

## Urban Futures Symposium

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**Presentation:** Circular Business Model for End-of-life Electric Vehicle Lithium Batteries in Australia

Globally, there has been an increase in the production and deployment of lithium batteries (LiB). Specifically, this is due to the recent energy transition and electrification of vehicles. However, as LiB prices continue to decline and the dependence of electric vehicles (EV) continue to increase, a large volume of LiBs from EVs are expected to reach end-of-life in the coming years. The circular economy approach has been proposed for end-of-life EV LiBs to intensify the application of a product, create regenerative systems and minimize waste. Circular business models act as a tool to implement this approach in current business models and create value-adding opportunities for all stakeholders.

With a focus on circular business models for end-of-life (EOL) electric vehicle LiBs, the literature review revealed a lack of awareness or focus on this aspect. Moreover, within the aspect of electric vehicle LiBs at EOL, the literature either focuses on 'recycling' or 'repurposing' strategy for closing or slowing the circular loop respectively. While linear business models tend to be distinct, circular business models function through a combination of different circular economy strategies to 'co-exist', 'co-evolve' and 'co-operate'. To develop a circular business model for electric vehicle LiBs at EOL and understand the value creation opportunity arising as a result of implementing a circular business model, this research adopts a qualitative approach to examine the research project from stakeholders' perspective. In doing so, the research aims to identify key factors to develop a circular business model for electric vehicle lithium batteries at EOL in Australia.