Executive Insights online sessions
Speakers and their Challenge Questions

The Executive Insights sessions are a new addition to the highly regarded API Summer School, with senior leaders providing invaluable strategic context to the comprehensive content from industry experts that will be explored during the 2-week residential API Summer School. The sessions started in 2021, with the live and recorded content available to Summer School participants who will then develop short responses after the Summer School (reflecting in small groups). Other users include the 100 participants in the API's Powerful Women Leadership Program.

**Patrick Matweew**
CEO (API Board Director)
Redback Technologies, Luceo Energy
LinkedIn

“How can networks and consumers collaborate effectively and in an easy way without any additional costs to reduce the overall costs of networks and share benefits fairly?”

**Kelly Wood**
Executive General Manager, Network Delivery & Services, Ausgrid
LinkedIn

“The role of DNSPs is changing substantially and we don’t yet know where it is going to land. How do we ensure we remain continually relevant and high performing, while optimising our investments and ensuring that we maintain delivery of services to our current customers?

What are the best options for managing the change (eg do we lean in and define our future role vs wait for the market to decide)?”
Peter Price  
Executive General Manager – Engineering, Energy Queensland  
LinkedIn

“Minimum demand means the lowest level of demand from the grid in any given day, week or year and is extremely sensitive to ongoing uptake of solar PV, weather conditions, and local economic activity. The situation is compounded when consumers’ energy needs, particularly during daylight hours, are being met by their own distributed energy resources (DER) such as solar PV.

What challenges must we overcome in managing minimum demand and what are the most compelling possible solutions to address these challenges?”

Bess Clark  
CEO  
Marinus Link  
LinkedIn

“Implementing AEMO’s Integrated System Plan, including development of Renewable Energy Zones, requires significant transmission investment in new corridors across the NEM to deliver reliable and secure energy for customers, at the least cost.

How can we achieve the range of necessary support (from landowners, communities, and tiers of government) and approvals (from environment, land use planning and heritage approvals bodies, energy regulators and governments) in a timely way?”

How do the Executive Insights sessions link to Summer School?  
The 2-week residential API Summer School features expert speakers, site tours, and small group projects (Syndicate projects) that focus on technical, market, policy and operational matters in the power sector and most participants have a technical background. The Executive Insights sessions provide broad strategic context to the more detailed content in the School and also insights into the different approaches and mindsets of executives in the power sector.
Gair Landsborough  
Executive Manager Asset Management  
Western Power  
LinkedIn

“Access to affordable electricity is essential to support a healthy community and economy.

As the electricity sector transforms to support higher levels of renewable energy, what options should we consider to ensure the benefits of this new technology is equitably shared?”

Scott Ryan  
Chief Asset and Operating Officer  
Endeavour Energy  
LinkedIn

“The energy transition is upon us.

There are many players in this, including but not limited to: generators, retailers, regulators, market operators, distributors, transmission operators, DER proponents, and most important of all…our customers.

How can we best integrate all these stakeholders, with their competing priorities and interests, to deliver the optimal customer solution in terms of safety, costs, reliability and the environment in a world where technology is redefining solutions faster than ever before?”

How were our Executives selected?
The API is focused on providing value to our member community and worked with our Governor member organisations and selected other stakeholders from the API’s Board to develop the Executive Insights program and to source the first speakers in this new addition to the Summer School format. We thank our members and our Executive speakers for their support of this new program.
Violette Mouchaileh  
Chief Markets Officer  
Australian Energy Market Operator (AEMO)  
LinkedIn

“The energy transition is happening faster than anyone expected, and there are no signs its slowing down.

What are the things we as an industry need to do to prepare the system and market for a 100% instantaneous renewable energy grid?

You can tackle this question from a technical engineering, market and regulatory framework, industry culture and capability, or data and technology perspective. Think big and bold!”

Paul Simshauser  
Chief Executive Officer  
Powerlink  
LinkedIn

“With our power system moving to increasing volumes of intermittent and asynchronous generation resources – is our market design capable of meeting this challenge?

