CRE Aspirations

A Quantitative Study among Stakeholders

March 2013

UMR RESEARCH
AUCKLAND • WELLINGTON • SYDNEY

Contents

Objectives and methodology

1.1 Methodology

The results of this report are based on an online survey conducted from Tuesday the 5th of February to Thursday the 28th of February 2013.

There were 81 completed surveys. The margin of error for a sample size of 81 and population of 180 for a 50% figure at the '95% confidence level' is ± 8.1%.

1.2 Sample profile

Most of the respondents who completed the survey (n=81) were from the transmission or distribution sector (30.9%) or consumers and their representatives (25.9%). A relatively large proportion were either investors, educational institutions or professional bodies (17.3%). Similar to 2011, relatively few were from the supply side (11.2% were generator-retailers, generators only or retailers only).

Due to the changing nature of the sample, we investigated whether changes apparent in the overall results were due to the change in the sample or due to a real change in perceptions. We weighted the results back to the sample profile in 2011 and found that the changes remained. Therefore, we opted to stay with the unweighted overall results as any weighting would be based on an arbitrary baseline.

There were fewer consumers this year (n=12) compared to 2011 (n=21), with all indicating how they purchased their electricity[1]. The most common method was to purchase from a retailer on a fixed price tariff (n=7), followed by purchasing hedges (n=5). Purchasing from a retailer whose prices fluctuate with changes in the spot market was less common (n=3) and purchasing directly from the spot market was least common with only two respondents using this method.

Just under half (46%) of respondents had also completed the survey in 2011, with the remainder completing it for the first time (32%) or unsure whether they had participated before (22%).

Due to the small sub-samples, a significant proportion of analysis in this report is by the number of responses given rather than the percentage. This provides a clearer picture of the size of the sample being referred to.

1.3 Tracking

Where appropriate, results have been compared to the 2011 survey which took place in August.

[1] Consumers were able to purchase electricity using multiple methods.

ORGANISATION TYPE

What type of organisation do you represent?

	2011 %	2013 %	Difference (2013-2011) %
Base: n=	***75***	***81***	
Primarily a generator	2.7	2.5	-0.2
Generator & electricity retailer	8.0	6.2	-1.8
Primarily an electricity retailer	4.0	2.5	-1.5
Distribution or transmission	26.7	30.9	4.2
Service provider or agent (e.g. hedge market agent)	8.0	4.9	-3.1
Electricity consumer	28.0	14.8	-13.2
Electricity consumer representative	10.7	11.1	0.4
Investors / educational institutions / professional bodies	8.0	17.3	9.3
Metering servicer / provider	n/a	4.9	-
Other	4.0	4.9	0.9

Base: All respondents (due to rounding percentages may not add to 100)

HOW ELECTRICITY CONSUMERS PURCHASE ELECTRICITY

Electricity consumers only, please indicate from the list below how you purchase your electricity.

	2011 %	2013 %	Difference (2013-2011) %
Base: n=	***21***	***12***	
Purchase directly from the spot market	15	17	2
Purchase electricity hedges	30	42	12
Purchase from a retailer - prices paid fluctuate with the spot market	25	25	-
Purchase from a retailer on a fixed price tariff	75	58	-17
Other	5	-	-5

Base: Electricity consumers
Due to multiple response question, percentages do not add to 100

RESPONDENT IN PREVIOUS YEARS

Were you a respondent to this survey in August 2011?

	2013 %
Yes	46
No	32
Don't know	22

Base: All (due to rounding percentages may not add to 100)

Executive summary

2.1 Overview

Perceptions of the industry have become more positive overall, with almost every measure in the survey increasing favourably in 2013. However, the electricity industry continues to be rated poorly for competitiveness when compared to other industries, ranking behind every other retail sector they were compared to with the exception of petrol stations.

While the industry rated well for its day-to-to-day reliability of supply and capacity to meet demand for electricity during dry years, it continued to rate poorly for having competition levels that keep prices down.

The spot market was the only market to be perceived as competitive by a majority. The retail market was deemed to be the least competitive market and opinion on the provision of metering services was divided with a slightly higher proportion disagreeing that effective competition existed. Opinions on the competitiveness of other markets in the industry were less solid with relatively large proportions unable to give a rating, though respondents were still more likely to agree they were competitive than disagree.

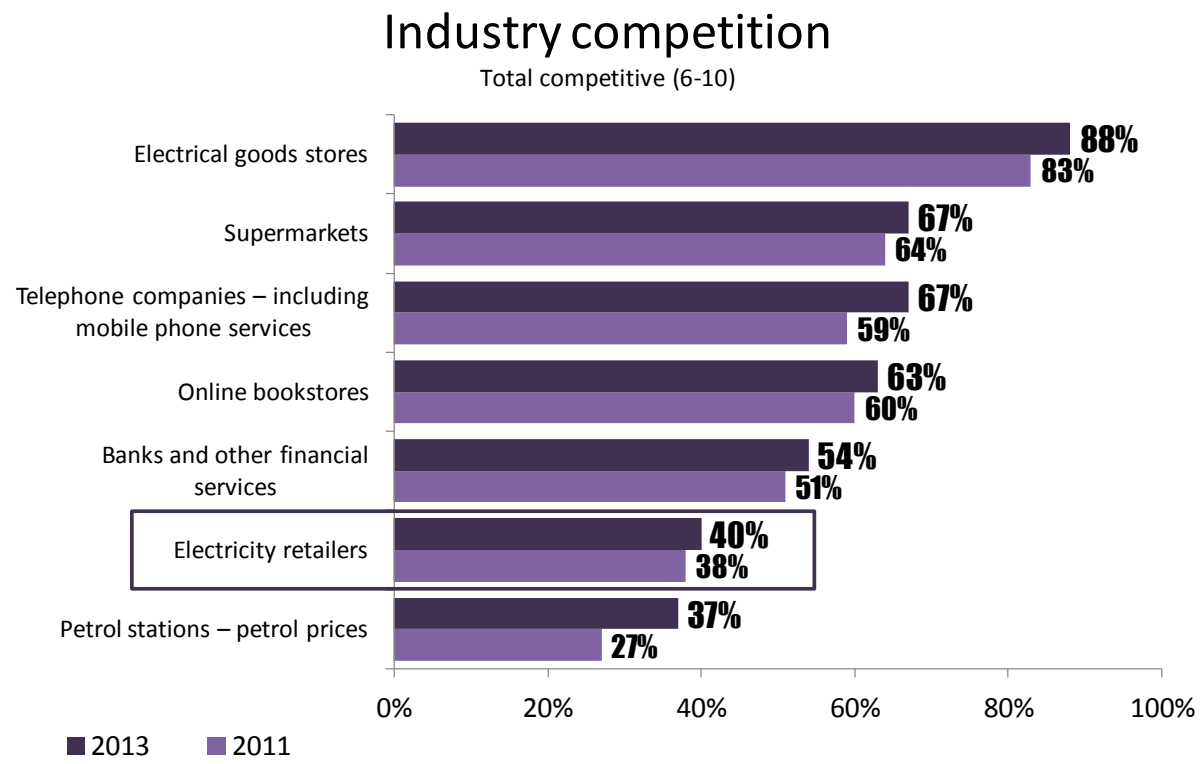
The wholesale, hedge, retail electricity markets and transmission and distribution arrangements were all seen as being more effective at coordinating electricity production and consumption than they were at facilitating timely and innovative investment in the electricity system. Stakeholders were significantly more likely to agree the wholesale market was efficient at these things and more likely to disagree that the retail market was an efficient mechanism.

A majority of stakeholders accepted that there was an efficient level of day-to-day reliability. A majority also agreed that investors understood the trade-offs between reliability and cost but did not believe consumers understood these trade-offs.

There were improvements in the ratings for current market arrangements compared to 2011, although no arrangement was deemed as good by the majority. Encouraging efficient investment and innovation in transmission and ensuring appropriate balance between reliability and cost were the two most highly ranked arrangements this year.

2.2 Retailer comparisons

The competitiveness of electricity retailers was measured against the competitiveness of six other types of retailers. Overall, levels of competition increased slightly from 2011.



A minority think electricity retailers are competitive

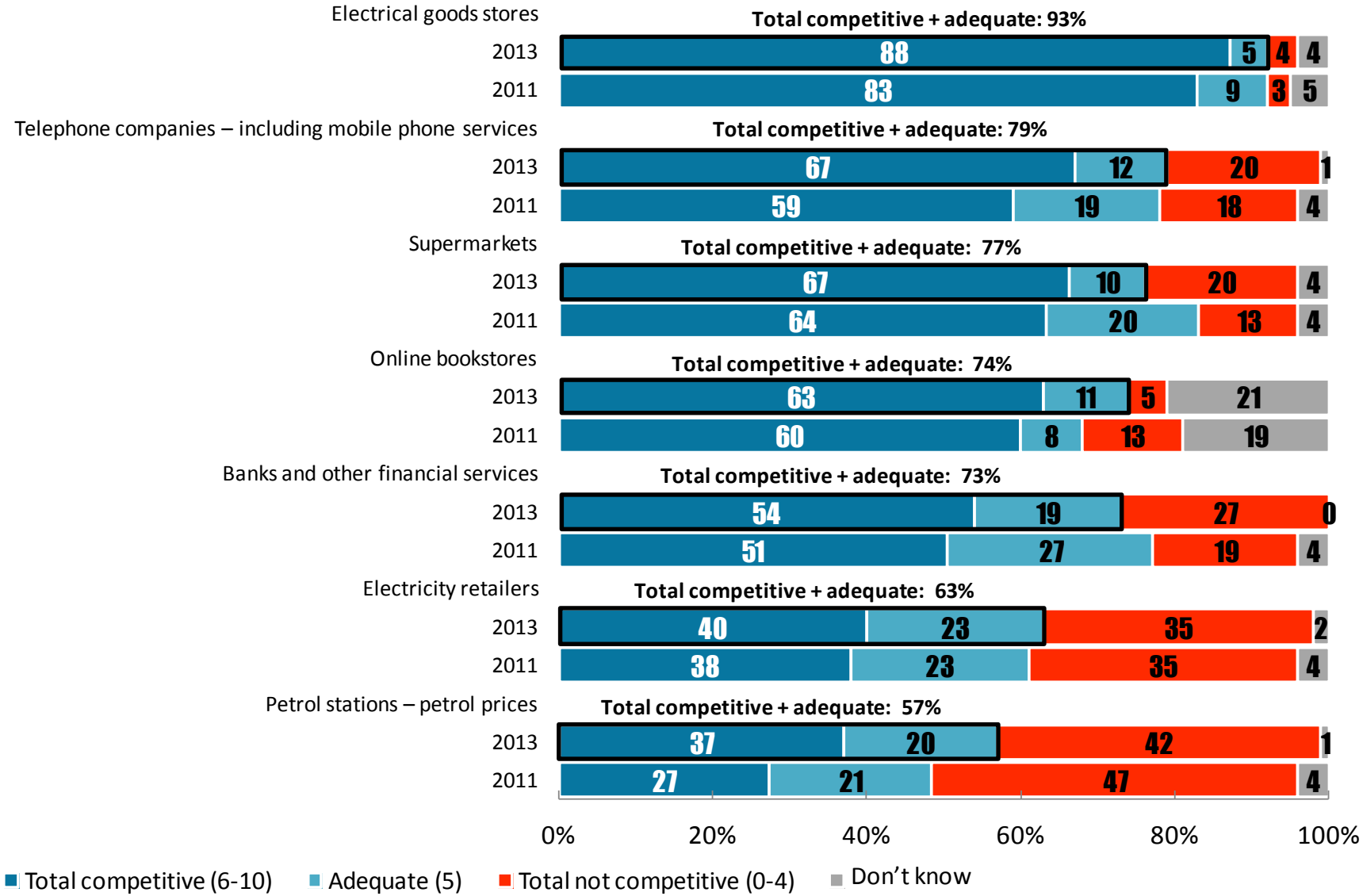
A large minority (40%) of those surveyed rate electricity retailers as competitive and slightly less (35%) rated them as uncompetitive. Additionally, 23% rated their competitiveness as 'just adequate'[2]. These results were almost identical to 2011.

Of the seven different types of retailers rated for competitiveness, electricity retailers placed ahead of only petrol stations (petrol prices). Electrical goods stores, telephone companies, supermarkets, online bookstores and banks or other financial services were all rated ahead of electricity retailers for competitiveness.

[2] Competitiveness was measured on a 0-10 scale where 0 meant 'not at all competitive' and 10 'extremely competitive.' A rating of '5' is deemed as 'just adequate.'

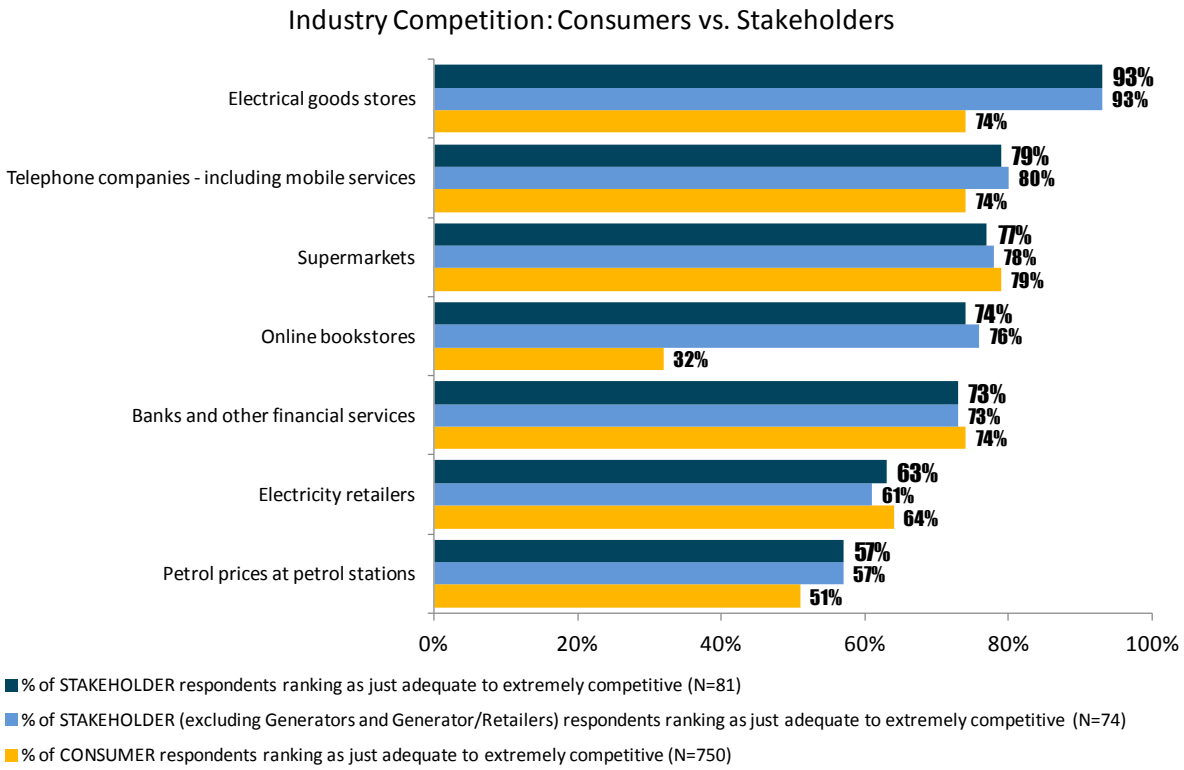
COMPETITIVENESS OF BUSINESSES

Using a 0-10 scale where 0 means not at all competitive, 5 means just adequate and 10 means extremely competitive, how competitive are the following businesses in terms of working to get your business and offering you the best deals? If you do not know enough, just say so.



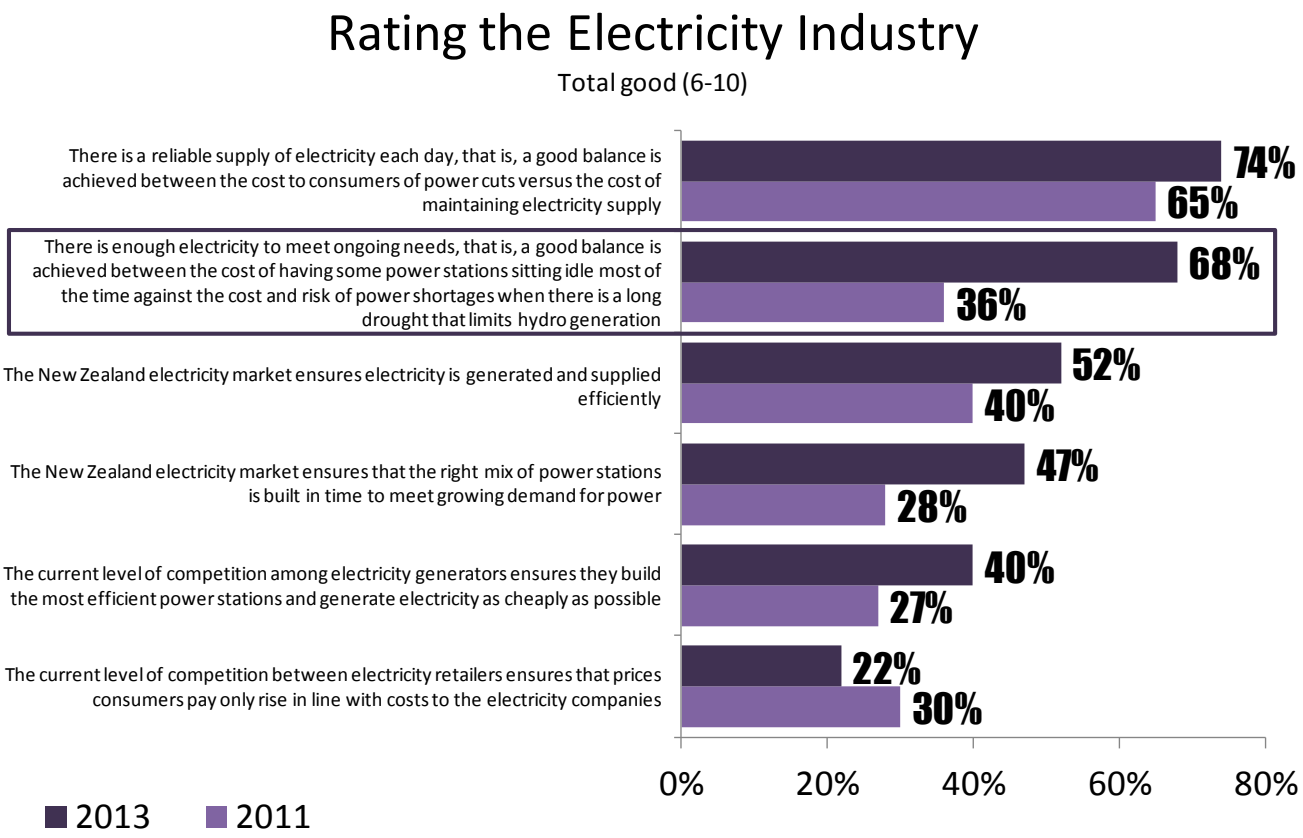
Stakeholder opinion mostly similar to consumers

Results are similar to those found in the consumer survey with two exceptions; stakeholders were more likely to rate both electrical goods stores and online bookstores as competitive.



