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CHANGING PARADIGMS AND THE NEW ENERGY FUTURE

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>>> retail >>> regulation >>> networks



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"The 2017 Downstream Summit brings the key regulatory, strategic, commercial and stakeholder issues to the table in a unique event that is heavy on discussion panels and high calibre presentations."

WELCOME TO THE ENERGY SECTOR'S PREMIER EVENT. The 2017 Strategic Summit will focus on the key opportunities and challenges that lie ahead of New Zealand's world class energy system. The must-attend two day summit will offer insights for generation, transmission, distribution, retail and regulation, preparing the sector for disruption in the context of the technology and consumer revolution.

SPEAKER HIGHLIGHTS

FEATURING PRESENTATIONS FROM:

Jenny Cameron, ERANZ

Paul Goodeve, First Gas

Gary Holden, Pulse

Marc England, Genesis Energy Ken Sutherland, Unison

AND PANEL DISCUSSIONS WITH:

Alison Andrew, Transpower

Sheridan Broadbent, Counties Power

Vince Hawksworth, Trustpower





NEW to the Downstream Strategic Summit



ROUNDTABLES: Join the conversation and customise your event experience with our specialised roundtable discussions, giving you the opportunity to strategise and debate the hottest topics in the energy sector today. INCLUDES: new technology, the consumer challenge, data optimisation, the future of gas, zero harm for the energy sector.



SMART ENERGY TECHNOLOGY STREAM: Prepare for disruption and the future of the energy environment with the Smart Energy Technology Stream, designed to provide an overview of the newest technologies and their ability to enhance and disrupt the sector. INCLUDES: storage, energy management, solar, micro-grid and the IOT of energy.



MONDAY 6 MARCH 2017 | 9.00AM - 12.30PM

In association with the New Zealand and Pacific Solar and Storage Council



New this year is the separately bookable NZ Downstream Battery-On-Grid Masterclass.

Come along to hear from global and local experts about the development of battery storage systems, case studies of grid scale battery storage, regulatory hurdles and the future of EV charging and storage in New Zealand.





MONDAY 6 MARCH 2017 | 1.30PM - 5.00PM

A half-day forum for electricity networks covering technology, asset management strategy and operations.

Invitation only event. More information available at: www.nzdownstream.co.nz

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TUESDAY 7 MARCH 2017 | 7.00PM

Join us at the 2017 gala dinner to round off the Summit first day and connect with industry leaders.

Enjoy the informal atmosphere and take advantage of this opportunity to network with your peers, enjoy a great dinner and be regaled with an inspirational story of success.

This is sure to be a great night, don't miss out - book your table for your clients or your team!

See the back page for booking details.

Dinner Sponsor







9.00 - 12.30 6 MARCH 2017

The Battery-On-Grid Masterclass, designed to deliver the latest information on the progress and potential of battery storage in NZ.

8.15 Registration - Tea and coffee available

8.50 Welcome - Barbara Elliston - President, NZPSSC

9.00 Battery-On-Grid systems update

A synopsis of the current landscape - who's doing what, where, how much and with whom.

Steve Blume - Director, Global Solar Council

9.30 Keynote: Enabling scale of storage - the need for an adaptive grid

Market-level impact of storage requires system-level innovation and an adaptive grid. Chris will share the technological pieces of the puzzle that will allow storage to scale, and explain how these fit into the New Zealand market context.

Chris McArthur - Strategic Account Manager, New Zealand & Pacific Islands, **Enphase Energy**

10.00 A Chinese manufacturer's perspective and global outlook

As one of the largest energy storage suppliers worldwide (with over 260MW installed) what we are seeing as major trends in battery storage internationally plus a case study of the Grand Ridge Battery Storage Facility.

Lin Wang - Energy Storage Director Asia Pacific, BYD

10.30 Morning tea

11.00 Case study: Alpine Energy battery storage trial expectations, results, insights and next steps

Learning by doing - Keeping up with technological advances to better understand business risks and opportunities, to evolve business strategies that better match an evolving electricity service offering expected by customers.

