

CEP2025 CONFERENCE

27th & 28th May
Grand Millennium Auckland



PRELIMINARY PROGRAMME As at 30 April

DAY 1: TUESDAY 27 MAY 2025

Grand Millennium Auckland

TE RADAR | CONFERENCE MC *Te Radar appears by arrangement with Johnson & Laird Management*

8.00am	Registration and Coffee Pre-Function Area, Grand Ballroom Level
	Session 1 Conference Opening and Welcome Millennium Ballroom, Grand Ballroom Level
9.00am	Mihi Whakatau
9.10am	Welcome and Housekeeping TE RADAR MC
9.15am	Welcome from CEP CEP BOARD MEMBER / MIKE HOPKINS
9.20am	Welcome to Auckland
9.25am	The Psychology of Climate Change, Especially on Behaviour Change LORRAINE WHITMARSH DIRECTOR, CENTRE FOR CLIMATE CHANGE & SOCIAL TRANSFORMATIONS (CAST) <p>In this talk, I will argue that most of the measures required to reach our climate change targets require at least some degree of behaviour change. And that more broadly, social transformation is required to reach 'net zero' carbon targets in the coming years. In order to achieve this, we need public engagement and participation in decision-making about what a low-carbon future looks like, and how to reach it. We also need a wide range of measures to change people's behaviour at home, work and elsewhere. I will present findings from polls and citizens assemblies on public concern about climate change, and support for net zero policies; and from behavioural science research on how to effectively change behaviour to cut emissions.</p>
10.25am	Introducing a Reliable and Verifiable Net Zero Pathway LUIS FILARDI HEAD OF SUSTAINABILITY, BSI GROUP ANZ <p>There are many regulations and sustainability schemes, which can be confusing for organizations aiming for a systemic, credible, and achievable net zero plan. Accuracy and management of data, communication, board commitment, efficient governance and wider impact are essential elements to obtain compliance and stakeholder's needs. BSI has launched the Net Zero Pathway (IWA42) with ISO at COP27, which is one of the 60,000 standards it has designed since its inception. BSI will share case studies, benchmarking practices and details about how organisations can systemically manage their net zero projects, plans and sustainable actions.</p>

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	Delegates will understand how their operations can become aligned with trusted Net Zero plans, while compliant with disclosure regulations.		
10.55am	MEET THE EXHIBITORS – 2 MINUTES		
11.15am	Networking Break in the Industry Exhibition		
	Session 2a Millennium Ballroom, Grand Ballroom Level	Session 2b Coromandel Room, Level 1	Session 2c Workshop Aucklander Room, Ground Floor
11.45am	Health New Zealand’s Emissions Reduction Approach RICK LOMAX HEAD OF SUSTAINABILITY, TE WHATU ORA HEALTH NEW ZEALAND Health New Zealand Te Whatu Ora is committed to integrating sustainability into healthcare, with emissions reduction as one of four key priorities. This presentation will outline Health NZ’s environmental sustainability and climate change approach, detailing where emissions reduction fits within broader health sector goals and our established targets. Sharing the complexity and scope of our emissions — both measured and unmeasured emissions — and review progress made through key initiatives, including eliminating coal usage, transitioning to cleaner energy sources, enhancing energy efficiency, and optimising our fleet. Sharing some lessons learned to date. Looking ahead, the presentation will share longer-term opportunities to further reduce emissions in publicly funded healthcare, emphasising prevention and early intervention. The session will also outline Health NZ’s priorities, opportunities, and proposed actions over the next three years to drive meaningful emissions reductions while delivering high-quality healthcare.	5th Generation Heat Networks (5GHN) RICHARD FREEBORN FOUNDER, THE KENSA GROUP Richard will introduce 5th generation heating and cooling networks, including why you might want one and where you can buy them. He will feature details of the 68 house “Tewa Banks” community housing development in Arrowtown, opened by the Housing Minister in late November, which is probably the first 5 th generation heat network in the Southern hemisphere.	Product Emissions Workshop: Biofuels / Fuels (limited to 25 people) DUSTIN COURAGE SCIENCE & ADVISORY, SECTOR LEAD, BUILT ENVIRONMENT & FINANCE, TOITŪ ENVIROCARE STEVE SCHOULTZ SUSTAINABILITY SPECIALIST, TOITŪ ENVIROCARE The Bioenergy Association of NZ and Toitū have developed product carbon footprint guidance for Gaseous Biofuels in NZ. The workshop will introduce the biofuels guidance based on international renewable energy certificate schemes and low carbon fuel standards. All fuels have product related carbon emissions from upstream indirect activities and downstream use phase. Producers and users of fuels should understand the product lifecycle emissions to enable organisational carbon reporting and highlight reduction opportunities. This workshop will apply LCA principles to understand product carbon footprints of fuels and highlight the opportunities of low carbon fuels to reduce organisational emissions.
12.15pm	Advanced Data Analytics NIKK KING DIRECTOR, OT SYSTEMS CONSULTANT, NZ CONTROLS LTD	Beyond the Hype: Real-World Lessons in AI for Energy Management HONG LEE ENERGY CONSULTING LEAD, BRAVEGEN VAIBHAV CHOUDHARY ENERGY ANALYST, BRAVEGEN In this presentation, we aim to provide energy managers and practitioners with practical insights into the current state of AI for energy management. We will set the scene with a quick primer on relevant AI and machine learning techniques—from	

