

Energy in Western Australia 2021 Conference Program

CONFERENCE DAY 1: Wednesday, 28 July 2021

Time	Session
8.00	Conference registration and arrival tea & coffee
8.45	Introduction by Day 1 Conference MC Kate Ryan, Coordinator of Energy, Energy Policy WA
8.50	Welcome to Country Vaughn McGuire
9.00	Opening remarks by Kate Ryan, Coordinator of Energy, Energy Policy WA
9.10	Minister's Address Hon Bill Johnston MLA, Minister for Mines and Petroleum, Energy and Corrective Services
	International trends and global changes
9.30	United States policy and energy trends in a global context Speaker: David J. Gainer, US Consul General Synopsis: David will review the policy changes and direction of the new United States government in energy and climate change. The administration will become more active in international relations and this has implications for Australia and all energy producers.
10.00	Global energy trends Speaker: Professor Paul Stevens, Chatham House Synopsis: Global energy trends have recently been dominated by the transition away from fossil fuels. However, recently this has been impacted by the COVID-19 pandemic leading to a dramatic fall in energy consumption. Paul will discuss the two key questions that emerge. How quickly will lost fossil fuel demand return and has the pandemic speeded up or slowed down the transition?
10.30	Morning tea-sponsored by ATCO
11.00	The NEM and the WEM Speaker: David Swift, Deputy Chair, Energy Security Board Synopsis: There are common issues associated with running a power system with a high proportion of renewable, distributed, and asynchronous generation and storage. David will look at the market structures, the trends for the NEM to 2025 and, importantly, what we can learn from each other.
	Upstream and resources sector outlook

11.30	<p>Climate change and the role of natural gas Speaker: Peter Metcalfe, General Manager Climate Engagement, Woodside Synopsis: Woodside considers a wide range of factors in its business planning. Climate change and the Paris Agreement will be key influences on energy demand and new technology. Peter will discuss the role of LNG in a Paris-aligned future and the pace of the emergence of new energy technologies including hydrogen and carbon capture and storage. He will look at how Woodside can increase the supply of gas to the developing Asian Pacific region while meeting clear targets for decarbonising production including avoiding emissions, engineered reduction and offset programs.</p>
11.50	<p>Oil and gas – fossil fuel trends, export and domestic Speaker: Paul Bloxham, Chief Economist, HSBC Synopsis: China’s recovery, a manufacturing upswing, OPEC+ oil supply constraints, dry weather and the impact of climate policy changes have driven a rapid rise in commodity prices, including for energy products. However, a pull-back from the recent exceptional pace is expected. We see a broad price upswing as well-supported but see a ‘super-cycle’ as unlikely. Join Paul as he discusses the latest trends in oil and gas.</p>
12.10	<p>Powering the resources sector Speaker: Gary Bryant, General Manager Asset Strategy, Alinta Energy Synopsis: The mining sector accounts for roughly 10% of Australia’s total energy use. This energy is mainly supplied by diesel (41%), natural gas (33%), and grid electricity (21%). Globally and domestically, many countries and businesses are already moving to decarbonise supply chains in heavy industry sectors. Some businesses have gone so far as to announce carbon neutral targets well in advance, and in some cases decades ahead, of the outcomes required to meet the Paris Agreement requirements. Some of Australia’s biggest mining companies, such as BHP, FMG and Bluescope Steel have joined the Australian Industry Energy Transitions Initiative, convened by ClimateWorks Australia and Climate-KIC Australia. The initiative aims to set Australian industry up for success in a decarbonised global economy. Join Gary as he provides an overview of how our businesses in the mining sector are taking up the challenge of achieving net zero emissions, with a particular emphasis on the WA resources sector.</p>
12.30	<p>Lunch</p>
1.30	<p>China's energy sector reform and energy mix Speaker: Philip Andrews-Speed, Senior Principal Fellow, Energy Studies Institute, National University of Singapore Synopsis: In September 2020, President Xi Jinping pledged that China would peak carbon emissions before 2030 and strive for carbon neutrality by 2060. The 14th Five-Year Plan (2021-2025) prepares some of the ground for moving forward, but details will emerge over the coming year. In the meantime, the government will need to balance a number of conflicting priorities including constraining rising carbon emissions, economic growth and employment, boosting innovation, enhancing the role of state-owned enterprises, and increasing self-reliance. Join Philip for insight into China’s energy sector reform and the challenges ahead.</p>
1.50	<p>H₂ prospects and its synergies with the natural gas and LNG industries Speaker: Roberto F. Aguilera, Energy Economist, Curtin University Synopsis: Hydrogen is expected to play a role in a low carbon energy future, and Australia plans to be a major producer and exporter, but it remains to be seen if the universe’s most abundant element will be able to gain significant market share in the energy mix. Roberto will provide an overview, examining the opportunities and constraints in the coming decades</p>

