

**IN THE AUSTRALIAN COMPETITION TRIBUNAL
AGL ENERGY LIMITED**

of 2014

**RE: PROPOSED ACQUISITION OF MACQUARIE GENERATION (A CORPORATION
ESTABLISHED UNDER THE ENERGY SERVICES CORPORATIONS ACT 1995
(NSW))**

ANNEXURE CERTIFICATE

This is the annexure marked "**MB10**" annexed to the statement of **MARK TROY BROWNFIELD**
dated 21 March 2014

Annexure MB10

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utility
CustomerSwitching

Vaasa ETT Global Energy Think Tank

Research Project

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World Energy
Retail Market Rankings
2012

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2011-2012 Highlights

A Changing Order

The past year saw dramatic changes in the positions of markets in the World Energy Retail Market Rankings.

- Once again Victoria, Australia led the World as the only 'Super Hot' market, with world record levels of switching of nearly 28%, having increased over 1% from a year earlier. Victoria remains the most active market of all time.
- Of the 32 markets in the rankings in 2011, 19 (59%) increased their switching rates from the previous year. Only 9 (28%) decreased their switching rates.
- The global average switching rate for 2011 was the highest ever recorded record rate of 7.75%, around 0.54% higher than a year earlier.
- The biggest riser was New Zealand, which is now rapidly approaching Victorian switching levels, thanks largely to a successful national awareness campaign.
- Texas finally became a 'Hot' market, albeit marginally.
- The biggest fallers during the past year were Great Britain and Ireland, with Australia generally, due largely to its price caps outside Victoria, losing its national lead. Both Great Britain and Ireland are now bordering on losing their status as 'Hot' markets, losing 21% and 35% of their activity respectively between 2009 and 2011.
- Central and Eastern Europe, most notably the Czech Republic, finally illustrated that active switching levels are not exclusive to Anglo Saxon or Nordic markets.
- There are now fewer 'Dormant' markets than ever before.
- Door-to-Door sales is proven historically to be by far the most important (albeit the most unpopular) sales channel for utilities customer switching.
- Restrictions on door-to-door sales in Australia and Great Britain are starting to inhibit switching levels.
- Price caps and long fixed-term contracts are continuing major barriers to higher switching levels.
- New analysis identifies overwhelming international similarities in customer switching .
- New analysis proved that absolute price levels are insignificant in switching levels. Other pricing dynamics are far more important.
- New analysis reveals that retailers are failing to understand the role and dynamics of cyclical in switching. Major switching opportunities are therefore being missed.

Introducing the 2012 World Energy Retail Market Rankings Report



I am delighted to present the Eighth Edition* of the VaasaETT World Energy Retail Market Rankings Report, the report that remains to this day the only truly comparative global view and explanation of utility customer switching activity.

Drawn from the VaasaETT Utility Customer Switching Research Project (UCSRP), the most comprehensive and uniform source of comparable switching statistics (tracking 38 markets past and present) and explanations in the electricity and gas markets worldwide, this summary report is merely an overview of selected analysis that has been collected by VaasaETT, recently and during the past 16 years. If you would like the full version of this report or would like additional information from the UCSRP, or are interested in tapping into our world leading expertise, analysis or consulting services in this field, please send an email to UCSRP@VAASAETT.COM, visit UTILITYCUSTOMERSWITCHING.COM or contact us through any of our direct phone numbers or email addresses listed at www.vaasaett.com.

If you would like to use the tables, charts and other figures from this report in your own reports and presentations, you can find them at <http://www.energydatastore.com> (available soon). Otherwise please contact us for assistance.

I hope you enjoy the report.

Philip Lewis, CEO and Founder, VaasaETT

* Please note that the previous public edition of this report, the sixth edition, was published in 2010 and ranked 2009 switching rates. VaasaETT has all ranking data for 2010 however, and has been continuing to analyse quarterly switch data since the previous public version of this report. Non-public data is available only to private subscribers. Please contact VaasaETT for more information. The next edition of this report will be the Ninth Edition and will be published in Spring 2013.

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Get the Full Report

If you find this report useful and would like much more information, the full report, with over 80 pages of additional material including the following:

- Over 50 pages of in-depth analysis of the determinants of switching. Cross-data-analysis of switching versus a whole host of influential variables ranging from the dynamics of pricing and savings to social media, door-to-door sales, dual fuel, market concentration, new market entrants, switching times, market momentum, marketing timing, seasonality, cyclicity and other issues. The findings are probably not what you would expect.
- Analysis and graphs of long-term switching trends, patterns, styles, types, similarities and differences in a wide variety of countries and regions.
- Additional Country Reviews: Austria, Czech Republic, Slovenia, Belgium.
- Retailer market perspectives (written by retailers) for Australia, Ireland, Norway, Denmark and Belgium
- Additional case study material

To buy the report (price €1900+VAT) please contact UCSRP@VAASAETT.COM.

Terminology

Please note that in this report:

- Energy Suppliers are generally referred to as Retailers.
- Unless otherwise stated, statistics refer to electricity and to aggregated (weighted residential and I&C) data.
- A Fully Liberalised Market is one where all customers, including residential customers are able, at no financial cost, to switch to the retailer of their choice. See a more detailed definition of Switching and Liberalisation later in this report.
- 'Fully Deregulated', 'Full Retail Competition (FRC)' and 'Fully Liberalised' are taken to mean the same.



The VaasaETT

Global Energy Think-Tank



VaasaETT is a Global Energy Think-Tank, one of the World's top centres for expertise in Utility Customer Psychology, Customer Behaviour and Demand Response in energy markets.

We are also a leading international expert in related issues including Utilities Marketing and Competition, Smart Energy, Smart Home, Smart Grid and Market Structures. In particular for instance we are the World's leading authority on utility customer switching trends and dynamics; Europe's best source of retail energy price data; and a founding member of the Smart Energy Demand Coalition (SEDC).

VaasaETT comprises five inter-dependent business areas: 1) Data and Analysis, 2) Research and Consulting, 3) Events, 4) Associations, and 5) Networks and Partnerships.

At the heart of VaasaETT's differentiation is a network of thousands of experts and specialists in four continents, people who VaasaETT know personally and with whom we collaborate for all our business activities. VaasaETT is a unique concept, bringing together Utilities, Vendors, Researchers, Consultants, Associations, NGOs and Policy Makers to collaborate and solve important issues facing the energy industry today and in the future. VaasaETT and its staff have worked for more than 500 utilities and other industry organizations around the world, experience that dates back as far as the opening of the world's first competitive markets and covers almost every fully liberalised market in the world.

VaasaETT and its staff have worked for over 500 utilities and other industry organizations around the world, experience that dates back as far as the opening of the world's first competitive markets and covers every fully liberalised market in the world.

"VaasaETT provided a concise and informative report using primary and secondary information to survey international energy markets. The depth of content and speed of which the report was assimilated was remarkable and of great value to us"

Pádraig Fleming, Head of Regulation, Bordgais, Ireland

VaasaETT offers knowledge sharing through: its extensive online knowledge centre site energydatastore.com; various projects such as the Household Energy Price Index for Europe and the Utility Customer Switching Research Project; intimate high level events; the VaasaETT Community and world leading round-tables and coalitions such as the Smart Energy Demand Coalition based in Brussels.

The VaasaETT Energy Data Store

Unique and unmatched tables, graphs, reports and other data, for free download or purchase. The quick, simple and cost-effective way to obtain ready to use material for your reports, presentations and analysis.



The VaasaETT Global Energy Think-Tank also publishes an array of free reports, on its own or in partnership with other organizations such as Capgemini, and its collaborative projects, such as the

renowned Respond 2010 smart metering and demand response project, incorporating the best partner organizations and experts that the world has to offer.

VaasaETT Global Energy Think Tank

exchange 2012

December 4-6, 2012, Leeds Castle, Near London



"We are particularly impressed with VaasaETT's in-depth knowledge and understanding of consumer related issues..."

Walter Boltz, Director General, E-Control
(Austrian Energy Regulator)

VaasaETT Global Energy Think Tank



ENERGY PRICE INDEX

Europe's best analysis of household energy prices

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members include:



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ENERGY IN TUNE WITH YOU

Honeywell



Landis+Gyr+
manage energy better

VaasaETT

Europe's largest coalition of demand response players



SEDC
Smart Energy Demand Coalition

"your works are always interesting and extremely useful for my job"

Luca Marchisio, Vice President Marketing, ENEL, Italy

This knowledge sharing, best practice identification and collaboration ultimately leads to outstandingly innovative strategies, solutions, methodologies, tools and visions, such as the Utility Customer Loyalty Management System Utility Churn Radar, the most advanced loyalty/disloyalty prediction tool available in the energy utilities market, developed through 16 years of research and collaboration in over 38 liberalised energy markets around the globe.