2.3 Rating aspects of the electricity industry

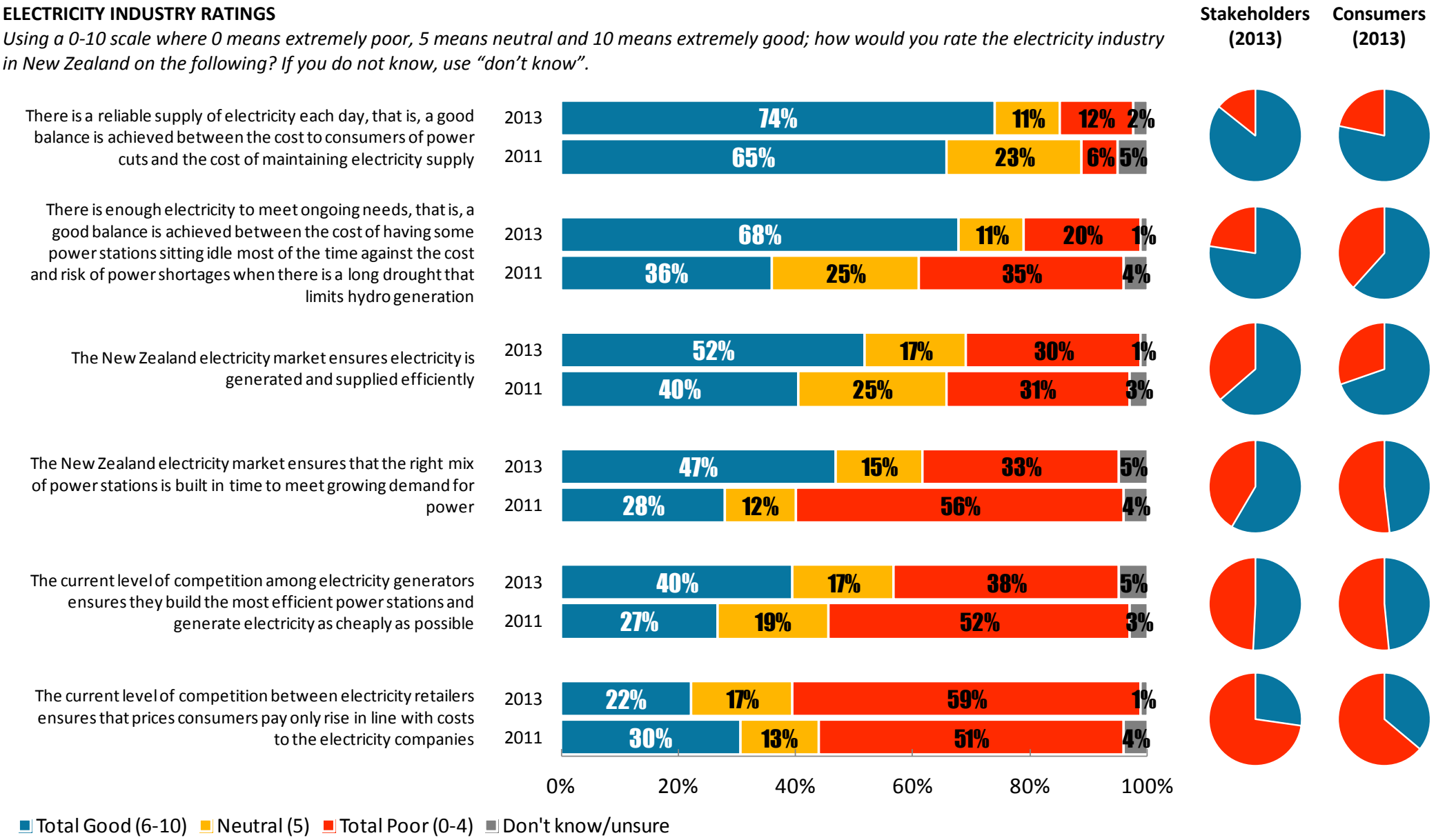
Six aspects of the electricity industry were rated on a 0-10 scale where 0 meant 'very poor' and 10 'very good'. Ratings predominately increased from 2011, with just one aspect, 'competition ensuring prices only rise in line with costs to electricity companies' rating more poorly. One aspect in particular, ensuring the availability of electricity in dry years, had a very large rise in those that rated it well, increasing by 32% from 2011.



When compared to results found in the consumer survey, stakeholders were far more likely rate aspects positively. However, when comparing the ratios (good versus poor excluding those that gave a neutral or unsure rating) results were much closer. The biggest difference was for ensuring the availability of electricity in dry years, with a significantly larger proportion of stakeholders prepared to give this a good rating.

ELECTRICITY INDUSTRY RATINGS

Using a 0-10 scale where 0 means extremely poor, 5 means neutral and 10 means extremely good; how would you rate the electricity industry in New Zealand on the following? If you do not know, use "don't know".



Note: Pie charts depict ratios (good versus poor excluding those that gave a neutral or unsure rating)

Reliability of daily supply and supply meeting ongoing needs rated very well

Two of the six statements about the electricity industry's performance were rated as 'good'[3] by a large majority of respondents. The statement concerning 'supplying enough electricity to meet ongoing needs' had the largest rating increase across all statements in 2013.

- *There is a reliable supply of electricity each day, that is, a good balance is achieved between the cost to consumers of power cuts and the cost of maintaining electricity supply (which is included in the overall cost of electricity to consumers).* (74% rated as good, up 9% from 2011; 12% rated it as poor and 11% gave a neutral rating of '5').

- *There is enough electricity to meet ongoing needs, that is, a good balance is achieved between the cost of having some power stations sitting idle most of the time against the cost and risk of power shortages when there is a long drought that limits hydro generation.* (68% rated this as good, up 32% from 2011; 20% rated it as poor and 11% gave a neutral rating of '5').

Efficiency of supply and building stations to meet demand rated reasonably well

Around half of respondents rated the efficiency of electricity supply and the building of stations to meet growing demand as good; both ratings increased from 2011.

- *The New Zealand electricity market ensures electricity is generated and supplied efficiently.* (52% rated this as good, up 12% from 2011; 30% rated it as poor and 17% gave a neutral rating of '5').

- *The New Zealand electricity market ensures that the right mix of power stations is built in time to meet growing demand for power.* (47% rated this as good; up 19% from 2011; 33% rated it as poor and 15% gave a neutral rating of '5').

Electricity industry rated poorly for competition

Opinion was polarised on whether the industry builds efficient power stations that generate electricity as cheaply as possible. While respondents were more definitive on whether competition ensures consumer prices only rise in line with electricity companies' costs with the majority rating this statement poorly.

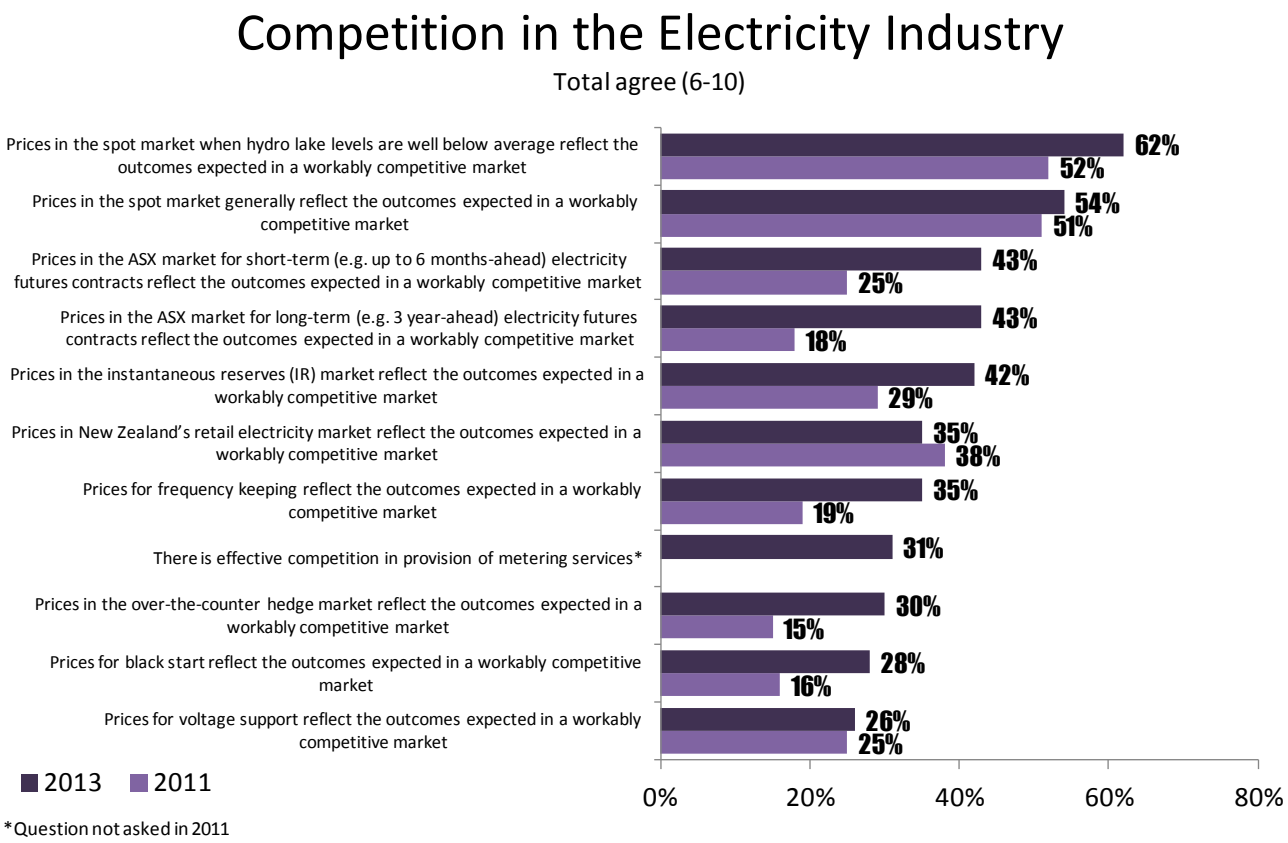
- *The current level of competition among electricity generators ensures they build the most efficient power stations and generate electricity as cheap as possible.* (40% rated as good, 38% as poor and 17% gave a neutral rating of '5').

- *The current level of competition between electricity retailers ensures that prices consumers pay only rise in line with costs to the electricity companies.* (22% rated as good, 59% as poor and 17% gave a neutral rating of '5').

[3] Ratings were on a 0-10 scale where 0 meant 'very poor', 5 'neutral' and 10 'extremely good'. Those who gave a 6-10 rating are described as rating a statement as 'good', those who gave a 0-4 rating are described as rating statements as 'poor'. Those who chose the neutral 5 rating are deemed to have no firm opinions on the statements.

2.4 Competition in the electricity industry

Levels of agreement with 11 statements reflective of a workably competitive market were rated on a 0-10 scale where 0 meant 'strongly disagree' and 10 'strongly agree'. As in 2011, a reasonably large proportion of respondents did not have an opinion or gave a neutral rating for the most of these statements. In spite of this, agreement increased across most statements from 2011.



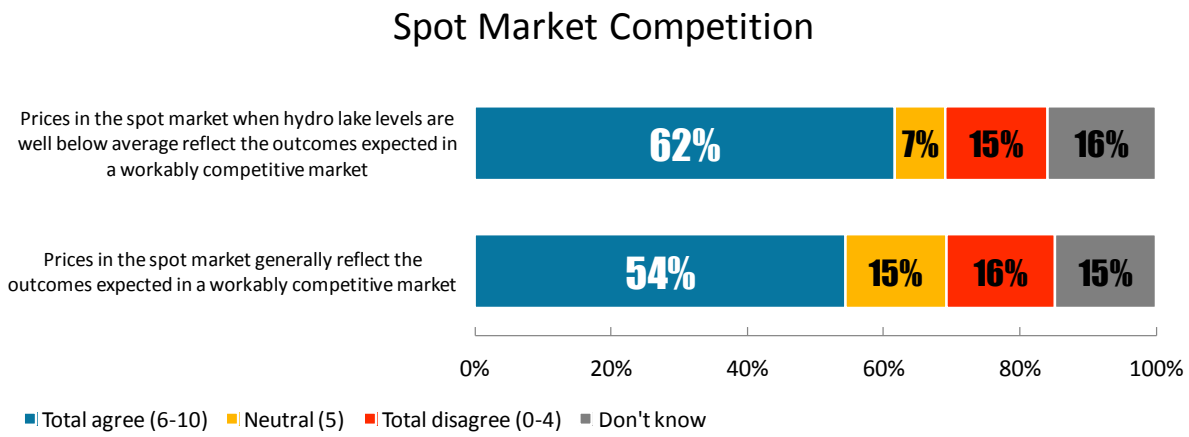
*Question not asked in 2011

Spot market perceived as most competitive

The highest levels of agreement were for the two statements related to the spot market, which were the only two statements to have a majority of respondents in agreement:

- *Prices in the spot market when hydro lake levels are well below average reflect the outcomes expected in a workably competitive market.* (62% agreed, up 10% from 2011; 15% disagreed, 7% neutral with a '5' rating and 16% didn't have an opinion).

- *Prices in the spot market generally reflect the outcomes expected in a workably competitive market.* (54% agreed, up 3% from 2011; 16% disagreed, 15% neutral with a '5' rating and 15% didn't have an opinion).

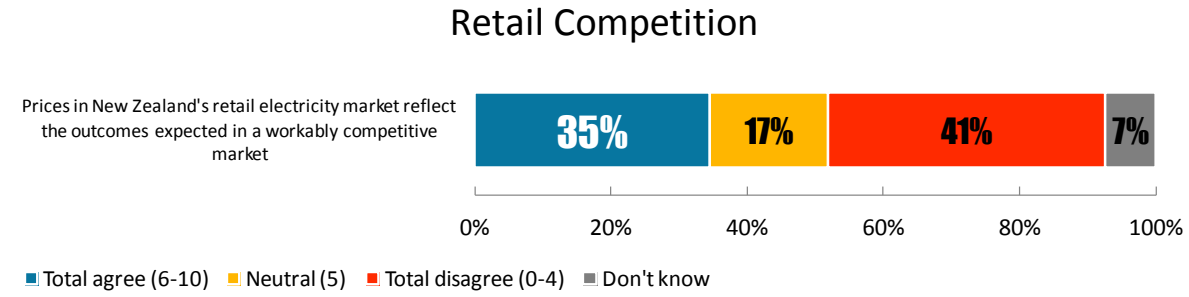


Retail market and metering services perceived as least competitive

The highest level of disagreement was with the statement related to prices in the retail market reflecting those of a competitive market. Similar proportions agreed and disagreed metering services were competitive with a slightly higher proportion disagreeing:

- *Prices in New Zealand's retail electricity market reflect the outcomes expected in a workably competitive market.* (35% agreed, down 3% from 2011; 41% disagreed, 17% neutral with a '5' rating and 7% didn't have an opinion).

- *There is effective competition in provision of metering services.* (31% agreed, 35% disagreed, 22% neutral with a '5' rating and 12% didn't have an opinion).



Reasonable levels of agreement with competition in ASX and instantaneous reserves market

Although less than half of respondents agreed with statements concerning the competitiveness of the ASX and instantaneous reserves market, the proportions that disagreed with these statements were much lower:

- *Prices in the ASX market for long-term (e.g. 3 year ahead) electricity futures contracts reflect the outcomes expected a workably competitive market.* (43% agreed, up 25% from 2011; 12% disagreed, 17% neutral with a '5' rating and 27% didn't have an opinion).

- *Prices in the ASX market for short-term (e.g. up to 6 months ahead) electricity futures contracts reflect the outcomes expected a workably competitive market.* (43% agreed, up 18% from 2011; 14% disagreed, 15% neutral with a '5' rating and 28% didn't have an opinion).

- *Prices in the Instantaneous Reserves (IR) market reflect the outcomes expected in a workably competitive market.* (42% agreed, up 13% from 2011; 14% disagreed, 17% neutral with a '5' rating and 27% didn't have an opinion).

High level of 'don't know' for all other statements, however larger proportions in agreement than disagreement

Of the remaining statements, over a third did not have an opinion or provide a rating and sizeable minorities gave neutral ratings. Even so, larger proportions agreed with each statement than disagreed.

- *Prices for frequency keeping reflect the outcomes expected in electricity futures contracts reflect the outcomes expected a workably competitive market.* (35% agreed, up 16% from 2011; 11% disagreed, 19% neutral with a '5' rating and 36% didn't have an opinion).

- *Prices in the over-the-counter hedge market reflect the outcomes expected in a workably competitive market.* (30% agreed, up 15% from 2011; 15% disagreed, 21% neutral with a '5' rating and 35% didn't have an opinion).

- *Prices for black start reflect the outcomes expected in a workably competitive market.* (28% agreed, up 12% from 2011; 6% disagreed, 21% neutral with a '5' rating and 44% didn't have an opinion).

- *Prices for voltage support reflect the outcomes expected in electricity futures contracts reflect the outcomes expected a workably competitive market.* (26% agreed, up 1% from 2011; 12% disagreed, 17% neutral with a '5' rating and 44% didn't have an opinion).

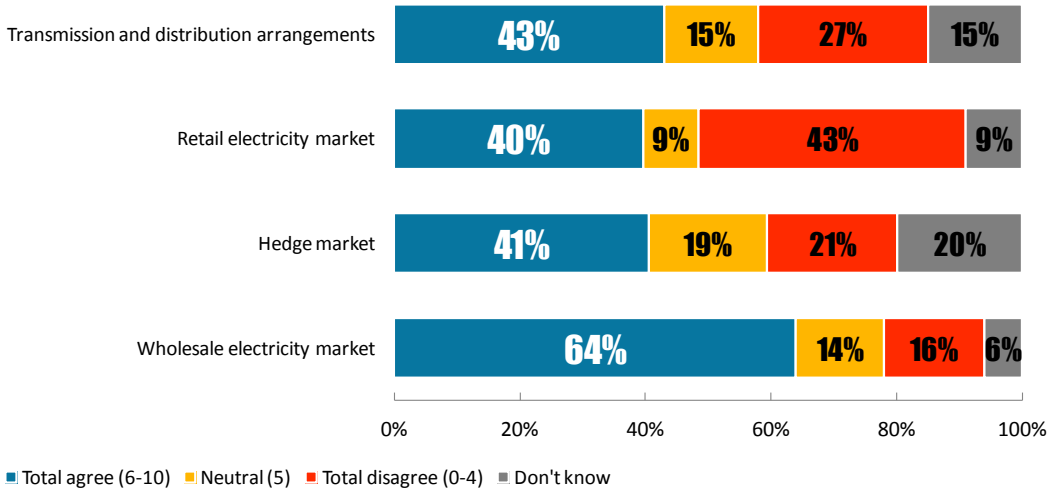
2.5 Efficiency in the electricity industry

Levels of agreement with eight statements relating to the efficiency of the wholesale, hedge and retail markets together with transmission and distribution arrangements were rated on a 0-10 scale where 0 meant 'strongly disagree' and 10 'strongly agree'. A ninth statement measured overall efficiency.