		anomaly detection to large language models like ChatGPT. We will then introduce examples of AI deployments within the energy efficiency and carbon management realms and discuss what we can learn from these examples and how to separate real-world applications from excessive hype. We will then showcase a case study detailing the development, testing, and deployment of our own AI tool, including the pitfalls we encountered and the tangible benefits we achieved in terms of cost savings, energy reductions, and operational efficiencies.	
12.45pm	STUDENT PAPERS Variable Renewable Energy and Distributed generation: Impacts on New Zealand's Electricity Market JACK O'LEARY Embodied Carbon Unveiled: A Life Cycle Assessment of Aotearoa New Zealand's Evolving Electricity System MAOXING LIU Carbon Price Volatility in the New Zealand Emission Trading Scheme YUDOU YANG A Techno-Economic Analysis of Hybrid Industrial Boiler Systems MATTHEW TAYLOR A New Zealand Heat Atlas: A Regional Breakdown of Residential Heat Demand and Associated Emissions HANNAH KONINGS		
1.15pm	Networking Lunch Break in the Industry Exhibition <i>Proudly Sponsored by:</i> LUMEN		
	Session 3a Millennium Ballroom, Grand Ballroom Level	Session 3b Workshop Coromandel Room, Level 1	Session 3c Workshop Aucklander Room, Ground Floor
2.30pm	EECA Position and Strategy	Electric Boiler Workshop <i>(limited to 25 people)</i> JONATHAN POOCH MANAGING DIRECTOR, DETA GLOBAL ALEIGN GESSESE ENERGY LEAD, LUMEN This workshop explores the different types of electric boilers such as hot water vs steam and electric vs electrode. It covers key feasibility considerations such as efficiency first, thermal metering, electrical capacity upgrades, water quality and treatment, and installation requirements. The session also dives into optimising the economics of electric boilers, focusing on minimising capital expenditure through solutions such as hybrid systems, N electrical redundancy (instead of N - 1), and thermal storage. Additionally, participants will learn strategies to	Deep Conversations About Scope 3 – Materiality, Reduction Strategies, Engagement <i>(limited to 25 people)</i> EMMA ELBAUM MANAGING CONSULTANT, CORPORATE SUSTAINABILITY ADVISORY, SLR CONSULTING CHEILO MANALO PRINCIPAL – SUSTAINABLE VALUE TEAM, AUCKLAND COUNCIL MARTA KARLIK-NEALE PRINCIPAL SUSTAINABILITY & RESILIENCE, TONKIN + TAYLOR KEVIN MANALO ASSOCIATE, ALTA Join this interactive workshop to explore the complexities of Scope 3 GHG emissions. Participants will first hear about three case studies: <ul style="list-style-type: none"> port sector guidance materiality assessment process,
3.00pm	TBC		
3.30pm	From Consumer to Prosumer: Sharing the Benefits of Rooftop Solar Energy MOONIS VEGDANI GROUP CHIEF STRATEGY AND TRANSFORMATION OFFICER, COUNTIES ENERGY SARAH ANDERSON PROGRAMME DIRECTOR, CLIMATE CONNECT AOTEAROA Counties Energy's Group Chief Strategy and Transformation Officer Moonis Vegdani will overview an ambitious and innovative energy-sharing pilot in Auckland's Franklin region, which will test how households and businesses generating solar electricity can share or gift excess energy to		

