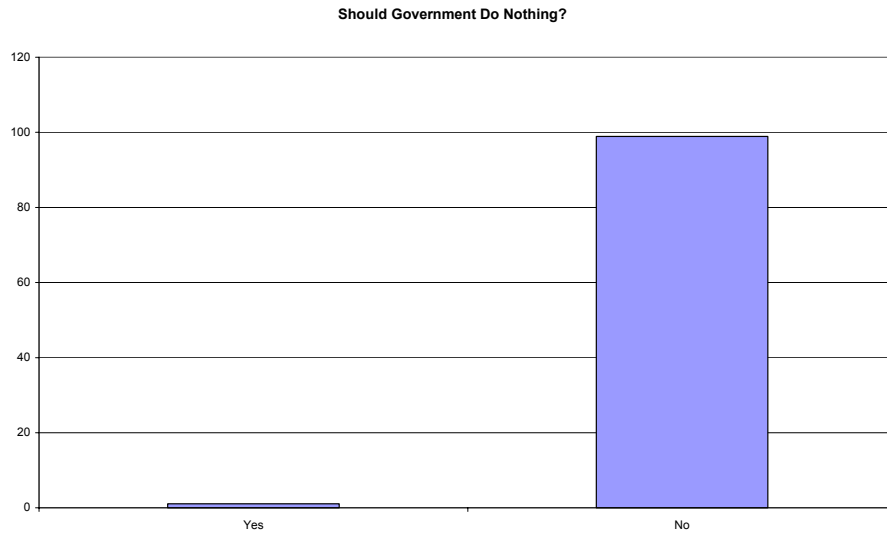
**f. Should Government impose a carbon tax?**

A total of 77% of respondents believed that the Government should not impose a carbon tax, whilst 23% felt they should.



**g. Should the Government do nothing?**

Virtually all respondents believed the Government should act on energy conservation/ alternative energy use issues, with 98.9% feeling that 'doing nothing' should not be an option.



## 6.9 Comments

Businesses made a range of comments concerning Government policy and what the Government should be doing with respect to encouraging greater use of alternative energy or conservation practices. A cross-section of such commentary is listed below.

*"This Govt lacks the ability to do any of the above well".*

*"Discounted rates".*

*"Subsidise costs of changes".*

*"Points reward system i.e. like Fly Buys".*

*"Through tax treatment of capital expenditure".*

*"Fund cost of preparing energy conservation plan".*

*"Financial inducements, not just education".*

*"Subsidise good practices in homes (light bulbs, insulation, heat pumps) & possibly legislate to make energy charges purely variable to give right signals to consumers".*

*"Financial assistance or tax relief".*

*"Subsidize installation of alternative energy technologies".*

*"Interest free loans - cash advance – subsidy".*

*"To put towards costs of changing to solar energy".*

*"Lower tax take on fuels".*

*"Return to gas powered cars, LPG etc".*

*"Give some form of credit or incentive to those investing in forestry and even to households planting trees in their backyard".*

*"Interest free loans to install solar power".*

*"Recycling should be taken more seriously".*

*"Financial help for new home owners".*

*"Build a big nuclear station".*

*"Incentives for co-generation in industry".*

*"Cheaper insulation and cost".*

*"Promote use of wet back and solar".*

*"Help with upfront costs".*

*"I pay enough tax as it is!".*

*"Something to entice us all to participate".*

*"Subsidise investigations into viable alternatives".*

*"Make it easier or help out with costs".*

The following additional (generic) comments were also made on the topic of energy conservation and alternative energy use.

*"Make the Resource Management Act less stringent".*

*"Ban large cars & 4-wheel drives on roads. Get a passenger rail system operating. Remove large trucks - long distance freight should be transported via rail".*

*"When Govt subsidised cars to LPG it was well supported & fuel was reasonably priced".*

*"Make use of energy efficient lighting compulsory in all new insulations".*

*"Encourage/plan more electrical generation using hydro and clean coal technologies".*

*"Reversible meters so excess self generation can be credited against account".*

*"Would be great if it was cost effective".*

*"Needs central co-ordination and buy-in from Govt".*

*"Provide a full recycle system for business, not just residential".*

*"Promote use of LPG in automotives".*

*"Solar energy should be more affordable. Help fund bio-fuel development more. Wind farm must be viable in our province".*

