

Resilience and Infrastructure

2021 Northern Regional Forum

TOWNSVILLE

Monday, 26 July 2021
Queensland Country Bank Stadium



The 2021 Northern Regional Forum is an annual event combining our regional groups from Townsville, Cairns and Mackay regional areas. This event will deliver the theme of 'Resilience and Infrastructure' with guest speakers from a variety of disciplines.

The second of the regional forums for 2021, the Northern Regional Forum will cover a number of timely topics relevant to the happenings in Northern Queensland.

Engineers, as well as business executives, public servants and engineering students, are invited to attend.

The full day of hands-on learning will grant attendees up to 8 CPD hours.

Attendees will all have the opportunity to have a site visit of this environmentally inspired, architecturally designed and sustainable stadium.

Read more here <https://createdigital.org.au/pandanus-tree-inspired-queensland-stadium/>

Read about Scott Rathie innovative engineer award <https://createdigital.org.au/innovative-engineers/scott-rathie/>

At the completion of the tour attendees will gather for a networking event from 5.15pm – 7.15pm.

Enjoy a day of learning and networking amongst peers.

For further information:

eaqevents@engineersaustralia.org.au

VENUE

Queensland Country Bank Stadium
Gundulu Room 2
17/49 Saunders St
Railway Estate Townsville

DATE & TIME

26 July 2021
08:30 am to 07:15 pm

TICKETS (incl. GST)

Registration Cost Forum and Dinner:
Member Rate: \$140.00
Student Member Rate: \$110.00
Non-Member Rate: \$190.00

REGISTRATIONS CLOSE

23 July 2021

REGISTER NOW

engineersaustralia.org.au



Official Forum Opening

Mayor Jenny Hill, Mayor of Townsville

Mayor Hill will welcome guests to the event and provide an overview of the region.

Councillor Hill was born and educated in Melbourne, Victoria, and graduated from LaTrobe University with a Bachelor of Science in 1981. The following year she moved to Townsville with her fiancé who was enlisted in the Australian Army.

Cr Hill has 23 years' experience as a scientist with mining companies, the Department of Primary Industries, James Cook University and Townsville Hospital. She has also completed a Masters of Public Health and Tropical Medicine at James Cook University, which included management, economics and accounting.

In 1982 she joined the Army Reserve, first serving in the Royal Corps of Australian Electrical and Mechanical Engineers (RAEME), maintaining and recovering defence vehicles. In 1987, she graduated from the Officer Cadet Training Unit (OCTU) as a General Service Officer (GSO).

Cr Hill has over 20 years' service in local government. In 2012, she was elected the first female mayor of Townsville.



Message from the Deputy Mayor

Cr Mark Molachino, Deputy Mayor of Townsville

Mark Molachino was born and schooled in the sugar producing town of Ingham. He joined the RAAF in 2000 and has served in various locations around Australia. He settled back in Townsville upon retiring from the permanent RAAF and continues to serve as a Reservist.

Mark is a commercial helicopter pilot and graduate of the Australian Institute of Company Directors course. Currently serving as the Deputy Mayor of Townsville, Mark is working hard to move Townsville forward. Mark lives with his wife and three daughters.



Forum Welcome

Elizabeth Harrison, MIEAust CPEng

Division Committee Member Elizabeth will provide an update on Engineers Australia Queensland Division activities.

Elizabeth is a chartered engineer with 13+ year's national and international experience working in the offshore, utilities and oil & gas engineering industries. She brings together both the people and the technical aspects of large & small scale engineering projects to ensure better client & stakeholder engagement, staff engagement and collaboration for better outcomes.

Elizabeth is passionate about engaging, energising & bringing together multi-disciplinary teams of engineers & managers together to deliver great outcomes across the life of the project from design, construction, through life optimal performance and integrity.



Meet our speakers!



Mary Balfour, Communications and Consultation Manager, Balfour Consulting Pty Ltd and Jeff Hughes, The Infrastructure Group's [TIG] Structures Construction Manager

Mary Balfour has management and corporate experience, as well as acknowledged expertise in strategic communications. She was managing director of a national Australian public relations consultancy from 1988 to 1990 and managed her own strategic planning consultancy in Melbourne and Sydney from 1990 to 2001, before moving to Townsville to join her brother in Balfour Consulting.