The wholesale, hedge markets and transmission/distribution arrangements generally had a higher proportion of respondents agree they were efficient mechanisms, with the reverse being true for the retail market. However, these market arrangements were perceived as being more efficient at coordinating electricity production and consumption than at facilitating timely and innovative investment in the electricity system.

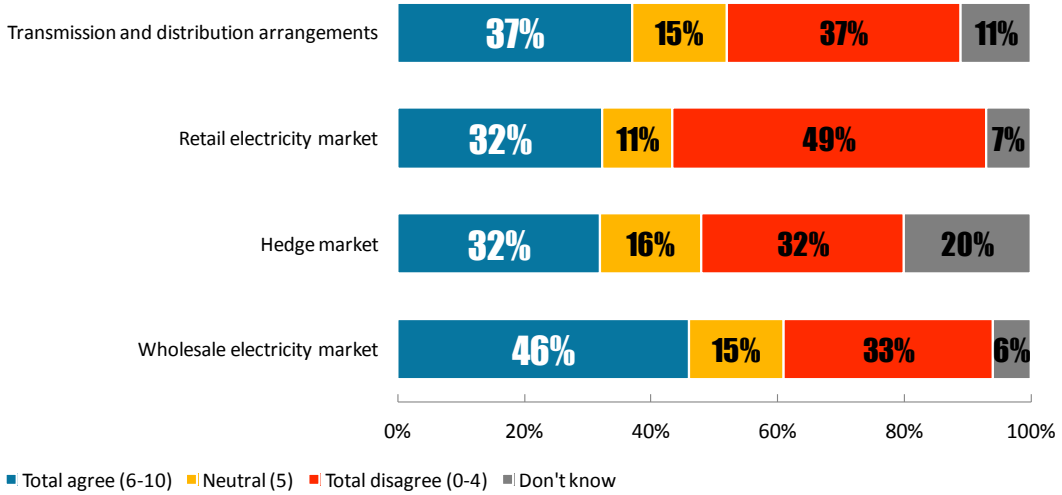
Static Efficiency

- *Is an efficient mechanism for coordinating electricity production and consumption*



Dynamic Efficiency

- *Is an efficient mechanism for facilitating timely and innovative investment in the electricity system*



Overall efficiency rated moderately

Just under half (49%) rated the wholesale and retail markets and transmission/distribution arrangements as efficient mechanisms for coordinating electricity production and consumption and for facilitating timely and innovative investment in the electricity system; an increase of 9% from 2011.

While a third believed they were not efficient mechanisms for facilitating such investment, 12% were neutral and 5% did not have an opinion.

Highest agreement with wholesale market as an efficient mechanism

The highest level of agreement was recorded for the wholesale market being an efficient mechanism for coordinating production and consumption with 64% agreeing (up 8% from 2011), 16% disagreeing, 14% neutral and 6% not giving a rating. As in 2011, this was the only statement to attract agreement from the majority of those surveyed.

It was also rated as the most efficient mechanism for facilitating timely and innovative investment in the electricity system with 46% agreeing, 33% disagreeing, 15% neutral and 6% not providing a rating.

Highest disagreement with retail market as an efficient mechanism

The highest level of disagreement was with the retail market facilitating timely and innovative investment in the electricity system with 49% in disagreement (down 6% from 2011), 32% in agreement, 11% neutral and 7% not giving a rating.

It was also rated as the least efficient mechanism for coordinating production and consumption with 43% disagreeing, 40% agreeing, 9% neutral and 9% not giving a rating.

Both hedge market and transmission and distribution arrangements seen as efficient mechanisms for coordinating production and consumption

Both the hedge market and transmission and distribution arrangements had higher proportions of respondents agree they were efficient mechanisms for coordinating production and consumption than disagree:

- The hedge market (41% agree, 21% disagree, 19% neutral and 20% did not know);
- Transmission and distribution arrangements (43% agree, 27% disagree, 15% neutral and another 15% did not know).

Divided on whether hedge market or transmission and distribution arrangements seen as efficient mechanisms for facilitating timely and innovative investment in the electricity system

Respondents were polarised over whether the hedge market and transmission and distribution arrangements are efficient mechanisms for facilitating timely and innovative investment in the electricity system:

- The hedge market (32% agree, 32% disagree, 16% neutral and 20% did not know);
- Transmission and distribution arrangements (37% agree, 37% disagree, 15% neutral and 11% did not know).

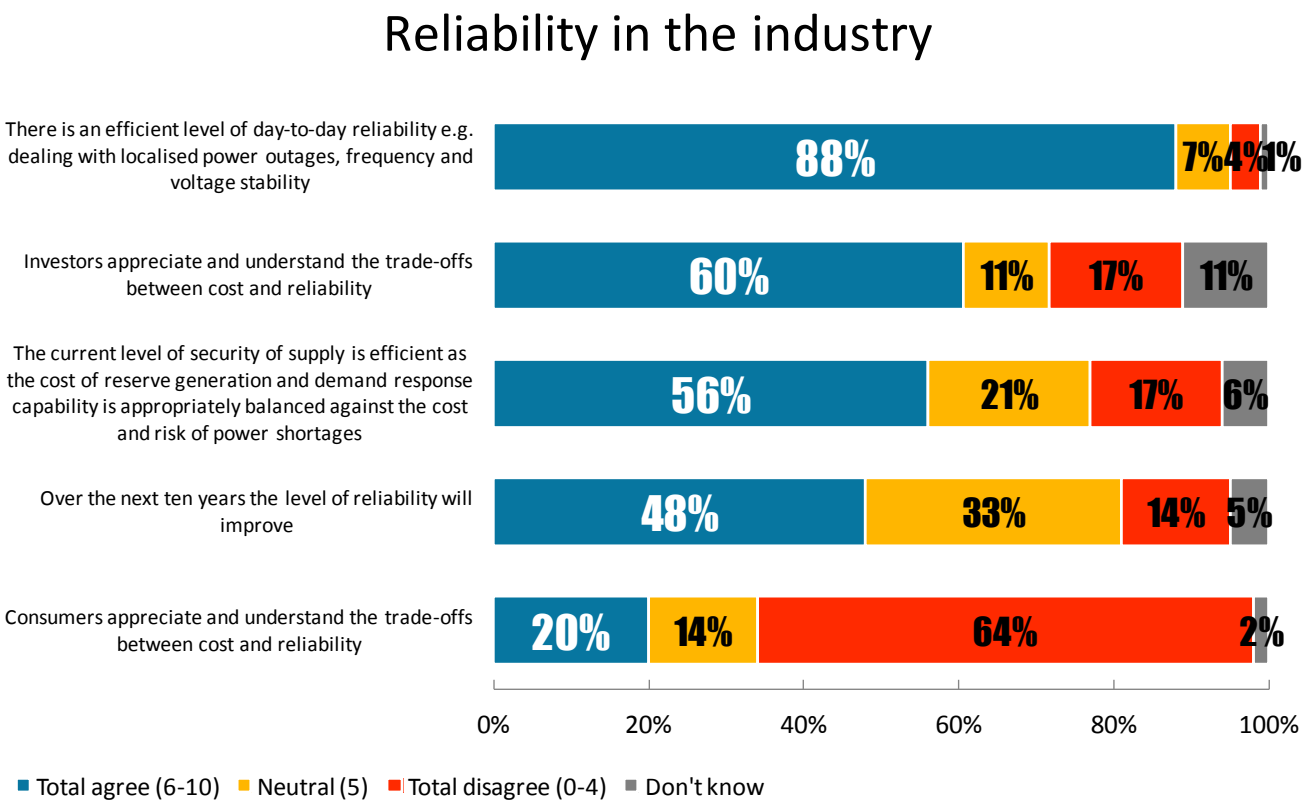
2.6 Reliability in the electricity industry

Levels of agreement with five statements measuring the reliability of supply of electricity were rated on a 0-10 scale where 0 meant 'strongly disagree' and 10 'strongly agree'. A larger proportion of respondents recorded agreement for most statements with the exception of consumer understanding of cost-reliability tradeoffs, which had a clear majority disagree.

A vast majority agree on day-to-day reliability

The statement concerning day-to-day reliability of supply was agreed with to a much larger extent than any other statement.

- *There is an efficient level of day-to-day reliability e.g. dealing with localised power outages, frequency and voltage stability.* (88% agreed, up 20% from 2011; 4% disagreed, 7% were neutral with a '5' rating and 1% did not know).



A majority agree investors understand the trade-offs

A majority agreed that investors appreciated and understood the trade-offs between costs and reliability than disagreed.

- *Investors appreciate and understand the trade-offs between costs and reliability.* (60% agreed, up 12% from 2011; 17% disagreed, 11% were neutral with a '5' rating and 11% did not know).

Conversely, a majority disagree that consumers understand the trade-offs

A large proportion disagreed that consumers appreciated and understood the trade-offs between costs and reliability.

- *Consumers appreciate and understand the trade-offs between costs and reliability.* (20% agreed, up 5%; 64% disagreed, 14% neutral with a '5' rating and 2% did not know).

Majority agree cost of reliability appropriately balanced against risk of shortages

More than half of respondents agreed that the security of supply is efficient as the costs of reserve generation and demand side response balanced the risk of shortages.

- *The current level of security of supply is efficient as the cost of reserve generation and demand response capability is appropriately balanced against the cost and risk of power shortages.* (56% agreed, up 22% from 2011; 17% disagreed, 21% were neutral with a '5' rating and 6% did not know).

Just under half convinced about long-term reliability

Just under half agreed that over the next 10 years the level of reliability will improve.

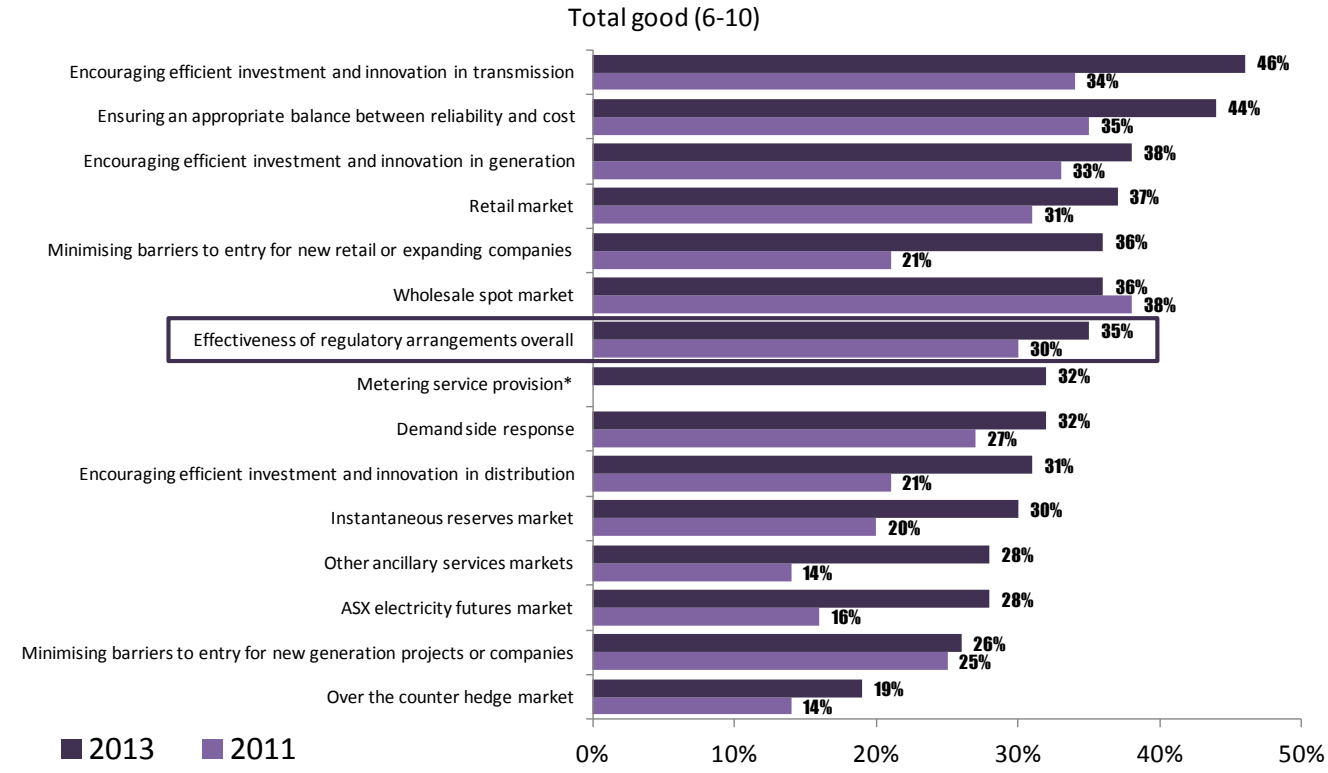
- *Over the next 10 years the level of reliability will improve.* (48% agreed, up 3% from 2011; 14% disagreed, 33% were neutral with a '5' rating and 5% did not know).

2.7 Current market arrangements

Fifteen current market arrangements within the electricity sector were rated on a 0-10 scale where 0 meant 'very poor' and 10 'very good.' Similar to 2011, none of the statements were rated as good by a majority of those surveyed and four arrangements were not rated on by over a third of respondents - over the counter hedge market, ASX electricity futures market, instantaneous reserves market and other ancillary services markets.

Perceptions of current market arrangements were more positive in 2013 with almost universal increases in the number rating them as good. Seven arrangements recorded a higher proportion rating them as good than poor, four showed polarised ratings and three were more likely to be rated poorly.

Current Market Arrangements



*Question not asked in 2011

Overall effectiveness of regulatory arrangements rated slightly more poorly then good:

A higher proportion of respondents rated the statement concerning overall effectiveness of regulatory arrangements as poor than good:

- Effectiveness of regulatory arrangements overall (35% rated this as good, up 5% from 2011; 42% as poor, 19% were neutral and 5% did not know).

Seven arrangements much more likely to be rated as good:

More rated the following arrangements as good than they did poor:

- Encouraging efficient investment and innovation in transmission (46% rated this as good, up 12% from 2011; 27% as poor, 19% were neutral and 9% did not know).
- Ensuring an appropriate balance between reliability and cost (44% rated this as good, up 9%; 23% as poor, 26% were neutral and 6% did not know).
- Encouraging efficient investment and innovation in generation (38% rated this as good, up 5%; 23% as poor, 22% were neutral and 16% did not know).
- Wholesale spot market (36% rated this as good, down 2%; 17% as poor, 17% were neutral and 30% did not know).
- Instantaneous reserves market (30% rated this as good, up 10%; 9% as poor, 23% were neutral and 38% did not know).
- ASX electricity futures market (28% rated this as good, up 12%; 11% as poor, 21% were neutral and 40% did not know).

- Other ancillary services markets (28% rated this as good, up 14%; 7% as poor, 27% were neutral and 37% did not know).

Opinion divided for four arrangements

Opinion was divided for four arrangements with similar levels of respondents rating them as good and poor:

- Retail market (37% rated this as good, up 6% from 2011; 41% as poor, 20% were neutral and 2% did not know).
- Minimising barriers to entry for new retail companies or existing companies expanding into new areas (36% rated this as good, up 15%; 36% as poor, 20% were neutral and 9% did not know).
- Metering service provision (32% rated this as good (not asked in 2011), 28% as poor, 28% were neutral and 11% did not know).
- Over the counter hedge market (19% rated this as good, up 5%; 16% as poor, 21% were neutral and 44% did not know).

Three arrangements more likely to be rated as poor

More rated the following arrangements as poor than good:

- Encouraging efficient investment and innovation in distribution (31% rated this as good, up 10% from 2011; 42% as poor, 21% were neutral and 6% did not know).
- Demand side response (32% rated this as good, up 5%; 42% as poor, 11% were neutral and 15% did not know).
- Minimising barriers to entry for new generation projects and/or new generation companies (26% rated this as good, up 1%; 32% as poor, 22% were neutral and 20% did not know).

Competitiveness of different retailers

3.1 Competitiveness of different types of retailers

Similar to 2011, electricity retailers rated lowly for competitiveness. Of seven retail sectors measured, they were rated as more competitive than petrol stations, but less competitive than electrical goods stores, telephone companies (including mobile phone services), supermarkets, online bookstores, banks and other financial services. Although ratings of competitiveness have increased across the board in 2013, electricity retailers increased the least (by 2%) to 40%.

COMPETITIVENESS OF BUSINESSES
(SUMMARY TABLE - '6-10' TOTAL COMPETITIVE)

We would like you to answer the first two questions as a residential electricity consumer, not as a representative of your organisation.

Using a scale of 0 to 10 where 0 means 'not at all competitive', 5 means 'just adequate' and 10 means 'extremely competitive', how competitive are the following businesses in terms of working to get your custom and offering you the best deals. If you do not know, use "don't know".

	2011 %	2013 %	Difference (2013-2011) %
Base: n=	***75***	***81***	
Electrical goods stores	83	88	5
Telephone companies – including mobile phone services	59	67	8
Supermarkets	64	67	3
Online bookstores	60	63	3
Banks and other financial services	51	54	3
Electricity retailers	38	40	2
Petrol stations – petrol prices	27	37	10

Base: All respondents

Electricity retailers

By organisation type

There was a marked difference between retailers and consumers about electricity retailers' competitiveness with the former more likely than any other group to rate them as competitive.

- Of the nine generator-retailers, generators only and retailers only, five rated electricity retailers as competitive, one rated them as uncompetitive and three as just adequate. Specifically, four of the five generator-retailers and one of the retailers gave a rating of competitive.

- Of the 25 from transmission or distribution organisations, ten rated electricity retailers as competitive, seven rated them as uncompetitive and another seven as just adequate. One did not know what to rate them.

- Of the 21 consumers and consumer representatives, eight rated electricity retailers as competitive, 10 rated them as uncompetitive and three rated them as just adequate.

- Of the 14 investors, educational institutions or professional bodies, five rated electricity retailers as competitive and five rated them as uncompetitive. Three rated them as just adequate and one did not know what to rate them.

- Of the four service providers, one rated electricity retailers as competitive and three as uncompetitive.

- Of the four metering servicers or providers, one rated electricity retailers as competitive, two as uncompetitive and one as neutral.

- Of the rest (n=4), two rated electricity retailers as competitive and the other two gave a neutral rating.

