

EMANZ

# CONFERENCE & EXHIBITION

IN ASSOCIATION WITH THE  
SUSTAINABILITY SOCIETY

WELLINGTON | 29 - 30 MAY 2019



# SHAPING OUR LOW EMISSIONS FUTURE

CONFERENCE PROGRAMME



Energy Management  
Association of New Zealand



the sustainability society

carbonZero  
certified event operations

# DAY 1: WEDNESDAY 29 MAY 2019

HARBOURSIDE FUNCTION CENTRE, WELLINGTON

## TE RADAR | CONFERENCE MC

Te Radar appears by arrangement with Johnson & Laird Management

8.00am	<b>Registration and Coffee</b>
	<b>Session 1   CONFERENCE OPENING AND WELCOME</b>
9.00am	<b>Mihi whakatau</b>
9.20am	<b>Welcome</b> YVONNE GILMORE   EMANZ CHAIR
9.30am	<b>Ministerial Address</b> HON JAMES SHAW   MINISTER FOR CLIMATE CHANGE
10.00am	<b>Morning Tea, Networking, Industry Exhibition</b>
	<b>Session 2   OPPORTUNITIES</b>
10.30am	<b>The Potential for Microgrids in New Zealand</b> JAMES HUNT   GENERAL MANAGER SOLUTION SALES SCHNEIDER ELECTRIC AUSTRALIA AND NEW ZEALAND We are moving to a decentralised energy future which is bringing a fundamental shift in how energy and networks are managed. Microgrids will be at the core of decentralised energy resource management and this disruption brings opportunities for both incumbents and new players. I will discuss some of the key drivers for microgrids as well as trends and applications using both global and local case studies. I will also dive into some of the technical and economic challenges in developing microgrid projects and the bigger questions that we still need to answer.
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11.45am	<b>Some Reflections on Farms, Forests and Fossil Fuels: The Next Great Landscape Transformation?</b> SIMON UPTON   PARLIAMENTARY COMMISSIONER FOR THE ENVIRONMENT
12.15pm	<b>Best Student Paper and Award</b> <b>The Role of Artificial Intelligence in the Transition from Conventional Power Systems to Modernised Smart Grids</b> SOHEIL MOHSENI   VICTORIA UNIVERSITY OF WELLINGTON Operating stand-alone microgrid systems and integrating them with wider networks offers enormous potential for energy efficiency and carbon reduction. These opportunities will be optimised through the use of dynamic, AI systems controlling microgrids to optimise usage and storage and deliver resilience and reliability.
12.45pm	<b>Lunch, Networking, Industry Exhibition</b>
	<b>Session 3   OUR CARBON FUTURE</b>
1.30pm	<b>Accounting for Climate Change Risk</b> KAREN MCWILLIAMS   BUSINESS REFORM LEADER CHARTERED ACCOUNTANTS AUSTRALIA AND NEW ZEALAND Climate change is a business and financial risk, not just an environmental, social and governance issue. Material risks must be disclosed in financial reports in Australia and New Zealand and we'll cover how climate-related risks are covered by existing and potential reporting frameworks.
1.55pm	<b>TCFD and Energy Transition</b> JONATHAN PERRY   MANAGING PARTNER NEW ZEALAND, ERM The task force on climate-related financial disclosures (TCFD) has developed a framework around climate-related disclosures, allowing investors and other stakeholders to assess and understand better the possible risks and opportunities involved in transitioning to a lower carbon future. This presentation considers how the work of the TCFD influences energy management in New Zealand and how climate-related disclosures are driving new opportunities to reduce carbon emissions in line with New Zealand's goal of 'Net Zero'.