Mary has worked for over 30 years in strategic planning and public relations in Australia and New Zealand. She has a strong management background and specialises in issues management, media relations and communications strategic planning – all necessary skills for successful community engagement. Mary has worked particularly with government, unions and business in the community engagement area.

Mary has also developed and implemented strategic communication programs for a wide range of organisations, from BHP Steel and Telstra through to specialist companies such as Moldflow, a Victorian software company.

She has successfully conducted community engagement programs for projects that include road construction, CBD mall upgrade, major building projects, traffic management, sewerage upgrades, harbour dredging and land acquisition by the government.

From 2004, the work by Mary and her clients in Townsville has been recognised in 20 State and national awards.

Presentation Topic: Consultation and Innovation - It's all about Team

The challenges of communicating and engaging with stakeholders involved in the Houghton River Floodplain Upgrade project were made significantly easier by working with a project team committed to a bottom-up focus on innovation. This approach, the ability to solve stakeholder challenges quickly and effectively, was driven by innovative solutions that built trust with stakeholders at all levels and ensured communication channels remained positively connected. Engineering innovation has also contributed to the success of the project, with examples ranging from one-off solutions through to major design and construction innovations.



John Ginger, Cyclone Testing Station, James Cook University, Research Director

John Ginger is a Professor of Engineering at James Cook University in Townsville and the Research Director of the Cyclone Testing Station. He has been involved in research, testing and consulting in Wind Engineering since 1987. John has extensive experience in wind tunnel model studies, full-scale field tests and structural vulnerability studies in Australia and overseas, and has published widely in these areas. He is a committee member of Standards Australia committee BD-006/2 – Wind Loads. He is also a Chief Investigator in projects funded by the ARC and Bushfire & Natural Hazards CRC.

Presentation: Vulnerability of Buildings to Wind-storms

The Cyclone Testing Station (CTS) established in 1977 at James Cook University in Townsville is recognised as a leader in wind engineering research. The CTS carried out a study to assess the vulnerability of houses to windstorms. The study determined the vulnerability of a range of house types across Australia, and provided retrofit options for strengthening houses. This presentation will describe the design of buildings for wind loading, VAWS software package, vulnerability of selected house types and the web based retrofit guidelines.



Marissa Wise, FIEAust, General Manager Infrastructure and Environment, Port of Townsville

Marissa is the General Manager of Infrastructure and Environment at the Port of Townsville. She has the pleasure of leading the development of sustainable ports in Townsville and Lucinda through implementing best practice strategic asset management and sustainable Port development codes. This is also a period of substantial capital investment at the Port with the Channel Upgrade project creating future trade opportunities.

Presentation: Sustainable Port

The Port of Townsville exists to create prosperity for our communities and value for our customers and shareholders through world-leading sustainable operations. To continue to serve our communities, grow trades and services of the future and ensure strategic defence and cruise capabilities, our Ports will require expansion and modernisation. Sustainability has been central to how we have done business since the very beginning and will be of paramount importance into the future.



Glenn Dahlenburg, Manager Battery Project, Energy Queensland

Glenn Dahlenburg is currently Managing Energy Queensland's Battery project which is connecting 5 grid scale batteries to Ergon Energy's distribution network across regional Queensland.

Previous to the battery project Glenn managed Energy Queensland's Group Strategy team who developed strategic scenarios to model structural changes within the energy industry, from slowing economic growth to rapid adoption of renewables. Previous experience includes managing, the Strategic Network planning team, Ergon Energy's 33 Isolated Networks and Energex and Ergon Energy's demand management programs.

Glenn is passionate about the future of energy and being part of the sustainable transformation of an entire industry.

Presentation: Energy Queensland's Local Battery Plan

Energy Queensland is a 100% Queensland Government owned group of electricity distribution, retail and services businesses. Our distribution businesses - Ergon Energy and Energex - support one of the world's largest distribution networks, from 99 depots dotted all over the state. Our network connects over 2.2million customers, 700,000 rooftop solar energy systems, 20 plus solar farms and 26 large bioenergy generators. The Local Battery Plan is one part of how we ensure electricity can be reliably supplied to our customers while supporting the continued adoption of renewable energy to meet Queensland's Renewable Energy Target.