	<p>mostly from an economic, technical and policy perspective. Roberto will also discuss hydrogen synergies with the natural gas and LNG industries in Western Australia.</p>
	<p>Leveraging the power of data</p>
2.10	<p>What does big data mean for us in the future? Speaker: Tanya Schneider, Consulting Partner, Deloitte Synopsis: In August 2019, the Australian Government passed legislation to enable the Consumer Data Right (CDR), which gives customers greater access to, and control over, their data. By making data available to customers, the CDR will encourage competition between service providers, leading not only to better prices for customers but also more innovative products and services. While implementation in Western Australia is some way off, how can WA industry participants prepare for this future? Join Tanya in a discussion about how we can maximise the opportunities the CDR will bring.</p>
2.30	<p>Consumer data right - what does it mean for customers? Speaker: Jill Berry, Chief Executive Officer, Adatree Synopsis: The Consumer Data Right (CDR) is a new regulatory regime that gives consumers greater access to and control over their data and improves their ability to compare and switch between products and services. It starts with sharing banking data then extends to energy, telecommunications, insurance, superannuation and economy-wide. The opportunities to bring use cases to life are infinite to bring smoother and smarter experiences to consumers and businesses. The adoption can either be an opportunity or a threat to businesses based on their ability to access and leverage the data for their customer offerings. Join Jill as she outlines some important considerations and use cases in data collection, use and sharing.</p>
2.50	<p>Afternoon tea - sponsored by ATCO</p>
3.20	<p>Using data to help alleviate hardship Speaker: Kelley Yeats, Marketing Manager, Synergy Synopsis: Synergy is leveraging the power of big data to understand customers' needs and partnering with associations in Western Australia to provide assistance to community members in financial hardship. Kelley will walk us through the initiatives Synergy has put in place, working in collaboration with the community, to provide long term solutions to alleviate the stress and effort involved in keeping the lights on!</p>
3.40	<p>Leveraging big data to improve utility costs. Case Study - The Smart City, Melville Smart Grid Project Speaker: Professor Chris Lund, Adjunct Professor, Murdoch University Synopsis: The City of Melville has partnered with ARNOWA and Murdoch University to use data to increase efficiency, reduce utilities' costs, mitigate carbon emissions, optimise renewable energy generation, and serve as an educational platform for local community members. Chris will provide an overview of, and insights from, the project.</p>
	<p>Business of the future</p>
4.00	<p>Communication of complexity and empowering consumers Speaker: Alisha Aitken-Radburn, Consultant, Newgate Communications Synopsis: Energy used to be simple. We turned on the switch and our light went on. Our bill arrived and we paid the bill. Now energy seems more complicated than ever before. We have solar panels, batteries, smart meters, solar power purchase arrangements, duck curves, and</p>