By how electricity is purchased

Those consumers who purchase directly from the spot market and purchase electricity hedges were more likely than others to rate electricity retailers' competitiveness poorly.

- Of the seven who purchase from a retailer on a fixed price tariff, two rated electricity retailers as competitive, four rated them as uncompetitive and one rated them as 'just adequate'.

- Of the five who purchase hedges, one rated electricity retailers as competitive and four rated them as uncompetitive.

- Of the three who purchased from a retailer and whose prices fluctuated with the spot market, one rated electricity retailers as competitive and two rated them as uncompetitive.

- Of the two who purchase directly from the spot market, both rated electricity retailers as uncompetitive.

Electrical goods stores most competitive; petrol stations least competitive

Rankings were similar to those in 2011, with electrical goods stores being ranked significantly higher than the other industries for competitiveness. Telephone companies moved the most relative to other industries, climbing two places due to an 8% increase in those that rated them as competitive. Although petrol stations had the largest increase (by 10%) they remain perceived as the least competitive industry. Perceptions of electricity retailers also remained relatively low, ranked as the second least competitive industry.

The industries tested, in descending order of perceived competitiveness:

- Electrical goods stores (88%, up 5%);
- Supermarkets and telephone companies including mobile phone services (67%, up 3% and up 8% respectively);
- Online bookstores (63%, up 3%);
- Banks and other financial services (54%, up 3%);
- Electricity retailers (40%, up 2%);
- Petrol stations - petrol prices (37%, up 10%).

COMPETITIVENESS OF BUSINESSES (OVERALL)

*Using a 0-10 scale where 0 means **not at all competitive**, 5 means **just adequate** and 10 means **extremely competitive**, how competitive are the following businesses in terms of working to get your business and offering you the best deals? If you do not know enough, just say so.*

	February 2013						
	Petrol prices at petrol stations %	Telephone companies - including mobile phone services %	Supermarkets %	Online bookstores %	Electrical goods stores %	Banks and other financial services %	Electricity retailers %
0 - Not at all competitive	5	1	-	-	-	1	2
1	6	1	2	-	-	2	7
2	6	5	6	1	-	6	9
3	14	2	4	1	-	6	9
4	11	10	7	2	4	11	7
Total non-competitive	**42**	**20**	**20**	**5**	**4**	**27**	**35**
5 - Just adequate	20	12	10	11	5	19	23
6	15	16	17	10	11	22	11
7	14	21	16	10	17	12	19
8	7	17	22	20	25	12	4
9	1	4	4	12	14	-	2
10 - Extremely competitive	-	9	7	11	21	7	4
Total competitive	**37**	**67**	**67**	**63**	**88**	**54**	**40**
Don't know	1	1	4	21	4	-	2

Base: All respondents (due to rounding percentages and totals shown may not add to 100)

Rating aspects of the electricity industry

4.1 Ratings of aspects of the electricity industry

Six aspects of the electricity industry's performance were measured, five of which had moderate to large increases in performance ratings from 2011.

RATING THE ELECTRICITY INDUSTRY
(SUMMARY TABLE - '6-10' TOTAL GOOD)

We would like you to answer the first two questions as a residential electricity consumer, not as a representative of your organisation.

Using a scale of 0 to 10 where 0 means extremely poor, 5 means neutral and 10 means extremely good; how would you rate the electricity industry in New Zealand on the following? If you do not know, use "don't know".

	2011 %	2013 %	Difference (2013-2011) %
Base: n=	***75***	***81***	
There is a reliable supply of electricity each day, that is, a good balance is achieved between the cost to consumers of power cuts and the cost of maintaining electricity supply (which is included in the overall cost of electricity to consumers)	65	74	9
There is enough electricity to meet ongoing needs, that is, a good balance is achieved between the cost of having some power stations sitting idle most of the time against the cost and risk of power shortages when there is a long drought that limits hydro generation	36	68	32
The New Zealand electricity market ensures electricity is generated and supplied efficiently	40	52	12
The New Zealand electricity market ensures that the right mix of power stations is built in time to meet growing demand for power	28	47	19
The current level of competition among electricity generators ensures they build the most efficient power stations and generate electricity as cheaply as possible	27	40	13
The current level of competition between electricity retailers ensures that prices consumers pay only rise in line with costs to the electricity companies	30	22	-8

Base: All respondents (due to rounding percentages may not add to 100)
*In 2011, question read: There is a reliable supply of electricity each day, that is, a good balance is achieved between the cost of power cuts versus the cost of maintaining power lines, which is funded by the fixed daily charge on your electricity bill

Those related to a reliable daily supply of electricity and producing enough electricity in dry years were the only two rated as good by a large majority. Producing enough electricity in dry years also had the largest increase in performance rating, with 32% more respondents rating it as good from 2011. The aspect to do with competition ensuring prices only rise in line with costs to the electricity companies was the only aspect to decrease in its performance rating and was rated much more poorly than the others.

Daily reliability of supply

Two of the six statements about the electricity industry's performance were rated as 'good' by a large majority of respondents. The aspect with the highest rating was:

- *There is a reliable supply of electricity each day, that is, a good balance is achieved between the cost to consumers of power cuts and the cost of maintaining electricity supply (which is included in the overall cost of electricity to consumers).* (74% rated as good, up 9% from 2011. 12% rated it as poor and 13% gave a neutral rating of '5' or did not know).

By organisation type

Generator retailers and generators were more likely to rate performance as good.

- Of the nine generator-retailers, generators only and retailers only, five rated this aspect as good, three as poor and one did not know what to rate it.
- Of the 25 from distribution or transmission organisations, 24 rated this aspect as good and one as neutral.
- Of the 21 consumers and consumer representatives, 13 rated it as good, three as poor and five as neutral.
- Of the 14 investors, educational institutions or professional bodies, 11 rated it as good and three as poor.
- Of the four service providers, all of them rated this aspect as good.
- Of the four metering servicers or providers, two rated this aspect as good, one as poor and one as neutral.
- Of the rest (n=4), one rated this aspect as good and three were either neutral or did not know.

By how electricity is purchased

Those who purchased from a retailer on a fixed price tariff were slightly more likely than others to provide neutral or poor ratings, though for the most part ratings were good.

- Of the seven who purchase from a retailer on a fixed price tariff, three rated it as good, one as poor and three as neutral.
- Of the five who purchase hedges, four rated it as good and one as neutral.

- All three who purchase from a retailer with prices that fluctuated with the spot market rated it as good.

- Of the two who purchase directly from the spot market, one rated it as good and one as neutral.

Ensuring enough electricity is available in dry years

The second aspect whose performance was rated as 'good' by a large majority of respondents dealt with ensuring enough electricity is available in dry years:

- *There is enough electricity to meet ongoing needs, that is, a good balance is achieved between the cost of having some power stations sitting idle most of the time against the cost and risk of power shortages when there is a long drought that limits hydro generation.* (68% rated as good, up 32% from 2011. 20% rated it as poor and 12% gave a neutral rating of '5' or did not know).

By organisation type

Service providers or agents and those from investors, educational institutions or professional bodies and distribution or transmission organisations tended to give slightly higher ratings.

- Of the nine generator-retailers, generators only and retailers only, five rated this aspect as good, three as poor and one didn't know.

- Of the 25 from distribution or transmission organisations, twenty rated this aspect as good, four as poor and one as neutral.

- Of the 21 consumers and consumer representatives, nine rated it as good, six as poor and another six as neutral.

- Of the 14 investors, educational institutions or professional bodies, 12 rated it as good and two as poor.

- All of the four service providers rated this aspect as good.

- Of the four metering servicers or providers, two rated this aspect as good, one as poor and one as neutral.

- Of the rest (n=4), three rated this aspect as good and one as neutral.

By how electricity is purchased

There was a reasonably homogenous set of poor ratings by type of purchaser.

- Of the seven who purchase from a retailer on a fixed price tariff, three rated it as good, one as poor and three as neutral.

- Of the five who purchase hedges, two rated it as good, one as poor and two as neutral.
- Of the three who purchased from a retailer with prices that fluctuated with the spot market, two rated it as good and one as poor.
- Both of those who purchase directly from the spot market rated this aspect neutrally.

Ensuring electricity is generated and supplied efficiently

A slight majority rated the performance of this aspect as 'good' and a relatively large minority rated it poorly.

- *The New Zealand electricity market ensures electricity is generated and supplied efficiently.* (52% rated as good, up 12% from 2011. 30% rated it as poor and 18% gave a neutral rating of '5' or did not know).

By organisation type

Electricity consumers and their representatives were more likely to give lower ratings.

- Of the nine generator-retailers, generators only and retailers only, four rated this aspect as good, three as poor, one as neutral and one did not know what to rate it.
- Of the 25 from distribution or transmission organisations, 15 rated this aspect as good, six as poor, and four as neutral.
- Of the 21 consumers and consumer representatives, eight rated it as good, 10 as poor and three as neutral.
- Of the 14 investors, educational institutions or professional bodies, eight rated it as good, three as poor and three as neutral.
- Of the four service providers, three rated it as good and one as poor.
- Of the four metering servicers or providers, two rated this aspect as good and another two as neutral.
- Of the rest (n=4), two rated this aspect as good, one as poor and one as neutral.

By how electricity is purchased

Those that purchased from retailers whose prices fluctuated with the spot market were more likely to give poorer ratings for this aspect.

- Of the seven who purchase from a retailer on a fixed price tariff, one rated it as good, four as poor and two as neutral.
- Of the five who purchase hedges, two rated it as good and three as poor.

- All three who purchased from a retailer with prices that fluctuated with the spot market rated this aspect poorly.

- Both of those that purchase directly from the spot market rated this aspect as good.

Ensuring the right mix of power stations is built

Though fewer respondents rated this aspect well when compared with previous aspects, it still had a higher proportion rate it as 'good' than 'poor'.

- *The New Zealand electricity market ensures that the right mix of power stations is built in time to meet growing demand for power.* (47% rated as good, up 19% from 2011. 33% rated it as poor and 20% gave a neutral rating of '5' or did not know).

By organisation type

Electricity consumers and their representatives were more likely to give lower ratings.

- Of the nine generator-retailers, generators only and retailers only, five rated this aspect as good, three as poor and one didn't know what to rate it.

- Of the 25 from distribution/transmission organisations, 13 rated this aspect as good, eight as poor, three as neutral and one didn't know.

- Of the 21 consumers and consumer representatives, five rated it as good, 11 as poor and five as neutral.

- Of the 14 investors, educational institutions or professional bodies, eight rated it as good, two as poor, three were neutral and one didn't know.

- Of the four service providers, three rated it as good and one as poor.

- Of the four metering servicers or providers, two rated this aspect as good, one as poor and one did not know what to rate it.

- Of the rest (n=4), two rated this aspect as good, one as poor and one as neutral.

By how electricity is purchased

Those that purchased electricity from a retailer on a fixed price tariff were more likely to rate this aspect neutrally compared to the other groups, which were more likely to rate it poorly.

- Of the seven who purchase from a retailer on a fixed price tariff, one rated it as good, two as poor and four as neutral.

- Of the five who purchase hedges, four rated it as poor and one as neutral.

- Of the three who purchased from a retailer with prices that fluctuated with the spot market, two rated it as poor and one as neutral.

- Both of those that purchase directly from the spot market rated it as poor.

Competition - ensures most efficient stations built as cheaply as possible

Performance ratings were polarised for the statement relating to competition among generators to ensure efficient power stations and cheaply generated electricity.

- *The current level of competition among electricity generators ensures they build the most efficient power stations and generate electricity as cheap as possible.* (40% rated as good, up 13% from 2011. 38% rated it as poor and 22% gave a neutral rating of '5' or did not know).

By organisation type

Once again, consumers and their representatives were more likely to give lower ratings.

- Of the nine generator-retailers, generators only and retailers only, five rated this aspect as good, three as poor and one as neutral.

- Of the 25 from distribution/transmission organisations, ten rated this aspect as good, eight as poor, and seven as neutral.

- Of the 21 consumers, consumer representatives and service providers, four rated it as good, 14 as poor, one as neutral and two didn't know what to rate it.

- Of the 14 investors, educational institutions or professional bodies, eight rated it as good, two as poor, three were neutral and one didn't know.

- Of the four service providers, two rated it as good, one as poor and one as neutral.

- Of the four metering servicers or providers, one rated this aspect as good, two as poor and one did not know what to rate it.

- Of the rest (n=4), two rated this aspect as good, one as poor and one gave it a neutral rating.

By how electricity is purchased

Every purchaser type, excluding those that purchased electricity from a retailer on a fixed price tariff, wholly rated this aspect as poor.

- Of the seven who purchase from a retailer on a fixed price tariff, one rated it as good, four as poor, one as neutral and one did not know.

- All five who purchase hedges rated it as poor.

- All three who purchase from a retailer with prices that fluctuated with the spot market rated it as poor.

- Both of those who purchase directly from the spot market rated it as poor.

Competition - ensures prices only rise in line with company costs

The statement concerning competition levels ensuring consumer prices only rise in line with costs to electricity companies rated significantly more poorly than every other statement.

- *The current level of competition between electricity retailers ensures that prices consumers pay only rise in line with costs to the electricity companies.* (22% rated as good, down 8% from 2011. 59% rated it as poor and 18% gave a neutral rating of '5' or did not know).

By organisation type

As with previous statements, consumers and their representatives were more likely to give lower ratings.

- Of the nine generator-retailers, generators only and retailers only, five rated this aspect as good and four as poor (all of the five generator-retailers rated it as good).
- Of the 25 from distribution or transmission organisations, six rated this aspect as good, sixteen as poor and three as neutral.
- Of the 21 consumers, consumer representatives and service providers, one rated it as good, 15 as poor and five as neutral.
- Of the 14 investors, educational institutions or professional bodies, four rated it as good, seven as poor, two as neutral and one did not know.
- Of the four service providers, three rated it as poor and one as neutral.
- Of the four metering servicers or providers, two rated this aspect as good and two as poor.
- Of the rest (n=4), one rated this aspect as poor and three gave it a neutral rating.

By how electricity is purchased

Ratings by type of purchaser were largely homogenous for this statement.

- Of the seven who purchase from a retailer on a fixed price tariff, five rated it as poor and two were neutral.
- Of the five who purchase hedges, four rated it as poor and one was neutral.
- Two of the three who purchased from a retailer with prices that fluctuated with the spot market rated it as poor and one was neutral.
- Both of those who purchase directly from the spot market rated this statement poorly.

RATING THE ELECTRICITY INDUSTRY (2013)

We would like you to answer the first two questions as a residential electricity consumer, not as a representative of your organisation.

Using a scale of 0 to 10 where 0 means extremely poor, 5 means neutral and 10 means extremely good; how would you rate the electricity industry in New Zealand on the following? If you do not know, use "don't know".

	0 %	1 %	2 %	3 %	4 %	TOTAL POOR (0-4) %	NEUTRAL 5 %	6 %	7 %	8 %	9 %	10 %	TOTAL GOOD (6-10) %	Don't know %
There is a reliable supply of electricity each day, that is, a good balance is achieved between the cost to consumers of power cuts and the cost of maintaining electricity supply (which is included in the overall cost of electricity to consumers)*	2	1	1	2	5	**12**	**11**	9	23	20	14	9	**74**	2
There is enough electricity to meet ongoing needs, that is, a good balance is achieved between the cost of having some power stations sitting idle most of the time against the cost and risk of power shortages when there is a long drought that limits hydro generation	4	-	4	10	2	**20**	**11**	16	21	16	7	7	**68**	1
The New Zealand electricity market ensures electricity is generated and supplied efficiently	1	4	10	6	9	**30**	**17**	6	23	7	9	6	**52**	1
The New Zealand electricity market ensures that the right mix of power stations is built in time to meet growing demand for power	2	4	11	7	9	**33**	**15**	14	14	12	5	2	**47**	5
The current level of competition among electricity generators ensures they build the most efficient power stations and generate electricity as cheaply as possible	1	2	11	14	10	**38**	**17**	11	7	10	5	6	**40**	5
The current level of competition between electricity retailers ensures that prices consumers pay only rise in line with costs to the electricity companies	12	11	10	16	10	**59**	**17**	7	7	4	2	1	**22**	1

Base: All respondents (due to rounding percentages and totals shown may not add to 100)
*In 2011, question read: There is a reliable supply of electricity each day, that is, a good balance is achieved between the cost of power cuts versus the cost of maintaining power lines, which is funded by the fixed daily charge on your electricity bill

Rating aspects of competition

5.1 Rating aspects of competition in the electricity industry

COMPETITION IN THE ELECTRICITY INDUSTRY
(SUMMARY TABLE - '6-10' TOTAL AGREE)

In terms of competition, the Authority is seeking: Widespread consumer and investor confidence in the competitiveness of New Zealand's wholesale and retail electricity markets. A workably competitive market is one in which level of rivalry between suppliers is satisfactory, in that a supplier wanting to maximise its profits must carefully consider the responses of rivals and customers when deciding on prices or what to produce.

Using a scale of 0 to 10 where 0 means strongly disagree, 5 means neutral and 10 means strongly agree; please indicate your views on the following statements. If you do not have an opinion, please use "don't know".

	2011 %	2013 %	Difference (2013-2011) %
Base: n=	*75*	*81*	
Prices in the spot market when hydro lake levels are well below average reflect the outcomes expected in a workably competitive market	52	62	10
Prices in the spot market generally reflect the outcomes expected in a workably competitive market	51	54	3
Prices in the ASX market for long-term (e.g. 3 year-ahead) electricity futures contracts reflect the outcomes expected in a workably competitive market	18	43	25
Prices in the ASX market for short-term (e.g. up to 6 months-ahead) electricity futures contracts reflect the outcomes expected in a workably competitive market	25	43	18
Prices in the instantaneous reserves (IR) market reflect the outcomes expected in a workably competitive market	29	42	13
Prices for frequency keeping reflect the outcomes expected in a workably competitive market	19	35	16
Prices in New Zealand's retail electricity market reflect the outcomes expected in a workably competitive market	38	35	-3
There is effective competition in provision of metering services*	n/a	31	-
Prices in the over-the-counter hedge market reflect the outcomes expected in a workably competitive market	15	30	15
Prices for black start reflect the outcomes expected in a workably competitive market	16	28	12
Prices for voltage support reflect the outcomes expected in a workably competitive market	25	26	1

*Question not asked in 2011
Base: All respondents (due to rounding percentages may not add to 100)

Levels of agreement with 11 statements reflective of a workably competitive market were rated on a 0-10 scale where 0 meant 'strongly disagree' and 10 'strongly agree'. Agreement was higher across almost every statement when compared to 2011, though there was one slight decrease for the statement concerning price in the retail market reflecting a competitive market.

Ratings of competitiveness were highest for statements regarding the spot market, followed by the ASX market. There was no firm opinion on the prices in the over-the-counter hedge market with over half of respondents not giving a rating or remaining neutral. Though most ancillary services also had relatively proportions of respondents that did not give a rating, they were generally perceived as more competitive than less competitive. Retail competition was deemed to be the least competitive.

