



The Sustainable Engineering Society

...engineering in harmony with ecology

SENG-WA Newsletter – October 2022

Join SENG-WA along with other organisations at the Enactus ECU Sustainability Festival on Saturday 15 October in raising awareness of the Sustainable Development Goals. Other events in the coming month include the DWER information sessions on WA's Plan for Plastics stage 2, the SEVENTEENx national tour event in Perth for the first time, and a UN event on sustainable financing for decarbonisation.

We invite members to contribute to the SENG Accessible Sustainability Collection by submitting any relevant sustainability and climate change material useful for research, project work, policy development and education.

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

Sustainability is an important factor in climate change but very costly in terms of infrastructure projects. How do you balance the cost vs climate change?

A

The modern economy has provided huge benefits to humanity, for example, clean drinking water, reliable sewage systems and safe transport. Human ingenuity has provided these benefits within a market economy where key resources such as the environment have been an externality. Because of this the modern economy is also the most destructive force on Earth; for example, species extinctions, loss of vegetation, plastic pollution and climate change.

So, the question is not one of 'balance' but one of 'survival': survival of not only a moderately comfortable way of life for people in the wealthier

countries but also basic survival for many in poorer countries and for many species of plants and animals. It has become a need to 'implement an imperative' rather than 'balance a cost'.

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

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

ACCESSIBLE SUSTAINABILITY COLLECTION

SENG plans to develop an Accessible Sustainability Collection on the SENG website.

This collection will contain recent sustainability and climate change material in a menu-driven web format that is easy to access.

It will provide key references that are useful for project work, policy development or of general educational benefit.

For example, tools for project work will include summary information and references on carbon mitigation (Life Cycle Assessment) and resource avoidance/substitution of high recycled content to enable and promote best practice sustainability outcomes.

We will prioritise:

- quality over quantity, such as providing the most useful or relevant reference so that useful content is not buried in long lists of similar references.
- Ease of accessibility, such as wherever available providing links to free resources (in preference to paid resources) and that are in compact file size.
- resources available in a modern form, such as free and publicly available YouTube i.e., with the objective of influencing the wider engineering community and the public. Of course, we will still include reports where the content is highly technical.

To help the SENG committee build and develop this Accessible Sustainability Collection, please email suggested links to seng.library@gmail.com

For each suggestion, please provide the link (URL) and a brief description of what the link contains and why it is relevant/useful.

Once the Accessible Sustainability Collection has been created and if you propose a link similar to an existing link, then please justify listing both with an explanation of how the suggested link complements (or addresses gaps in) the existing link or explain why it should replace/update the existing link.

EVENTS

LIFE CYCLE ASSESSMENT FOR IMPROVING SUSTAINABILITY OF INFRASTRUCTURE

Hybrid Event (Online and In Person) by SENG

Date: Monday, 17 October 2022

Time: 9.00 – 10.00 AM AWST

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

To avoid worsening impacts of climate change, the world needs to rapidly transition to low carbon design. In this webinar, case studies will be presented on the use of life cycle assessment (LCA) by engineers, including carbon accounting, to inform design alternative reviews. The objective of presenting these case studies is to promote the benefits of LCA and educate engineers in the practice of carbon accounting.

More information and registration: <https://www.engineersaustralia.org.au/event/2022/09/life-cycle-assessment-improving-sustainability-infrastructure-45066>



Stream passing through Ejby Molle wastewater treatment plant, which is the site of one of the LCA case studies.

ENACTUS ECU SUSTAINABILITY FESTIVAL 2022

Event by Enactus ECU

Date: Sat, 15 October

Time: 10.00 AM – 4.00 PM AWST

Location: Hillarys Boat Harbour

The Sustainability Festival is an event that unifies the community and builds knowledge and momentum toward a sustainable future.

The Enactus ECU Sustainability Festival aims to raise awareness of environmental, economic and social sustainability. By increasing awareness of what a sustainable future looks like, people and businesses can adopt more sustainable practices in their day-to-day activities. Through the Sustainability Festival, Enactus ECU strives to educate and promote sustainable practices while bringing the community together.

What can you expect at the Festival?