Andrew Tombs - Chief Executive, Alpine Energy

11.20 Panel: Perspectives of regulatory hurdles and bottlenecks - what needs to change

The regulatory hurdles and bottlenecks that hinder new players, products and services in the changing electricity service landscape - perspectives followed by Q&A.

Stephen Drew - Manager New Zealand, EnerNoc Sheridan Broadbent - Chief Executive, Counties Power Facilitator: Ewan Gebbie - Secretary, NZPSSC

12.10 Storage, EVs and charging networks - rounding out the storage picture

Electric vehicle uptake, battery storage and the requirement for charging stations is creating a new market opportunity for the electricity sector - inside the transport sector.

Jason Franklin - Chief Executive, PowerNet

In association with







DAY ONE 7 MARCH 2017

8.00 Registration & coffee in the Downstream exhibition

9.00 Welcome from the Chair: Toby Stevenson

9.10 MINISTERIAL ADDRESS

9.40 LEADERS' PANEL DISCUSSION: Realising the opportunity of change - are we ready?

Technology continues to challenge the sector as it adapts to new business models and a new era for the energy industry. Is the industry ready for this change?

What is the industry doing to prepare?

- With an increasing pace of change, can it respond quick enough?
- Collaboration amongst sector players is more important than ever
 what are the key opportunities for the industry to work together?
- · Which changes will deliver the best outcomes for consumers?
- Transitioning from legacy business models to new models
- Fundamental regulatory changes needed to facilitate the transition

Alison Andrew - Chief Executive, Transpower

Sheridan Broadbent - Chief Executive, Counties Power

John Harbord - Chairman, MEUG

Vince Hawksworth - Chief Executive, Trustpower

Ken Sutherland - Chief Executive, Unison

Fraser Whineray - Chief Executive, Mercury

Facilitator: John Hancock - Director, Signature Consulting

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10.50 Morning break & refreshments

11.20 Energy fundamentals, strategic opportunity and a future view of energy

This fascinating look at the long term global trends of oil and electricity will set the stage for a rich debate of where the New Zealand energy sector may go in the future.

- How will the rest of the world impact New Zealand's energy strategy?
- Can you protect regulated assets and simultaneously encourage new technologies?
- In the long term, where will NZ energy companies realise the highest value?
- Is solar power a necessary ingredient to meet global long term energy needs?
- What are the key ingredients for NZ energy policy going forward? **Gary Holden** - *Chief Executive*, **Pulse Energy**

12.00 Young leaders and the new energy future

The Young Energy Professionals Network confront the status quo and share their thoughts for the future of the New Zealand energy sector.

- What are the leading challenges, opportunities and calls to action?
- Which direction is the industry heading in? Is it the right direction?
- How would the young professionals refocus the industry to pave the way for a brighter future?

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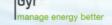
Representatives from

Young Energy Professionals Network

Young Energy Professionals Network Supported by the BusinessNZ Energy Council

12.40 Lunch break

Day One Lunch Sponsor



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CHOOSE UP TO 2 ROUNDTABLE TOPICS OR CONTINUE IN THE MAIN PLENARY SESSIONS

1.40 NZ Downstream 2017 features interactive roundtable discussions which allow you to debate the hottest topics and challenges facing the industry.

- 1. With the uncertainty around uptake of new technologies such as electric vehicles, solar and storage, what are the challenges facing your current asset management investment strategy?
- 2. How do you see the modern consumer challenging traditional notions of energy retail and what are the opportunities to adapt business models to meet their expectations?
- 3. What are the opportunities to optimise data for energy efficiency and customer management and how is data affecting your future business models and asset management strategies?
- 4. What is the future of gas in New Zealand are we running out of gas? What are the opportunities to utilise gas in our current energy mix?
- 5. Is a goal of zero harm for health and safety in the energy industry achievable? How have you adapted your culture to work towards this ambitious benchmark and where does the energy sector need to focus its efforts to reach this?

1.40 The changing energy consumer landscape

Nielsen presents the latest research on the demands of the modern consumer; the power of the grey dollar and impact on the energy sector.