	<p>others. Programme Director of Climate Connect Aotearoa, Sarah Anderson, will discuss the key role of collaboration – between Counties Energy, Ara Ake and other partners - in bringing this pilot to life. Together, they will unpack the potential of energy-sharing to empower communities and accelerate Aotearoa New Zealand's energy transition.</p>	<p>reduce operational costs, including solutions such as spot market exposure, leveraging retailer special rates and PPAs, and participating in demand flexibility markets.</p>	<ul style="list-style-type: none"> • using a framework for Scope 3 emissions reductions, and • Auckland Council Healthy Waters embodied carbon strategy. <p>Speakers will then facilitate small group discussions to answer strategic questions on Scope 3 emissions, with all attendees having the opportunity to participate in each discussion.</p>
4.00pm	Networking Break in the Industry Exhibition		
	Session 4 Millennium Ballroom, Grand Ballroom Level		
4.30pm	The Value of Sustainable Buildings – The Realised Benefits of Rating Energy Efficiency in Sales/Rental Value BOBBY SHEN SENIOR MANAGER - EXISTING BUILDINGS, NZ GREEN BUILDING COUNCIL <p>More energy efficient buildings not just reduce emissions and ease pressure on the struggling electricity grid, it also provides tremendous value for owners and users.</p> <p>Green Star Performance and NABERSNZ are widely used to benchmark performance on a range of building types. The NZ Green Building Council's (NZGBC) recent 'Guidance on Green Building Ratings for Sustainable Finance' sets out how these third-party verifications relate to sustainable finance.</p> <p>With growing evidence of the value of green certified buildings, such as JLL's 'Turning Green to Gold' report based on the latest transactional data, there is a huge opportunity to realise sales and rental premiums, and gain access to sustainable finance.</p> <p>Hear how to access these benefits in buildings and beyond.</p>		
5.00pm	Keynote - Virtual PETER SWEATMAN CHIEF EXECUTIVE & FOUNDER, CLIMATE STRATEGY & PARTNERS <p>Peter's presentation will address the latest developments in finance for buildings renovation in Europe. Starting from the current new regulatory frame defined by the Energy Efficiency Directive and Buildings Performance Directive, the presentation will look specifically at the clauses which cover finance. Residential building segmentation and the design of a new EU Renovation Loan will be the centrepiece of the forward looking segment of the presentation, leaving the audience with a clear view of the advances in Europe and the key elements which may resonate in the local markets.</p>		
6.00pm	Ministerial Address HON SIMON WATTS		
6.20pm	Day's Wrap and Invitation and Welcome to Networking Drinks		
6.20pm – 8.00pm	Networking Drinks in the Industry Exhibition <i>Proudly Sponsored by: Tonkin + Taylor</i>		

DAY 2: WEDNESDAY 28 MAY 2025

Grand Millennium Auckland

8.30am	Registration and Coffee		
	Session 5 Millennium Ballroom, Grand Ballroom Level		
9.00am	Housekeeping TE RADAR MC		
	Session 6a Millennium Ballroom, Grand Ballroom Level	Session 6b Workshop Aucklander Room, Ground Floor	