2.20pm	<p><b>Helping Local Government and Communities Reduce Emissions - Lessons Learnt Over 15 Years</b>  <b>MAURICE MARQUARDT   TEAM LEADER - SUSTAINABILITY AND RESILIENCE, CLIMATE CHANGE SPECIALIST, AECOM</b></p> <p>Most businesses and local councils don't consider how investment decisions will impact their carbon emissions and potential future liabilities. This is particularly important for the development of long-lasting assets such as roads, 3-waters, street lighting and buildings. This presentation draws on lessons learnt over the past 15 years, discussing a wide range of potential emission reduction opportunities and their impacts on organisational and community carbon emissions.</p>
2.45pm	<p><b>How the New Climate Architecture is Shaping Up, and the Journey to a Low Emissions Economy</b>  <b>PAUL ALEXANDER   PROGRAMME DIRECTOR, CLIMATE CHANGE POLICY, MINISTRY OF THE ENVIRONMENT AND GUS CHARTERIS   GENERAL MANAGER, JUST TRANSITIONS UNIT</b></p> <p>Achieving the transition to a climate-resilient and low-emissions economy over the next decades will present opportunities. It will be also involve challenges and will require new ways of working.</p> <p>This presentation will cover what the next steps on the journey to a low emissions economy may look like such as putting in place an independent Climate Change Commission. The transition will also require concerted effort across government, business, iwi, households and communities, and taking a Just Transition approach, building from the conversation started at the recent Just Transition Summit.</p>
3.15pm	<p><b>PANEL SESSION   KAREN MCWILLIAMS, JONATHAN PERRY, MAURICE MARQUARDT, PAUL ALEXANDER AND GUS CHARTERIS</b></p>
3.35pm	<p><b>Afternoon Tea, Networking, Industry Exhibition</b></p>
	<p><b>Session 4   WORKING TOGETHER</b></p>
4.00pm	<p><b>Mobilising New Zealanders to be World Leaders in Clean and Clever Energy Use</b>  <b>EDDIE CHRISTIAN   GROUP MANAGER, MARKET ENGAGEMENT, EECA</b></p> <p>Eddie will share EECA's experience in mobilising New Zealand's most energy intensive businesses in the transition to a low-emissions economy and discuss the pivotal role the energy management industry is playing in accelerating action.</p>
4.25pm	<p><b>Genesis Shares New Zealand's Aspiration</b>  <b>MATTHEW OSBORNE   EXECUTIVE GENERAL MANAGER CORPORATE AFFAIRS, GENESIS ENERGY</b></p> <p>Genesis shares New Zealand's aspiration to move further and faster to a lower carbon future. In fact, the leadership at Genesis feel strongly that as the owner and operator of some of New Zealand's last remaining coal fired generation assets, they have an obligation to lead the conversation in a way that supports New Zealand getting there sensibly and sustainably.</p>
4.50pm	<p><b>Engineering a Better New Zealand - Cleaner Energy</b>  <b>TANIA WILLIAMS   GENERAL MANAGER, ENGINEERING NEW ZEALAND</b></p> <p>Engineering New Zealand's vision for a cleaner energy sector covers energy storage, refocusing the electricity market, driving down demand across the urban road network, prioritising mass transit and pursuing electrification. Tania will discuss how engineers will drive these changes.</p>
5.15pm	<p><b>The Living Building Challenge (LBC) - A Powerful and Systematic Tool for the Built Environment</b>  <b>JEROME PARTINGTON   SUSTAINABILITY MANAGER ASSOCIATE PRINCIPAL, JASMAX</b></p> <p>The LBC offers a holistic framework to transformational change in the design, construction and operation of our built environment, considering the fundamental drivers that deliver outcomes to generate long term value for society and the economy.</p> <p>Jerome will overview the LBC, highlighting the specific potential to drive positive carbon, life-cycle and mega energy efficiency in buildings but also the wider opportunities of buildings to help reduce our everyday negative carbon impacts.</p>
5.50pm -7.50pm	<p><b>Cocktail Function</b></p>

