



# TEFMA

## SUSTAINABILITY WORKSHOP



17 - 18 MARCH 2020 INNOVATION CAMPUS, WOLLONGONG

### FINAL PROGRAM

Updated 9 March 2020

*\*Please Note: Timings are subject to change*

<b>Day 1</b> <b>Tuesday, 17 March 2020</b>			
8.30am	Registration Open		
9.00am	Official Welcome and Acknowledgement of Country		
9.10am – 9.20am	<b>Workshop Briefing and Program Unpacked</b> TEFMA Welcome: Workshop Welcome, Briefing and Program Unpacked:		
9.20am – 10.10am	<b>Unprecedented</b>  Matthew Reeves, District Co-ordinator, Illawarra, NSW Rural Fire Service		
10.10am – 10.40am	Morning Refreshments		
10.40am – 11.40am	Session 1: A Global Perspective		
	<b>Sustainability and Resilience; Challenges and Opportunities in a tertiary context</b>  Michael Snow, RMIT University	<b>Who is driving food sustainability?</b>  Professor Niall Blair, Charles Sturt University	
11.40am – 12.00pm	Panel – Questions + Summary and Conclusions		
12.00pm – 12.40pm	<b>Beyond Sustainability</b>  Geoff Dennis, Queensland University of Technology		
12.40pm – 1.40pm	Lunch		
1.40pm – 2.40pm	Session 2: Developing a Clean Energy Strategy		
	<b>100% Renewable, 100% Do-able</b>  Daan Schiebaan, University of Newcastle	<b>Your campus in the electric, autonomous, shared and connected mobility future - developing a future transport migration strategy</b>  Dan Hilson, Everergi	<b>Delivering Net Zero / Carbon Positive</b>  Sophie Hutchinson, ADP Consulting
2.40pm – 3.00pm	Panel – Questions + Summary and Conclusions		
3.00pm – 3.30pm	Afternoon Refreshments		

<b>3.30pm – 5.00pm</b>	<b>Site Tours</b>		
	<b>Tour 1</b> Rotating tour including: - Sustainable Buildings Research Centre - Solar Decathlon - IAccelerate Innovation Hub	<b>Tour 2</b> University of Wollongong	
<b>5.00pm – 5.10pm</b>	<b>Day One Wrap-Up and Close</b>		
<b>6.00pm</b>	<b>Workshop Networking Function</b> <i>LevelOne @ Harbourfront</i> Level 1/2 Endeavour Drive, Wollongong   <i>For those attending, we invite you to bring along \$10 to partake in a game of 'heads &amp; tails' to raise much needed funds for TEFMA's chosen charity partner, BrAshA-T. To find out more about this charity, please click <a href="#">here</a>.</i>  <i>With thanks to our Networking Function Sponsor</i> 		
<b>Day 2</b> <b>Wednesday, 18 March 2020</b>			
<b>8.00am</b>	<b>Registration open</b>		
<b>8.45am</b>	<b>Day One Recap – Day Two Unpacked</b>		
<b>9.00am</b>	<b>LiFE Framework: Practical Assessment</b>  <i>This session will work through one of the 16 LiFE frameworks, allowing attendees to complete their own self-assessment and produce an action plan to take back to their institution.</i>  Lead: Kym Witney-Soanes and Ed Maher, <i>Charles Sturt University</i>		
<b>10.10am - 10.40am</b>	<b>Morning Refreshments</b>		
<b>10.40am - 11.40am</b>	<b>Session 3: Design and Construction</b>		
	<b>Sustainable innovation – La Trobe's new student accommodation building</b>  Kimberley Wilkinson, <i>La Trobe University</i>	<b>Climate Risk to Climate Ready: Building for Climate Resilience</b>  Sam Smith, <i>Deakin University</i>	<b>Fab Lab, designing smart and sustainable research facilities</b>  David Keenan, <i>CBRE</i>
<b>11.40am – 12.00pm</b>	<b>Panel – Questions + Summary and Conclusions</b>		
<b>12.00pm – 1.00pm</b>	<b>Session 4: Engagement</b>		
	<b>UOW Pulse Setting the Bar for Sustainability</b>  Jodi Evans, <i>University of Wollongong</i>	<b>Co-Designing a Sustainable Student Precinct</b>  Jeff Robinson, <i>Aurecon</i> & Alex Kennedy, <i>University of Melbourne</i>	<b>Students Doing Good: Engaging students in the sustainability journey through the Sustainable Development Goals</b>  Leah Knapp, <i>Murdoch University</i>
<b>1.00pm – 1.20pm</b>	<b>Panel – Questions + Summary and Conclusions</b>		
<b>1.20pm – 2.20pm</b>	<b>Lunch</b>		