Is our market working or are we in fact missing markets for things like fast frequency, system strength and inertia?”
Stephanie Unwin  
CEO  
Horizon Power  
LinkedIn

The pace of change as we pursue decarbonization is profound, and in many ways 2030 is becoming the new 2050 in terms of goals for some organisations and communities.

We need to think hard about what these goals truly mean for electricity networks and their stability and performance, and we need to make sure we are developing systems that are able to support these goals.

At present we don’t have the technical solutions for a 24/7 renewable world within economic and reliability standards and that meet the diverse needs of customers across Australia. For example, Horizon Power has challenged ourselves to have no new diesel in our footprint from 2025. But we know that we can get much better outcomes with 90% renewable and 10% diesel generator input than 100% renewable generation. This prompts consideration of options such as biodiesel, but also the need to understand the whole lifecycle, and how the fuel is created and used/burnt and what are the ‘best’ ways to achieve our goals. Similarly, electric vehicles have the capability to reduce the use of diesel in transport, but in much of WA, we need electric vehicles with the capabilities, range, and grunt in tough conditions of vehicles like Landcruisers rather than road-optimised EVs.

Unfortunately, there is a fundamental lack of appreciation in the debate about these constraints of technical capabilities. At the same time, we are challenging ourselves to do better (such as Horizon’s ‘no new diesel’ goal) and through innovation and trial and error we can develop different paths to the same goal. The challenge is the disconnection between how visions for the future are developed and appreciation of the technical constraints and possible pathways to get there (and the associated risks and challenges as we innovate and explore).

How do we improve the understanding and consideration in the public and community debate of the technical challenges in delivering energy systems that support achieving net zero goals, while also continuing to set goals and develop and test ideas that drive change and progress towards the overall outcomes that we seek?

Editor’s note: this question was written by Dr David Pointing on behalf of Stephanie after the Executive Insights session.
Brett Redman

CEO
Transgrid
LinkedIn

Energy policy is a hotly contested space. It’s impacted the last five prime ministers and is a feature of this federal election. We know that renewables will be a large part of the future, but how we get there is not yet agreed.

Putting words into action, when you think about building new transmission lines, how would you balance the needs of the many (all consumers) with the needs of the few (the landowners where we need to build transmission towers)?

Is the argument for the right pathway enough?
And how do you build agreement within a community – with logic or emotion?

Editor's note: Brett spoke to the live Summer School participants via Zoom at the start of Week 2 on 2 May 2022.
"The power system is becoming increasingly complex and dynamic. How can innovations and technologies be deployed to support power system operations in processing lots of information and making real-time decisions and actions to maintain a safe, reliable and secure network at all times? What can we learn from other industries that use big data and automation heavily in their operations?"
Doug Schmidt  
General Manager Regulation  
SA Power Networks  
LinkedIn  

In South Australia we regularly experience periods when the entire State is powered by variable renewable energy. Other State’s are also heading quickly down this path.

While there is currently much work underway to ensure that electricity grid can operate securely for long periods at 100% variable renewable energy, we are now turning our attention in SA to how we can use electrification to support decarbonisation in other sectors. For example, the electrification of transport and transitioning away from fossil fuels used for industrial heating and processing.

Electricity currently accounts for about 20% of all energy consumed in Australia. The electrification of other sectors is likely to result in an electricity supply industry that will ultimately need to deliver **3 to 5 times the amount of energy as it does today**. Current forecasts are that this electrification effort will significantly ramp up from about 2025 onwards to support achievement of State and Federal Governments’ net zero targets.

**Question:** What are some of the major challenges and opportunities that electrification will pose for the electricity supply industry? And as an industry, how can we successfully navigate them?
We are facing big challenges and a fast pace of change in the energy transition. We need big, bold and innovative solutions. But many parts of the supply chain and many different players are involved. We have been given a clear message by customers and stakeholders that we need to be working together so that solutions are coordinated and deliver “best for all, overall” solutions rather than duplication.

How do we coordinate our efforts so that “best for all, overall” solutions are delivered for the benefit of customer and the community? How do we improve the maturity of ongoing customer engagement?

How can we have confidence we are making the right transmission investments when we have certainty over the costs but uncertainty over the future benefits.