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28	Q29	Q30	Q31	Q32	Q33	Q34	Q35	Q36	Q37	Q38	Q39	Q40	Q41	Q42	Q43	Q44	Q45	Q46	Q47	Q48	Q49	Q50	Q51	Q52	Q53	Q54	Q55	Q56	Q57	Q58	Q59	Q60	Q61	Q62	Q63	Q64	Q65	Q66	Q67	Q68	Q69	Q70	Q71	Q72	Q73	Q74	Q75	Q76	Q77	Q78	Q79	Q80	Q81	Q82	Q83	Q84	Q85	Q86	Q87	Q88	Q89	Q90	Q91	Q92	Q93	Q94	Q95	Q96	Q97	Q98	Q99	Q100
1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0	5.1	5.2	5.3	5.4	5.5	5.6	5.7	5.8	5.9	6.0	6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.9	7.0	7.1	7.2	7.3	7.4	7.5	7.6	7.7	7.8	7.9	8.0	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	10.0										

The Churn Radar

Through 16 years of extensive analysis around the world, VaasaETT has now developed a loyalty / disloyalty engine, known as the Churn Radar which enables utilities to predict, in real-time the switching propensity and likely switch levels in their market. The Churn Radar integrates more than 100 variables and is totally customizable to almost any liberalised market. This tool is now available to all utilities.

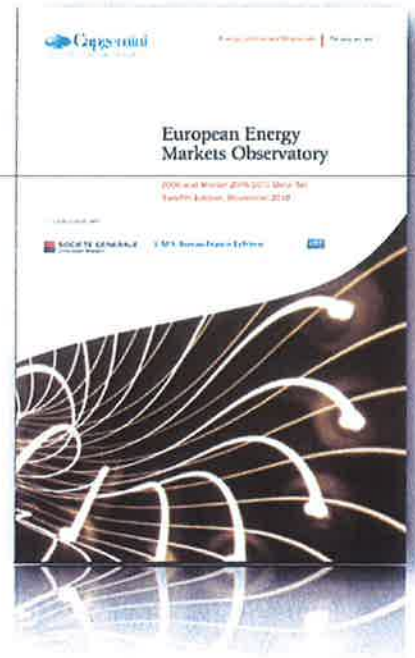
The Utility Customer Switching Research Project

The Utility Customer Switching research project (UCSRP), founded jointly in 2004 by Dr Philip E. Lewis and Paul Grey (and assisted early on also by James Griffin and James Braatvedt), monitors switch rates and trends in all fully liberalised energy retail markets worldwide.

It was the first and remains to this day the only global view of utility customer switching activity, as well as being the most comprehensive and uniform source of comparable switching statistics in the electricity and gas markets worldwide. For all observed markets we have switch trend data since the time those markets were fully liberalised until the present.

It also provides ever-increasing analysis of observed trends and explanations for utility customer switching behaviour. Some of this information is provided free or through subscription services to our network members, additional insight is provided through client offerings.

More Information at: www.utilitycustomerswitching.com



The Utility Customer Switching Research Project is used extensively around the global utilities industry and in leading reports such as the Cap Gemini European Energy Market Observatory

Project Scope

- Research, measure and compare customer switch rates
- Historical customer switching trends and projections
- Identify factors promoting and hindering competitive retail activity
- Insights into successful customer acquisition and retention strategies
- Customer switch rates as a benchmark for market success
- Retail market share analysis

The UCSRP currently follows 38 liberalised electricity markets, many of which also have liberalised gas markets. Both residential and I&C switch rates are covered separately, although publicly, only aggregated switch rates are published in the rankings. Unfortunately a few markets, such as Alberta, Canada, are recorded but not included in the rankings due to irreconcilable data comparability issues.

Why Measure Customer Switch Rates?

Customer switch rates are an important dimension of energy market competitiveness and have the advantage of being objective, measurable and comparable between markets. Many energy market commentators tend to focus on the wholesale aspects of the utility value chain as a measure of restructured market success, such as generation sources, transmission interconnections and wholesale market trading. The UCSRP contends that both retail and wholesale markets must be successful for consumers to receive the full benefits of competition.

A Definition of Customer Switching

In January 2006 Dr Philip E. Lewis, in a report for the European Regulators Group for Electricity and Gas (ERGEG) proposed a comprehensive definition of utility customer switching which has been adopted by the CEER (Council of European Energy Regulators), ERGEG and therefore the effectively the European Union:

Switching supplier is defined as "the action through which a customer changes supplier". More specifically: A switch is essentially seen as the free (by choice) movement of a customer (defined in terms of an overall relationship or the supply points and quantity of electricity or gas associated with the relationship) from one supplier to another. Switching activity is defined as the number of switches in a given period of time.

A switch additionally includes: a) A re-switch: when a customer switches for the second or subsequent time, even within the same measured period of time b) A switch-back: when a customer switches back to his/her former or previous supplier. When a customer moves, a switch should only be recorded if a customer switches to a supplier other than the supplier which is incumbent in the area where he/she is moving to. Theoretically, a switch should NOT be recorded if the customer remains with the same supplier as before the move, but for practicality this specification has been removed from the definition for this project and from those of CEER and ERGEG. A change of tariff with the same retailer is not equivalent to a switch (this exclusion extends to: changing to a new tariff; changing from a regulated to a non-regulated tariff with the same supplier or a subsidiary of the same supplier).

Sources of Data

The Utility Customer Switching Research Project draws on more than 100 of the best sources for data collection. These sources include national or regional regulators, system operators, energy associations, meter registration organizations, statistical authorities, research organizations and energy utility companies.

Levels of Activity

VaasaETT divides levels of switching into six categories. The category into which a market fits depends essentially upon its switching rate, but also upon its behavioural characteristics. Naturally, some markets fit the margins between two categories, in which case expert judgement has been applied to determine into which category a market fits.

Super Hot Markets: These are markets where activity is (in the current year) over 20% and has been consistently around 20% for at least three years. These are markets where high levels of switching and competition are an inevitable reality of the market, where at least half of all customers have switched supplier. These are the truly competitive markets where customers come first (or on a level par with other key business objectives) and complacency leads to major losses of customers. Prices may not be lower than in less active markets, nor may retailer image be higher, but a high emphasis is placed on the development of long-term lifestyle and added value services. Energy efficiency, smart home, demand response and other offerings are expected to flourish in such markets, depending on regulatory and other market structure conditions.

Hot Markets: Annual switching is approximately 15% or higher, up to 20% (even higher on occasions or for a year or two here and there). Typically, switching activity is so intensive that competitive positioning becomes one of the utility's most strategic issues. Switching momentum is usually high, constant, needs little encouragement and easily flares up.

Warm Active Markets: Annual switching is between 8.5% and 14%. Typically, switching activity is sufficient that utilities risk losing significant numbers of customers if they do not actively compete, or if they make loyalty-related errors. Switching momentum is significant but less permanent and mainly related to occasional stimulants in the market, such as price rises or profit announcements. While many utilities are far more customer focused, traditional corporate attitudes and over-complacency often remain despite the looming major threat facing revenues and customer profitability.

Active Markets: Annual switching is between 4% and 8.4%. Entry into this level of activity sometimes acts as a wake-up call for utilities, although for many it will not take place until at least the next level of switching activity. There is some degree of switching momentum, albeit it is weak and fragile.

Cool Active Markets: Annual switching is between 1% and 3%. Typically, switching is noticeable and measurable, but insufficient to affect substantial change in the attitudes or behaviour of utilities. Competition is barely visible and customer awareness poor. The seeds of future activity may nevertheless already be sown.

Dormant Markets: Annual switching is less than 1%. Typically, switching and competition exist only in theory. The markets may be officially open to competition, and customers are able to choose their supplier, but in practice only larger consumers are motivated or able to do so, competitors may not be able to compete with the prices of incumbent utilities (due to scale, access to energy or low-set regulated incumbent price issues) and in general the market is likely to be inhibited by insufficient conditions for real competition. This is not necessarily to say that competition cannot emerge, however, but regulators may need to take action in order to break the deadlock.

Comparative Data

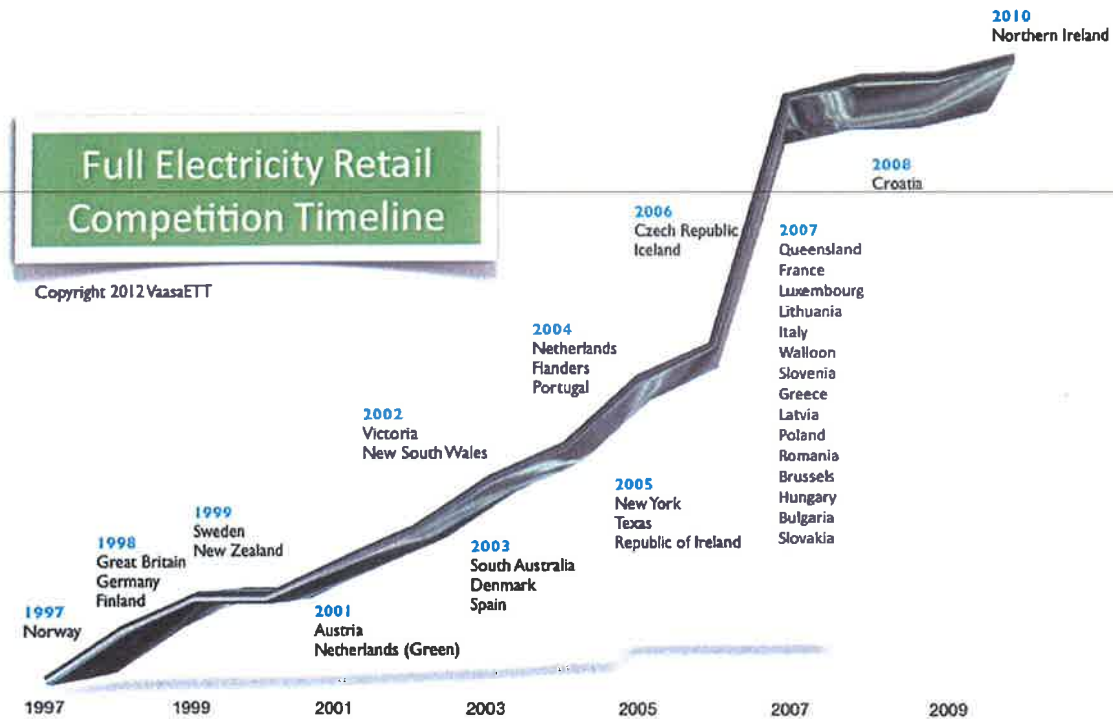
It should be noted that not all countries/markets collect or document data in a way that corresponds to this definition. Through cooperation with our data sources and careful calibration where necessary, we are able to largely overcome these limitations but some markets are nevertheless unavoidably non-comparable (and therefore left out of the rankings). A margin of error is additionally factored into all ranking comparisons.