<b>2.20pm – 3.20pm</b>	<b>Session 5: Operations</b>		
	<b>Are you throwing money away?</b>  David Wilson, <i>Australian National University</i>	<b>The SBRC: One of Australia’s Most Sustainable Buildings</b>  Craig McLauchlan, <i>University of Wollongong</i>	<b>UTS opens its plastic free foodcourt</b>  Benjamine Duncan, <i>University of Technology Sydney</i>
<b>3.20pm – 3.40pm</b>	<b>Panel – Questions + Summary and Conclusions</b>		
<b>3.40pm – 3.55pm</b>	<b>Wrap Up, Close and Thank You</b>		
<b>3.55pm</b>	<b>Afternoon Refreshments</b>		

## **SESSION ABSTRACTS**

### **Day 1: Tuesday, 17 March 2020**

#### **SESSION 1: A GLOBAL PERSPECTIVE**

##### **Michael Snow, RMIT University**

Details to be provided

##### **Professor Niall Blair, Professor of food sustainability, Charles Sturt University**

###### **Who is driving food sustainability?**

This presentation will provide an overview of the push and pull of food sustainability and how it is changing the way we live and work. This change is well and truly upon us and Australia is catching up to the rest of the world. Understanding the drivers in this area will make the transition and impact on your workplace seamless.

##### **Geoff Dennis, Executive Director - Facilities Management, Queensland University of Technology**

###### **Beyond Sustainability**

The term “sustainability” continues to be used as a special “thing”. This is no longer the case; it is now an essential element of business as usual, particularly in the higher education sector.

This presentation will illustrate QUT’s sustainability journey over the last four years and the formulation of a Sustainability Action Plan that we hope to embed into QUT as “essential normal business”.

#### **SESSION 2: DEVELOPING A CLEAN ENERGY STRATEGY**

##### **Daan Schiebaan, University of Newcastle**

###### **100% Renewable is 100% Do-able**

Guided by the United Nations’ Sustainability Development Goals, last year our University developed our new Environmental Sustainability Plan 2019–2025. Through consultation with staff, students, business partners and community, a key priority emerged. Our stakeholders asked us to take a leading role in mitigating climate change.

In 2018, we achieved a major milestone on our journey towards becoming carbon neutral, and the impact is being felt across the sector and our region. By procuring a first-of-its-kind energy supply agreement with Red Energy, we will be powered by 100% renewable electricity by January 2020, resulting in a 75% decrease in CO<sub>2</sub>e-emissions.

This sector-leading \$48 million investment has inspired others around us to take action, as we collectively strive to tackle the global issue of climate change and create a more sustainable future for all.

##### **Dan Hilson, Evenergi**

###### **Your campus in the electric, autonomous, shared and connected mobility future - developing a future transport migration strategy**

The acceleration of change in transportation towards a shared, electric, autonomous and connected future brings with it huge opportunities for decarbonization and efficiencies. It also brings risks (both real and mythological) that can derail a transition journey for an Organisation. This presentation will outline the shifts that are occurring, how they may impact Universities, the opportunities and risks presented, and how to start your transition journey.