# DAY 2: THURSDAY 30 MAY 2019

HARBOURSIDE FUNCTION CENTRE, WELLINGTON

7.00am	<b>Registration and Coffee</b>	
7.30am	<b>EMANZ Annual General Meeting – Open to EMANZ Members Only</b>	
9.00am	<b>Housekeeping</b>	
	<b>Session 5   BUSINESS SUSTAINABILITY</b>	
9.05am	<p><b>Optimising the Future of Steam</b>  <b>GLENN SCHULTZ   REGIONAL BUSINESS DEVELOPMENT MANAGER AUSTRALASIA SPIRAX SARCO AUSTRALASIA</b></p> <p>Think Steam, Think Spirax Sarco. Steam can heat or sterilise almost any industrial process. That's why it's often the first choice for heating in so many applications around the world. With the ever increasing need for optimising energy usage in process plants, Steam needs to be measured and managed whilst providing visibility of its impact on process. Spirax Sarco provides products, services, knowledge and platforms to accomplish your goal of operating a visible, energy efficient steam and condensate loop.</p>	
9.20am	<p><b>The Business Case for a Low Emissions Future</b>  <b>BOB WILLARD   CHIEF SUSTAINABILITY CHAMPION AND FOUNDER, SUSTAINABILITY ADVANTAGE</b></p> <p>It's fine to talk about a low-carbon future and dramatically reducing greenhouse gas emissions, but can we justify making the transition? Bob will describe free, open-source tools that help us figure that out.</p>	
10.25am	<b>Morning Tea, Networking, Industry Exhibition</b>	
	<b>Session 6a   KEY SUSTAINABILITY ISSUES</b> Te Aro Room	<b>Session 6b   PROCESS HEAT EFFICIENCY</b> Waterfront Room
10.50am	<p><b>Product Stewardship as a Tool in the LEE Toolbox</b>  <b>ADELE ROSE   CHIEF EXECUTIVE, 3R GROUP LTD</b></p> <p>Adele's presentation brings together the themes inherent in the transition to a low emissions economy: the future of work, amplifying the opportunities within a circular economy and climate change adaptation. She'll be sharing how 3R Group develops strategies and plans to reduce emissions by engaging behavioural change principles across stakeholders.</p>	<p><b>Decarbonising the Industrial Sector with Appropriate Substitution and Technological Innovation</b>  <b>ALAN BRENT   CHAIR IN SUSTAINABLE ENERGY SYSTEMS, VICTORIA UNIVERSITY OF WELLINGTON</b></p> <p>This presentation will explore the potential for renewable energy technologies and electrification to decarbonise the industrial sector and will include discussion of high and low temperature heat pumps, solar thermal and biomass solutions for the New Zealand context.</p>
11.15am	<p><b>Circular Cities: Models of Disruptive Innovation</b>  <b>DEBBIE O'BYRNE   CIRCULAR ECONOMY STRATEGY CONSULTANT, CIRCULAR BUSINESS SOLUTIONS</b></p> <p>Cities consume 75% of global primary energy, 75% of the world's production of natural resources and are responsible for 70% of global CO2 emissions. Cities, and how they are designed and function, are a key part of any global solution tackling climate change. Debbie will discuss examples of challenging the status quo of the take-make-waste business model from Germany, Singapore and the US to illustrate the potential for creating Circular Cities.</p>	<p><b>Accelerating Transition</b>  <b>ALEXANDRA HARE   MANAGER STRATEGY AND PROGRAMME DEVELOPMENT, EECA</b></p> <p>EECA is piloting an energy transition acceleration programme and would like to share with the Energy Management Association members progress so far. We are inviting feedback and input on where and how the industry can support a clear long-term energy transition pathway plan to enable NZ businesses to reach the lowest emissions profile possible.</p>