Switch Rate Metric

The UCSRP customer switching rate metric is calculated by dividing the number of customers who switched suppliers in a given period by the total number of customers in the market, and the result is then converted to an annual rate. For example, if one per cent of customers switch suppliers in a given month, that month would have a 12 per cent annualised customer switch rate. Similarly, where switching trend data is reported on a quarterly basis, the quarterly switch percentage has been multiplied by four to derive the 'annualised quarterly' switching rate.

Defining Fully Liberalised Markets

Full liberalisation (otherwise known as full retail competition or FRC or full deregulation) is when residential and I&C (Industrial and Commercial) customers are all eligible to choose their energy (electricity and or gas) retailer (otherwise known as supplier). In the Utility Customer Switching Research Project Full Liberalization additionally refers to electricity or gas markets where end customers can choose their retailer freely, where they have at least one alternative retailer realistically available to them, and where switching supplier does not incur additional financial costs, reprisals from the former utility/retailer, technical changes (such as the need for an additional meter), or other unreasonable or excessive effort on the part of the customer. The dates when markets became fully liberalised are given in the following timeline.



Switching Trends

2011 saw a continuation of the year-on-year increasing global switching activity that has taken place ever since records began. Once again Victoria, Australia holds the crown for the most active market in the world, but hot on its heels is now New Zealand. All in all the VaasaETT Utility Customer Switching Research Project recorded 24 active markets, compared to 8 dormant markets. Of the active markets a record 7 reached the Hot or Super Hot levels of activity.

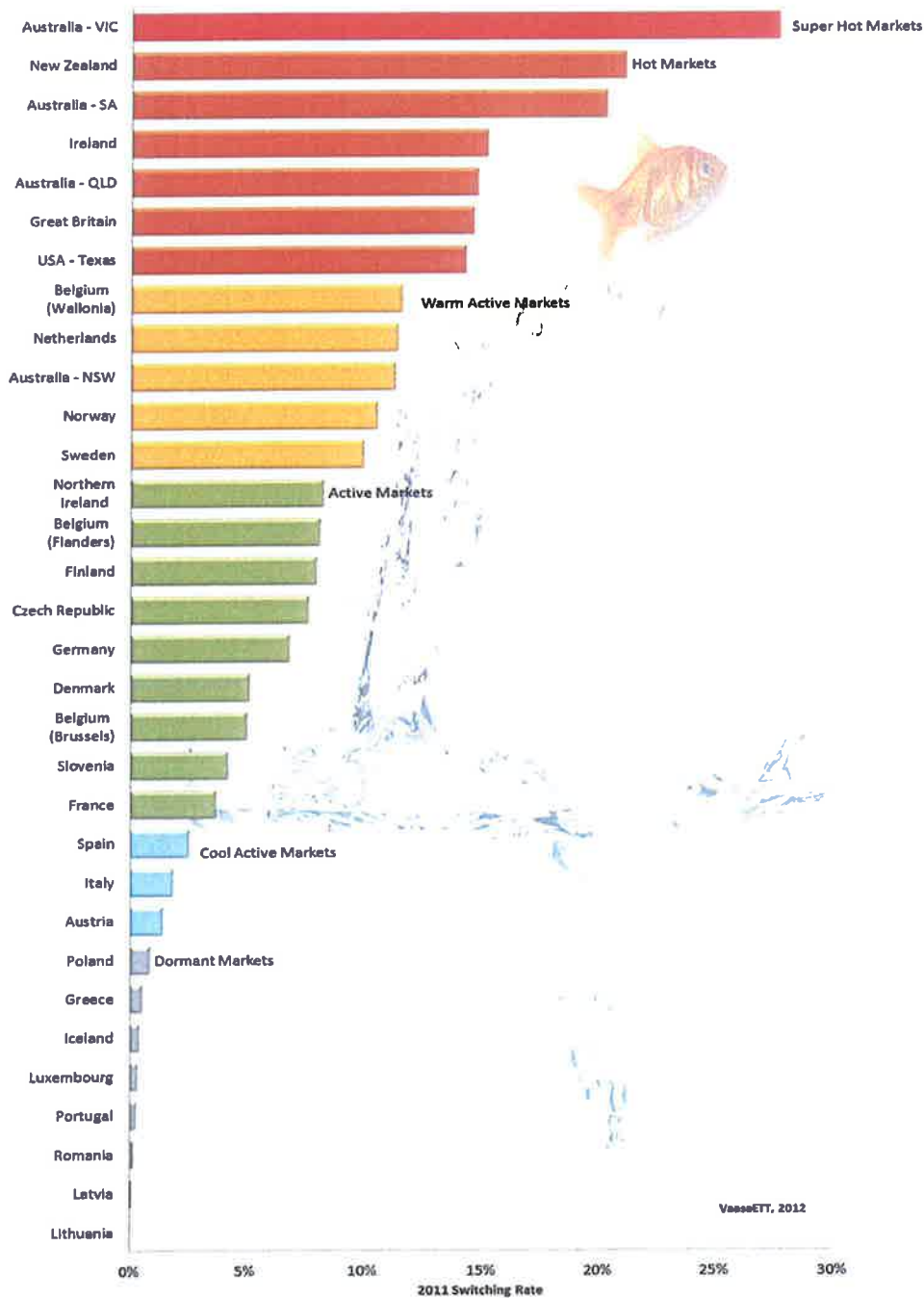
Once again Victoria was the only market to reach the 'Super Hot' level of activity, reflecting not only extreme levels of switching, but also an average switching level of above 25% over the past three year period. This level of switching was well above that of any other market.

The biggest changers in the 2011 rankings included New Zealand, which rose to second place; South Australia which moved to third; Ireland which fell from second to fourth; Texas which finally became a hot market; the Czech Republic which is progressing towards the top of the Active level of switching; and Great Britain, which fell substantially and is now for the first time ever at risk of losing its status as a Hot market.

Once again, but with more substantive evidence than ever before, the myth that switching is a Nordic or Anglo Saxon phenomenon was exposed, with six non-Nordic or Anglo Saxon markets reaching an active level of switching, most notably the Czech Republic and Slovenia.

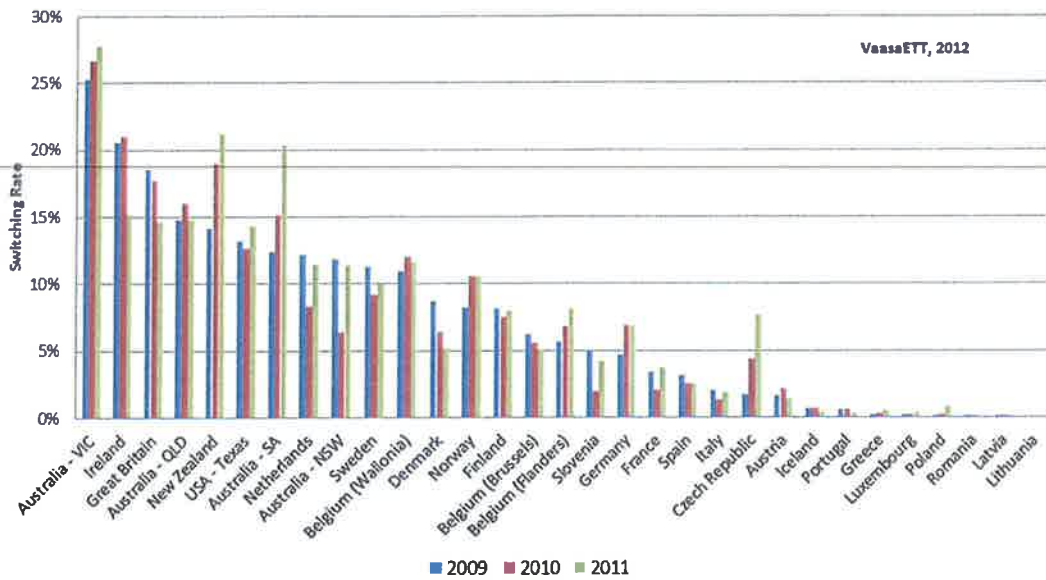
Global Levels of Switching Activity 2011

Global Levels of Switching Activity 2011



It can be seen that despite the enormous variation in switching levels, there is something of an evenness to the range of the spread, from markets with 20 to nearly 28% annual switching right down to those with 0%.