- Ethnicity changing faces
- Changing households size and structure
- Getting the marketing messages to the right consumer at the right time - marketing to Auckland and the rest of NZ strategy
- · Consumer technology uptake
- Corporate responsibility impacting consumer decisions something for everyone or just those who can afford it

Judy Humphris - Associate Director, Nielsen

2.20 Assessing and improving market performance at the Electricity Authority

The Electricity Authority assesses the performance of the electricity market through its routine monitoring and insights gained from anomalous events; both are hugely important in ensuring the market is competitive, efficient and reliable. This work is underpinned by data, analytics and bespoke tools. This presentation will cover:

- Key metrics and observations on market performance in 2016
- · Recent enquiries and our monitoring work
- · Reducing barriers through analytics and data

Rory Blundell - General Manager Market Performance, Electricity Authority

3.00 ERANZ: It's all about the customer

Since its establishment, the Electricity Retailers' Association of New Zealand (ERANZ) has sought to provide a collective voice for its members and advocate for them on key issues that impact on retailers and their customers. From all quarters there is a renewed focus on meeting the needs of the customer, from both an individual and an NZ Inc perspective, especially as the future energy market emerges. ERANZ has particularly focused on advocacy that promotes and enhances the competitive market, delivers a level, less complex, playing field for all participants in that market. All driven by an understanding of what it takes to win and keep customers - choice, control and value.

Jenny Cameron - Chief Executive, ERANZ

3.30 Afternoon break & refreshments

4.00 PANEL: Responding to customer competitiveness - Staying savvy in the energy sector

- How do you lock in new customers whilst keeping your existing customer base?
- Do you stick with one brand, or multiple brands to attract different consumers?
- How do you create an offering the customer will actually talk about?
- Aligning your back office to your customer proposition

Jessica Venning-Bryan - General Manager, Brand, Flick Electric Julia Jack - Chief Marketing Officer, Mercury

Stuart Innes - Co-Director, P2 Power

Philippa Dawe - Creative Lead, Powershop

Facilitator: Simon Coates - Director, Concept Consulting

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4.50 A journey of disruption and clues as to what might happen next

The disruptors used to sneak up on the competition to become the leader, growing a market by meeting peoples' needs who found the incumbent's product too expensive and complex. Its now only takes days for market leadership to be upended and evaporate. Technology is supercharging the disruption model, you can enter the market, go bigger faster immediately disrupting incumbents around the world. What lessons are there from silicon valley, and Xero, a business that is growing at scale and became a global leader in a few short years.

Chris Teeling - Global Head of Strategy, Xero

- 5.30 Summary remarks from the Chair
- **5.35** New Zealand Downstream networking drinks

7.00 NEW ZEALAND DOWNSTREAM GALA DINNER



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DAY TWO 8 MARCH 2017

- 8.00 Registration & coffee
- 8.45 Welcome back from the Chair: John Hancock
- 8.50 POLITICAL LEADERS' PANEL: Election year energy sector priorities

This debate will feature the Green, Labour and Act parties sharing their views on energy sector priorities.

Gareth Hughes - Green Party Stuart Nash - Labour Party David Seymour - Act Party

9.45 KEYNOTE: Genesis Energy and the new energy ecosystem

Marc England has been in the role of CEO a little under a year and has already reshaped Genesis Energy into a more agile and adaptive organisation. Not wanting to merely react to the rapidly evolving energy market, Genesis Energy is aiming to be a driving force and accelerate development of engaging products and services for the New Zealand energy consumer.

Marc England - Chief Executive, Genesis Energy

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10.15 Morning break & refreshments

MAIN PROGRAMME CONTINUES

10.45 Update: BEC 2050 scenarios - Deep dives

John will share insights from the BEC 2050 scenarios deepdive into New Zealand energy sector emissions, and outline the energy sector's potential contribution towards New Zealand's Paris target.