11.40am	<p><b>Low Carbon Healthcare - The Experience of a Sustainability Manager Working in a Large Healthcare Organisation</b>  <b>DEBBIE WILSON   SUSTAINABILITY OFFICER, COUNTIES MANUKAU DISTRICT HEALTH BOARD</b></p> <p>Debbie will look at opportunities to deliver low carbon healthcare illustrated by case studies and examples from one of New Zealand's leading DHBs.</p>	<p><b>Industrial Systems Optimisation</b>  <b>JONATHAN POOCH   MANAGING DIRECTOR, DETA CONSULTING</b></p> <p>As industrial process companies grapple with the balance between improving profit margins and reducing carbon emissions, Jonathan will cover how proficient systems optimisation can deliver yield, quality, health and safety, carbon reduction and energy efficiency improvements as well as bottom line gains.</p>
<p><b>Session 6c   Te Aro Room</b></p>		
12.05pm	<p><b>Toyota Kata Continuous Improvement Behaviour Change and Culture in Energy Efficiency</b>  <b>FRANS PLUGGE   DIRECTOR, BUSINESS DEVELOPMENT AND STRATEGY, ECONEW</b></p> <p>Frans will present a session on the theory of the Toyota Kata, continuous improvement philosophy and how to apply it to energy and sustainability. This will be followed by an optional Kata in the Classroom exercise over the lunch break.</p>	
<p><b>12.30pm Lunch, Networking, Industry Exhibition &amp; Continuous Improvement Exercise</b></p>		
<p><b>Session 7a   BUILT ENVIRONMENT</b>  <b>Te Aro Room</b></p>		<p><b>Session 7b   FUELS</b>  <b>Waterfront Room</b></p>
1.20pm	<p><b>Continuous Commissioning Insights</b>  <b>LANCE JIMMIESON   MANAGING DIRECTOR, JACKSON ENGINEERING ADVISERS LTD</b></p> <p>Lance will revisit the whys and benefits of Continuous Commissioning of existing systems and discuss what's involved in undertaking a CC project. It's not just about saving energy. Energy savings are often only an important by-product of the real benefits to building users, manufacturing factories and other facilities.</p>	<p><b>The Potential and Challenges for Hydrogen</b>  <b>JIM HINKLEY   SENIOR LECTURER, VICTORIA UNIVERSITY OF WELLINGTON</b></p> <p>Hydrogen is much heralded as a clean fuel. This talk will explore some of the challenges and opportunities for New Zealand as a potential early adopter of hydrogen technologies.</p>
1.50pm	<p><b>The Pathway to Net Zero Carbon</b>  <b>ANDREW EAGLES   CHIEF EXECUTIVE, NEW ZEALAND GREEN BUILDING COUNCIL</b></p> <p>In order to reach our climate change goals all our buildings will need to get to zero carbon. This presentation will set out the pathway for new and existing buildings, how this standard aligns with other net zero standards around the world and what it means for the buildings you work on.</p>	<p><b>Unlocking Renewable Process Heat in New Zealand</b>  <b>BROOK BREWERTON   GENERAL MANAGER, AZWOOD ENERGY</b></p> <p>Drawing on recent examples of wood energy projects, Brook will discuss the barriers to be overcome and the levers energy managers can pull to encourage the uptake of low-emission energy solutions.</p>