##### **Sophie Hutchinson, Sustainability Director, ADP Consulting**

###### **Delivering Net Zero / Carbon Positive**

The Paris Agreement, signed by all parties of the UNFCCC, set a framework to avoid dangerous climate change and limit warming to well below 2°C. Many organisations are implementing roadmaps to ensure that they cut their emissions to ensure this global target is met, including meeting exceptional targets for energy efficiency and transitioning all assets away from fossil fuels. In line with the next Green Star tool release, we are working on a number of projects to deliver net zero and carbon positive outcomes, something we predict will be a key trend for 2020 and beyond.

### **DAY 2: Wednesday, 18 March**

#### **LIFE FRAMEWORK – PRACTICAL ASSESSMENT**

Charles Sturt University adopted the [Learning in Future Environments \(LiFE\) Index](#) in 2012 as their sustainability framework. This Index is used by 70 tertiary institutions internationally, and administered across Australasia by [ACTS](#). The LiFE Index is a structured process for evaluating current practices that support or impede good sustainability practices, and for developing improvement plans via cross-organisational participation.

This session will examine Charles Sturt's interpretation and implementation of the Index. This involves a taste of the participatory workshop experience implemented on a six monthly basis across the university. Charles Sturt coordinate an ongoing annual schedule of participatory workshops that identify existing areas of good sustainable practice; opportunities for improvement across all activity areas of the organisation; and ways of prioritising and resourcing improvement actions towards best practice. This process is core to continually engaging key stakeholders and to working towards an annual embedded LiFE key performance indicator in the Charles Sturt University Strategy.

### **SESSION 3: DESIGN AND CONSTRUCTION**

#### **Kimberley Wilkinson, La Trobe University**

##### Sustainable innovation – La Trobe's new student accommodation building

This presentation will be based on a new cross-laminated timber building at the Bundoora campus. The new building is the 2nd largest cross laminated timber (CLT) construction in Australia and consists of 624 student rooms, 18,000m<sup>2</sup> GLA - \$100m project.

#### **Sam Smith, Project Manager Sustainability, Design & Development, Deakin University**

##### Climate Risk to Climate Ready: Building for Climate Resilience

As one of Deakin University's "Sustainability Commitments" and pathway to their 2030 goals, climate risk and adaptation recommendations have been developed for the delivery of the 2020 goal.

This process uncovered some unexpected risks and prompted a re-calibration around how we consider our future needs, design and build our campuses and also how our organisational governance, decision making and budgeting need to be reconsidered. Some simple actions, including going back to design basics are currently being developed to answer complex problems. The Deakin RISE building will be the first project to have applied the concept of "climate readiness" and is looking like providing exceptional sustainability outcomes and %performance improvement on NCC2019.

Sam Smith, Project Manager Sustainability, Design + Development will share Deakin's journey from "Climate Risk to Climate Readiness".

#### **David Keenan, National Director Science & Research, CBRE**

##### Fab Lab, designing smart and sustainable research facilities

When it comes to sustainable laboratory design, global thinking can lead to local benefits. In David's presentation he will talk to some of the global best practice thinking behind the Kinghorn Cancer Centre project and being part of a community of knowledge sharing to improve sustainability in our industry.

### **SESSION 4: ENGAGEMENT**

#### **Jodi Evans, University of Wollongong**

##### UOW Pulse Setting the Bar for Sustainability

UniBar has been leading the way with sustainability with the installation of a Pulpmaster waste to energy system.

An audit identified that a significant percentage of the waste generated from UniBar was going to landfill and recommended that UniBar and UOW Pulse overall focused on waste separation, in particular the Front of House areas. UniBar was the perfect environment to pilot the front of house separation system that would ensure we could maximise the benefits of a pulpmaster without contamination issues.

The system macerates the food waste and compostable food packaging into a pulp inside the machine before being transferred into a holding tank. The Pulpmaster can process up to 1,000 litres of organic waste in just 20 minutes. The pulp is then converted to a biogas for renewable energy generation which then fuels the Sydney Water Sewage Plant at Cronulla.