9.05am	New Zealand’s Pathway to 110% Renewable Electricity Generation by 2035 AL YATES CEO AND CO-FOUNDER, ECOTRICITY This presentation outlines a bold vision for New Zealand to exceed its 100% renewable energy target and reach 110% by 2035. It explores how an oversupply of clean energy can enhance grid resilience, reduce electricity costs, and attract industry from overseas. Delegates will gain insights into mindset shifts, policy reforms, and emerging technologies needed to accelerate this transition and future-proof Aotearoa’s energy system.		Product Emissions Workshop - Food Products <i>(limited to 25 people)</i> ALIREZA MOKHTAR ENERGY & CARBON CONSULTANT, PATHWAY2050 ABBAS TAMADON LEAD OF LCA & CIRCULAR ECONOMY, PATHWAY2050 The CEP conference workshop, hosted by PathWay2050, will focus on life cycle assessment and product carbon footprint of food products. In 60 minutes, participants will explore these concepts through a case study in New Zealand's food industry, engaging in collaborative assignments and teamwork. This interactive session aims to enhance understanding of sustainability metrics and their practical applications within the industry, fostering skills to practically assess environmental impacts. Join us to learn, collaborate, and contribute to a greener future.	
9.35am	On the Grid - How the Electricity Grid is Enabling Decarbonisation MATT WEBB EXECUTIVE GENERAL MANAGER GRID DEVELOPMENT, TRANSPOWER Transpower is the national transmission power grid provider for Aotearoa. Transpower’s nationwide grid can provide a boost to renewables adoption via connection of the large number of currently proposed renewable wind and solar developments but comes with a number of challenges if supply reliability and security are to be maintained for all customers during the transition to renewables. Matt Webb, Executive General Manager Grid Development will provide perspective on the areas focus areas for Transpower as well as insights from his previous role working on Renewable Energy Zone proposals in Australia.			
10.20am	MEET THE EXHIBITORS – 2 mins each			
10.45am	Networking Break in the Industry Exhibition			
	Session 7a Millennium Ballroom, Grand Ballroom Level	Session 7b Coromandel Room, Level 1	Session 7c Workshop Aucklander Room, Ground Floor	
11.15am	Electrification in C&I TAHIR TARIQ SENIOR MANAGER - C&I SALES, GENESIS ENERGY JEFF SMIT PRINCIPAL STRATEGY ADVISOR, GENESIS ENERGY TOM NEWITT SPARK In today’s energy market, the journey toward decarbonisation requires genuine partnership between retailers and customers. The Genesis team will share market insights and innovative approaches creating mutual value through this transition, including how collaborative solutions provide customers with supply and price certainty across thermal fuels and electricity. Genesis and our PPA partner Spark will highlight lessons from the Lauriston solar project - demonstrating how strategic partnerships can accelerate decarbonisation while delivering tangible benefits for customers in a turbulent energy market.	Biogas: Is Bigger Always Better? EMMA REES CHEMICAL AND PROCESS ENGINEER, BECA NATHAN HILL COMMERCIAL ANALYST, POWERCO Powerco and Wood Beca have been working together to explore a regional biogas ecosystem—one that transforms organic waste into energy, enhances local waste management and energy resilience, and maximises shared resources. By bringing together councils, industry, and the waste, energy, and agricultural sectors, we can aggregate feedstock, scale up production, and establish biogas as a mainstream energy solution. This presentation examines why biogas hasn’t taken off in New Zealand, why that’s changing, and how we can overcome key challenges. Powerco and Wood Beca will share their perspectives on why	Managing Climate Risk: A Practical Workshop for Businesses and Asset Owners <i>(limited to 25 people)</i> GUI BERRINGER TEAM LEADER – BUSINESS SOLUTION TEAM, EKOS KĀMAHI JAMES HUGHES TECHNICAL DIRECTOR: CLIMATE AND RESILIENCE, TONKIN + TAYLOR Businesses and asset owners face increasing challenges in managing climate risk, as extreme weather events, rising temperatures, and shifting environmental conditions place growing pressure on essential services. At the same time, the transition to a low-emissions economy presents its own risks and opportunities, with regulatory changes, shifting market dynamics, and evolving stakeholder expectations reshaping investment and operational landscapes. This workshop will equip participants with the knowledge and tools to assess, plan for, and	