	more acronyms than ever. Join Alisha as she talks about how we can communicate the story of energy to inform and empower customers.
4.20	<p>Organisational culture in the energy sector</p> <p>Speaker: Gabrielle Harris, Founder and Managing Director, Interchange</p> <p>Synopsis: Organisational culture can be thought of as ‘the way we do things here’. Sounds simple, but why do some organisational cultures produce outstanding results and others mediocre? What are the steps we can take to create an organisational culture that enables us to meet our long-term strategic goals? Join Gabrielle as she provides insights into creating an organisation culture that helps us successfully manage and adapt to change and disruption.</p>
4.40	<p>Leadership strategies to manage and adapt to change and disruption</p> <p>Speaker: Madeleine Long, Managing Director, Apogee Global Consulting</p> <p>Synopsis: Leaders are not remembered for how well they lead when everything is smooth sailing. They are remembered for extraordinary performance during times of rapid change or crisis. With no set rule book or handy manual to guide a leader, what are the qualities of exceptional leadership? In today’s unpredictable world, how do we thrive and position ourselves and our organisations for the opportunities that exist now and into a future we cannot predict. Leaders at every level will require a new worldview and set of tactics to thrive in these uncertain times - and beyond. Join Madeleine to explore what it means to be an extraordinary leader.</p>
5.00	Event close
6.00	<p>Conference dinner at Fraser’s Kings Park Sponsored by Synergy</p> <p>Come & join us for a memorable evening sampling some of the best Western Australian food and wine, while enjoying the company of your industry peers. Delegates will have an opportunity to further network during pre-dinner drinks at 6pm, before taking their seats and enjoying the rest of the night with a three course set menu and fine beverages. Our guest speaker, Dr Mike Nahan, will give an engaging talk on his career in politics, with a focus on energy.</p>

CONFERENCE DAY 2: Thursday, 29 July 2021

Time	Session
7.00	<p>Women in Energy and Young Energy Professionals Breakfast</p> <p>Join the Women in Energy and Young Energy Professionals over breakfast to hear from Dr Mary Stewart, Tamara Smith, and facilitator Meri Fatin, all leaders who are representing different perspectives on how to combat climate change.</p>
8.30	Conference registration and arrival tea & coffee
8.45	<p>Introduction by Day 2 Conference MC</p> <p>Genevieve Simpson, AIE Perth Branch Chair</p>
8.50	Opening remarks by Genevieve Simpson, AIE Perth Branch Chair
	Energy and politics

9.00	<p>Politics of energy Speaker: Peter Milne, Journalist, Boiling Cold Synopsis: Business as usual in Western Australia’s South West power grid ended with the surge in rooftop solar. With Collie’s coal sector financially fragile, big question marks over both the supply and demand for gas, and just 29 years to achieve net-zero emissions the pace of change can only increase. Peter gives an overview of the big commercial and political forces that will shape the future of primary fuels and electricity supply in the State.</p>
9.20	<p>Energy pricing, affordability, and competition Speaker: Tony Wood AM, Energy and Climate Change Program Director, Grattan Institute Synopsis: Exporting primary resources and low-cost electricity sounds like a good thing. However, the widespread uptake of distributed and large-scale renewable generation projects and overseas gas demand is challenging how our energy markets operate. Politicians, policy makers, market participants, regulators, market operators, as well as consumers are all challenged in different ways to ensure adequate supply, quality, and reliability at an affordable price. Tony will explore the lessons for Western Australia’s gas and electricity markets from the experiences elsewhere in Australia.</p>
9.40	<p>Renewables, decarbonisation, and carbon pricing Speaker: Dr Mary Stewart, Chief Executive Officer, Energetics Synopsis: Mary will present on the frameworks that companies are using to drive their decarbonisation journeys. She will explain how these frameworks treat emissions reduction activities differently and highlight the distinctions between renewable energy certificates and projects to reduce carbon emissions. She will demonstrate how these activities are linked to grid-scale renewables projects and discuss the dramatic growth in this market using the Energetics Corporate Renewable Power Purchase Agreement Tracker. Mary will conclude with insights into current carbon prices, and the indicative levels that these need to be in order to drive real change.</p>
10.00	<p>Panel Discussion- Energy and politics Panellists:</p> <ul style="list-style-type: none"> - Peter Milne, Boiling Cold - Tony Wood, Grattan Institute - Mary Stewart, Energetics <p>Moderated by Matthew McKenzie, Business News Synopsis: Bringing together the speakers from this morning to participate in an engaging discussion on energy and politics.</p>
10.30	<p>Morning tea</p>
Creating a sustainable energy future	
11.00	<p>How will energy use underpin the transition to clean energy? Speaker: Rob Murray-Leach, Head of Policy, Energy Efficiency Council Synopsis: The way that households and businesses in Australia and abroad use energy is changing dramatically, with global private and public investment in energy efficiency reaching AU\$327 billion in 2019. Rob will examine how smarter energy use is transforming energy markets around the world, and how COVID-19 and recent policy announcements are accelerating this transition.</p>