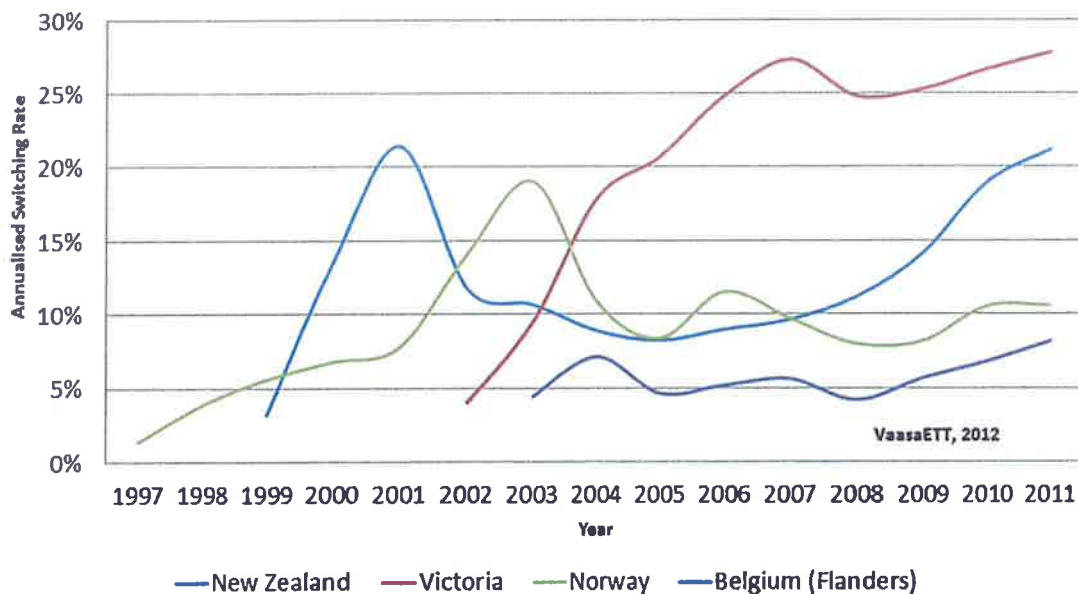
Customer Switching Rates 2009-2011



Patterns of Switching

When long-term switching patterns are compared between markets, it becomes increasingly apparent that there are more similarities than differences between different markets, countries, regions, market structures and cultures.

Switching Evolution for Major Markets By Region

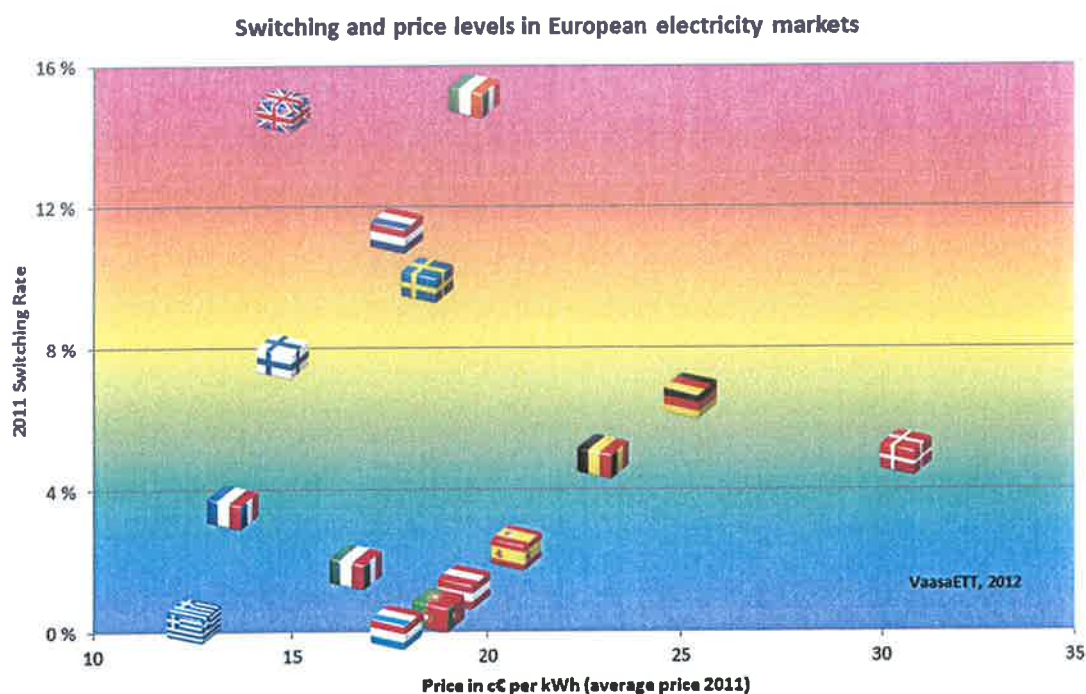


Following this activity boom, they will typically pause for breath for a while, after which they will find their more natural level and personality, and then settle into a cyclical pattern. With hundreds of variables determining the switching trends of any retail energy market, this almost inherited innate switching behaviour will always be only an influence on the switching pattern of a market, but it will be significant and needs to be incorporated into any model of market prediction. All in all, learning such as these have proved of great value in the development of VaasaETT's market switching modelling.

Does Price Matter ?

Surprisingly, recent research from the Utility Customer Switching Research Project has found that absolute price levels are not a significant determinant of customer switching. The research has found that the complexity of the relationship between prices and switching is such that the way in which prices change, and the environment of the change are far more significant. A detailed explanation of the price-switching relationship is provided in the full version of this report.

Less surprisingly, savings are a more significant determinant, albeit in a conditional way. Sweden, for instance has the greatest potential savings, far higher than Ireland, which has far higher levels of switching. Even Finland, with a similar market to Sweden, offers far lower savings opportunities than in Sweden, but a similar level of switching.



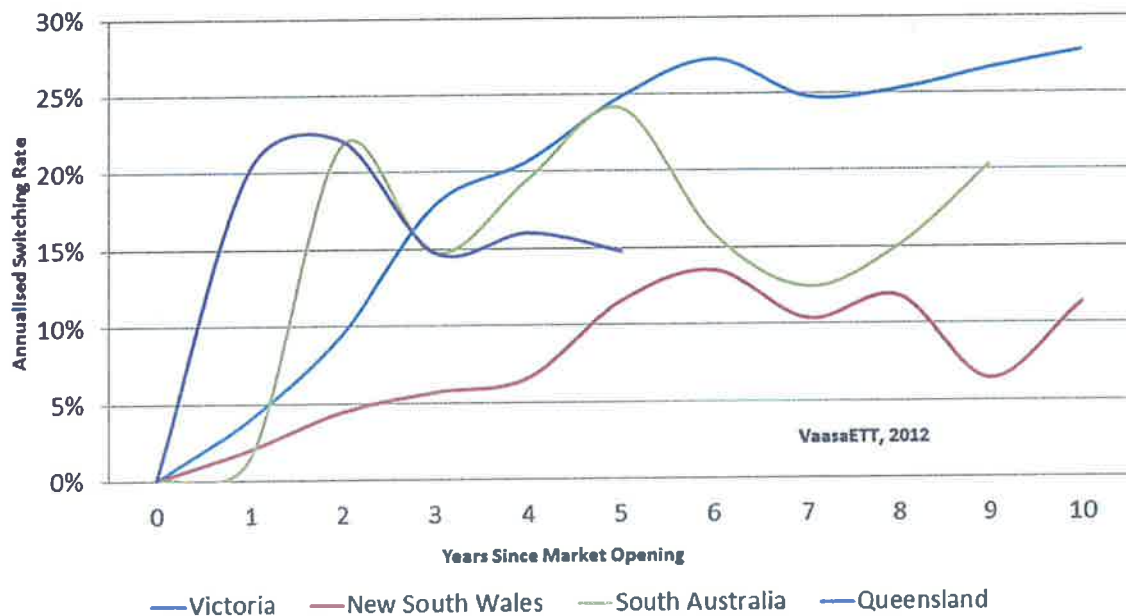


Australia

Since 2008 Australia has experienced a significant retail price spike largely driven by network expenditure authorised by the new national regulator, the Australian Energy Regulator (AER). Historically network expenditure is lumpy but growing household peak demand has been a major factor in the more recent network investment and has promoted a more active debate about demand side management and overly generous distributor incentives.