- A fun, informative, and dynamic environment for people of all ages to learn about the 17 United Nations Sustainable Development Goals and how they relate to our everyday lives.
- interactive workshops to help educate the community on how to better adapt sustainable practices and choices in their daily lives
- information booths about the impact of your product/services
- stalls showcasing sustainable products and providing the community the opportunity to purchase

SENG-WA will be joining the sustainability festival, with a stall addressing the following SDGs:

- SDG 6: Clean water and sanitation
- SDG 9: Industry, innovation and infrastructure
- SDG 11: Sustainable cities and communities
- SDG 13: Climate action
- SDG 14: Life below water

More information: <https://enactusecu.org/sustainability-festival/>



DEPARTMENT OF WATER AND ENVIRONMENTAL REGULATION INFORMATION AND FEEDBACK SESSIONS ON THE IMPLEMENTATION OF STAGE TWO OF WA'S PLAN FOR PLASTICS

Eight online workshops will be held during October and November 2022, five during business hours and three in the evening.

The workshops will provide information on the items proposed to be banned, implementation actions and timeframes for delivery. The sessions will provide you with an opportunity to share your views, what needs to be in place for the change, and identify the support you require to adapt to the phase-out of stage 2 items listed in the Plan.

Upcoming sessions:

Thursday, 13 October 2022	6.30pm – 8pm
Wednesday, 19 October 2022	10.30am – 12pm
Wednesday, 19 October 2022	1.30pm – 3pm
Tuesday, 25 October 2022	6.30pm – 8pm
Wednesday, 9 November 2022	10.30am – 12pm
Wednesday, 9 November 2022	6.30pm – 8pm
Thursday, 17 November 2022	1.30pm – 3pm

If you would like to attend one of the information sessions, please register via the link below. Attendance numbers for each session are limited, so please register early.

More information: <https://www.wa.gov.au/service/environment/business-and-community-assistance/western-australias-plan-plastics>

Registration: <https://impcom.wufoo.com/forms/zqfxg5m0ajkikx/>

SEVENTEENX AUS TOUR 2022

HYBRID EVENT BY SEVENTEENX

Date: Wed, 26 October

Time: 4.00 - 8.30 PM AWST

Location: SBDC Exhibition Space - Level 2, 140 William St, Perth WA 6000, Australia

SEVENTEENx is heading to Perth for the first time with a hybrid event (online and in person) as the 3rd stop around 5 Australian cities after Sydney and Brisbane earlier this year.

This event is a speaking event, with short, impactful keynotes; a fast paced and highly engaging opportunity to connect with brands and corporates looking to engage with purpose and create action for the Global Goals and re-defining the way we do business.



More info: <https://www.seventeensdg.com/tour22>

Registration: <https://events.humanitix.com/seventeenx-perth-2022>

THE PACE OF CHANGE – CAN WE HAVE IT ALL?

EVENT BY THE AUSTRALIAN INSTITUTE OF ENERGY

Date: Thu, 3 November

Time: 5.30 – 8.00 PM AWST

Location: Parmelia Hilton - 14 Mill St, Perth WA 6000

AIE Perth is hosting an expert panel to discuss the pace of change in our energy sector, and whether it really is possible to have it all in the time required to meet emissions reduction targets, while keeping the lights on.

We are in transition to a zero emissions future, brought about by emissions reduction targets; the declining cost of renewables; increased penetration of household PV; and community demand for action. At the same time, technology improvements have provided us with alternative options for

managing many of the power system security and reliability challenges we face in living with 100% renewables, all we need to do now is keep up!

The pace of change in our energy system is unprecedented, at federal, state and community levels, the evolution is palpable. So, can we have it all? Our panellists will discuss how they believe we can manage the volume of change within our electricity system to meet our ambitious targets, while delivering reliable, secure and affordable energy.

More info: <https://www.aie.org.au/eventdetails/15832/aie-perth-the-pace-of-change-can-we-have-it-all>

SUSTAINABLE FINANCING: THE ROADMAP TO DECARBONISATION & SDGS

Event by United Nations Association of Australia WA Division

Date: Tue, 8 November

Time: 5.30 – 8.00 PM AWST

Location: KPMG Perth, 235 St Georges Terrace City of Perth, WA 6000

Learn about how Sustainable Financing helps achieve decarbonisation for our state and the Sustainable Development Goals (SDGs) by 2030.