#### **Jeff Robinson, Sustainability Leader, Aurecon & Alex Kennedy, Project Director in Major Projects, University of Melbourne**

##### Co-Designing a Sustainable Student Precinct

In this presentation Jeff will talk about Sustainability and Student engagement and the recent work which Aurecon have done with the University of Melbourne for their new student precinct which has been co-designed with the University of Melbourne's students as a World Class sustainable precinct. This is a joint presentation with the University of Melbourne in which we will talk about the student engagement process and how student ideas have influenced the design. We will also cover how the precinct has been designed to contribute to the University of Melbourne's Zero Carbon targets, the modern slavery assessment which was undertaken and the outdoor comfort assessments which were undertaken as part of designing for future resilience.

To bring some of these ideas to life we will include stories of a day in the life of a student using the new student precinct and to tell about some of the experiences she may have .

### **Leah Knapp, Murdoch University**

#### **Students Doing Good: Engaging students in the sustainability journey through the Sustainable Development Goals**

Murdoch University became the first WA University to sign the University Commitment to the Sustainable Development Goals in March 2019. In November 2019 we hosted a student-driven sustainability ideation and problem solving event, the Students Doing Good Sustainability Challenge, with the aim to get students actively involved in implementing the Sustainable Development Goals on campus.

In partnership with selected industry mentors, six sustainability- related problem statements were developed to address 'wicked' facilities sustainability issues, framed through the lens of the Sustainable Development Goals.

While the 2 winning projects have the potential to be implemented on campus, the benefits of the event extend to all participants .

I propose to share my experience with organising this event and the outcomes from it, including next steps for implementation.

## **SESSION 5: OPERATIONS**

### **David Wilson, Manager, Cleaning, Waste & Recycling, Australian National University**

#### **Are you throwing your money away?**

With over 10 years' experience in managing waste contracts I thought, there must be a better way. How do you verify you are getting the service you are paying for? How do you get accurate data for reporting purposes? The answer is "Pay as you throw" weight based charging.

### **Craig McLauchlan, University of Wollongong**

#### **SBRC Presentation**

The Sustainable Buildings Research Centre (SBRC) at the University of Wollongong is a unique research entity with the aim to undertake research in collaboration with industry to meet the challenge of improving the energy efficiency of new and existing building stock. The SBRC team is engaged in sustainable building research through delivery of advanced technologies, integrated component testing, skills training and researching the impacts of day-to-day behaviours of building occupants.

The home of the SBRC research team is the SBRC Building - one of the most sustainable buildings in Australia. It is a net-zero energy, 6 Star Green Star and Living Building Challenge accredited, multi-disciplinary facility. The building was designed and constructed using the principles of the Living Building Challenge to be a flagship of sustainability, with the aim of inspiring communities throughout Australia and the world to take action on sustainability.

The stellar performance of the SBRC is not due to a single exotic technology; rather it is from a combination of pragmatism, challenging design assumptions and making the best of currently available equipment. This presentation will present highlights from the design processes, construction and operation of the Sustainable Buildings Research Centre. It will focus presenting the processes and technology in a modular way that singly, or together, can be applied to other building projects.

### **Benjamine Duncan, Head of Sustainability, University of Technology Sydney**

#### **UTS opens its plastic free food court**

In 2019, UTS celebrated the opening of our newest campus building UTS Central. The public food court in the building was designed to phase out single use plastics in response to environmental concerns of staff and students. Staff and students are encouraged to bring their own reusable cups, containers and cutlery. All take-away food packaging is commercially compostable (a mix of cardboard, paper, bamboo and PLA) and all drink containers are recyclable glass, aluminium and paper board. This development of the plastic-free food court was part of the UTS Plastic Free by 2020 Plan designed to phase out single-use plastics on campus. The UTS Central plastic-free food court sets a new benchmark for Australia and is a manifestation of the university's commitment to on-campus sustainability. In 2020, UTS will be converting around 19 tonnes of waste into usable compost, by diverting food scraps and packaging to be commercially composted rather than added to landfill.