Highest level of agreement with spot price in a dry year statement

As in 2011, the highest level of agreement was for a statement related to the spot market prices in dry years with just over three in five of those surveyed agreeing with it:

- *Prices in the spot market when hydro lake levels are well below average reflect the outcomes expected in a workably competitive market.* (62% agree, up 10%. 15% disagree, 7% neutral with a '5' rating and 16% did not know).

There tended to be higher levels of agreement with this among distribution or transmission organisations (18 agreed, two disagreed, one neutral and four did not know) and investors, educational institutions or professional bodies (ten agreed, three disagreed and one was neutral). Electricity consumers and their representatives were also slightly more likely to agree (nine agreed, three disagreed and two were neutral), or lack an opinion (seven reported they didn't know). Likewise, of the nine generator-retailers, generators only and retailers only, six agreed and three disagreed.

- Of the seven who purchase from a retailer on a fixed price tariff, two agreed and five did not know.
- Of the five who purchase hedges, two agreed, one disagreed and two were neutral.
- Of the three who purchased from a retailer with prices that fluctuated with the spot market, two agreed and one disagreed.
- Of the two who purchase directly from the spot market, both were neutral.

Second highest level of agreement with spot prices reflecting outcomes in a workably competitive market

The second highest level of agreement was for the spot market generally reflecting market outcomes.

- *Prices in the spot market generally reflect the outcomes expected in a workably competitive market.* (54% agree, up 3%. 16% disagree, 15% neutral with a '5' rating and 15% did not know).

There tended to be higher levels of agreement with this among generator-retailers, generators only and retailers only (seven agreed, one disagreed and one was neutral) and among the 25 distribution or transmission organisations (17 agreed, three disagreed, one was neutral and four didn't know), followed by investors, educational institutions or professional bodies (nine of 14 agreed, two disagreed, two were neutral and one didn't know). In comparison, of the 21 electricity consumers and their representatives, six agreed, six disagreed, four gave a neutral rating and five didn't know.

- Of the seven who purchase from a retailer on a fixed price tariff, just one agreed, two gave a neutral rating and four did not know.

- Of the five who purchase hedges, one agreed, three disagreed and one gave a neutral rating.

- Of the three who purchased from a retailer with prices that fluctuated with the spot market, one agreed and two disagreed.

- Of the two who purchase directly from the spot market, one disagreed and one gave a neutral rating.

Highest level of disagreement with retail market

The highest level of disagreement was with the statement related to the retail market with just over two in five in disagreement:

- *Prices in New Zealand's retail electricity market reflect the outcomes expected in a workably competitive market.* (35% agree, down 3%. 41% disagree, 17% were neutral with a '5' rating and 7% did not know).

The highest levels of disagreement came from the 21 electricity consumers and their representatives, of which 10 disagreed, three were neutral, five agreed and three did not know. Following this, 11 of those from distribution or transmission organisations disagreed, six were neutral, six agreed and two did not know.

In contrast, of the 14 investors, educational institutions or professional bodies, seven agreed, five disagreed and two were neutral. Opinion was divided for the nine generator-retailers, generators only and retailers only with four each agreeing and disagreeing and one giving a neutral rating.

Of the seven who purchase from a retailer on a fixed tariff, three disagreed, one was neutral and three didn't know. Of the five who purchase hedges, four disagreed and one agreed. Of the three who purchased from a retailer with prices that fluctuated with the spot market, two disagreed and one agreed. Additionally, both of those who purchase directly from the spot market disagreed.

Second highest level of disagreement with metering services

The only other high level of disagreement belonged to the new statement introduced in 2013 relating to the provision of metering services, with just over a third in disagreement:

- *There is effective competition in the provision of metering services.* (31% agree, 35% disagree, 22% were neutral with a '5' rating and 12% did not know).

The highest levels of disagreement came from the four service providers or agents with all of them disagreeing. More consumers and their representatives disagreed (6) than agreed (3), six gave a neutral rating and another six did not know. Four of the nine generator-retailers, generators only and retailers only agreed, three disagreed and two were neutral. Nine of those from distribution or transmission organisations agreed and eight disagreed, five gave a neutral rating and three did not know. Of the 14 investors, educational institutions or professional bodies, five agreed, three disagreed, five gave a neutral rating and one didn't know.

Of the seven who purchase from a retailer on a fixed tariff, one agreed, one was neutral and five didn't know. Of the five who purchase hedges, two disagreed, one agreed, one was neutral and one did not know. Of the three who purchased from a retailer with prices that fluctuated with the spot market, one disagreed, one agreed and one was neutral. Additionally, of those who purchase directly from the spot market one disagreed and one did not know.

High level of 'don't know' for all other statements

Although the number of respondents without an opinion decreased in 2013, there were still high levels of those that selected 'don't know' for the remaining seven statements. Between 27% and 44% of respondents chose not to provide a rating for these seven statements. However, levels of agreement were far higher for each statement than levels of disagreement; this is different to the 2011 results in which three statements had higher levels of disagreement. In descending order of agreement:

- *Prices in the ASX market for long-term (e.g. 3 year ahead) electricity futures contracts reflect the outcomes expected a workably competitive market.* (43% agree, 12% disagree, 17% neutral with a '5' rating and 27% did not know).

Excluding all respondents that did not give a rating:
Of nine generator-retailers, generators only and retailers only, five agreed, two disagreed and two gave a neutral rating. Thirteen of 16 from distribution/transmission organisations agreed, one disagreed and two were neutral. Seven of 14 electricity consumers and their representatives agreed, three disagreed and four were neutral. Six of 12 investors, educational institutions or professional bodies agreed, four disagreed and two were neutral.

Of the five that purchase electricity hedges, two agreed, one disagreed and two were neutral. Of the three that purchase from a retailer on a fixed tariff, one agreed, one disagreed and one was neutral. Two of three that purchase from a retailer whose prices

fluctuate with the spot market agreed and one disagreed. Both of those that purchase directly from the spot market gave a neutral rating.

- *Prices in the ASX market for short-term (e.g. up to 6 months ahead) electricity futures contracts reflect the outcomes expected a workably competitive market.* (43% agree, 14% disagree, 15% neutral with a '5' rating and 28% did not know).

Excluding all respondents that did not give a rating:
Of the nine generator-retailers, generators only and retailers only, six agreed with the statement, two disagreed and one was neutral. Of the 16 from distribution or transmission organisations, 11 agreed, two disagreed and three gave a neutral rating. Of the 15 electricity consumers and their representatives who gave a rating, seven agreed, four disagreed and four were neutral. Eight of the 12 investors, educational institutions or professional bodies agreed, three disagreed and one gave a neutral rating.

Of the five who purchase hedges, two agreed, two disagreed and one gave a neutral rating. Of the three who purchase from a retailer on a fixed tariff, one agreed, one disagreed and one was neutral. Two of the three that purchase from a retailer whose prices fluctuate with the spot market disagreed and one agreed. One of those that purchase directly from the spot market agreed and one gave a neutral rating.

- *Prices in the Instantaneous Reserves (IR) market reflect the outcomes expected in a workably competitive market.* (42% agree, 14% disagree, 17% neutral with a '5' rating and 27% don't know).

Excluding all respondents that did not give a rating:
Of the nine generator-retailers, generators only and retailers only four agreed with the statement, four disagreed and one gave a neutral rating. Of 18 from distribution or transmission organisations, 14 agreed, two disagreed and two were neutral. Of the 14 electricity consumers and their representatives who gave a rating, six agreed, three disagreed and five were neutral.

Of the five that purchase hedges, one disagreed and four were neutral. Both of those that purchase from a retailer on a fixed tariff that gave a rating agreed. One of those that purchase from a retailer whose prices fluctuate with the spot market disagreed and two were neutral and both of those that purchase directly from the spot market were neutral.

For the remaining statements, at least one third of respondents had no opinion or did not give a rating:

- *Prices for frequency keeping reflect the outcomes expected in electricity futures contracts reflect the outcomes expected a workably competitive market.* (35% agree, 11% disagree, 19% neutral with a '5' rating and 36% did not know).

Excluding all respondents that did not give a rating:
Of the eight generator-retailers, generators only and retailers only who did give a rating three agreed, four disagreed and one gave a neutral rating. Of 14 from distribution or transmission organisations, 10 agreed, two disagreed and two were neutral. Of the 12

electricity consumers and their representatives, seven agreed, one disagreed and four were neutral. Five of the nine investors, educational institutions or professional bodies agreed, two disagreed and two gave a neutral rating.

Of the four who purchase hedges that gave a rating, one each agreed and disagreed and two were neutral. Two of those that purchase from a retailer on a fixed tariff agreed and one gave a neutral rating. One of those that purchase from a retailer whose prices fluctuate with the spot market agreed and another was neutral; of those that purchase directly from the spot market one disagreed and one was neutral.

- *Prices in the over-the-counter hedge market reflect the outcomes expected in a workably competitive market.* (30% agree, 15% disagree, 21% neutral with a '5' rating and 35% did not know).

Excluding all respondents that did not give a rating:
Of the nine generator-retailers, generators only and retailers only, three agreed with the statement, four disagreed and two were neutral. Of the 17 from distribution or transmission organisations, nine agreed, three disagreed and five gave a neutral rating. Of the 11 electricity consumers and their representatives, six agreed, two disagreed and three were neutral.

None of those that purchase from a retailer on a fixed tariff gave a rating for this statement. Of the five who purchase hedges, two agreed, one disagreed and two were neutral. Two of those that purchase from a retailer whose prices fluctuate with the spot market agreed and one disagreed; both that purchase directly from the spot market were neutral.

- *Prices for black start reflect the outcomes expected in a workably competitive market.* (28% agree, 6% disagree, 21% neutral with a '5' rating and 44% did not know).

Excluding all respondents that did not give a rating:
Of the eight generator-retailers, generators only and retailers only that gave a rating, five agreed with the statement, two disagreed and one gave a neutral rating. Of the 13 from distribution or transmission organisations, seven agreed, one disagreed and five gave a neutral rating. Only eight electricity consumers and their representatives gave a rating for this statement: four agreed, one disagreed and three were neutral.

When categorised by purchaser type, the majority did not give a rating for this statement.

- *Prices for voltage support reflect the outcomes expected in electricity futures contracts reflect the outcomes expected a workably competitive market.* (26% agree, 12% agree, 27% neutral with a '5' rating and 44% did not know).

Excluding all respondents that did not give a rating:
Of the seven generator-retailers, generators only and retailers only who did give a rating, three agreed with the statement, three disagreed and one gave a neutral rating. Of the 13 from distribution or transmission organisations, eight agreed, two disagreed and three gave a neutral rating. Of the nine electricity consumers and their representatives, two each agreed and disagreed and five gave a neutral rating. Five of the nine investors,

educational institutions or professional bodies that gave a rating agreed, three disagreed and one gave a neutral rating.

None of those that purchase from a retailer on a fixed tariff gave a rating for this statement. Of the five who purchase hedges that gave a rating, one disagreed and four were neutral. All three that purchase from a retailer whose prices fluctuate with the spot market were neutral and of those that purchase directly from the spot market one disagreed and one was neutral.

COMPETITION IN THE ELECTRICITY INDUSTRY (2013)

In terms of competition, the Authority is seeking: Widespread consumer and investor confidence in the competitiveness of New Zealand's wholesale and retail electricity markets. A workably competitive market is one in which level of rivalry between suppliers is satisfactory, in that a supplier wanting to maximise its profits must carefully consider the responses of rivals and customers when deciding on prices or what to produce.

Using a scale of 0 to 10 where 0 means strongly disagree, 5 means neutral and 10 means strongly agree; please indicate your views on the following statements. If you do not have an opinion, please use "don't know".

	0 %	1 %	2 %	3 %	4 %	TOTAL DISAGREE (0-4) %	NEUTRAL 5 %	6 %	7 %	8 %	9 %	10 %	TOTAL AGREE (6-10) %	Don't know %
Prices in the spot market when hydro lake levels are well below average reflect the outcomes expected in a workably competitive market	2	1	2	2	6	15	7	12	23	10	11	5	62	16
Prices in the spot market generally reflect the outcomes expected in a workably competitive market	1	2	1	5	6	16	15	15	15	14	9	2	54	15
Prices in the ASX market for long-term (e.g. 3 year-ahead) electricity futures contracts reflect the outcomes expected in a workably competitive market	2	5	-	-	5	12	17	14	16	7	5	1	43	27
Prices in the ASX market for short-term (e.g. up to 6 months-ahead) electricity futures contracts reflect the outcomes expected in a workably competitive market	1	2	2	4	4	14	15	16	10	14	4	-	43	28
Prices in the instantaneous reserves (IR) market reflect the outcomes expected in a workably competitive market	1	2	-	6	4	14	17	16	12	7	5	1	42	27
Prices for frequency keeping reflect the outcomes expected in a workably competitive market	-	1	1	9	-	11	19	14	9	7	4	1	35	36
Prices in New Zealand's retail electricity market reflect the outcomes expected in a workably competitive market	6	5	5	9	16	41	17	11	9	7	6	1	35	7
There is effective competition in provision of metering services	2	5	6	11	10	35	22	11	10	6	2	1	31	12
Prices in the over-the-counter hedge market reflect the outcomes expected in a workably competitive market	4	2	1	2	5	15	21	12	10	6	1	-	30	35
Prices for black start reflect the outcomes expected in a workably competitive market	1	-	-	4	1	6	21	10	7	5	4	2	28	44
Prices for voltage support reflect the outcomes expected in a workably competitive market	1	-	1	6	4	12	17	4	14	5	4	-	26	44

Base: All respondents (due to rounding percentages and totals shown may not add to 100)

Rating aspects of efficiency

6.1 Rating aspects of efficiency in the electricity industry

Ratings of how efficient wholesale, hedge, retail markets and transmission and distribution arrangements are for coordinating electricity production and consumption and for facilitating timely and innovative investment in the electricity system have increased across the board in 2013. This is also evidenced by a higher rating for the statement measuring the overall efficiency of these mechanisms. Each mechanism was also thought to be more efficient at coordinating electricity production and consumption than facilitating timely and innovative investment in the electricity system.

RATING THE ELECTRICITY INDUSTRY
(SUMMARY TABLE - '6-10' TOTAL AGREE)

In terms of efficiency, the Authority is seeking: Widespread recognition that New Zealand's wholesale and retail electricity markets, and transmission and distribution arrangements are efficient mechanisms for coordinating electricity production and consumption, and for facilitating timely and innovative investment in the electricity system.

Using a scale of 0 to 10 where 0 means strongly disagree, 5 means neutral and 10 means strongly agree; please indicate your views on the following statements. If you do not know, just say so.

	2011 %	2013 %	Difference (2013-2011) %
Base: n=	*75*	*81*	
New Zealand's wholesale electricity market is an efficient mechanism for:			
Coordinating electricity production and consumption	57	64	7
Facilitating timely and innovative investment in the electricity system	32	46	14
New Zealand's hedge market is an efficient mechanism for:			
Coordinating electricity production and consumption	20	41	21
Facilitating timely and innovative investment in the electricity system	19	32	13
New Zealand's retail electricity market is an efficient mechanism for:			
Coordinating electricity production and consumption	34	40	6
Facilitating timely and innovative investment in the electricity system	27	32	5
New Zealand's transmission and distribution arrangements (regulatory and voluntary) are efficient mechanisms for:			
Coordinating electricity production and consumption	36	43	7
Facilitating timely and innovative investment in the electricity system	33	37	4
Overall New Zealand's wholesale and retail electricity markets, and transmission and distribution arrangements are efficient mechanisms for coordinating electricity production and consumption and facilitating timely and innovative investment in the electricity system.	40	49	9

Base: All respondents (due to rounding percentages may not add to 100)

Overall efficiency is average, has improved from 2011

The overall efficiency of the wholesale, retail and transmission or distribution arrangements for coordinating electricity production and consumption and for facilitating timely and innovative investment in the electricity system has improved from 2011. This year, almost half (49%) agreed these were efficient mechanisms for facilitating such investment, a 9% increase. One third disagreed, 12% were neutral and 5% did not know.

By organisation type

Generators, retailers and service providers had the highest levels of agreement.

- Of the nine generator-retailers, generators only and retailers only, eight agreed and one disagreed.
- Of the 25, distribution or transmission organisations, 11 agreed, nine disagreed and five were neutral.
- Of the 21 electricity consumers and their representatives, six agreed, 12 disagreed, one was neutral and two did not know.
- Of the 14 investors, educational institutions and professional bodies, eight agreed, four disagreed, one was neutral and one did not know.
- Of the four service providers, three agreed and one was neutral.
- Of the four metering servicers or providers, one agreed, one disagreed, one was neutral and one did not know.
- Of the rest (n=4), three agreed and one gave a neutral rating.

By how electricity is purchased

Higher levels of disagreement were associated with those who purchased a fixed price tariff from a retailer.

- Of the seven who purchase from a retailer on a fixed price tariff, one agreed, four disagreed and two did not know.
- Of the five who purchase hedges, one agreed, three disagreed and one was neutral.
- All three of those who purchased from a retailer with prices that fluctuated with the spot market disagreed.
- Of the two who purchase directly from the spot market, one agreed and one was neutral.

Highest agreement with wholesale market coordinating production and consumption

Consistent with 2011, the highest level of agreement was with the wholesale market being an efficient mechanism for coordinating production and consumption with 64% in agreement (up 7%), 16% disagreeing, 14% neutral giving a rating of '5' and 6% not giving a rating. This was the only statement to attract agreement from the majority of those surveyed.

By organisation type

Agreement was firm across most organisations, with the exception of electricity consumers and their representatives.

- Of the nine generator-retailers, generators only and retailers only, eight agreed and one disagreed.
- Of the 25 distribution or transmission organisations, 17 agreed, two disagreed, five were neutral and one did not know.
- Of the 21 electricity consumers and their representatives, eight agreed, seven disagreed, two were neutral and four did not know.
- Of the 14 investors, educational institutions and professional bodies, 11 agreed, two disagreed and one was neutral.
- Of the four service providers, three agreed and one was neutral.
- Of the four metering servicers or providers, two agreed, one disagreed and one was neutral.
- Of the rest (n=4), three agreed and one was neutral.

By how electricity is purchased

Agreement was relatively consistent across most organisations, though those who purchased a fixed price tariff from a retailer were more likely to not give a rating.

- Of the seven who purchase from a retailer on a fixed price tariff, one agreed, two disagreed, one was neutral and three did not know.
- Of the five who purchase hedges, two agreed, two disagreed and one was neutral.
- Of the three who purchased from a retailer with prices that fluctuated with the spot market, one agreed and two disagreed.
- Of the two who purchase directly from the spot market, one agreed and one was neutral.