John Carnegie - Manager -

Energy, Environment & Infrastructure, Business NZ

11.00 DISCUSSION: Post-Paris climate change commitments - what should the sector be doing?

New Zealand will need to work hard to meet the targets set in Paris in 2015, of reducing its emissions to 30 per cent below 2005 levels by 2030. How can the energy sector contribute to lowering carbon emissions? The panel will consider a number of factors that could come into play:

- · Responsibilities of businesses
- · How to respond easy wins
- · Making climate responsibility business as usual

Ralph Sims - *Director*, Centre for Energy Research (Massey University)

Paul Young - Researcher, Gareth Morgan Foundation

Andrew Booth - CEO, Solar City

John Carnegie - Manager -

Energy, Environment & Infrastructure, Business NZ
Jenny Lackey - GM Strategy and Delivery Services, EECA
Facilitator: Stuart Frazer - Consultant, Frazer Lindstrom

11.40 Solving systemic industry issues

Based on over 20 years involvement in the electricity and gas field, Nanette Moreau presents her views on the main systemic issues facing the energy industry today. Even though there are more channels, core challenges remain. Failure to address these issues harms consumers and the industry. Solutions are within our grasp. The systemic issues are:

- Non-cooperation among retailers, regulators, distributors and lines companies
- · Poor consumer engagement

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- Communication gaps when introducing any type of change
- Inconsistent corporate (including small retailers and start-ups) good citizenship across all strata of society

Supported by examples and extensive research, Commissioner Moreau's talk will highlight specific, achievable calls to action for the entire industry.

Nanette Moreau - Commissioner, Utilities Disputes

12.20 Lunch break





SMART ENERGY TECHNOLOGIES STREAM

10.45 Welcome from the Chair

Eric Pellicer - Commercial Manager, Powerco

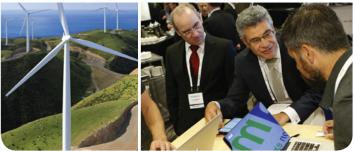
10.50 New technologies and old tariffs - Addressing 'hot button' issues

Simon Coates will present the results of a study showing that without significant restructuring of consumer tariffs, New Zealanders will be heading for higher costs and greenhouse emissions, and the wealthy increasingly being subsidised by the poorest members of society. He will also highlight the significant challenges associated with navigating towards more sensible tariff structures.

- Addressing the potential of new energy technologies, and the inadequacies they are exposing with current tariffs
- Understanding the economic, environmental, and social benefits of restructuring tariffs
- Analysing the potential scale of 'bill shocks' for some consumers - and the associated social and political challenges

Simon Coates - Director, Concept Consulting





11.40 Upcoming smart technologies for energy management

What are the current and future technologies for energy management in the home and commercial sector? This session gives an overview of these technologies and their future applications for energy efficiency and effective management.

Dr Daniel Gnoth -

Head Researcher, Powering Tomorrows Homes, Powerco Dr Mike Hopkins - CEO, EMANZ

12.20 Lunch break

1.20 PANEL: Input Methodologies review

The Commerce Commission is finishing its first major review of input methodologies, with a significant focus having been placed on the opportunities and potential implications of new and improving technologies in the electricity sector. For the next few years the Commission's work will increasingly focus on analysing the performance of NZ's electricity lines businesses. The key aspects of supplier performance that the Commission should focus on

- The issues arising from investment in new technologies that should have more of a light shone on them
- Factors critical to ensuring that this analysis leads to improved outcomes for the consumers of these services

Simon Healy - GM, Commodity Risk and Strategy, Contact Energy Ralph Matthes - Executive Director, MEUG Mark Toner - Head of Public Policy & Regulatory Counsel, Vector Facilitator: Robert Bernau - Head of Energy, Airports and Dairy Regulation, Commerce Commission

2.10 Gas is heating up

First Gas was formed by the merger of Vector's non-Auckland gas pipeline business and the Maui pipeline in 2016. In this session the Chief Executive of First Gas, Paul Goodeve, talks about the company's future plans for the country's gas pipelines. This session explores some of the key challenges faced by First Gas including regulatory change, transmission pipeline security and some new opportunities for First Gas.