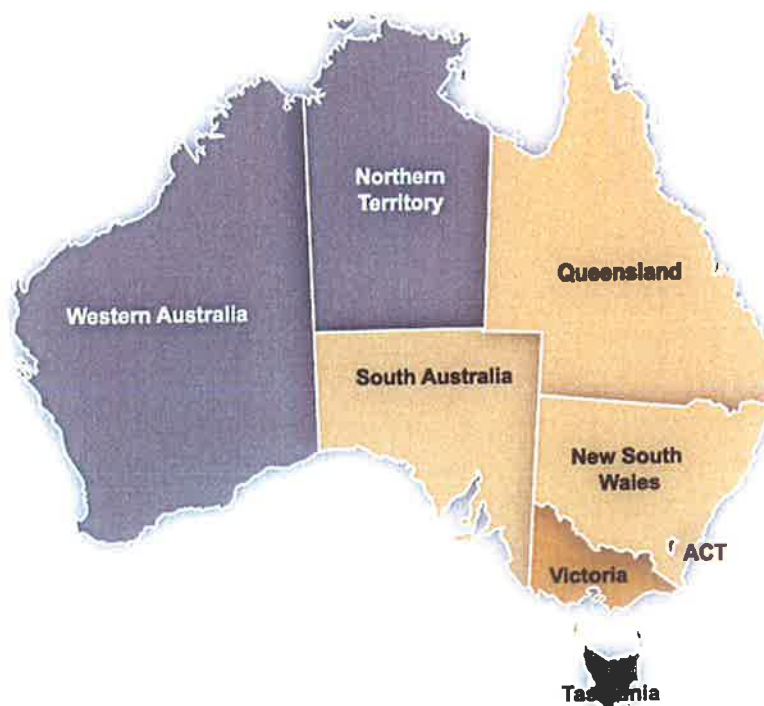
Switching Evolution for Australia



The network price increases have also been supplemented by generous State and Federal renewable incentives which, once their cost at retail level became apparent, added to the consumer backlash over electricity and gas prices. Throughout this period wholesale electricity prices in the east coast National Electricity Market (NEM) have been largely stable in line with demand, but this is set to change with the introduction of a national carbon tax from 1 July, 2012. Indeed, the carbon tax is the policy on the lips of consumers, with a 10% price increase impact, leading to increased consumer desires to save, consumer discontent and concerns about the affordability of energy bills. In the long run east coast fuel costs are also likely to go up as black coal is increasingly exported to Asia and as new Liquid Natural Gas (LNG) trains begin operations in 2015, thereby linking east coast gas prices to the international price

At the retail level, the continual upward movement in prices has translated into increased switching by consumers, especially in the deregulated Victorian market. Elsewhere, switching levels have remained strong, however retail margins remain under pressure due to retained low price caps imposed by State based price regulators experiencing pressure from the political level. With the network component of retail prices in some States now approaching 50%, the ownership of distributors and transmission by State Governments in some jurisdictions has also come under greater scrutiny.

Retailers are now contemplating the added value services they need to bring to the table to entice customers in and improve retention at a time of increased discontent, high switching levels and squeezed margins.



Victoria

Ranked number 1 in the World rankings once again, the switching rate in Victoria continued to be extremely high in 2011, the highest annual switch rate ever recorded in a retail energy market anywhere in the World, even increasing a little on the previous year. Driving this switching has been prominent price changes, extremely high levels of marketing spend, high proportions of door-to-door sales, and critically sufficient levels of awareness. Because it is generally seen as the most competitive state, intermediaries are also strong in recommending the need for customers to change retailers. While there are around 12 active retailers in Victoria however, 1st tier retailers have tended to be more moderately competitive recently, leaving the most aggressive competition to tier 2 and 3 retailers. Minimal price regulation has allowed for Dodo for instance, in the consumer space, to create ultra-cheap products. The retailer 'Momentum' in the same space has also been consistently a competitive option.

South Australia

Historically the NEMs most 'peaky' market, South Australia suffered less in 2011 from the volatile events that affect the energy trading conditions of previous years and was ranked number 3 in the world, up from seventh two years ago. Discounts have remained stable, supported additionally by a degree of customer distrust with the general switching practice due to poor historical sales practices and complex pricing. South Australia remains a hot market, largely because of competition between four to five active 'gentailers' (retailers that have access to their own generation) who can hedge their retail load against the peaks. The large peaks, constrained inter-connection to other states, modest price caps and smaller population makes South Australia nevertheless unattractive to some of the retailers' active in Victoria.

Queensland

In 5th place, in the World rankings in 2011, down from 4th in 2009, the Queensland market continued to display strong competition throughout 2011, although residential customers did not experience large variances in available discounts (averaging 7-10% of the Government Regulated Tariff GRT). Business customers saw discounts in the mid-teens of GRT, which grew to 18-20% in early 2012. However large network price increases led to retail margins being squeezed

New South Wales

With the sale of the government owned retail base in March 2011, competition began to be more aggressive with available discounts increasing by 50-60%. Additionally, network price pressures and a very generous rooftop solar scheme have fed into a major movement in the regulated tariffs leading to customers shopping around more. Non-incumbents such as AGL laid claim to a significant share of the switchers, with customer retention activity being strong from for instance Origin. Door to door, intermediary and outsourced telemarketing activity is also strong and New South Wales is unique in having a large challenger brand in AGL which missed out on the State Government owned assets. Its historical role as the state's gas retailer has meant it has provided hot competition to the incumbent retailers, Origin and TRU energy.

Despite these activities however, NSW remains the least active of the four tracked Australian markets, falling one place to 10th place in the World rankings between 2009 and 2011, arguably because retail margins remain low (and are set to reduce still further in 2012), reducing the market's attractiveness to new entrant retailers. It is perhaps not surprising therefore that NSW has the most limited number of retailers.

SwitchStats Australia

The Switchstats Australia Scheme is a collaboration between the VaasaETT Global Energy Think-Tank and 8 Australian energy retailers representing around 90% of electricity and gas customers in Victoria, New South Wales, Queensland and South Australia. The collaboration is conducted in partnership with the Energy Retailers Association of Australia (ERAA).

VaasaETT collects switch data directly from the retailers, according to a strict and consistent methodology and definition, in compliance with the same definition used with the Utility Customer Switching Research Project. This is based on the same definition (by Dr Philip E. Lewis) used by the European Union regulators, and therefore allows direct comparison against switching data from all European markets as well as fully liberalized markets in the USA and Canada.

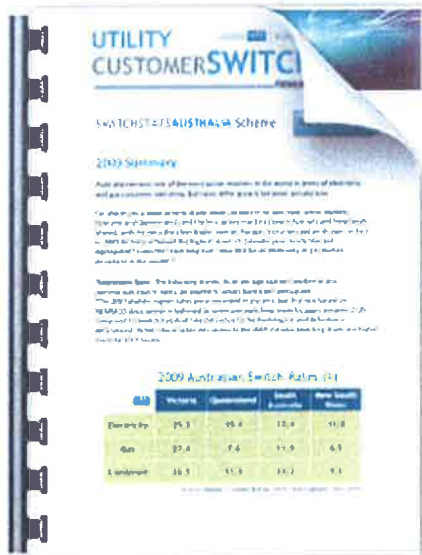
For more information on members, methodologies and definitions, please contact Dr Philip E. Lewis at Philip.lewis@vaasaett.com

"We use data from the Utility Customer Switching Research Project to evaluate the success of the Australian markets and the level of competitive activity"

- Cameron O'Reilly,
Energy Retailers of
Association of Australia

Members of SwitchStats Australia

- AGL
- Australian Power and Gas
- Lumo Energy
- Momentum
- Origin (including Country Energy and Integral)
- Red Energy
- Simply Energy
- TRU Energy (including Energy Australia)



New Zealand

Ranked number 2 in the World rankings In 2011, up from 5th in 2009. The New Zealand switching market saw a changing landscape for electricity consumers, with a marked increase in switching rates. The switching rate in New Zealand has been trending upwards since 2008, from an annual rate of 10.5 per cent in 2008 to 19.5 per cent in 2011. However, a number of regulatory initiatives and market changes have resulted in a further increase in retail competition, including:

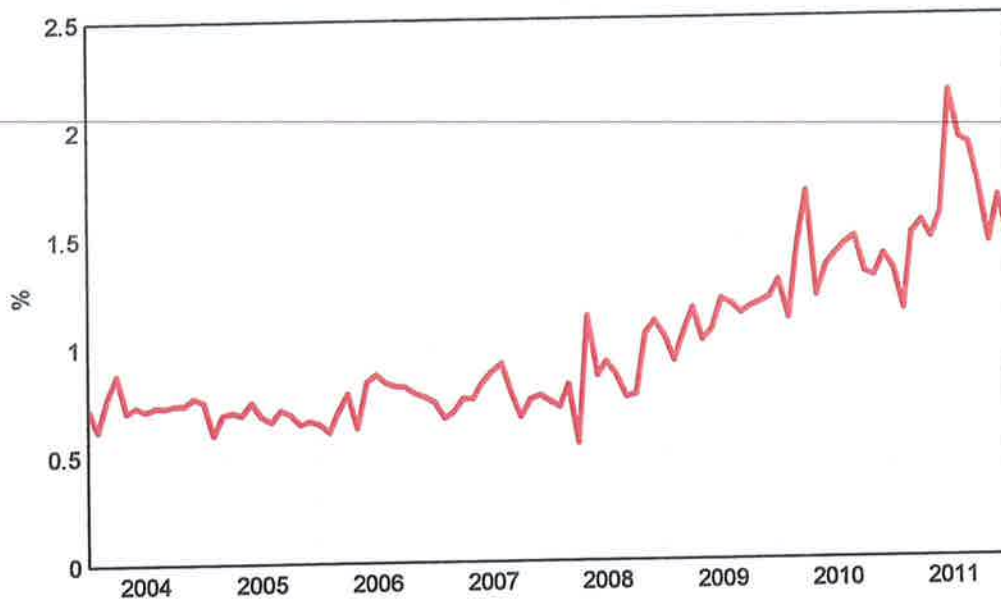
- The Electricity Authority's What's My Number campaign: This is an advertising campaign that ran during June to August 2011 designed to promote to consumers the benefits of comparing and switching retailers. The key goal is to increase the propensity of consumers to switch. The campaign was repeated commencing April 15 2012, continuing throughout the winter.
- The reduction in required switching timeframes in October 2010 from 23 business days to 10 business days (with 4.5 days being the average switching time achieved in 2011). Ten years ago the average switch time was as much as six months or more.
- Developments to establish a more active electricity hedge market;¹ and
- Government mandated physical and virtual generation asset swaps between state owned retail and generation businesses in 2011 that encouraged these businesses try to win customers outside their previous 'patch'.