Highest disagreement with retail market facilitating timely and innovative investment

Also consistent with 2011, the highest level of disagreement was with the retail market facilitating timely and innovative investment in the electricity system with 49% in disagreement (down 6%), 32% in agreement, 11% neutral giving a rating of '5' and 7% not giving a rating.

By organisation type

Disagreement was higher for service providers and those working in distribution or transmission organisations.

- Of the nine generator-retailers, generators only and retailers only, two agreed, four disagreed, two were neutral and one did not know.
- Of the 25 distribution or transmission organisations, six agreed, 16 disagreed, one was neutral and two did not know.
- Of the 21 electricity consumers and their representatives, four agreed, 11 disagreed, three were neutral and another three did not know.
- Of the 14 investors, educational institutions and professional bodies, eight agreed, five disagreed and one was neutral.
- Of the four service providers, one agreed and three disagreed.
- Of the four metering servicers or providers, three agreed and one disagreed.
- Of the rest (n=4), two agreed and two gave a neutral rating.

By how electricity is purchased

No electricity consumers agreed with this statement; the highest levels of outright disagreement were associated with those who purchase from a retailer whose prices fluctuate with the spot market and those that purchase hedges.

- Of the seven who purchase from a retailer on a fixed price tariff, four disagreed, one was neutral and two did not know.
- Of the five who purchase hedges, four disagreed and one did not know.
- Each of the three who purchased from a retailer with prices that fluctuated with the spot market disagreed.
- Of the two who purchase directly from the spot market, one disagreed and one did not know.

Coordinating production and consumption

Respondents were more likely to agree each mechanism was efficient at coordinating electricity production and consumption than it was for facilitating timely and innovative investment in the electricity system.

As well as the wholesale market described above, there were higher levels of agreement than disagreement that the hedge market and transmission and distribution arrangements were efficient for coordinating electricity production and consumption. The retail market was the only mechanism to have a slightly higher proportion of respondents disagree that it was efficient for coordinating electricity production and consumption.

➢ **The hedge market** (41% agree, 21% disagree, 19% neutral and 20% don't know).

By organisation type

Higher levels of agreement came from generator-retailers, generators only and retailers only.

- Of the nine generator-retailers, generators only and retailers only, five agreed, two disagreed and two were neutral.
- Of the 25 distribution or transmission organisations, 11 agreed, five disagreed, six were neutral and three did not know.
- Of the 21 electricity consumers and their representatives, seven agreed, four disagreed, three were neutral and seven did not know.
- Of the 14 investors, educational institutions and professional bodies, seven agreed, four disagreed, one was neutral and two did not know.
- Of the four service providers, one agreed, one disagreed and two were neutral.
- Of the four metering servicers or providers, one agreed and three did not know.
- Of the rest (n=4), one agreed, one disagreed, one was neutral and one did not know.

By how electricity is purchased

There were reasonably high levels of disagreement from all consumers but those that purchase from a retailer on a fixed price tariff, who were more likely to state they did not know.

- Of the seven who purchase from a retailer on a fixed price tariff, two agreed and five did not know.
- Of the five who purchase hedges, two agreed and three disagreed.
- Of the three who purchased from a retailer with prices that fluctuated with the spot market, one agreed and two disagreed.

- Of the two who purchase directly from the spot market, one agreed and one disagreed.

➢ **Transmission and distribution arrangements** (43% agree, 27% disagree, 15% neutral and 15% don't know).

By organisation type

Higher levels of agreement came from investors, educational institutions and professional bodies as well as distribution or transmission organisations.

- Of the nine generator-retailers, generators only and retailers only, three agreed, three disagreed and two were neutral and one did not know.
- Of the 25 distribution or transmission organisations, 11 agreed, six disagreed, four were neutral and four did not know.
- Of the 21 electricity consumers and their representatives, six agreed, eight disagreed, three were neutral and four did not know.
- Of the 14 investors, educational institutions and professional bodies, ten agreed, two disagreed and two did not know.
- Of the four service providers, one agreed and three were neutral.
- Of the four metering servicers or providers, one agreed, two disagreed and one did not know.
- Of the rest (n=4), three agreed and one disagreed.

By how electricity is purchased

Levels of agreement were polarised across each method of purchasing electricity.

- Of the seven who purchase from a retailer on a fixed price tariff, one disagreed, two were neutral and four did not know.
- Of the five who purchase hedges, two agreed, two disagreed, and one was neutral.
- Of the three who purchased from a retailer with prices that fluctuated with the spot market, one agreed, one disagreed and one was neutral.
- Of the two who purchase directly from the spot market, one agreed and one disagreed.

➢ **The retail market** (43% disagree, 40% agree, 9% neutral and 9% don't know).

By organisation type

Slightly higher levels of disagreement came from consumers and distribution or transmission organisations.

- Of the nine generator-retailers, generators only and retailers only, three agreed, four disagreed and one was neutral and one did not know.
- Of the 25 distribution or transmission organisations, 11 agreed, 12 disagreed and two did not know.
- Of the 21 electricity consumers and their representatives, five agreed, 11 disagreed, two were neutral and three did not know.
- Of the 14 investors, educational institutions and professional bodies, eight agreed, five disagreed and one was neutral.
- Of the four service providers, two agreed and two disagreed.
- Of the four metering servicers or providers, one agreed, one disagreed, one was neutral and one did not know.
- Of the rest (n=4), two agreed and two were neutral.

By how electricity is purchased

The highest levels of disagreement were associated with those who purchase from a retailer with prices that fluctuate with the spot market and those who purchase hedges.

- Of the seven who purchase from a retailer on a fixed price tariff, three disagreed, one was neutral and three did not know.
- Of the five who purchase hedges, one agreed and four disagreed.
- All three who purchased from a retailer with prices that fluctuated with the spot market disagreed.
- Of the two who purchase directly from the spot market, one agreed and one disagreed.

■ **Higher levels of disagreement for those statements relating to facilitating timely and innovative investment**

Each mechanism was seen as less efficient at facilitating timely and innovative investment in the electricity system. Opinion was also more divided as to whether mechanisms were efficient at all. The wholesale electricity market was the only mechanism that had a larger proportion of respondents clearly agree was efficient at facilitating timely and innovative investment in the electricity system. The hedge market and transition and distribution arrangements were polarised with equal proportions agreeing and disagreeing as to their

efficiency. In contrast and as previously reported, the retail market was the only mechanism to clearly have a larger proportion disagree that it was efficient for facilitating timely and innovative investment.

- **The wholesale market** (46% agree, 33% disagree, 15% neutral and 6% don't know).

By organisation type

Levels of agreement were higher than disagreement across most organisations, though no consumers agreed this was an efficient mechanism for facilitating timely and innovative investment at all.

- Of the nine generator-retailers, generators only and retailers only, five agreed, three disagreed and one was neutral.
- Of the 25 distribution or transmission organisations, 13 agreed, nine disagreed, two were neutral and one didn't know.
- Of the 21 electricity consumers and their representatives, four agreed, nine disagreed, five were neutral and three did not know.
- Of the 14 investors, educational institutions and professional bodies, nine agreed, three disagreed and two were neutral.
- Of the four service providers, one agreed, one disagreed and two were neutral.
- Of the four metering servicers or providers, two agreed, one disagreed and one did not know.
- Of the rest (n=4), three agreed and one disagreed.

By how electricity is purchased

No electricity consumers agreed with this statement; those that purchase from a retailer on a fixed price tariff were more likely to be neutral or not give a rating than those that purchase elsewhere.

- Of the seven who purchase from a retailer on a fixed price tariff, three disagreed, two were neutral and two did not know.
- Of the five who purchase hedges, three disagreed and two were neutral.
- Of the three who purchase from a retailer with prices that fluctuate with the spot market, two disagreed and one was neutral.
- Of the two who purchase directly from the spot market, one disagreed and one was neutral.

➢ **The hedge market** (32% agree, 32% disagree, 16% neutral and 20% don't know).

By organisation type

Higher levels of disagreement came from distribution or transmission organisations.

- Of the nine generator-retailers, generators only and retailers only, five agreed, three disagreed and one was neutral.
- Of the 25 distribution or transmission organisations, six agreed, 11 disagreed, five were neutral and three did not know.
- Of the 21 electricity consumers and their representatives, five agreed, six disagreed, two were neutral and eight did not know.
- Of the 14 investors, educational institutions and professional bodies, eight agreed, three disagreed, one was neutral and two did not know.
- Of the four service providers, one disagreed and three were neutral.
- Of the four metering servicers or providers, one agreed, one disagreed and two did not know.
- Of the rest (n=4), one agreed, one disagreed, one was neutral and another did not know.

By how electricity is purchased

The highest levels of disagreement were associated with those who purchase from a retailer with prices that fluctuate with the spot market and those who purchase hedges.

- Of the seven who purchase from a retailer on a fixed price tariff, two agreed and five did not know.
- Of the five who purchase hedges, three disagreed, one was neutral and one did not know.
- All three who purchase from a retailer with prices that fluctuate with the spot market disagreed.
- Of the two who purchase directly from the spot market, one was neutral and one did not know.

- **Transmission and distribution arrangements** (37% agree, 37% disagree, 15% neutral and 11% don't know).

By organisation type

Higher levels of disagreement came from consumers and their representatives.

- Of the nine generator-retailers, generators only and retailers only, three agreed, four disagreed and two were neutral.
- Of the 25 distribution or transmission organisations, nine agreed, ten disagreed, four were neutral and two did not know.
- Of the 21 electricity consumers and their representatives, four agreed, ten disagreed, three were neutral and four did not know.
- Of the 14 investors, educational institutions and professional bodies, eight agreed, four disagreed, one was neutral and one did not know.
- Of the four service providers, two agreed and two were neutral.
- Of the four metering servicers or providers, one agreed, one disagreed and two did not know.
- Of the rest (n=4), three agreed and one disagreed.

By how electricity is purchased

No electricity consumers agreed with this statement; the highest levels of disagreement were associated with those who purchase from a retailer with prices that fluctuate with the spot market and those who purchase hedges.

- Of the seven who purchase from a retailer on a fixed price tariff, two disagreed, two were neutral and three did not know.
- Of the five who purchase hedges, three disagreed, one was neutral and one did not know.
- All three who purchased from a retailer with prices that fluctuated with the spot market disagreed.
- Of the two who purchase directly from the spot market, one was neutral and one did not know.

EFFICIENCY IN THE ELECTRICITY INDUSTRY (2013)

In terms of efficiency, the Authority is seeking: Widespread recognition that New Zealand's wholesale and retail electricity markets, and transmission and distribution arrangements are efficient mechanisms for coordinating electricity production and consumption, and for facilitating timely and innovative investment in the electricity system.

Using a scale of 0 to 10 where 0 means strongly disagree, 5 means neutral and 10 means strongly agree; please indicate your views on the following statements. If you do not know, just say so.

	0 %	1 %	2 %	3 %	4 %	TOTAL DISAGREE (0-4) %	NEUTRAL 5 %	6 %	7 %	8 %	9 %	10 %	TOTAL AGREE (6-10) %	Don't know %
New Zealand's wholesale electricity market is an efficient mechanism for:														
Coordinating electricity production and consumption	4	-	1	2	9	**16**	**14**	11	14	28	7	4	**64**	6
Facilitating timely and innovative investment in the electricity system	1	5	10	6	11	**33**	**15**	16	14	9	5	2	**46**	6
New Zealand's hedge market is an efficient mechanism for:														
Coordinating electricity production and consumption	7	4	1	4	5	**21**	**19**	15	9	12	2	2	**41**	20
Facilitating timely and innovative investment in the electricity system	5	4	5	10	9	**32**	**16**	12	7	5	6	1	**32**	20
New Zealand's retail electricity market is an efficient mechanism for:														
Coordinating electricity production and consumption	9	5	7	6	16	**43**	**9**	7	12	10	6	4	**40**	9
Facilitating timely and innovative investment in the electricity system	5	7	15	10	12	**49**	**11**	15	10	2	4	1	**32**	7
New Zealand's transmission and distribution arrangements (regulatory and voluntary) are efficient mechanisms for:														
Coordinating electricity production and consumption	2	1	7	4	12	**27**	**15**	14	15	9	6	-	**43**	15
Facilitating timely and innovative investment in the electricity system	1	6	11	6	12	**37**	**15**	11	9	11	6	-	**37**	11
Overall New Zealand's wholesale and retail electricity markets, and transmission and distribution arrangements are efficient mechanisms for coordinating electricity production and consumption and facilitating timely and innovative investment in the electricity system.	2	-	9	2	20	**33**	**12**	16	22	6	5	-	**49**	5

Base: All respondents (due to rounding percentages and totals shown may not add to 100)

Rating aspects of reliability

7.1 Rating aspects of reliability in the electricity industry

The number of respondents that agree with statements concerning reliability in the electricity industry has increased from 2011.
The vast majority agreed that the current level of day-to-day reliability was efficient. A majority also agreed that investors understand the trade-offs between costs and reliability and that the cost of reliability is appropriately balanced against the risk of shortages. A much larger proportion also agreed that reliability would improve over the next ten years over those that disagreed. These statements all had relatively small minorities disagree with them.

The only statement which a majority disagreed with concerned consumers understanding of the trade-offs between costs and reliability.

RELIABILITY IN THE ELECTRICITY INDUSTRY
(SUMMARY TABLE - '6-10' TOTAL AGREE)

In terms of reliability, the Authority is seeking: Widespread consumer and investor acceptance of efficient levels of supply reliability across the 'supply chain' (generation, transmission, distribution, and retailing). This includes developing a wider appreciation and understanding of the trade-offs between cost and reliability.

Using a scale of 0 to 10 where 0 means strongly disagree, 5 means neutral and 10 means strongly agree; please indicate your views on the following statements. If you do not know, just say so.

	2011 %	2013 %	Difference (2013-2011) %
Base: n=	***75***	***81***	
There is an efficient level of day-to-day reliability e.g. dealing with localised power outages, frequency and voltage stability	68	88	20
Investors appreciate and understand the trade-offs between cost and reliability	48	60	12
The current level of security of supply is efficient as the cost of reserve generation and demand response capability is appropriately balanced against the cost and risk of power shortages	34	56	22
Over the next ten years the level of reliability will improve	45	48	3
Consumers appreciate and understand the trade-offs between cost and reliability	15	20	5

Base: All respondents (due to rounding percentages may not add to 100)

Vast majority agree on day-to-day reliability

One statement related to the day-to-day reliability of supply attracted agreement of the vast majority.

- *There is an efficient level of day-to-day reliability e.g. dealing with localised power outages, frequency and voltage stability.* (88% agree, up 20% from 2011. 4% disagree, 7% neutral with a '5' rating and 1% did not know).

By organisation type

There were high levels of agreement across all organisations.

- Of the nine generator-retailers, generators only and retailers only, eight agreed and one disagreed.
- Of the 25 distribution or transmission organisations, 24 agreed and one was neutral.
- Of the 21 electricity consumers and their representatives, 17 agreed, one disagreed and three were neutral.
- Of the 14 investors, educational institutions and professional bodies, 13 agreed and one disagreed.
- Of the four service providers, three agreed and one was neutral.
- Of the four metering servicers or providers, three agreed and one did not know.
- Of the rest (n=4), three agreed and one was neutral.

By how electricity is purchased

Levels of agreement were high across all methods of purchasing; however, it was highest for those who purchase from a retailer on a fixed price tariff.

- All seven who purchase from a retailer on a fixed price tariff agreed.
- Of the five who purchase hedges, three agreed and two were neutral.
- Of the three who purchased from a retailer with prices that fluctuated with the spot market, two agreed and one was neutral.
- Of the two who purchase directly from the spot market, one agreed and one was neutral.

Majority disagree that consumers understand the trade-offs

The majority disagreed that consumers appreciate and understand the trade-offs between costs and reliability.

- *Consumers appreciate and understand the trade-offs between costs and reliability.* (20% agree, up 5% from 2011. 64% disagree, 14% neutral with a '5' rating and 2% did not know).

By organisation type

High levels of disagreement came from across all organisations.

- Of the nine generator-retailers, generators only and retailers only, eight disagreed and one agreed.
- Of the 25 distribution or transmission organisations, 18 disagreed, five agreed and two were neutral.
- Of the 21 electricity consumers and their representatives, ten disagreed, four agreed, five were neutral and two did not know.
- Of the 14 investors, educational institutions and professional bodies, nine disagreed, four agreed and one was neutral.
- All of the four service providers disagreed.
- Of the four metering servicers or providers, one agreed, two disagreed and one was neutral.
- Of the rest (n=4), one agreed, one disagreed and two were neutral.

By how electricity is purchased

There were higher levels of disagreement from those who purchase a fixed price tariff.

- Of the seven who purchase from a retailer on a fixed price tariff, two disagreed, two agreed, two were neutral and one did not know.
- Of the five who purchase hedges, four disagreed and one was neutral.
- Of the three who purchased from a retailer with prices that fluctuated with the spot market, two disagreed and one was neutral.
- Both of those who purchase directly from the spot market disagreed.

■ Larger proportions agree than disagree with the remaining statements: three in five agree investors understand the trade-offs

Three in five respondents agreed that investors appreciated and understood the trade-offs between costs and reliability.

- *Investors appreciate and understand the trade-offs between costs and reliability.* (60% agree, up 12% from 2011. 17% disagree, 11% neutral with a '5' rating and 11% did not know).

By organisation type

There were high levels of agreement across all organisations.

- Of the nine generator-retailers, generators only and retailers only, six agreed, two disagreed and one was neutral.
- Of the 25 distribution or transmission organisations, 18 agreed, five disagreed, one was neutral and one did not know.
- Of the 21 electricity consumers and their representatives, nine agreed, four disagreed, two were neutral and six did not know.
- Of the 14 investors, educational institutions and professional bodies, ten agreed, one disagreed, two were neutral and one did not know.
- All of the four service providers agreed.
- Of the four metering servicers or providers, one agreed, one disagreed, one was neutral and another did not know.
- Of the rest (n=4), one agreed, one disagreed and two were neutral.

By how electricity is purchased

Those who purchase a fixed price tariff from a retailer were slightly less likely to agree than the others.

- Of the seven who purchase from a retailer on a fixed price tariff, three agreed, one disagreed, one was neutral and two did not know.
- Of the five who purchase hedges, three agreed, one disagreed and one did not know.
- Of the three who purchased from a retailer with prices that fluctuated with the spot market, two agreed one did not know.
- Of the two who purchase directly from the spot market, one agreed and one disagreed.

Similar level of agreement with cost of reliability appropriately balanced against risk of shortages

A similar level agreed that the current level of security of supply was efficient as the costs of reserve generation and demand side response balanced the risk of shortages. This statement also had the largest increase in agreement from 2011.

- *The current level of security of supply is efficient as the cost of reserve generation and demand response capability is appropriately balanced against the cost and risk of power shortages.* (56% agree, up 22% from 2011. 17% disagree, 21% neutral with a '5' rating and 6% did not know).

By organisation type

There were higher levels of agreement from distribution or transmission organisations and investors, educational institutions or professional bodies.