*"Yes - when we can keep and use the resources in our own back yard instead of exporting and paying back for our own production & utilise the country's own resources".*

*"Don't like windmill effects on look of landscape".*

*"Local government can assume greater vision. Essential".*

*"The market will drive the best option without Govt interference".*

*"Initial set up costs a concern for small businesses wanting to change to more energy efficient practices".*

*"Usually these are based towards high energy companies or high waste companies that change. For low energy/low waste companies to make big savings can still be important".*

*"It will only happen if Central Govt make it happen".*

*"It will cost more in the med-long term if we do not collectively address these as a business community".*

*"Our company manufactures energy conservation equipment since 1998 - despite many approaches to Govt they have never assisted us or our clients - all talk, no do".*

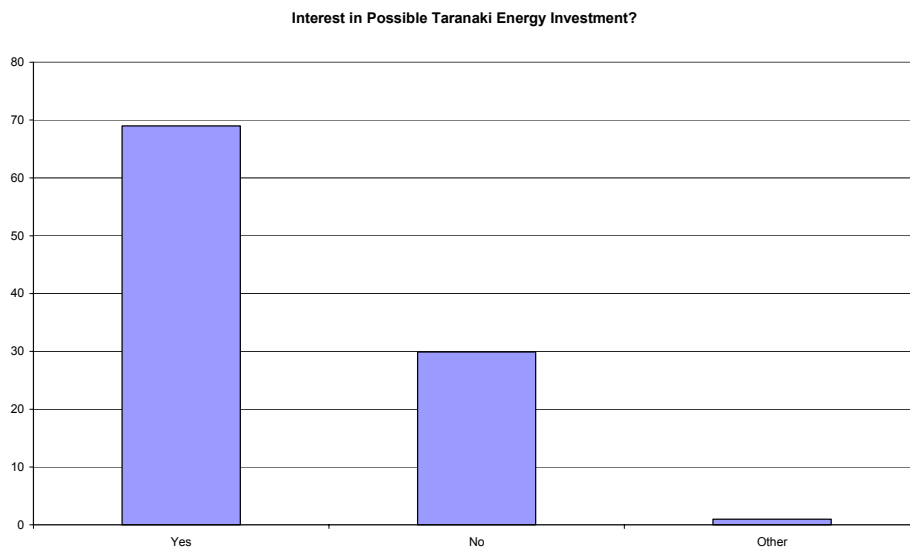
*"Expand horizons re: all alternatives. A balanced discussion is needed".*

*"I think we all have to do it !"*

## 7.0 Interest in a Taranaki Alternative Energy Investment Offering

Businesses were asked whether they would be interested in an opportunity to invest (personally or via their business) in a Taranaki-based renewable energy initiative that had a 15-year payback.

A total of 69% of respondents were interested – however many also signalled it was dependant on the nature of the investment and whether it stacked up financially.



## 8.0 CONCLUSIONS

The November/December 2006 survey highlighted the following results:

- In terms of the NZ economy, the majority of business respondents are anticipating the status quo will prevail (54.5%), 21.4% anticipate deterioration, whilst 19.1% expect improvement. This reflects a small but heartening improvement in confidence by local businesses from the last survey undertaken six-months previously.
- In terms of industry-specific conditions, the majority of respondents (44.3%) anticipate the economy will remain the same, 33% anticipate improvement whilst 20.4% predict a decline. This is a more positive result than the outcome taken six-months ago.
- The oil and gas industry appeared the most optimistic sector as well as those in the retail/wholesale restaurant and accommodation industries. Those involved in communications and transport also appeared relatively positive. Businesses in manufacturing appeared more pessimistic. Agriculturally-based businesses also appeared cautious.
- Businesses based in New Plymouth were more optimistic than those in central or south Taranaki.
- The majority of respondents anticipated employment levels will remain the same in the coming six months, with 24.2% anticipating increasing staff numbers. This outcome is very similar to the employment situation of six months ago.
- Businesses operating in the oil/gas industry as well as manufacturing, construction and restaurant/hospitality industries appeared more likely to be taking on new staff, relative to other industries. Furthermore, employment expectations were higher in New Plymouth-based businesses than those in Stratford or South Taranaki.
- On the subject of energy conservation and alternative energies, Taranaki businesses predominantly thought this was an issue of importance. Only 2.3% of respondents said it wasn't important.
- Approximately 33.6% of respondents said they were totally aware of the energy costs within their business and had systems in place to monitor this; 50.4% said they had a reasonable knowledge of such costs, whilst 12.3% replied they had a vague knowledge.
- Approximately 31.7% of responding businesses stated they had energy conservation/alternative energy initiatives in place within their business, although 68.3% said they did not.
- Of those who did, virtually all respondents (98.6%) had various strategies and initiatives to help conserve energy. Very few respondents reported using renewable energy, such as bio fuel or solar.
- Most energy conservation practices of Taranaki businesses were small, simple, yet beneficial initiatives - changing light bulbs to a lower wattage and/or replacing them with more energy efficient types of bulbs, turning off machinery, lights etc when not in use, using timers for heating and use of insulation etc.