# DAY 2: THURSDAY 30 MAY 2019

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<b>2.20pm</b>	<b>Lighting for the Internet of Things - Interact and LiFi systems</b> <b>SIMON WILLIS   NATIONAL CONTROLS MANAGER, SIGNIFY</b> Data-enabled services are booming – and transforming how we live. In building, we've entered an era when the environments in which we work and shop use data gathered from IoT-enabled systems to optimise a range of functions. Learn how Signify's Interact and LiFi systems turn light sources into points of data to connect more devices, places and people through light, contributing to a safer, more productive and smarter world.	<b>Decarbonising Transport</b> <b>DOM KALASIH   HSSE BUSINESS PARTNER, Z ENERGY LTD</b> In 2012 Z set a goal to reduce the road transport emissions of its bulk fuel road transport delivery activity by 20 percent over 3 years. At that time, activities involved trucks travelling between 6m and 7m kilometres delivering around 2b litres and emitting over 9,000 tonnes of CO2. Dom will present the various approaches taken to reduce the impacts of these trips. The solutions included: logistics, human factors, overcoming technical constraints, adjusting payment models. Many of these challenges still apply but lessons have been learned and will be shared.
<b>2.50pm</b>	<b>Afternoon Tea, Networking, Industry Exhibition</b>	
	<b>Session 8a   RESOURCE EFFICIENCY</b> <b>Te Aro Room</b>	<b>Session 8b   THE ENERGY FUTURE</b> <b>Waterfront Room</b>
<b>3.20pm</b>	<b>Water, Energy and Carbon - Approaches to Complex System Interactions</b> <b>CALEB CLARKE   DIRECTOR, MORPHUM ENVIRONMENTAL LTD</b> The water cycle interacts with a range of other systems. Our modern take on water management may not be resilient to likely changes in climate and increasing pressure on energy resources and carbon efficiency. This session discusses strategies to approach the complexity of the Water/Energy nexus from the Sustainability Society of Engineering New Zealand.	<b>Changing Perceptions in the Tourism Accommodation Industry</b> <b>TRICIA LOVE   DIRECTOR, TRICIA LOVE CONSULTANTS LTD</b> Camp Glenorchy has been created with beauty, comfort and sensory delight in mind, whilst achieving Zero Energy in operation. This session offers opportunities to learn how technical and creative collaboration can create the potential to instigate change.
<b>3.50pm</b>	<b>Harnessing Energy from Waste: The Sustainable Way</b> <b>JULES HAYEZ   ENERGY MANAGER AND MAX MOREL   BUSINESS DEVELOPMENT PROJECT MANAGER, VEOLIA</b> Waste can become an accessible and sustainable source of energy for buildings and industries. We present key case studies that address sustainable, financial and operational goals in delivering energy from waste.	<b>Pricing 100% Renewables</b> <b>GREG SISE   MANAGING DIRECTOR, ENERGY LINK LTD</b> The Government has set a target of 100% renewables for 2035. This talk will explore the issue of pricing in electricity markets with 100% renewable generation and the implications of this for New Zealand prices as we head to 2050.
<b>4.20pm</b>	<b>Te Aro Room   Conference Reflections</b>	
<b>4.30pm</b>	<b>Conference Close</b>	

# HEALTH AND SAFETY

The Conference Managers, ForumPoint2 Conference Partner, in conjunction with the EMANZ Conference and Exhibition 2019 Organising Committee and the venue are morally and legally responsible to provide a safe and healthy environment for all attendees at conference. This commitment extends to ensuring the conference operations do not place the local community at risk of any injury, illness or property damage.

All reasonable measures within our ability will be undertaken to ensure attendees are as informed as possible about any potential risks or hazards they may face whilst attending conference.

All attendees will need to:

- Listen to the health and safety briefing onsite and/or read the health and safety document available at the registration desk
- Ensure all health and safety concerns and all accidents or near misses are immediately reported to the safety officer on site.

All attendees are encouraged to be responsible for promoting a safe and healthy working environment for the entire conference duration.

A First Aid kit is located at the conference registration desk. The closest defibrillator is located on the outside, side wall of the Wellington Free Ambulance building on the waterfront across from the venue.

In the event emergency medical assistance is required, please call 111 from the nearest phone/mobile.

**The nearest medical centre to the Harbourside Function Venue is:**

**Wellington Accident & Urgent Medical Centre (including a Pharmacy),**

17 Adelaide Road, Mount Cook, Wellington

T: (04) 384 4944 Open Monday - Friday 9.00am - 11.00pm

**The nearest pharmacy is:**

**Unichem Pharmacy**, 100 Courtenay Place, Wellington

T: (04) 384 8333 Open Monday - Friday 9.00am - 6.00pm

**Fire and Emergency:**

In the event of fire:

- On the discovery of fire, immediately activate an alarm and notify the ForumPoint2 team or venue staff
- Upon hearing an alarm, STOP WORK, evacuate immediately. Further instructions will be provided by venue staff, please follow their directions
- Designated wardens will be on hand to guide you to the nearest emergency evacuation assembly area
- Proceed immediately to your nearest exit as instructed
- Always use the stairs, never the lift
- Await further instructions or clearance from the wardens for an orderly re-entry
- Fire hoses and fire alarm switches must remain visible and accessible to the public at all times

**Earthquake:**

- Remain in the building
- Move away from any equipment, windows or large furniture
- Take immediate shelter under solid furniture such as tables or desks
- If an evacuation order is given, follow the fire evacuation procedures
- Keep calm and assist those around you

**Accident Reporting:**

- All accidents and incidents must be reported immediately to the conference registration desk or Vicky Riley, ForumPoint2 Conference Partners, 021 027 27073.

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