- Of the nine generator-retailers, generators only and retailers only, four agreed, four disagreed and one was neutral.
- Of the 25 distribution or transmission organisations, 15 agreed, two disagreed, six were neutral and two did not know.
- Of the 21 electricity consumers and their representatives, nine agreed, four disagreed, six were neutral and two did not know.
- Of the 14 investors, educational institutions and professional bodies, nine agreed, four disagreed and one was neutral.
- Of the four service providers, three agreed and one was neutral.
- Of the four metering servicers or providers, two agreed, one was neutral and one did not know.
- Of the rest (n=4), three agreed and one was neutral.

By how electricity is purchased

Those who purchase from a retailer with prices fluctuating with the spot price had higher levels of agreement.

- Of the seven who purchase from a retailer on a fixed price tariff, three agreed, one disagreed, two were neutral and one did not know.
- Of the five who purchase hedges, two agreed and three were neutral.
- Of the three who purchased from a retailer with prices that fluctuated with the spot market, two agreed and one was neutral.
- Both of those who purchase directly from the spot market gave neutral ratings.

Just less than half convinced about long-term reliability

Just under half agree that over the next ten years the level of reliability will improve; this proportion is much higher than those that disagree.

- *Over the next ten years the level of reliability will improve*. (48% agree, up 3%. 14% disagree, 33% neutral with a '5' rating and 5% did not know).

By organisation type

There were higher levels of agreement from distribution or transmission organisations and lower levels from generator-retailers, generators only and retailers only.

- Of the nine generator-retailers, generators only and retailers only, one agreed, five disagreed and three were neutral.
- Of the 25 distribution or transmission organisations, 16 agreed, three disagreed and six were neutral.
- Of the 21 electricity consumers and their representatives, nine agreed, two disagreed, eight were neutral and two did not know.
- Of the 14 investors, educational institutions and professional bodies, eight agreed and six were neutral.
- Of the four service providers, two agreed, one disagreed and one was neutral.
- Of the four metering servicers or providers, two agreed and two did not know.
- Of the rest (n=4), one agreed and three were neutral.

By how electricity is purchased

No consumer disagreed with this statement; hedge purchasers and those who purchase from a retailer with prices fluctuating with the spot market were more likely to agree.

- Of the seven who purchase from a retailer on a fixed price tariff, one agreed, five were neutral and one did not know.
- Of the five who purchase hedges, three agreed and two were neutral.
- Of the three who purchased from a retailer with prices that fluctuated with the spot market, two agreed and one was neutral.
- Of the two who purchase directly from the spot market, one agreed and one was neutral.

RELIABILITY IN THE ELECTRICITY INDUSTRY (2013)

In terms of reliability, the Authority is seeking: Widespread consumer and investor acceptance of efficient levels of supply reliability across the 'supply chain' (generation, transmission, distribution, and retailing). This includes developing a wider appreciation and understanding of the trade-offs between cost and reliability.

Using a scale of 0 to 10 where 0 means strongly disagree, 5 means neutral and 10 means strongly agree; please indicate your views on the following statements. If you do not know, just say so.

	0 %	1 %	2 %	3 %	4 %	TOTAL DISAGREE (0-4) %	NEUTRAL 5 %	6 %	7 %	8 %	9 %	10 %	TOTAL AGREE (6-10) %	Don't know %
There is an efficient level of day-to-day reliability e.g. dealing with localised power outages, frequency and voltage stability	2	-	-	1	-	4	7	15	30	27	12	4	88	1
Investors appreciate and understand the trade-offs between cost and reliability	1	1	4	6	5	17	11	14	16	19	7	5	60	11
The current level of security of supply is efficient as the cost of reserve generation and demand response capability is appropriately balanced against the cost and risk of power shortages	1	2	4	4	6	17	21	16	21	12	6	-	56	6
Over the next ten years the level of reliability will improve	1	-	4	1	7	14	33	10	15	12	6	5	48	5
Consumers appreciate and understand the trade-offs between cost and reliability	10	10	21	14	10	64	14	6	10	-	2	1	20	2

Base: All respondents (due to rounding percentages and totals shown may not add to 100)

Current market arrangements

8.1 Current market arrangements

The proportion that rated current market arrangements within the electricity sector as good increased across most arrangements in 2013. Similar to 2011, no arrangement was rated as good by a majority of respondents. There were also high levels of those that gave a neutral rating or reported they did not know what rating to give.

In contrast to 2011, most arrangements had higher proportions rate them as good rather than poor. Even so, one statement concerning the overall effectiveness of regulatory arrangements had a slightly higher proportion rate it poorly.

CURRENT MARKET ARRANGEMENTS WITHIN THE ELECTRICITY SECTOR (SUMMARY TABLE - '6-10' TOTAL GOOD)

Using a scale of 0 to 10 where 0 means extremely poor, 5 means neutral and 10 means extremely good; how would you rate the current market arrangements within the electricity sector (voluntary and regulatory). If you do not know, just say so.

	2011 %	2013 %	Difference (2013-2011) %
Base: n=	***75***	***81***	
Encouraging efficient investment and innovation in transmission	34	46	12
Ensuring an appropriate balance between reliability and cost	35	44	9
Encouraging efficient investment and innovation in generation	33	38	5
Retail market	31	37	6
Wholesale spot market	38	36	-2
Minimising barriers to entry for new retail companies or existing companies expanding into new areas	21	36	15
Effectiveness of regulatory arrangements overall	30	35	5
Demand side response	27	32	5
Metering service provision*	n/a	32	-
Encouraging efficient investment and innovation in distribution	21	31	10
Instantaneous reserves market	20	30	10
ASX electricity futures market	16	28	12
Other ancillary services markets	14	28	14
Minimising barriers to entry for new generation projects and/or new generation companies	25	26	1
Over the counter hedge market	14	19	5

*Arrangement not asked in 2011
Base: All respondents (due to rounding percentages may not add to 100)

More stakeholders believe current regulatory arrangements are not effective overall - but not by much

➢ **Effectiveness of regulatory arrangements overall** (35% good, up 5%. 42% poor, 19% neutral and 5% did not know).

By organisation type

Investors, educational institutions or professional bodies and distribution or transmission organisations slightly more likely to deem them as ineffective.

- Of the nine generator-retailers, generators only and retailers only, five rated this as good, three as poor and one as neutral.
- Of the 25 distribution or transmission organisations, eight rated this as good, 13 as poor and four as neutral.
- Of the 21 electricity consumers and their representatives, six rated this as good, eight as poor, five as neutral and two did not know.
- Of the 14 investors, educational institutions and professional bodies, five rated this as good, eight as poor and one did not know.
- Of the four service providers, two rated this as poor and another two gave it a neutral rating.
- Of the four metering servicers or providers, one rated this as good and three as neutral.
- Of the rest (n=4), three rated it as good and one did not know.

By how electricity is purchased

Opinion was polarised for this arrangement across most methods of purchasing electricity.

- Of the seven who purchase from a retailer on a fixed price tariff, two rated this as good, two as poor, one as neutral and two did not know.
- Of the five who purchase hedges, one rated this as good, two as poor and two as neutral.
- Of the three who purchase from a retailer with prices that fluctuate with the spot market, one rated this as poor and two as neutral.
- Of the two who purchase directly from the spot market, one rated this as good and one as poor.

■ Seven arrangements had much higher proportions rate them as good over poor

Four of these arrangements had very large minorities agree with them:

➢ **Encouraging efficient investment and innovation in transmission** (46% good, up 12%. 27% poor, 19% neutral and 9% did not know).

By organisation type

Generator-retailers, generators only and retailers only gave better ratings than the other organisations.

- Of the nine generator-retailers, generators only and retailers only, six rated this as good, one as poor and two as neutral.
- Of the 25 distribution or transmission organisations, 13 rated this as good, seven as poor and five as neutral.
- Of the 21 electricity consumers and their representatives, six rated this as good, five as poor, five as neutral and five did not know.
- Of the 14 investors, educational institutions and professional bodies, six rated this as good, six as poor, one as neutral and one did not know.
- Of the four service providers, two rated this as good, one as poor and one as neutral.
- Of the four metering servicers or providers, one rated this as good, one as poor, one as neutral and another did not know.
- Of the rest (n=4), three rated it as good and one as poor.

By how electricity is purchased

The majority of consumers gave a neutral rating for this arrangement or did not know what to rate it.

- Of the seven who purchase from a retailer on a fixed price tariff, two rated this as good, one as neutral and four did not know.
- Of the five who purchase hedges, one rated this as poor, three as neutral and one did not know.
- Of the three who purchase from a retailer with prices that fluctuated with the spot market, one rated this as poor and two as neutral.
- Of the two who purchase directly from the spot market, one rated this as neutral and one did not know.

- **Ensuring an appropriate balance between reliability and cost** (44% good, up 9%. 23% poor, 26% neutral and 6% did not know).

By organisation type

Distribution or transmission organisations gave slightly better ratings than the other organisations.

- Of the nine generator-retailers, generators only and retailers only, four rated this as good, two as poor and three as neutral.
- Of the 25 distribution or transmission organisations, 14 rated this as good, five as poor and six as neutral.
- Of the 21 electricity consumers and their representatives, six rated this as good, four as poor, eight as neutral and three did not know.
- Of the 14 investors, educational institutions and professional bodies, seven rated this as good, five as poor, one as neutral and one did not know.
- Of the four service providers, one rated this as good, two as poor and one as neutral.
- Of the four metering servicers or providers, one rated this as good, one as poor and two were neutral.
- Of the rest (n=4), three rated it as good and one did not know.

By how electricity is purchased

Again, the majority of consumers gave a neutral rating for this arrangement or did not know what to rate it.

- Of the seven who purchase from a retailer on a fixed price tariff, one rated this as good, one as poor, three as neutral and two did not know.
- Of the five who purchase hedges, one rated this as good, one as poor and three as neutral.
- Of the three who purchased from a retailer with prices that fluctuated with the spot market, one rated this as good and two as neutral.
- Of the two who purchase directly from the spot market, one rated this as poor and one as neutral.

- **Encouraging efficient investment and innovation in generation** (38% good, up 5%. 23% poor, 22% neutral and 16% did not know).

By organisation type

Generator-retailers, generators only and retailers only gave better ratings than the other organisations.

- Of the nine generator-retailers, generators only and retailers only, five rated this as good, three as poor and one as neutral.
- Of the 25 distribution or transmission organisations, nine rated this as good, five as poor, eight as neutral and three did not know.
- Of the 21 electricity consumers and their representatives, six rated this as good, eight as poor, two as neutral and five did not know.
- Of the 14 investors, educational institutions and professional bodies, seven rated this as good, three as poor, three as neutral and one did not know.
- Of the four service providers, seven rated this as good, three as poor, three as neutral and one did not know.
- Of the four metering servicers or providers, one rated this as good and three did not know.
- Of the rest (n=4), two rated it as good, one as neutral and one did not know.

By how electricity is purchased

Those that purchase from a retailer on a fixed price tariff were more likely to have a firm opinion and give a rating of either good or poor (rather than neutral or did not know) for this arrangement.

- Of the seven who purchase from a retailer on a fixed price tariff, two rated this as good, three as poor and two did not know.
- Of the five who purchase hedges, two rated this as poor, two as neutral and one did not know.
- Of the three who purchased from a retailer with prices that fluctuated with the spot market, one rated this as poor and two as neutral.
- Of the two who purchase directly from the spot market, one rated this as poor and one did not know.

- **Wholesale spot market** (36% good, down 2%. 17% poor, 17% neutral and 30% did not know).

By organisation type

Generator-retailers, generators only and retailers only gave better ratings than the other organisations.

- Of the nine generator-retailers, generators only and retailers only, eight rated this as good and one as poor.
- Of the 25 distribution or transmission organisations, eight rated this as good, five as poor, five as neutral and seven did not know.
- Of the 21 electricity consumers and their representatives, four rated this as good, four as poor, three as neutral and ten did not know.
- Of the 14 investors, educational institutions and professional bodies, eight rated this as good, four as poor and two did not know.
- Of the four service providers, none rated this as good or poor, three gave a neutral rating and one did not know.
- Of the four metering servicers or providers, one rated this as good and three did not know.
- Of the rest (n=4), none rated this as good or poor, three gave a neutral rating and one did not know.

By how electricity is purchased

Those who purchase from a retailer on a fixed price tariff were less likely to give this arrangement a rating.

- Of the seven who purchase from a retailer on a fixed price tariff, one rated this as good and six did not know.
- Of the five who purchase hedges, two rated this as good, one as poor and two as neutral.
- Of the three who purchased from a retailer with prices that fluctuated with the spot market, one rated this as good, one as poor and one as neutral.
- Of the two who purchase directly from the spot market, one rated this as good and one as neutral.

The other three arrangements had somewhat large minorities agree with them:

- **Instantaneous reserves market** (30% good, up 10%. 9% poor, 23% neutral and 38% did not know).

By organisation type

Generator-retailers, generators only and retailers only gave better ratings than the other organisations.

- Of the nine generator-retailers, generators only and retailers only, five rated this as good, two as poor, one as neutral and one did not know.
- Of the 25 distribution or transmission organisations, 10 rated this as good, five as neutral and 10 did not know.
- Of the 21 electricity consumers and their representatives, four rated this as good, two as poor, four as neutral and 11 did not know.
- Of the 14 investors, educational institutions and professional bodies, four rated this as good, two as poor, three as neutral and five did not know.
- Of the four service providers, one rated this as poor, two as neutral and one did not know.
- Of the four metering servicers or providers, none rated this as good or poor, two gave a neutral rating and two did not know.
- Of the rest (n=4), one rated it as good, two as neutral and one did not know.

By how electricity is purchased

The majority of consumers gave a neutral rating for this arrangement or did not know what to rate it.

- Of the seven who purchase from a retailer on a fixed price tariff, two rated this as good, one as neutral and four did not know.
- Of the five who purchase hedges, one rated this as good, one as poor, two were neutral and one did not know.
- Of the three who purchased from a retailer with prices that fluctuated with the spot market, one rated this as good and two as neutral.
- Of the two who purchase directly from the spot market, one rated this as poor and one did not know.

- **ASX electricity futures market** (28% good, up 12%. 11% poor, 21% neutral and 40% did not know).

By organisation type

Generator-retailers, generators only and retailers only gave better ratings than the other organisations.

- Of the nine generator-retailers, generators only and retailers only, five rated this as good, three as poor and one as neutral.
- Of the 25 distribution or transmission organisations, six rated this as good, seven as neutral and twelve did not know.
- Of the 21 electricity consumers and their representatives, three rated this as good, two as poor, four as neutral and twelve did not know.
- Of the 14 investors, educational institutions and professional bodies, six rated this as good, two as poor, three as neutral and three did not know.
- Of the four service providers, one rated this as poor, one as neutral and two did not know.
- Of the four metering servicers or providers, one rated this as good and three did not know.
- Of the rest (n=4), two rated it as good, one as poor and one as neutral.

By how electricity is purchased

Those who purchase from a retailer with prices that fluctuate with the spot market were more likely to rate this arrangement as poor.

- Of the seven who purchase from a retailer on a fixed price tariff, none rated this as good or poor, one gave it a neutral rating and six did not know.
- Of the five who purchase hedges, two rated this as good, two as poor and one as neutral.
- Of the three who purchase from a retailer with prices that fluctuate with the spot market, one rated this as good and two as poor.
- Of the two who purchase directly from the spot market, one rated this as good and one as neutral.

- **Other ancillary services markets** (28% good, up 14%. 7% poor, 27% neutral and 37% did not know).

By organisation type

Generator-retailers, generators only and retailers only gave better ratings than the other organisations.

- Of the nine generator-retailers, generators only and retailers only, six rated this as good, one as poor and two as neutral.
- Of the 25 distribution or transmission organisations, eight rated this as good, one as poor, seven as neutral and nine did not know.
- Of the 21 electricity consumers and their representatives, two rated this as good, one as poor, six as neutral and 12 did not know.
- Of the 14 investors, educational institutions and professional bodies, four rated this as good, two as poor, two as neutral and six did not know.
- Of the four service providers, one rated this as poor and three as neutral.
- Of the four metering servicers or providers, one rated this as good, one as neutral and two did not know.
- Of the rest (n=4), two rated it as good, one as neutral and one did not know.

By how electricity is purchased

The majority of consumers gave a neutral rating for this arrangement or did not know what to rate it.

- Of the seven who purchase from a retailer on a fixed price tariff, two rated this as good and five did not know.
- Of the five who purchase hedges, one rated this as poor, three as neutral and one did not know.
- All three who purchase from a retailer with prices that fluctuate with the spot market rated this as neutral.
- Of the two who purchase directly from the spot market, one rated this as poor and one did not know.

- **Opinion was divided for four arrangements, with similar proportions rating them as good and poor**

➢ **Retail market** (37% good, up 6%. 41% poor, 20% neutral and 2% did not know).

By organisation type

Generator-retailers, generators only and retailers only were more likely to give better ratings for rate this arrangement and distribution or transmission organisations were slightly more likely to give poorer ratings.

- Of the nine generator-retailers, generators only and retailers only, six rated this as good, two as poor and one as neutral.
- Of the 25 distribution or transmission organisations, eight rated this as good, 13 as poor and four as neutral.
- Of the 21 electricity consumers and their representatives, five rated this as good, nine as poor, six as neutral and one did not know.
- Of the 14 investors, educational institutions and professional bodies, five rated this as good, six as poor, two as neutral and one did not know.
- Of the four service providers, two rated this as poor and another two as neutral.
- All four metering servicers or providers rated this as good.
- Of the rest (n=4), two rated this as good, one as poor and one as neutral.

By how electricity is purchased

Those that purchase from a retailer with prices that fluctuate with the spot market or purchase hedges were slightly more likely to give poorer ratings.

- Of the seven who purchase from a retailer on a fixed price tariff, one rated this as good, two as poor, three as neutral and one did not know.
- Of the five who purchase hedges, three rated this as poor and two as neutral.
- Of the three who purchase from a retailer with prices that fluctuate with the spot market, two rated this as poor and one gave it a neutral rating.
- Of the two who purchase directly from the spot market, one rated this as poor and one as neutral.

- **Minimising barriers to entry for new retail companies or existing companies expanding into new areas** (36% good, up 15%. 36% poor, 20% neutral and 9% did not know).

By organisation type

Distribution or transmission organisations were far more likely to give a rating of good than the other organisations.

- Of the nine generator-retailers, generators only and retailers only, three rated this as good, five as poor and one as neutral.
- Of the 25 distribution or transmission organisations, 17 rated this as good, four as poor and four as neutral.
- Of the 21 electricity consumers and their representatives, three rated this as good, ten as poor, three as neutral and five did not know.
- Of the 14 investors, educational institutions and professional bodies, two rated this as good, seven as poor, three as neutral and two did not know.
- Of the four service providers, two rated this as poor and two as neutral.
- Of the four metering servicers or providers, two rated this as good, one as poor and one as neutral.
- Of the rest (n=4), two rated it as good and two as neutral.