- A total of 83% of those who had conservation/energy-conscious systems in place did recycling. Paper, cardboard and plastics were frequently cited as products recycled by Taranaki businesses.
- The majority of respondents (60.4%) stated they would consider changing to an energy supplier who used renewable energy – however, many commented that the move was highly dependent on the cost-benefit of the change.
- Around 50.9% of respondents said they were willing to invest/change to more renewable energies but only if the effect was cost-neutral. A total of 27.1% of respondents, however, were willing to change if costs were up to 5% higher than their current source. A further 7.9% said they would change if costs were up to 15% higher but only a very small percentage (0.9%) would change if costs were 25% higher than their existing source.
- Cost-benefit was clearly an important consideration for businesses in any energy conservation/alternative energy decision. The payback/financial return on the investment was ranked more importantly than Government incentives or a moral obligation to change.
- In terms of Government Policy, businesses believed that a strategy to encourage adoption of energy conservation/renewable energies should predominantly be based on a “carrot versus stick” strategy and include financial assistance”
  - Virtually all respondents (94.4%) believed the Government should provide incentives to promote use of alternative energy and/or conservation.
  - A total of 80.7% of respondents believed the Government should reward low energy users.
  - 54.4% of respondents believed the Government should not penalise high energy users. However views on this matter were relatively split; 45.6% stated they should be penalised.
  - 93.9% of respondents believed the Government should subsidise alternative energy technologies to encourage use and adoption.
  - 91.2% of respondents believed the Government should reward companies who reduce their use of energy.
  - 77% of respondents were against a carbon tax.
  - Virtually all respondents believed the Government should act on energy conservation/ alternative energy use issues. 98.9% felt that ‘doing nothing’ should not be an option.

A total of 69% of responding businesses stated they would be (potentially) interested in an opportunity to invest (personally or via their business) in a Taranaki-based renewable energy initiative that had a 15-year payback.

## APPENDICES

### a. Confidence Levels

Confidence Interval at District Level:

District	Taranaki Population/Business	Sample Size	Confidence Interval (At 95%)
New Plymouth	5,398	143	7.97%
South Taranaki	2,003	40	13.85%
Stratford	730	16	24.25%
Throughout Taranaki/Other/	-	18	-
Taranaki Total	8,111	217*	6.50%

\*balance did not state location

Confidence Interval at Industry Level:

Industry Group	Taranaki Population/ Business	Sample Size	Confidence Interval (At 95% Confidence)
Manufacturing	547	35	16.04%
Retail/Wholesale	1,444	47	14.07%
Property/Business Services	2,792	23	20.35%
Recreational/Personal and Other Services	633	17	23.47%
Agriculture/Mining/Electricity/Construction	1,329	50	13.60%
Accommodation/Transport/Communications/Government	1,366	49	13.75%
All Industries	8,111	221	6.50%

NOTE: Industry sectors have been grouped where individual responses from sectors are not statistically significant. Analysis by industry and district should be interpreted as an indicator of trends only.

**b. Disclaimer**

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**c. About this Report and Its Authorship**

This Business Survey and analysis is an independent report commissioned by Venture Taranaki (Taranaki's regional development agency) and undertaken by Red Eye Limited. Red Eye Limited is a Specialist Projects and Research Company, based in Taranaki.

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