Retailers responded to the competition created by switching and other initiatives by offering more competitive and innovative services to customers. During the What's My Number campaign the monthly switching rate spiked to over 2 per cent in June 2011, a 35 per cent increase over June 2010. In the period from June to September, 162,965 consumers switched retail provider.

NOTES:

- More information on the initial results of the What's My Number campaign is available at, <http://www.ea.govt.nz/document/16344/download/consumer/csf/>.
- On 1 October 2010 the switching timeframes were reduced from 23 business days to 10 business days with at least 50% of standard switches to be completed within 5 business days.
- More information is available at, <http://www.ea.govt.nz/our-work/programmes/market/hedge-market-development/>.
- More information is available at, <http://www.med.govt.nz/sectors-industries/energy/electricity/implementing-electricity-market-review-recommendations/progress-on-review-measures>.

Monthly switching rates in the New Zealand electricity market:



There have also been an increasing number of retailers active throughout New Zealand from 2004 to 2011, an indication of an increasingly competitive market (See HHI index, Electricity Authority's What's My Number - A changing landscape for New Zealand electricity consumers, page 9).

An interesting consequence of the increased competition, and a spur for additional switching, has apparently been reductions in prices and increased saving incentives. Experience has shown that the average annual saving has been around NZ\$150 (US\$116).

This switching and increased competition trend is expected to continue given these market changes and initiatives are relatively new. The Electricity Authority has stated that it will continue to deliver on its mandate of promoting competition for the long term benefit of consumers. They believe there is still considerable potential for New Zealanders to save money by taking control of their electricity bills and shopping around. According to market research only 4-5% of consumers are actively shopping around for electricity, yet 90% of those people who have switched in the last two years found the process easy.

In 2012, the Electricity Authority is introducing a new online tool to allow small to medium enterprises to seek best offers from retailers.



Alberta, Canada

The Alberta retail market opened to competition in January 2001. Small customers who use less than 250,000 kWh annually can choose between a RRO and a competitive contract. Between 2006 and 2010, the rate under the RRO was a blend of monthly forward contracts and long-term hedges that RRO providers purchase on behalf of their customers. Customers had, since 2006, gradually been transitioning to a rate where the RRO would be entirely based on monthly forward hedges that vary in price each month. In July 2010, the RRO transition was successfully completed and customers can see monthly pricing which reflects current market conditions. Albertans, who prefer longer term fixed rates, rather than the month-to-month variability of the RRO, can choose from a variety of competitive contracts for a fixed period. Albertans can also choose from a variety of boutique retailers that provide an internet-based service.

World Rankings Exclusion

Due to data comparability issues resulting from the Alberta definition of switching, Alberta is no longer included in the world rankings. It is however still tracked and analysed by the Utility Customer Switching Research Project.

Current Status

There were no significant changes to the Alberta's retail market structure in 2011, comparing to 2010. The regulated rate option (RRO) transition years (2006 to 2010) gave retailers time to conduct research, implement marketing plans and create new products and services. It gave rise to more competitive offerings and numbers of retailers. As a result, several different retailer types have emerged in Alberta:

- Vertically re-integrated retailer: This type of retailer has more financial flexibility coming from ownership of wholesale electricity sales, regulated return from their RRO load and/or wires services. Retailing is just one of the many business lines.
- Fully financially hedged retailer: This type of retailer has long-term electricity to offer, but have no other services in Alberta such as wires services or RRO customers.
- Niche retailer: This type of retailer is the newest type emerging in Alberta. They are smaller, local or community based retailers and offer fixed or flow-through of the monthly average wholesale price. They typically own the customer relationship and lease billing services from a third party.
- Green retailer: This type of retailer adds a surcharge to the customer electric bill for carbon offsets that make the energy consumption carbon neutral. The certification process is in place to ensure that consumers are paying for an actual offset.

There are currently 12 residential retailers, and total of 27 retailers serving various segments of the retail market in 2011. Most competitive contracts available to residential customers are either for one, three or five year terms with dual fuel options available or for a flow-through of the monthly average wholesale price.

The Alberta retail electricity market has shown a continuous increase in the number of customers switching from the RRO to competitive market products*. From January 2002 to December 2011, the percentage of total sites that switched to a competitive retailer increased approximately from 3 percent to 32 percent.

The commercial and industrial customer groups continue to have the highest switching rate. By December 2011, 84 percent of large commercial and industrial customers and 48 percent of small commercial and industrial customers switched to a competitive retailer. Commercial and industrial customers are (relative to other customer groups) generally more knowledgeable of the electricity markets and therefore more comfortable in choosing an electricity retailer.

Residential and farms customer groups have switched traditionally at a lower percentage than other customer groups. However, starting August 2011 due to the high RRO prices, the switching rate for residential increased to 30.5 percent in December 2011 comparing to 27 percent in December 2010 and 28 percent in December 2009. The switching rate for farm customers also increased to 21 percent in December 2011 from 19 percent in December 2010.

* Please note that this definition of switching differs from the Utility Customer Switching Research Project definition, in that it relates essentially to movement from regulated to competitive tariffs rather than switches between suppliers.



Republic of Ireland

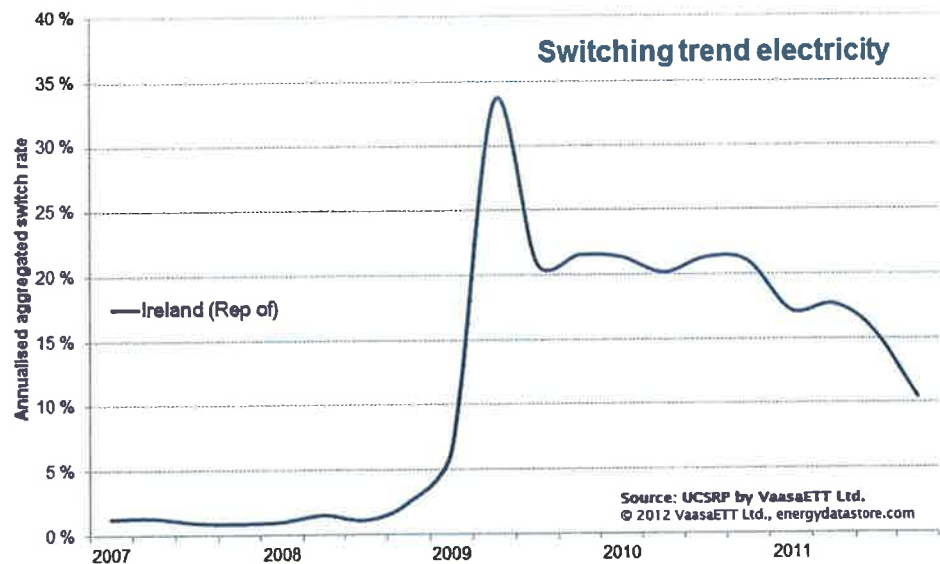
Ranked number four in the World Rankings in 2011 (down from 2nd in 2009), the Republic of Ireland (referred to here as Ireland) electricity market has been open to competition for larger businesses since February 2000 and has been fully open to competition in all market segments since 2005, but it was only in 2009, with the arrival of two key new entrants in February 2009, Bord Gáis Energy (the Incumbent Irish Gas Provider) and Airtricity, that the residential market became active, resulting in the electricity incumbent ESB losing large numbers of retail customers.

Social media marketing has been a key to the Irish Switching Phenomenon

After the initial wave of switching activity among larger energy users following market opening in 2000, there was a slow but steady level of switching only within business markets with the ESB losing approximately 4% of business consumption per annum during the period 2002-2008. Both Bord Gáis Energy and Airtricity had both been active in this business market for a number of years but had only built up relatively small (yet nevertheless significant customer bases), mainly in the SME markets.