By how electricity is purchased

Those that purchase from a retailer with prices that fluctuate with the spot market and purchase hedges were far more likely to rate this arrangement as poor.

- Of the seven who purchase from a retailer on a fixed price tariff, two rated this as good, one as poor, two as neutral and another two did not know.
- Of the five who purchase hedges, four rated this as poor and one as neutral.
- All three who purchase from a retailer with prices that fluctuate with the spot market rated this as poor.
- Of the two who purchase directly from the spot market, one rated this as poor and one as neutral.

- **Metering service provision** (Not asked in 2011 - 32% good, 28% poor, 28% neutral and 11% did not know).

By organisation type

Opinion was polarised across organisations for this arrangement.

- Of the nine generator-retailers, generators only and retailers only, two rated this as good, four as poor and three as neutral.
- Of the 25 distribution or transmission organisations, eight rated this as good, eight as poor, seven as neutral and two did not know.
- Of the 21 electricity consumers and their representatives, six rated this as good, five as poor, six as neutral and four did not know.
- Of the 14 investors, educational institutions and professional bodies, six rated this as good, two as poor, four as neutral and two did not know.
- Of the four service providers, two rated this as poor and two as neutral.
- Of the four metering servicers or providers, two rated this as good and another two as poor.
- Of the rest (n=4), two rated it as good, one as neutral and one did not know.

By how electricity is purchased

The majority of consumers gave a neutral rating for this arrangement or did not know what to rate it.

- Of the seven who purchase from a retailer on a fixed price tariff, two rated this as good, two as neutral and three did not know.
- Of the five who purchase hedges, two rated this as good, two as neutral and one did not know.
- Of the three who purchase from a retailer with prices that fluctuate with the spot market, one rated this as good and two as neutral.
- Of the two who purchase directly from the spot market, one rated this as good and one did not know.

- **Over the counter hedge-market** (19% good, up 5%. 16% poor, 21% neutral and 44% did not know).

By organisation type

Generator-retailers, generators only and retailers only gave better ratings than the other organisations.

- Of the nine generator-retailers, generators only and retailers only, five rated this as good, three as poor and one as neutral.
- Of the 25 distribution or transmission organisations, four rated this as good, three as poor, five as neutral and 13 did not know.
- Of the 21 electricity consumers and their representatives, two rated this as good, two as poor, four as neutral and 13 did not know.
- Of the 14 investors, educational institutions and professional bodies, two rated this as good, three as poor, five as neutral and four did not know.
- Of the four service providers, one rated this as poor, one as neutral and two did not know.
- Of the four metering servicers or providers, one rated this as good and three did not know.
- Of the rest (n=4), one rated it as good, one as poor, one as neutral and another did not know.

By how electricity is purchased

The majority of consumers gave a neutral rating for this arrangement or did not know what to rate it.

- Of the seven who purchase from a retailer on a fixed price tariff, none rated this as good or poor, one gave it a neutral rating and six did not know.
- Of the five who purchase hedges, two rated this as good, one as poor and two as neutral.
- Of the three who purchase from a retailer with prices that fluctuate with the spot market, one rated this as good, one as poor and one as neutral.
- Of the two who purchase directly from the spot market, one rated this as good and one as neutral.

Three arrangements had more respondents rate them as poor rather than good

There were smaller differences between the proportions of respondents that rated these three arrangements as poor compared to good than there were for the seven arrangements that had a greater proportion of respondents rate them as good compared to poor. Two arrangements had 42% of respondents rate them as poor:

- **Encouraging efficient investment and innovation in distribution** (31% good, up 10%. 42% poor, 21% neutral and 6% did not know).

By organisation type

Generator-retailers, generators only and retailers only were slightly more likely to rate this as poor than the other organisations.

- Of the nine generator-retailers, generators only and retailers only, five rated this as poor, two as good and another two as neutral.
- Of the 25 distribution or transmission organisations, 12 rated this as poor, 11 as good and two as neutral.
- Of the 21 electricity consumers and their representatives, eight rated this as poor, four as good, six as neutral and three did not know.
- Of the 14 investors, educational institutions and professional bodies, five rated this as poor, four as good, four as neutral and one did not know.
- Of the four service providers, two rated this as poor and another two as neutral.
- Of the four metering servicers or providers, one rated this as poor, two as good and one did not know.
- Of the rest (n=4), one rated it as poor, two as good and one as neutral.

By how electricity is purchased

The majority of consumers gave a neutral rating for this arrangement or did not know what to rate it.

- Of the seven who purchase from a retailer on a fixed price tariff, two rated this as poor, one as good, two as neutral and another two did not know.
- Of the five who purchase hedges, two rated this as poor and three as neutral.
- Of the three who purchase from a retailer with prices that fluctuate with the spot market, one rated this as poor and two as neutral.
- Of the two who purchase directly from the spot market, one rated this as poor and one as neutral.

- **Demand side response** (32% good, up 5%. 42% poor, 11% neutral and 15% did not know).

By organisation type

Generator-retailers, generators only and retailers only were more likely to rate this arrangement as poor.

- Of the nine generator-retailers, generators only and retailers only, six rated this as poor, two as good and one as neutral.
- Of the 25 distribution or transmission organisations, eight rated this as poor, eleven as good, three as neutral and three did not know.
- Of the 21 electricity consumers and their representatives, seven rated this as poor, six as good, two as neutral and six did not know.
- Of the 14 investors, educational institutions and professional bodies, eight rated this as poor, four as good, one as neutral and one did not know.
- Of the four service providers, three rated this as poor and one as neutral.
- Of the four metering servicers or providers, two rated this as poor, one as good and one did not know.
- Of the rest (n=4), two rated it as good, one as neutral and another did not know.

By how electricity is purchased

Those that purchase from a retailer on a fixed price tariff were less likely to rate this arrangement as poor.

- Of the seven who purchase from a retailer on a fixed price tariff, three rated this as good, one as neutral and three did not know.
- Of the five who purchase hedges, two rated this as poor, one as good, one as neutral and one did not know.
- Of the three who purchase from a retailer with prices that fluctuate with the spot market, one rated this as poor, one as good and one as neutral.
- Of the two who purchase directly from the spot market, one rated this as poor and one did not know.

➢ **Minimising barriers to entry for new generation projects and/or new generation companies** (26% good, up 1%. 32% poor, 22% neutral and 20% did not know).

By organisation type

Investors, educational institutions or professional bodies and consumers and their representatives were more likely to give this arrangement a poor rating.

- Of the nine generator-retailers, generators only and retailers only, two rated this as poor, three as good, three as neutral and one did not know.
- Of the 25 distribution or transmission organisations, six rated this as poor, nine as good, five as neutral and another five did not know.
- Of the 21 electricity consumers and their representatives, seven rated this as poor, five as good, three as neutral and six did not know.
- Of the 14 investors, educational institutions and professional bodies, six rated this as poor, two as good, four as neutral and two did not know.
- Of the four service providers, three rated this as poor and one as neutral.
- Of the four metering servicers or providers, one rated this as poor, two as good and one did not know.
- Of the rest (n=4), one rated it as poor, two as neutral and one did not know.

By how electricity is purchased

Those that purchase from a retailer on a fixed price tariff were less likely to rate this arrangement as poor than those that purchase using other methods.

- Of the seven who purchase from a retailer on a fixed price tariff, one rated this as poor, three as good and three did not know.
- Of the five who purchase hedges, four rated this as poor and one as good.
- Of the three who purchase from a retailer with prices that fluctuate with the spot market, two rated this as poor and one as good.
- Both of those who purchase directly from the spot market rated this arrangement poorly.

CURRENT MARKET ARRANGEMENTS WITHIN THE ELECTRICITY SECTOR (2013)

Using a scale of 0 to 10 where 0 means extremely poor, 5 means neutral and 10 means extremely good; how would you rate the current market arrangements within the electricity sector (voluntary and regulatory). If you do not know, just say so.

	0	1	2	3	4	TOTAL POOR (0-4)	NEUTRAL 5	6	7	8	9	10	TOTAL GOOD (6-10)	Don't know
	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Encouraging efficient investment and innovation in transmission	-	2	6	6	12	**27**	**19**	14	19	11	1	1	**46**	9
Ensuring an appropriate balance between reliability and cost	-	1	6	5	11	**23**	**26**	15	16	12	1	-	**44**	6
Encouraging efficient investment and innovation in generation	1	2	5	6	9	**23**	**22**	10	16	10	-	2	**38**	16
Retail market	2	4	6	17	11	**41**	**20**	16	11	7	2	-	**37**	2
Wholesale spot market	1	2	2	1	10	**17**	**17**	4	16	9	4	4	**36**	30
Minimising barriers to entry for new retail companies or existing companies expanding into new areas	5	7	5	7	11	**36**	**20**	14	7	10	2	2	**36**	9
Effectiveness of regulatory arrangements overall	5	6	9	10	12	**42**	**19**	19	9	6	-	1	**35**	5
Demand side response	6	4	9	15	9	**42**	**11**	14	11	4	-	4	**32**	15
Metering service provision*	2	1	7	2	15	**28**	**28**	14	10	6	1	1	**32**	11
Encouraging efficient investment and innovation in distribution	2	5	10	11	14	**42**	**21**	7	11	10	1	1	**31**	6
Instantaneous reserves market	-	1	-	5	2	**9**	**23**	9	11	6	1	2	**30**	38
ASX electricity futures market	1	1	1	5	2	**11**	**21**	15	7	6	-	-	**28**	40
Other ancillary services markets	-	1	1	4	1	**7**	**27**	12	10	2	1	2	**28**	37
Minimising barriers to entry for new generation projects and/or new generation companies	6	1	5	9	11	**32**	**22**	5	9	9	1	2	**26**	20
Over the counter hedge market	1	2	2	2	7	**16**	**21**	6	6	5	-	1	**19**	44

*Arrangement not asked in 2011

Base: All respondents (due to rounding percentages and totals shown may not add to 100)

Other market arrangements

Respondents were invited to suggest other market arrangements and provide a rating for them. A total of 11 suggestions were made this year, down from 18 in 2011.

In contrast to 2011, three skills were mentioned that had good ratings this year. Entry to direct spot market participation, transparency and the performance of the Electricity Authority were all cited with ratings over six. The remaining eight suggestions were given poor ratings with the validity of cost-benefit assessments from a consumer perspective and recompensing retail customers for feed in given the lowest rating of zero. Encouraging distributed generation, the ability of non-market participants to influence code decisions and the alignment of forecasts and final spot prices were also given low ratings.

CURRENT MARKET ARRANGEMENTS WITHIN THE ELECTRICITY SECTOR: OTHER COMMENTS

Using a scale of 0 to 10 where 0 means extremely poor, 5 means neutral and 10 means extremely good; how would you rate the current market arrangements within the electricity sector (voluntary and regulatory). If you do not know, just say so.

	Rating out of 10
Entry to direct spot market participation	8
Transparency	7
Performance of the Electricity Authority	6
Performance of Commerce Commission	4
Complexity	3
Regulator focus on core industry matters	3
Alignment of forecast, 5min, and final spot prices	2
Ability of non-market participants to influence code decisions	2
Encouraging distributed generation	1
Validity of cost-benefit assessments from consumer perspective	0
Recompensing retail customers for feed in	0

Base: All respondents (due to rounding percentages may not add to 100)

Priorities

9.1 Priorities

Respondents were also invited to make suggestions regarding the major development priorities for 2013 onwards in relation to the Electricity Industry Participation Code or voluntary arrangements within the sector. Comments were invited in order of their urgency; those that were deemed to be a first priority are next to a red bullet point, second priority suggestions are next to a purple bullet point and third priority suggestions are next to a green bullet point.

Comments have been grouped below without analysis as many are open to interpretation or are pitched at a very high-level.

Improve retail competition and relevant agreements

- *Analysis of components of changes in residential retail electricity costs over a reasonably long-term (10 years) to identify causes, and implement measures to minimise / mitigate these in future.*
- *First priority: Central repository of electricity consumption data linked to registry with appropriately codified rules for third party access to improve competition in the provision of quantification based energy services (how are you performing in terms of energy use against your sector i.e. energy use indicators, energy cost indicators etc) as opposed to current market that simply supplies units of production (kWh). This would improve retail competition and encourage more efficient use of energy through more open market arrangements and less information asymmetry (retailers having exclusive access to large tracts of meter data).*
- *High Priority Market Report on Customer Retail Electricity Prices based on Generation Capacity & Demand scenario's There is a real expectation from consumers to have transparency from the EA on how market effectiveness will rebalance retail energy pricing.*
- *Improve the 'buck passing' that goes on between retailer and lines companies when trying to get a new connection or resolve outages.*
- *Means to encourage passing on of lower wholesale prices to benefit less-competitive consumers. You call this a wealth transfer, we call it efficient pricing enabling price to better reflect costs.*
- *Objectively explore alternative market designs such as a single buyer market. The benefits are potentially in the billions of dollars.*
- *TOU prices.*
- *Sort the model UoSA so network companies will engage with new entrants.*

- *Urgent Review how Load Aggregators fit into the MUoSA and are assigned responsibility for Customer/Retailer/Distributor obligations. At present the MUoSA places obligations on Retailer and Distributor's for the long term benefits of Customers, however Load Aggregators are not linked to any arrangements.*

Encouraging efficient investment and innovation in generation and demand response

- *Incentivise innovation, efficiency and demand side initiatives.*
- *More support and emphasis on feed in tariffs for renewable energy investment.*
- *The Electricity Authority should mandate a feed in tariff for small scale solar and wind generation. To encourage customers to install micro generators and generate electricity where it is used. This would reduce the loads on the transmission network, reduce the cost of transmissions and reduce peak demand for customers and lines companies. This could be funded from the Electricity Authority Levy and administered by the Electricity Authority.*
- *Second priority - Provide sufficient resource to enable positive change to demand response capability and recognition of the huge value demand response brings to the market in terms of price elasticity of demand, and improved competition and efficiency (see IEA report - the power to choose - demand response in liberalised electricity market circa 2003). Recognize the need for retainer type commercial arrangements to build and maintain a demand response resource that is fit for purpose for NZ (recognizes hydro/wind/solar operational capacity uncertainty etc).*
- *Instead of building new power stations the Government should provide a rebate for the installation of small scale solar generation. The price is right at the moment and a rebate will encourage the uptake of new generation.*

Improving transmission and distribution arrangements

- *Do not create the market turmoil the proposed beneficiaries pays TPM will cause for consumers and investors. Focus on long term predictable pricing.*
- *Ensure the TPM process provides - annual pricing certainty for budgeting purposes - recognises that the DC link is there for the good of the whole of country as well as the effective normal users (i.e. southern half of the North Island)*
- *Remove uncertainty surrounding TPM by leaving it as is.*
- *Quickly resolve transmission pricing - practical and pragmatically - to reduce the diversion of EA and industry resources*

The Electricity Authority should do less

- *The authority should not embark on any further development projects until existing projects are completed, particularly the TPM and improvements in the ancillary services markets.*

- *The existing market arrangements are working very well in general, with prices fairly reflective of costs and good trends in the level of retail market competition. It is important that the Authority ensure that it does not search for projects to justify its existence or organisation scale. We see that there are no major projects that are likely to provide significant benefits relative to the existing market structure.*

- *The first priority is for the authority to do less.*

Increase competition for metering services

- *Increased competition in meter provision.*

- *Smart meter and related services competition.*

Future proofing supply

- *Improve line companies and retailers engagement with CDEM.*

- *Ensure arrangements drive the electricity sector to be ready in time for future needs.*

- *Security of supply not a primary issue due to low load growth and current over supply but security will be an issue in the future as current thermal plants age.*

- *Assess the resilience of the electricity supply chain to catastrophic events.*

Improve distributed generation (DG) regulations

- *Network connection regulatory framework - ensure DG regulations remain and implement for consumer connections*

- *Improve DG regulations for existing plants.*

Other

- *Introduce workable dispatchable demand.*

- *Resolution of who owns the consumer load issue as an enabler to demand side response.*

- *Review of the arrangement with the System Operator. It seems that the SO's promise with regards to the ease and cost of market development once the Market Systems Project was completed was a very hollow promise. I realise the SO is a statutory monopoly but something needs to be done, even if it involves changing the Act.*

- *Scrape the proposed HVDC pricing methodology and move to a simple postage stamp method.*

- *Separate retailers from generators reduce retail margin currently captured.*

- *The Electricity Authority should undertake as a matter of urgency a familiarisation process with the actual day to day work of electricity distribution networks. In particular, how the Authority's decisions can dramatically impact on cost and service to consumers to a degree that far outweighs energy market improvements. Knowledge of energy retailing, generation and transmission is no substitute for this.*

- *This survey has omitted consideration of the RMA on the investment decisions of industry players.*

- *Seek efficiency of cost in the EA as all businesses in the industry are facing review completed work for delivered benefits.*

- *Get retailers to show Transpower lines costs in addition to distribution costs on invoices (for TOU sites in particular). When doing annual budgeting for electricity, separate percentage increases apply to each party and if one does not have the transparency it can be hard to estimate forward lines cost increases in some cases.*

- *High Priority Regulatory Impact Statement on the impact of establishing a Load Control Market when there are already controls in place under a price/quality regime administered by the Commerce Commission. Benefits are the wider understanding of limitations of DPP to invest in quality improvement projects.*

- *Dealing with the misalignment of forecast, 5 min, and settlement prices.*

- *Take steps – such as no longer making Transpower charges "passthrough" to the lines companies- to restore a commercial incentive into using ripple control of water heaters and other devices as it was used 20 years ago when, on a peak demand day, the system load was held constant for about 12 hours. The benefits are in the range of hundreds of millions of dollars.*

- *Understanding the impact on the EAs decisions on capital markets.*

- *Reporting of internal transfer pricing between vertically integrated generator & retail companies and indexation to ASX prices.*

- *Minimising regulation and improving the quality of regulation. For example CGA liabilities that were forced on EDBs by the EA rather than the EA seeking the busy long-term outcome for consumers via government advice and low fixed charge regulation.*

- *The second priority is for the authority to focus that reduced activity on core industry matters such as fixing undesirable trading rules, rather than, for example, chasing levies and the like.*

- *Come up with simplified outline of rules so that you do not need to be a high level specialist to understand them.*

- *Resolve power quality market mechanisms to ensure there are efficient allocation of resources in dealing with power quality issues. Ensure the incentives to resolve power quality problems flow to the source of the power quality issues. Some lines companies have been doing some good work on this issue where others have been hopeless and*

have let their customers get away with poor power factor and quality management for years.

- *Use the under frequency elements on hot water heater relays to help manage the frequency. It would probably reduce the need for fast spinning reserve by about 200 MW. The savings would be in the millions of dollars.*

- *Ensure industrial and commercial entities understand their exposure to both spot movements and change in price over time.*