



The Sustainable Engineering Society

...engineering in harmony with ecology

SENG-WA Newsletter – July 2022

In this edition of the SENG WA newsletter, we present two events, one looking at sustainability from an indigenous perspective, and another discussing the future of electric vehicles in WA. The big news this month is the WA Government's plan to close coal-fired power stations near Collie. But is the Government taking enough action? We'd love to hear from you by [email](#).

WA businesses are also invited to let us know how they are being Sustainability Champions in their industry. Please get in touch if sustainability is at the heart of your business, or a business you know.

We hope you enjoy!

QUESTIONS AND ANSWERS

A 'Climate Change Challenges' series of webinars and forums was run in 2021 by the WA Division of Engineers Australia, in conjunction with the University of WA and Murdoch University.

During the series, over 100 questions or comments were submitted from around 1000 attendees. A 'Q&A' of the most pertinent, together with suggested answers, was put together by a group of senior EA members. The answers are NOT official EA answers; they are possible answers provided by the group as thought provokers.

In our Newsletter we will be publishing one Question and one possible Answer in each edition. We invite comments from our readers, a summary of which will be published in the following edition. Simple comments, such as agree/disagree are welcome, as are more detailed comments. These may be emailed to the [Q&A reply email](#).

This month, our question and possible answer is:

Q

How are we preparing our new engineers for leadership and our current engineering leaders to adapt?

A

By ensuring that sustainability, which includes climate change, is a key competency for all engineers, at all stages in their careers. This includes an understanding of systems thinking and in carbon accounting. EA is key because EA sets competency standards for professional engineers and approves all tertiary engineering courses in Australia.

SENG WA would love to hear from you about these questions and answers.

Contact us here: [Q&A reply email](#)

EVENTS



IMPLEMENTING SUSTAINABILITY FROM AN INDIGENOUS PERSPECTIVE

Event by Engineers Australia

Date: Tuesday, 26 July 2022

Time: 7:00 – 9:00 AM AWST

Location: Engineers Australia WA Auditorium, 712 Murray Street, West Perth, Western Australia, 6005

Over a light breakfast, the principal aim of this event is to understand Indigenous views of caring for Country (the environment) and how they might be included in EA's Sustainability Principles and Practice Guidelines. There may be ethical insights that can also be incorporated.

The event will be introduced by Jodey Brockhurst, the WA President, who will provide a personal perspective on the importance of this topic, given her Indigenous background.

The keynote speaker (Sharon Wood-Kenney) provides consulting services to local and state government departments to facilitate workshops with Aboriginal stakeholders and encourage co-design of projects in the early phase.

The second speaker (Grant Maher, IEG) is the Chair of EA's Indigenous Engineers Group (IEG). He also is the Director of Jabin Group, a 100% Indigenous-owned engineering consultancy, with extensive regional and remote experience. Grant will reflect on some case studies of relevance.

The third speaker (Tiina Ratamo, CLM) is on the WA Branch of the College of Leadership and Management. As Chief Engineer of KBR Infrastructure Services Australia, Tiina will contribute a perspective from one of Australia's largest engineering companies.

The fourth speaker (David Rice, SENG) is one of the principal authors of EA's Implementing Sustainability: Principles and Practice Guidelines. David will provide his insights on whether these guidelines should be adjusted to address Aboriginal perspectives.

More information: <https://www.engineersaustralia.org.au/event/2022/05/implementing-sustainability-indigenous-perspective-43056>

BUILDING A FUTURE FOR ELECTRIC VEHICLES IN WA

Event by Australian Institute of Energy - Perth

Date: Thursday, 28 July 2022

Time: 5.30 – 8:00 PM AWST

Location: Parmelia Hilton Perth, 14 Mill Street. Perth, WA 6000

Join AIE for drinks and canapés during an expert panel to discuss how we can build a future for electric vehicles in WA.

Speakers include Florian Popp, Director Mojo Car Share; Aden Barker, Director of Electricity Networks and Customer Participation, Energy Policy WA; Ben Bristow, Head of Grid Transformation, Western Power; and Edward Kestel, Gemtek Group.

More information: <https://www.eventbrite.com.au/e/building-a-future-for-electric-vehicles-in-wa-tickets-373143350807>

The banner features a red background with a white geometric pattern of interlocking triangles. On the left, the Engineers Australia logo is displayed above the text 'Recognition Awards' and 'Environmental College Awards'. Below this, it states 'Nominations open 1 March 2022' and 'Nominations close 1 August 2022'. At the bottom, two award categories are listed: 'Professional Environmental Engineer of the Year Award' and 'Young Environmental Engineer of the Year Award'. On the right side of the banner, there is a photograph of a wind turbine tower with a person climbing a rope.

ENVIRONMENTAL COLLEGE AWARDS

The Professional Environmental Engineer of the Year award is designed to promote excellence and the Environmental Engineering profession within the community at large, and to encourage recognition of environmental engineering.

There are two award categories: Professional and Young Environmental Engineer of the Year.

Applications close on **1 August**.

Applications: <https://aeea.engineersaustralia.org.au/environmental-college-awards/>

NEWS

STATE-OWNED COAL POWER STATIONS TO BE RETIRED BY 2030

Western Australia's State-owned coal power stations will be retired by 2030 - as the continued uptake of rooftop solar and renewables forces changes in the energy system to ensure a secure electricity supply and guard against higher power bills.

