

## OPENING STATEMENT FROM THE AUSTRALIAN ACADEMY OF TECHNOLOGY AND ENGINEERING (ATSE)

Good afternoon Senators, we would first like to take a moment to acknowledge the traditional custodians of the land we are meeting on today, the Ngunnawal and Ngambri peoples, and reflect on their long history of achievement as Australia's first scientists and technologists. We pay our respects to Elders past and present.

Thank you for the opportunity to address you today.

Australia's energy system is at a crossroads. We are undergoing the biggest and most important change to how we generate, store and use energy in our lifetimes.

This transformation includes top-down elements, like the Australian Energy Market Operator's Integrated System Plans and the Government's renewable energy targets. But it is also coming from energy consumers and increasing individual and community ownership of energy resources.

It's clear that people want more control over their own energy - around a third of all households have now installed solar panels and the rate of household battery installation is surging.

Increasing electrification – of stovetops, hot water systems and vehicles – will see energy prices fall but will add to the strain on our electricity grids, while reducing demand for gas, petrol and diesel.

Our energy market needs to adapt to these trends and support consumers to better manage their electricity needs.

Technological solutions like Virtual Power Plants – which allow consumer energy resources to support the broader grid needs – and vehicle-to-home and vehicle-to-grid technologies needs to be more broadly supported and adopted.

And all of this needs to be done in a way that supports energy security, safety and reliability. A whole of system approach is needed that places the wellbeing of communities, businesses and households at the centre.

Strategically planned and transformational change is needed in our energy system – ad hoc and short-term solutions are no longer enough. Failing to plan for the future risks blackouts, price rises, safety risks and the disruption of essential services.



In this critical moment, we have an opportunity to shape an energy system that is cleaner, more resilient, and inclusive for all Australians.

We can, and should:

- Move from an incremental and piecemeal approach to a transformational, strategic and holistic approach
- Conduct inclusive consultation that considers consumers of all kinds
- And craft solutions that are deeply informed by engineering expertise.

By embracing innovation and supporting communities to take an active role, we can build a better, fairer and cheaper energy system for all Australians.