Arran McGhie, Chief Operations Officer, Genex Power

Arran has over 20 years experience in project delivery of large underground mine development and urban infrastructure projects, in Australia and overseas including Malaysia, Indonesia, Singapore and Hong Kong. Arran acquired a Bachelor of Engineering (Mining) from the University of Queensland in 1994 and Graduate Diploma of Applied Finance and Investment from the Australian Securities Institute in 1998. Over the course of his career, Arran has worked for a number of Australia's largest construction companies including Lend Lease, John Holland, CPB Contractors and Thiess, in a variety of project delivery roles including Project Development, Project Management and Business Development.

Presentation: Kidston Pumped Storage Hydro Project

The presentation will provide an overview of Genex and the Kidston Pumped Storage Hydro Project. The Kidston Pumped Storage Hydro Project is a world-first project to be developed from utilising an abandoned open-cut gold mine and is the first hydro project to be developed in Australia in 40 years.



Kris Narayan, CPEng NER RPEQ, Project Manager, SMEC

Kris is a Project Manager with SMEC and a Chartered Professional Engineer through Engineers Australia. Kris is also a Registered Professional Engineer of Queensland and an alumnus of the Townsville Enterprise Emerging Leaders Program. He has worked on a number of large-scale multidisciplinary projects in the transportation, water and renewable energy sectors. He has also worked on a number of construction projects as a project manager with RMS before joining SMEC.

Kris has been part of a number of projects in the region including, the Hells Gates Business Case, Ross River Solar Farm, Clare Solar Farm, Haughton Pipeline Duplication and a number of projects for Transport and Main Roads.

Presentation: Hells Gates Business Case

Building resilience within the economy is dependent on building resilient infrastructures that have the ability to not only withstand but also adapt to disruptions in our everyday lives. Engineers play a fundamental role with this process at different levels of a project.

This resilience through critical infrastructures is what Hells Gates project seeks to meet both at a national level and also globally for renewable energy and agricultural production. Hells Gates project is quite uniquely a multi-disciplinary project and has over 50+ specialist engineers, scientists and technicians involved in the delivery of the critical infrastructures that make up Hells Gates.

Forum Program

Time	Topic	Speaker
8.30am	Guest Arrival and Registration	
9.00am	Opening Address & Introduction	
9.05am	Welcome Message	Elizabeth Harrison, MIEAust CPEng
9.15am	Message from the Mayor	Cr Jenny Hill - Mayor of Townsville
9.30am	Message from the Deputy Mayor	Cr Mark Molachino, Deputy Mayor
9.45am		
10.15am	Consultation and Innovation - It's all about Team	Mary Balfour, Communications and Consultation Manager, Balfour Consulting Pty Ltd and Jeff Hughes, The Infrastructure Group's [TIG] Structures Construction Manager
10.45am	Student presentations	(3 undergraduate students)
11.15am	Morning Tea & Networking	
11.45am	Energy Queensland Local Battery Plan	Glenn Dahlenburg, Manager Battery Project, Energy Queensland
12.15pm	Hells Gates Business Case	Kris Narayan, Project Manager, SMEC
12.45pm		Mario Martini Innovation Connections Facilitator
1.15pm	Lunch and Networking	
2.15pm	Kidston Pumped Storage Hydro Project	Arran McGhie, Chief Operations Officer, Genex Power
2.45pm	Vulnerability of Buildings to Wind-storms	John Ginger, Research Director, Cyclone Testing Station, James Cook University
3.15pm	Sustainable Port	Marissa Wise, FIEAust, General Manager Infrastructure and Environment, Port of Townsville
3.45pm	Afternoon Tea & Networking	
4.00pm	Townsville Stadium	Scott Rathie, Arup
4.30pm	Forum close	
4.45pm	Stadium Site Tour	
5.15pm – 7.15pm	Networking event	



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Monday, 26 July 2021. Queensland Country Bank Stadium



ENGINEERS AUSTRALIA

Dream Big.

**Tuesday 27 July
4.00pm - 6.00pm**

**James Cook
University
Townsville**

The event will include an introductory address, followed by the movie screening, an interactive Q&A discussion for the children, and hands-on activities.

- Parents/guardians are free, and kids just \$5 per child.
- Registration from 3.45pm.
- We encourage all parents to stay for this event and enjoy the activities with their children.
- If you are having issues registering, please email the team at eaqevents@engineersaustralia.org.au.
- Register [here](#)

CLICK HERE TO REGISTER YOUR CHILD / CHILDREN FOR THIS EVENT

engineersaustralia.org.au