The entry of Bord Gáis Energy and Airtricity into the domestic market in 2009 however transformed the competitive landscape not only in the domestic market, but also in the business market where it has had a major knock-on effect on business awareness of supplier switching options.

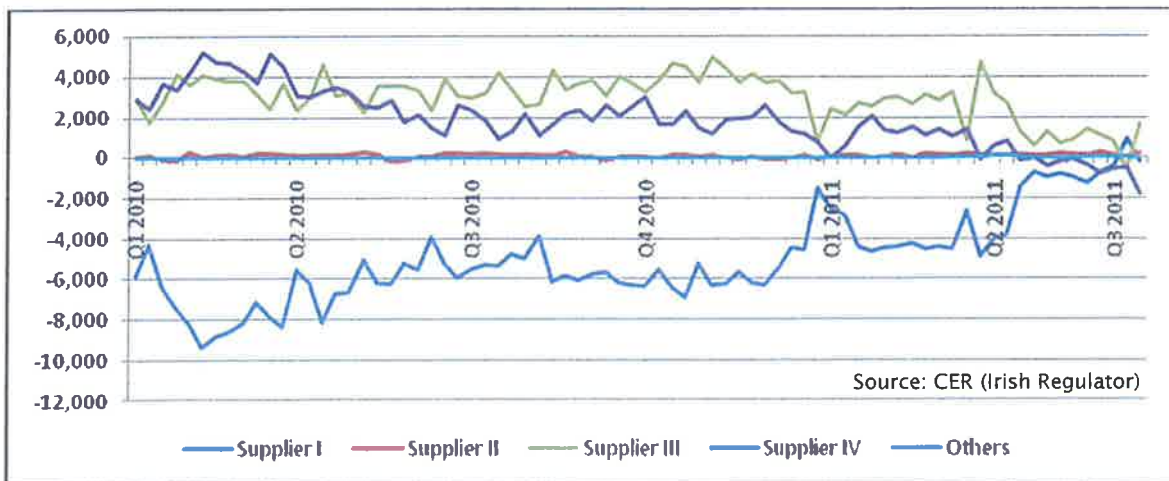
The Irish Experience is additional proof that there is no such thing as a safe customer for incumbent energy companies. Markets that are uncompetitive now, can become active very quickly if the conditions are right. In the coming few years it is predicted that similar the experiences will happen in other markets around Europe and elsewhere, especially since evidence indicates that once truly active, such markets tend to remain active.



With regards to switching trends, the graph below illustrates the trend over the last 18 months. The number of switches increased dramatically in 2009 when two suppliers entered the domestic market. During 2009 and 2010 switching patterns were dominated by domestic customers switching from Supplier I over to Suppliers III and IV. For the past two years we have seen a reasonably steady rate of switching at around 35,000 per month.

Upon entry to the market Supplier IV gained the highest number of customers, but since mid-2010 Supplier III has seen the largest gains every month. Over time Supplier I has seen a decrease in the number of monthly losses and during some weeks has actually gained more customers than it lost.

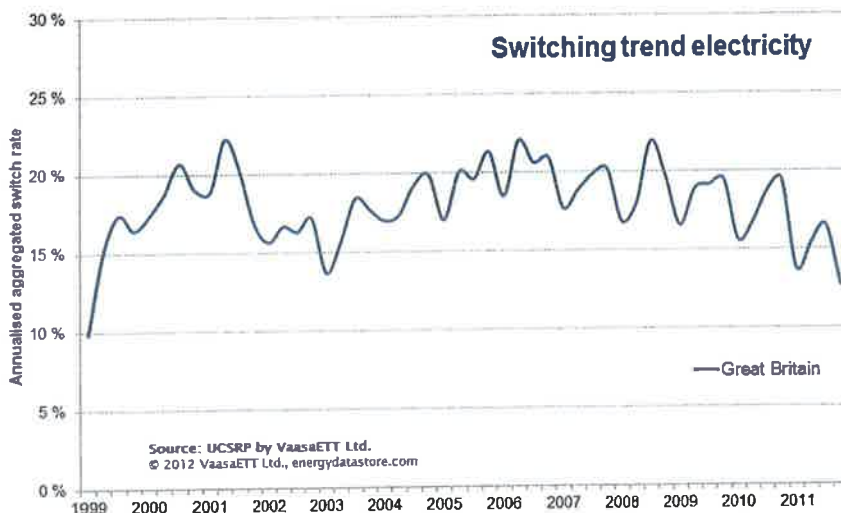
Following the full deregulation of the market on the 4th April 2011 and a significant advertising campaign by the former incumbent there was a slight drop in the number of switches. This may have been due to seasonal effects and in the last couple of week there has been growth again, so it is not yet clear what impact deregulation will have on the switching trends over the medium to long term. What is apparent is that there is growth in the number of customers switching between all three domestic suppliers as opposed to previous one-way traffic away from Supplier I.



Great Britain

Great Britain is a market with substantially less activity than ever before except the beginning of market opening. Great Britain long held the position of the most active market in the world. Six years ago it lost that position, but remained among the top two markets until Ireland overtook it in 2009. In 2011, Great Britain plunged to sixth place in the rankings, barely ahead of Texas and it would appear that Great Britain may no longer be a 'Hot' market as of 2012.

Great Britain is still an active market, supported once again by for example, aggressive and effective marketing, significant retail margins, high levels of customer awareness, powerful online switching and comparison services, active media and retail price volatility. The element of recession also appears to have played a continued supportive role. The continued activity of the Great Britain market, having remained highly active for over 13 years, is indeed testament to the switching momentum that can develop in competitive electricity markets. However, the recent capitulation of door-to-door sales activity (most leading utilities have discontinued door-to-door sales), coinciding with market wide price reductions by the main players in the market, has led to a massive fall-off in the established activity in the market.



It appears apparent that the propensity of the market to switch has not fallen, nor the pre-disposition of the customers. What has changed is the marketing environment and the ability of customers to save. The ability to save will recover, but it remains to be seen if the marketing environment will.

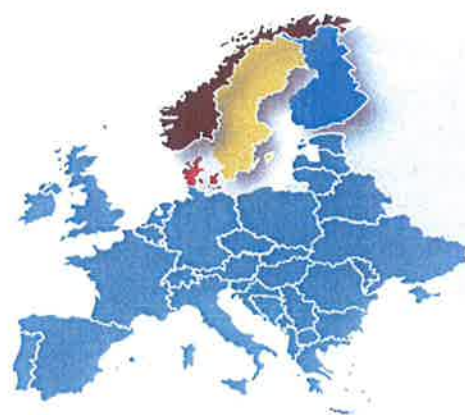
Extensive analysis by VaasaETT has proven the overwhelming importance and role of door-to-door within the global switching activity of energy markets. It is hardly surprising then that the Great Britain market has taken its recent downward turn, not that the utilities are likely to complain since high levels of switching heavily increase cost-to-serve through costs associated with winning, switching and retaining customers. Churn is an expensive business and who wants to be in a business with low margins?

It is interesting to note that British utilities appear to be increasingly moving away from the tradition of competing over price and 'service', towards a new paradigm of competition through partnership with the customers.

The initiation of mass smart meter rollout throughout Great Britain has been preceded by attempts by utilities to build closer relationships with customers. A number of the leading retailers in particular for instance are now offering customers in-home feedback displays to assist them to save energy and therefore money. These offerings are accompanied by energy savings advice, associated tariffs and even (in at least one case) the ability to remotely turn off devices to save money. Not only do such offerings help customers to save money in other ways than switching supplier (potentially avoiding the need to change supplier to ensure a good deal), but they also build a more mutual relationship with the customer, to some extent may tie in the customers, and may go some way to reversing the negative images associated with the utilities and the energy industry. In the longer-term they may also enable more advanced revenue generating or cost-reducing offerings to the mass market.

Sweden

Ranked 12th in the 2011 World rankings, Sweden has fallen two places during the past two years and now risks falling out of the Warm Active Markets category. Overall however, 1.6 million Swedish residential customers were active in the electricity market during 2011 either by changing electricity supplier or by signing a new contract (although switching contracts is not switching). This represents nearly 37 per cent of the total number of residential customers in the Swedish electricity market. Both the number of changes and renegotiation of contracts increased in 2011.



The Swedish Energy Inspectorate believes that the current activity, among other things, is associated with relatively high and volatile prices at the beginning of the year and also with the fact that the media debate about electricity prices and electricity contracts was intense during the year. In addition, the emergence of a number of web-based price comparison sites helped customers to increasingly compare and switch electricity contracts. The activity is also a reflection of customers moving away from standard price contracts to the preferred variable contracts. Variable-price contracts are now the most common type of supply contract among Swedish households with 30% of customers on variable-price contracts.

This activity is apparently leading to increased competition among electricity suppliers, which some observers believe will drive down prices and benefit customers through better deals, although this has yet to materialize.

It should be noted however, that the ability for Swedish electricity customers to request and receive personal improved contract offers from their existing retailers, may be seen as a barrier to more intensive competition rather than an illustration of it. As in other parts of the Nordic region, retailers can offer lower prices to their customers who request offers, than to those who do not (termed price-matching). This cherry picking means that incumbent retailers can subsidize their competitiveness to active and valuable (preferred) customers using margins from their less active incumbent customers. This extends their already significant home advantage against newcomers and neutralises much customer switching that would have occurred if price-matching was not allowed (price matching for instance does not occur in Australia or Great Britain for instance).