Paul Goodeve - Chief Executive, First Gas

2.40 The large consumer opportunity

Given our energy sector's world-class resources in many respects, we should explore the opportunity to convert them into products that grow our national economy. New Zealand's largest energy buyer presents their perspective on:

- The flow-on benefits for the energy sector and wider economy
- The key comparative advantages and disadvantages of New Zealand's energy sector for industrial consumers
- Possible sector developments that could improve the business case for both existing and potential new consumers

Gretta Stephens - CEO, New Zealand's Aluminium Smelter

3.10 Afternoon break & refreshments

1.20 The mini/micro grid opportunity

Mini-grid solutions are becoming increasingly cost-competitive with traditional supply models as solar and battery prices fall. Communities, resorts, individual customers and network providers are increasingly considering their options. PowerSmart will provide an update on the key trends and share some insights in some very interesting recent projects, here and overseas.

Shane Robinson - Director, **PowerSmart**

1.45 The levelised cost and market readiness of selected energy storage technologies

An assessment of grid and consumer scale energy storage technologies focusing on technology readiness level (TRL) and levelised cost of storage, covering a variety of storage use-cases and value streams.

Chris Thomson - Energy & Aviation Sector Manager, **Callaghan Innovation**

2.10 10:10:10: Stories from battery trials

We have selected three organisations have been involved with trialing network scale battery storage in the past year. Today they share some trial insights, observed benefits and their perceived impact of battery storage on the wider energy sector.

Andrew Fraser - Group Manager Key Projects, Vector Geoff Douch - GM, Asset Management, Counties Power Mark Booth - Manager, Mitsubishi

2.40 The IOT of energy: Moving from smart products to intelligent services

The future of energy is enabled by intelligently and personally connecting people, appliances and systems through the IoT, digital enterprise and service innovation.

- What are the current developments happening in the area of smart energy technology with the internet of things?
- What opportunities do they offer for energy efficiency, demand management and customer satisfaction?
- How can the data generated from IOT assist in development of strategy for both retail and infrastructure?
 Jamie Silk - Senior Consultant, Advisian

3.10 Close of stream - Afternoon break & refreshments

3.40 PANEL: Generation 2027 - The role for big kit in the new energy future

The generation outlook for the next ten years is unclear due to uncertain demand outlook and the removal of some large generation kit from the market, pitched against the need to plan for dry year risk and upswings in demand. This session explores what the likely generation mix might be come 2027, what steps need to be taken now to ensure the sector is well placed to meet the demands of the next decade and beyond.

- The current generation pipeline: projects on the slate
- Consenting framework, regulations and access to capital and funding
- · Managing dry year risk and capacity shortage in the market
- The best fuel mix, the role of renewable generation, baseload generators and peakers
- Quantifying the impact of distributed generation

Tim Cosgrove - General Manager Operations and Development, **Nova Energy**

Chris More - Product & Market Development Manager, **Meridian Energy**

Grant Smith - Independent Electricity Generators Association

James Kilty - Chief Generation and Development Officer, Contact Energy

Facilitator: Jamie Kerr - Manager - Energy Markets Policy, Ministry of Business, Innovation and Employment

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4.20 CLOSING KEYNOTE: Mike Underhill: 'Parting shots'

Mike Underhill retired from his role as Chief Executive of EECA in late 2016 but today returns to deliver some 'parting shots' to the sector. He shares some highlights from his 30-plus years in the industry, predicts what's coming in the next 10 years, and tells what the industry could and should be doing better.

Mike Underhill

5.00 Closing remarks from the Chair and end of conference

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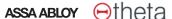






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2017 Downstream Event	Register & pay <mark>before 5pm</mark> 16 December 2016	Register & pay <mark>after 5pm</mark> 16 December 2016
NZ Downstream Strategic Summit	\$1850 + GST PER PERSON SAVE \$200	\$2050 + GST PER PERSON
NZ Downstream Strategic Summit + Gala Dinner	\$2060 + GST PER PERSON SAVE \$200	\$2260 + GST PER PERSON
NZ Downstream Gala Dinner ONLY	\$210 + GST PER PERSON	\$210 + GST PER PERSON
Dinner - Table for 10	\$2100 + GST PER TABLE	\$2100 + gst per table
NZ Downstream Battery-on-grid Masterclass	\$495 + GST PER PERSON SAVE \$100	\$595 + GST PER PERSON

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