Achieving the SDGs means transforming businesses to deliver positive social and environmental outcomes. The third SDG Business Forum this year will explore, together with industry, state government, and community leaders in Western Australia, the role of sustainable financing on achieving decarbonisation and the UN Sustainable Development Goals (SDGs).

Registration: <https://www.eventbrite.com.au/e/sustainable-financing-the-roadmap-to-decarbonisation-sdgs-tickets-421831297767>

SUSTAINABILITY LAW AND POLICY IN RESOURCE DEVELOPMENT

Short Course by UWA Law School and the Centre for Mining, Energy and Natural Resources Law

Date: Tue, 22 – Thu, 24 November

Time: 08.30 AM – 5.30 PM AWST

Location: UWA Law School 35 Stirling Highway Crawley, WA 6009

Sustainability is now a critical factor in the development of Australia's mineral and energy resources as companies and regulators seek to balance the sometimes competing requirements of the environment, society and the economy. Industry participants and their lawyers need to have a clear understanding of the applicable rules in order to develop appropriate responses for investors, regulators and the public and to balance competing objectives for the present and the future. This short course will give a clear understanding of those rules, including in mining, petroleum, climate change and environmental legislation and ASX reporting requirements. The workshop will provide practical examples enabling participants to apply the rules.

More information: <https://handbooks.uwa.edu.au/unitdetails?code=LAWS5100>

Registration: <https://www.eventbrite.com.au/e/sustainability-law-and-policy-in-resource-development-tickets-417805687057>

HYDRO BUILD BACKED

Australia's first large scale hydrogen plant will be built in the Pilbara region of WA.

One of the world's largest renewable hydrogen plants is due to be built in the Pilbara, after the Australian Renewable Energy Agency (ARENA) conditionally approved \$47.5 million towards ENGIE's renewable hydrogen and ammonia project near Karratha in Western Australia.

The \$87 million Yuri project includes a 10-megawatt (MW) electrolyser to produce renewable hydrogen, 18 MW solar PV system to power the electrolyser and 8 MW / 5 MWh lithium-ion battery for firming and will supply hydrogen and electricity to Yara Pilbara Fertilisers at its neighbouring liquid ammonia facility.

Once completed, the project will be Australia's largest electrolyser, capable of producing up to 640 tonnes of renewable hydrogen per year.

Full article: <http://www.watercareer.com.au/news/hydro-build-backed>

NATIONAL ELECTRIC VEHICLE STRATEGY: CONSULTATION PAPER

The Department of Climate Change, Energy, the Environment and Water are seeking views on proposed goals, objectives and actions for the National Electric Vehicle Strategy.

This feedback will help shape a national Strategy to ensure Australians can access the most appropriate transport technologies and help meet emission reduction targets. The Strategy will aim to provide social, economic, business, health and environmental benefits and promote an orderly transition to transport electrification.

Make a submission: <https://consult.industry.gov.au/national-electric-vehicle-strategy>

AUSTRALIA VIOLATED TORRES STRAIT ISLANDERS' RIGHTS TO ENJOY CULTURE AND FAMILY LIFE, UN COMMITTEE FINDS

In a ground-breaking decision, the U.N. Human Rights Committee has found that Australia's failure to adequately protect indigenous Torres Islanders against adverse impacts of climate change violated their rights to enjoy their culture and be free from arbitrary interferences with their private life, family and home.

The Committee today issued its [decision](#) after examining a joint complaint filed by eight Australian nationals and six of their children. They are all indigenous inhabitants of Boigu, Poruma, Warraber and Masig, four small, low-lying islands in Australia's Torres Strait region. The Islanders claimed their rights had been violated as Australia failed to adapt to climate change by, inter alia, upgrading seawalls on the islands and reducing greenhouse gas emissions.

"This decision marks a significant development as the Committee has created a pathway for individuals to assert claims where national systems have failed to take appropriate measures to protect those most vulnerable to the negative impacts of climate change on the enjoyment of their human rights," Committee member Hélène Tigroudja said.

Full article: <https://www.ohchr.org/en/press-releases/2022/09/australia-violated-torres-strait-islanders-rights-enjoy-culture-and-family>

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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