Collie Power Station will close in late-2027 and Muja D in late-2029. As previously announced, Muja C's Unit 5 will close later this year and Unit 6 in 2024.

WA's electricity system is being increasingly challenged by the overwhelming uptake of rooftop solar. These pressures force Synergy to offload excess power generated during the day at a loss, and add additional maintenance and generation costs, which are ultimately borne by taxpayers.

To address this, the State's energy generation system will embark on a managed transition to a greater use of renewables, while ensuring electricity reliability and affordability continues to be paramount.

An estimated \$3.8 billion will be invested in new green power infrastructure in the Southwest Interconnected System (SWIS) - including wind generation and storage - to ensure continued supply stability and affordability.

Full press release: <https://www.mediastatements.wa.gov.au/Pages/McGowan/2022/06/State-owned-coal-power-stations-to-be-retired-by-2030.aspx>

COAL EXIT ONLY PART OF THE ANSWER, SAY PROFESSORS CALLING FOR TOUGHER WA CLIMATE CHANGE ACTION

Professors from WA's five universities have delivered a scathing assessment of the state government's track record on climate action, accusing it of being "too close to the LNG industry".

A letter signed by 20 academics, emailed to all WA parliamentarians, says unlike other Australian states, WA's greenhouse gas emissions have increased, largely due to sectors including gas and alumina.

The letter arrived in MP's inboxes on Tuesday this week, the same day the McGowan Government announced that state-owned power provider, Synergy, [would close its remaining coal-fired plants by 2029](#).

By phasing out coal-fired power, Synergy said its carbon emissions would be reduced by 80 per cent by 2030.

But Curtin law school academic Hugh Finn, one of those behind the letter, said closing the coal plants would only bring WA part-way to where it needed to be.

Full article: <https://www.abc.net.au/news/2022-06-16/closing-coal-plants-only-part-of-the-answer-say-scientists/101149050>

SYNERGY BOSS DAVID FYFE FEELS NEED FOR SPEED IN TRANSITION TO WA'S CLEANER ENERGY FUTURE

The man overseeing WA's \$3.8 billion transition to a renewably powered energy grid has "no doubt" the energy chaos enveloping the Eastern States will be avoided.

Formally appointed in May, Synergy chief executive David Fyfe has just eight years to replace the State's aging and emissions-intensive coal-fired power plants with 800MW of wind generation and 1100MW of storage.

The massive task is further complicated by the continued rapid uptake of rooftop solar, which threatens the short-term stability of the system and further underscores the need for the rapid rollout of batteries.

But Mr Fyfe is upbeat about the challenge — perhaps unsurprising given the adversity he has already overcome having lost his right leg and suffered burns to half his body as a survivor of the 2002 Bali bombings.

Full article: <https://thewest.com.au/business/energy/synergy-boss-david-fyfe-feels-need-for-speed-in-transition-to-was-cleaner-energy-future-c-7267915>

AMBITIOUS INTERIM TARGET SET FOR STATE GOVERNMENT EMISSIONS

The WA Government is taking a step towards net zero greenhouse gas emissions by committing to a whole-of-government 2030 reduction target of 80 per cent below 2020 levels.

This interim target of 80 per cent below 2020 levels applies to emissions from all Government agencies across the State, including transport, health and education, and emissions generated by Government Trading Enterprises (GTEs).

This commitment builds on a recent announcement that Synergy will transition out of coal-fired power generation by 2030. An estimated \$3.8 billion will be invested in new green power infrastructure in the Southwest Interconnected System (SWIS), including wind generation and storage, to ensure emissions reduction, continued stability and affordability.

Full press release: <https://www.mediastatements.wa.gov.au/Pages/McGowan/2022/06/Ambitious-interim-target-set-for-State-Government-emissions.aspx>

\$662 MILLION BOOST FOR COLLIE'S TRANSITION TO SECURE LOCAL JOBS

Government to invest an additional \$547.4 million in Collie to support its long-term future, attract new industries and create new local jobs - boosting support for the town's transition to over \$662 million.

This package is in addition to the \$115 million previously committed by the WA Government to diversify and transition Collie's economy.

The funding is being put in place as preparations are made for the retirement of Collie's State-owned coal-fired power stations in response to WA's overwhelming uptake of rooftop solar and renewables.

The package includes the new \$200 million Collie Industrial Transition Fund to attract major projects and new industries to the town.

It will provide funding to enhance industrial land readiness and support new and emerging industries - including potential opportunities in battery manufacturing, wind turbine manufacturing, hydrogen, green cement and minerals processing.

In order to support and transition the affected blue-collar workforce, the State Government will undertake orderly and coordinated decommissioning works of Muja Power Station and Collie Power Station immediately after each asset closes.

Full press release: <https://www.mediastatements.wa.gov.au/Pages/McGowan/2022/06/662-million-dollar-boost-for-Collie%E2%80%99s-transition-to-secure-local-jobs.aspx>

SUSTAINABILITY CHAMPIONS



WA SENG is giving companies a free opportunity to showcase their sustainable, innovative practices in our newsletter.

For a chance to be featured, please complete [this form](#).



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