11.20	<p>Energy for everyone – solar equity Speaker: Ben Nickell, Residential Sustainability Analyst, Mirvac & Colin Smith, General Manager Customer Experience, Synergy Synopsis: More than 1 in 4 homes now generate their own energy during the day through rooftop solar but many people do not have access to this new technology. Amongst the many initiatives to alleviate energy poverty and deliver more affordable, sustainable energy to ensure none of their customers are left behind, Synergy has partnered with Mirvac on the Affordability Experiment. This initiative was developed to address the challenges of providing affordable housing and it outlines the importance of partnerships and collaboration in addressing industry sustainability challenges. Join Ben and Colin to hear how this initiative will play a key role in the future delivery of net-zero housing design concepts.</p>
11.40	<p>Developing new industry – State Government policy Speaker: Caroline Cherry, A/Executive Director of Infrastructure, Planning and Economic Development, Department of Jobs, Tourism, Science and Innovation Synopsis: Developing new energy industries, including batteries and renewable hydrogen, is transitioning at a rapid pace. The Department of Jobs, Tourism, Science and Industry supports this through provision of grant funding, stakeholder engagement and policy development. Caroline, who is responsible for delivery of the LNG Jobs Taskforce, Future Battery Industry Strategy and Renewable Hydrogen Strategy, will provide an overview of how these strategies are supporting industry development in Western Australia and addressing the key challenges of the future.</p>
12.00	<p>Lunch</p>
<p>Changes in electricity supply</p>	
1.00	<p>Managing change in WA’s SWIS from a system and market operator’s perspective Speaker: Cameron Parrotte, Executive General Manager, WA, Australian Energy Market Operator Synopsis: Minimum demand continues to decline in the South-West Interconnected System (SWIS) driven, in particular, by continued growth in distributed rooftop PV. Last year also saw grid-scale wind and solar generation on the SWIS almost double in scale. Cameron will outline the changes, opportunities and challenges this rapid transformation of the energy system is providing for the current and future operation of the system and market.</p>
1.20	<p>Managing the ‘belly of the duck’ in the changing power system Speaker: Ben Bristow, Head of Grid Transformation, Western Power. Synopsis: The rapid rise in rooftop PV capacity has caused low demand at a system-wide level and raised a new set of challenges and opportunities for managing the electricity network, such as reverse power flows (negative demand) and larger voltage variations. Ben will describe these challenges, what is being done to manage them, and profile some of the new opportunities renewables and technology bring to enhance this community asset.</p>
1.40	<p>Bringing VaDER in from the dark: unlocking the value of DER Speaker: Jai Thomas, Assistant Coordinator Strategic and Consumer Policy Energy Policy WA Synopsis: The Distributed Energy Resources Roadmap was Australia’s first plan to integrate DER in the power system. One year on, the Roadmap is leading how customers, the network and the system adapt to safely integrate the small-scale devices leading the energy transformation. Join Jai to understand the pioneering changes made over the last 12 months that seek to unlock the value of customer DER, and the innovative pilots and reforms planned for completion over the next few years.</p>