		collaboration isn't just beneficial—it's essential to unlocking renewable gas's full potential.	respond to both physical and transition climate risks. We will explore key frameworks for climate risk assessment, including scenario analysis and include some hands-on activities which will offer practical insights into effective climate risk management.
11.45am	Port of Auckland - Transitioning to Electrification: Why, How, When and Future Resilience SIMONNE ELLIOT SENIOR SUSTAINABILITY SPECIALIST, PORT OF AUCKLAND Port of Auckland Limited (POAL) has charted a path for zero emissions by 2050 via electrification. Adopting this target required POAL to review its electrical masterplan, considering increased demand, climate related risks and resilience. This process identified several interesting challenges and opportunities that will be discussed in the presentation. POALs electrification and resilience journey has commenced with the operationalising of an electric tug and an electric container hoist, as well as the installation of a solar array, the learnings from which will also be discussed.	From forest to furnace: NZ's biomass potential OLIVER HOWITT RETA PROGRAMME LEAD EECA New Zealand industries are facing challenges with the affordability and security of energy supply. Part of the solution for industrial process heat is woody biomass, which will create a market for residual and low value forestry material. This presentation will share insights on NZ's biomass potential, from both supply and demand perspectives. Information from EECA's RETA programme and other activities will be leveraged to show a pragmatic view of the opportunity, and provide insights on the barriers facing the developing market.	By the end of the session, attendees will have a clearer understanding of climate-related risks which will support them in ensuring their assets and operations remain viable and fit for the future.
12.15pm	A Sustainable Future for Macrae's: The Role of Renewable Energy and Hydrogen in Mining and Post Closure DANIEL JELFS ENERGY ENGINEER, OCEANA GOLD This presentation explores how OceanaGold's Macraes Operation can transition toward renewable energy and green hydrogen to reduce emissions and improve energy efficiency. It assesses the feasibility of integrating solar and wind power, hydrogen production, and the use of its oxygen byproduct in ore processing. A staged implementation strategy is outlined, considering both operational benefits and post-mine closure opportunities. The session will also discuss economic viability, policy incentives, and how Macraes can serve as a model for sustainable mining in New Zealand. By leveraging these technologies, Macraes can contribute to national net-zero goals while ensuring long-term industry resilience.	A Practical Journey into New Zealand's First Commercial-Scale Anaerobic Digestion Facility and Its Role in the Renewable Transition ANDY BEDFORD NORTH ISLAND MANAGER, ECOGAS SHAUN GOLDSBURY CEO, BRAVETRACE Ecogas' Reporoa commercial-scale Anaerobic Digestion (AD) facility is transforming 75,000 tonnes of organic waste annually into renewable electricity, biomethane, and biofertiliser. This session, led by Ecogas and BraveTrace, explores how biomethane supports the renewable transition, from production to certification. Learn about the AD process, its environmental and economic benefits, challenges, and future opportunities—including the role of New Zealand Energy Certificates (NZ-ECs) in tracking and certifying renewable gas. Gain insights into New Zealand's decarbonisation journey and how innovative solutions like Ecogas are driving the circular economy.	
12.45pm	Networking Lunch Break in the Industry Exhibition		
	Session 8 Millennium Ballroom, Grand Ballroom Level		

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2.00pm	Student Prizegiving
2.05pm	AI Energy Demand and Sourcing ANDREW GREEN DIRECTOR OF DATA CENTRES, DATACOM
2.35pm	Space Weather ANDREW RENTON SENIOR PRINCIPAL ENGINEER, TRANSPOWER Until the “Gannon” storm of May 2024 you may never have considered that space has weather, or thought about how it may impact the system and infrastructure we rely on in our modern world. This discussion will help you get to grips with what it is, how it could impact us, why it is important to be prepared, our resilience and what we’re doing to prepare and how you can help reduce the impact of a space storm.
3.05pm	Building Utility Scale Solar in New Zealand GARY HOLDEN MANAGING DIRECTOR, LODESTONE ENERGY The challenges, barriers and critical success factors to developing a 5% market share of large-scale solar generation that is directly sold to energy consumers. Mr. Holden will cover the financial challenges of raising debt, securing equity, the consenting process and the key methodologies of creating a credible long-term alternative to traditional electricity contracts.
3.35pm	Conference Reflections / Wrap up
3.40pm	Conference Close

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