Of course it can be argued that does this matter? Well it does matter because it prevents greater switching momentum in the market (essential for more newcomer competition), and since prices do not have to be as low to keep customers as to win them, the customer may end up with a worse price than if they had switched retailers. Incumbent retailers therefore retain most of their customers and most of their original market power, and true competition is killed off before it can even truly begin.

Norway

Switching levels in the residential market in Norway increased slightly in 2011, placing Norway in 11th place in the world rankings, one place higher than two years earlier and making Norway the most active Nordic market once again. In fact the switching rate in Norway in 2011 was at its highest since 2006, and one of the most active years for Norway since deregulation. Over 250.000 customers switched supplier. The business market experienced an even greater increase, substantially larger than 2010 and the second highest level of switching since liberalization.

The most recent increases in switching activity appear to be the result of increased retail electricity prices between 2010 and 2011. Supplier switches have been monitored in Norway for the last 15 years, and the statistics show that in general the number of switches is clearly correlated with energy prices and media publicity. When prices are high, the media writes more about the electricity market, on how to switch supplier and on ways to save energy, which in turn increases the public's awareness in this field. The prices in turn are partly a reflection of the weather conditions and tend to be higher in the winter when it is cold and demand for heating is high and lower in the summer when temperatures are pleasant.

In Norway there are about 100 energy suppliers. Some of them have offers nationwide, and some are local suppliers. A little more than 50% of the household customers and almost 70% of the industry customers have a spot contract in Norway.

A spot contract is a contract that offers the customer the monthly average system price at Nord Pool Spot (corrected for the price area of the customer) plus a mark-up from the supplier. The mark up is normally a sum per kWh, but could also be a monthly or yearly amount. For the customers with this kind of contract the mark up difference between suppliers is the potential gain by switching. The mark up is in itself low, in fact sometimes close to zero. The difference in mark up between the most expensive supplier and the least expensive supplier in this type of contract is normally small and thereby does not in itself trigger switches on a large scale, at least not for those with a low yearly consumption.

Because of many factors including relative price volatility, fast and simple switching procedures with no economic costs for the customer, and relatively high levels of customer awareness, Norway has for over a decade been one of Europe's most active energy markets in terms of customer switching. Nevertheless the majority of customers in Norway tend to stay with or return to their local supplier, even if that supplier is not the cheapest one. In fact around 70% of household customers and 65% of I&C customers still have a contract with the retailer connected with the local DSO.

Norway could therefore be described as a relatively mature, moderately active, low margin market with volatile tendencies, where incumbents remain dominant and most customers remain loyal , but those who switch tend to be habitual switchers.

Denmark

Denmark, at 18th place in the 2011 World rankings, has lost 41% of its switching activity rate, and dropped 4 places in the rankings during the past two years, largely due to reduced savings opportunities but also because new entrants activity and the effect of recession appear to have abated. As in other Nordic markets competition is also restricted by the fact that many customers negotiate or receive better contracts from their existing retailer rather than switching supplier.

Historic switching data indicates that the switching activity in Denmark has closely correlated to savings opportunities. All customers in Denmark have a default supplier who supplies the customers that has not changed supplier or has returned to default supplier. The default supplier has an "obligation to supply" in a geographic area and the product they must supply is a quarterly fixed price which is regulated by The Danish Energy Regulatory Authority DERA. Research conducted by The Danish Energy Association in November 2010 indicated that the share of household consumers who are still on the obligation to supply tariff at a default supplier is 85,5%. For business consumers (with consumption over 100 MWh/year) it is 34,3%. In all, 56 % of the Danish electricity consumption is supplied through non-obligation-to-supply tariffs).

The approved obligation to supply price is based on the forward-prices on Nordpool. Due to this, the price variation between "obligation to supply" and market prices from other suppliers is low when the development in prices is steady and anticipated. This has been the situation since the end of 2009 and into 2011. Even though there have been some peaks in the spot market these have not had a major effect on the price variation.

Nordic Switching Determinants

Research conducted by VaasaETT in collaboration with the Central Research Institute of the Electric Power industry of Japan (CRIEPI) in 2009, indicates that switching in the Nordic markets is primarily influenced by a number of key drivers. In the following table, the degree to which each market conforms to each criterion is defined by the numbers in the columns, ranging from 1 to 4 (where 4 indicates the highest and 1 the lowest degree of confirmation). By averaging the numbers for each market it is possible to then consider the overall switching propensity of each market. Analysis found that the relative propensities of the four markets closely reflected the relative observed switching levels in each market, indicating the importance of the selected switching variables.

Issue	Finland	Sweden	Norway	Denmark
Critical peaks	2	3	4	1
Seasonality	3	3	4	1
Switching momentum	2	3	4	1
Length of time since liberalization	4	4	4	1
Barriers to market entry / market concentration	4	4	4	1
Ease and speed of switching	4	4	4	1
Regulatory focus on switching	2	3	4	1
Ease of keeping customers	2	3	4	1
Suddenness of market opening	3	3	4	3
Pro-activeness of Corporate Attitudes and Marketing	2	3	4	1
Customer satisfaction	2	4	3	1
Customer loyalty	3	4	3	1
Customer Awareness	2	3	4	1
Need Drivers	2	3	4	1
Fixed-term contracts	2	1	3	4
Price and Bill Volatility	1	3	4	2
Fairness and Ethics	2	4	4	1
Lifestyle need fulfillment	2	3	4	1
Absolute savings	3	2	4	1
Bill share of consumer budget	1	3	2	4
Switchable share of bill	3	3	3	1
Energy consumption levels	2	3	4	1
Retail pricing behaviour	2	3	4	2
Average Score	2.4	3.1	3.7	1.4

Source: VaasaETT & CRIEPI

In general in the Nordic region in 2011, wholesale prices were been relatively low, enabling attractive offer prices, resulting in increases in switching levels. By 2012 however, standard retail prices have adjusted downwards resulting in reduced switching pressure.

About the Main Writers



Dr Lewis is a leading international specialist in utility customer behaviour and psychology and related market and marketing issues including: Customer Loyalty / Switching; Demand Response / Eco-Home / Smart Grid; and Market Competitiveness / Efficiency.

During 14 years in the liberalized utilities industry Dr Lewis has conducted research in over 50 countries for over 330 organizations including Shell, E.ON, EDF, RWE NPower, Panasonic, BP, Nokia, British Gas, Duke Energy, ABB, BC Hydro, Nuon, Fortum, RAO, Electrabel (GDF/Suez), E-Control (Austrian Regulator), CRIEPI (Central Research Institute of the Electric Power Industry of Japan), Landys & Gyr, Union Fenosa-Gas Natural, ADEME / World Energy Council (WEC), DECC (Department of Environment and Climate Change, UK), and Capgemini.

Dr Lewis has also worked extensively at an industry and market-wide level, having written major benchmarking and advisory reports for e.g. the European Regulator's Group for Electricity and Gas (ERGEG), Nordic Energy Regulators (NordReg) and the Finnish Ministry of Trade & Industry, as well as providing opinion and advice for the EU, the Finnish Parliament and a various other governmental organizations around the world.

Dr Lewis is a globally renowned expert in the field of customer switching and loyalty. His World Energy Retail Market Rankings report is the leading authority on customer switching trends around the world, and his definition of customer switching has been adopted as the European norm within Europe and Australia (by the European Union authorities as well as the Energy Retailers of Australia Association).

Dr Lewis was Formerly head of Marketing Research and Analysis for a UK based retailing subsidiary of Amoco and (now) Edf, during the onset of competition in the British retail energy market. Following this Dr Lewis was founder and chief of the University of Vaasa Energy Markets Group (VaasaEMG) as well as an Assistant Professor of Marketing.

Dr Lewis holds a PhD in Marketing (customer psychology and behaviour) from the University of Edinburgh, Scotland and developed his graduate marketing expertise in the banking sector with American Express Bank in Frankfurt and National Westminster Bank in London.





Sean is a specialist in Customer Switching data analysis within the Utility Customer Switching Research Project, Sean has also participated in a wide variety of other projects for VaasaETT relating to issues including Demand Response, Smart Demand Services, Marketing Strategies and Market Benchmarking Analysis.



Dr Daria Kennedy has worked for VaasaETT since 2008 in research and analyses and event-related roles. She has worked on various projects for VaasaETT in Russia and elsewhere in Europe. Daria has also been a writer of various reviewed reports for organizations such as CRIEPI (Central Research Institute of the Electric Power Industry) 2010.



Christophe Dromacque is head of market analysis at VaasaETT. He is additionally specialised in several market analysis fields including smart grid, demand response and market pricing issues. Christophe has worked as a key researcher for clients such as ADEME / World Energy Council, NUON, Panasonic, Capgemini, EDF and ONZO.

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- Nicky Doran, Head of Marketing, Bord Gáis Energy and Fergus Walsh, New Product Development Manager, Bord Gáis Energy
- Stephen Grant, Manager - Quality & Compliance, Red Energy
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