2.00	<p>Integrating customer DER at scale Speaker: Lee Ucich, Operational Planning Manager, Horizon Power Synopsis: At the forefront of DER innovation, Horizon Power has deployed an operational Distributed Energy Resource Management System (DERMS) in the town of Onslow to safely and reliably integrate customer DER at scale and well above traditional technical limits. This project sets Onslow as the home of Australia's largest and most advanced DER microgrid, with a high penetration of the town's electricity needs serviced from renewable energy sources. Join Lee who will outline the technical and customer lessons learned to date, and the implications for Horizon Power's operation of its microgrids into the future.</p>
2.20	<p>Afternoon tea</p>
2.50	<p>The changing customer journey as part of the generation transition to distributed energy resources Speaker: Ryan Warburton, General Manager Commercial and Industrial Customers, AGL Synopsis: In response to the accelerating market forces of customer, community and technology, AGL has announced plans to create two energy businesses focused on distinct strategies. 'New AGL' will be Australia's largest multi-product energy retailer, leading the transition to a low carbon future. 'PrimeCo' will be Australia's largest electricity generator. Ryan will reflect on commercial customers' appetite to decarbonise their energy purchasing and AGL's vision to deliver energy as a service by bringing together renewables supply in front of the meter via the renewables development pipeline with on the ground asset management and on-site renewables at scale via its Solgen and Epho acquisitions. The emphasis will be on the customer impact of the energy transition.</p>
	<p>Cool new stuff</p>
3.10	<p>Green hydrogen and fertiliser Speaker: Stuart Nicholls, CEO & MD, Strike Energy Synopsis: Strike Energy is the proponent of a 1.4mtpa ammonia-to-urea plant planned for the Narngulu Industrial Estate in Geraldton that will convert gas and green hydrogen into fertiliser. The Greater Erregulla Development strategy will see the company evolve into an integrated gas and manufacturing business. This evolution will leverage its Perth Basin gas resources to supply the State's growing energy requirements, create Mid-West manufacturing jobs, and support agriculture. Join Stuart as he provides an overview of this innovative project.</p>
3.25	<p>ATCO's hydrogen journey Speaker: Kapz Malhotra, General Manager Customer and Innovation, ATCO Synopsis: Leveraging its initial experiences in generating and using renewable hydrogen through the Clean Energy Innovation Hub, ATCO has continued to lead in utilising renewable hydrogen in Western Australia. Kapz will share some of ATCO's recent successes and the next steps, including a planned 10MW, commercial-scale hydrogen production facility. Kapz will also talk about delivering Western Australia's first hydrogen vehicle refuelling station in Jandakot with FMG and the Department of Jobs, Tourism, Science and Innovation and a pilot program to blend renewable hydrogen into one of Western Australia's gas distribution networks.</p>
3.40	<p>Accelerating electric vehicle uptake Speaker: Behyad Jafari, CEO, Electric Vehicle Council Synopsis: The Electric Vehicle Council has undertaken significant research and industry engagement to develop an understanding of the barriers preventing mass market uptake of electric vehicles in Australia. Priorities for the advancement of electric vehicles include</p>

	affordable vehicles, vehicle emission standards that support electrification, and consumer awareness. Behyad will talk about his work with industry, government, and the media to accelerate the electrification of road transport.
	Energy transformation in Western Australia and beyond
3.55	<p>Ask the WA Energy Leaders Moderator: Matthew Bowen, Partner, Jackson McDonald Panellists:</p> <ul style="list-style-type: none"> ● Samantha Tough, Chair, Horizon Power ● Rob Cole, Chair, Synergy ● Nicky Cusworth, outgoing Chair, ERA ● Liz Aitken, Director, Aitken Energy <p>Synopsis: The theme of this year's conference, Change, encapsulates a global trend that we are seeing firsthand here in Western Australia. There are multiple drivers for this – decarbonisation, changes in the primary fuels sector and in technology costs, and the availability of huge amounts of data placing control within the hands of small customers and enabling new business models. Retail markets are changing as customers take up new technologies and innovative solutions for their energy needs. Capturing the hearts and wallets of residential and business customers in these changing times requires the combined thinking of all of us in the energy sector. The challenges are many, but fortunately we are not alone in solving them. Everyone else is doing it too! Join our energy leaders in a lively panel discussion on the future of retail energy markets.</p>
4.50	Closing remarks by Kim Hutchinson, Conference Chair
5.00	<p>Event close and drinks sponsored by Western Power Come and join Western Power after the conference, enjoy drinks and canapes and reflect on the learnings from our thought-provoking speakers. You will also be able to take a sneak peek at what Western Power's doing to take our community's electricity network into the future.</p>