

Growing METS Matters

Mining Equipment Technology Services Forums

REPORT ON PROCEEDINGS

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Introduction

Many products and services used today in mining were developed in NSW, and NSW Mining, Equipment, Technology and Services (METS) companies continue to play a critical role in productivity, efficiency and optimisation improvements for the sector.

METS NSW is providing a knowledge sharing platform to further bolster industry competitiveness and growth. Established under the NSW Department of Industry funded NSW Energy and Resources Knowledge Hub, METS NSW connects METS related business and research to accelerate innovation and industry development in the sector.



The resources sector has proven its resilience with increased consolidation, export market development and activity, but continued innovation is essential to ongoing improvements in productivity and efficiency.

METS NSW is supporting and strengthening the agility of the sector by offering easy opportunities for collaboration and knowledge transfer and by working with businesses and researchers to identify and respond to new markets.

METS NSW dedicated programs focus on:

- METS specific industry support
- The expansion of SMEs in new markets
- Building stronger links between METS businesses and their end users mining companies and energy resource providers
- Knowledge sharing and research
- Connecting business to tools and services to support innovation and growth

The power of METS NSW is in the collaborative model that drives advancement by sharing strengths and leveraging off existing METS expertise.

METS NSW is a partnership between the Newcastle Institute for Energy and Resources (NIER), NSW Department of Industry, along with industry bodies HunterNet, Austmine, Dantia, Austrade, AiGroup, i3Net, and the METS Ignited Industry Growth Centre.

Collaboration is recognised as a critical measure of innovation, and a key aim of METS NSW, as an initiative of the NSW Energy and Resources Knowledge Hub is to improve collaborative networks to boost innovation and industry growth for the NSW METS sector.

Growing METS Matters Forums

The transition of the energy and resources sector is demanding a change in business models, technology and methods of operation. These changes can be unsettling for business owners, with paths to profit being new and untested.

Together with its strategic partners, METS NSW led a series of forums targeted at regional METS businesses in NSW to provide them collaborative platforms where participants share knowledge, best practice activity, information on support networks and opportunities for funding support.

In March and April 2017, METS NSW hosted four collaborative knowledge-sharing forums in four METS hubs of regional NSW. These towns were Dubbo, Parkes, Muswellbrook and Wollongong.

The main aim of the forums were to provide industry with opportunities for advancement and improvement and to connect them with government programs and research projects.

Other objectives were to raising awareness of support networks, programs and opportunities; engaging with stakeholder programs; delivering some "next-steps" for business improvement; generating optimism for METS future growth opportunities.

Overarching Theme

Growing METS Matters

Objectives

The forums were designed to assist regional NSW METS organisations to:

- Identify opportunities for Growth and Collaboration
- Identify how their existing strategy could be positively impacted by new insights into the future of mining and METS
- Meet various Stakeholders/Agencies/Groups that support METS and a raised level of awareness of support available
- Have a deepened level of engagement with established collaborative platforms NSW Energy & Resources Knowledge Hub (ERKH) and METS NSW, METS Ignited, Austmine, and other supporting agencies.
- Enthuse METS organisations to participate in the METS Ignited Thought Leadership Series in 2017-18

Success Measures

- Increased revenues brought about through the commercialisation of innovation and collaboration
- Increased capability of the METS Management to develop grow strategies for their business
- Enrolment in the Growing METS Matters Thought Leadership Series in 2017-18
- Increased use of available programs of support provided by ERKH / METS NSW and the Federal Government and Stakeholders.

Facilitator



Mark Jones, General Manager - Stakeholder Engagement, METS Ignited

Mark has more than 30 years' experience in various new technologies in diverse industries including professional services, telecommunications, FMCG, consulting, and mining.

Throughout 2015, Mark was involved in the startup of METS Ignited, through his partnership at Whittle Consulting - a founding member of the company. Prior to entering the mining industry, Mark was a Partner at PwC in Amsterdam for 12 years.

He was involved in the change management practice, including facilitation strategy and implementation, throughout Europe for multinational companies headquartered in Europe. He has facilitated the global implementation of head office innovations in operating subsidiaries for Unilever, Heineken, ING, Elsevier.

He has held a number of board positions including an incorporated community association and, more recently, company secretary. Mark is currently completing his Masters in Sustainable Mineral Beneficiation at the University of Cape Town.

In facilitating these forums, Mark was able to draw on his extensive knowledge of the METS Sector and the METS Ignited Sector Competitiveness Plan to drive the theme of Growing METS Matters. Mark delivered a workshop where he:

- Explained the current METS landscape
- Gave an overview of METS Ignited
- Distributed an outline of the Sector Competitiveness Plan
- Introduced the METS Ignited Thought Leadership Series
- Encouraged participants to focus on key local METS challenges (diagnostic)



Mark Jones delivering a session to participants at the Muswellbrook Forum on Friday 31 March 2017.

Events

- Dubbo Tuesday 28 March 2017
- Parkes Wednesday 29 March 2017
- Upper Hunter (Muswellbrook) Friday 31 March 2017
- Illawarra Thursday 6th April 2017

Strategic Partners

METS NSW worked with supporting partners from the beginning of this project to ensure relevance and to leverage successful partner programs for the mutual benefit of partners and regional METS businesses.

Our partners helped shape the theme and program for each forum, and attended the forums where applicable to engage with regional businesses and share information about support programs and opportunities available.

It is a priority of METS NSW, as well as our partners, to ensure regional business have access to relevant information, knowledge and opportunities to grow.

Key organisations in the development and delivery of these forums were:



























AUSTMINE

Austmine is the peak industry body in Australia for the METS sector. It promotes the advancement and competitive positioning of Australian technology and innovation in mining and resources. Its vision is to make Australia the true global hub for METS and continue to create opportunities for members globally.

METS Ignited

METS Ignited is an industry-led, government-funded, Growth Centre for the METS sector. METS Ignited works with Australian suppliers to the mining industry, global miners, research organisations

and capital providers to improve the competitiveness and productivity of the Australian METS sector.

On 8 November 2016, METS Ignited released an industry-led plan for the Australian METS sector to strengthen the METS sector and help invigorate Australia's position as the global hub for mining innovation. The METS 10 Year Sector Competitiveness Plan is a long-term view of how the Australian METS sector needs to be competitive, skilled and forward-thinking to respond to future industry demands and to strengthen its position as an integral part of the global mining innovation ecosystem.

The plan takes a 10 year view and proposes five broad programs of work, matched with a range of targeted initiatives. The plan provides a framework for long-term development of the METS sector over three horizons. The five program areas are:

- 1. Aligned strategy
- 2. Global brand
- 3. Internationally competitive
- 4. Collaborative and innovative
- 5. Skilled for 2026

NSW DEPARTMENT OF INDUSTRY

The NSW Department of Industry supports all areas of economic activity where NSW has competitive strengths, skills formation and economic growth in our regions. The Department aims to partner with key stakeholders to develop strategies that are matched with industry needs and the sustainable use of the State's natural resources.

AUSTRALIAN DEPARTMENT OF INDUSTRY, INNOVATION AND SCIENCE

The Department of Industry, Innovation and Science enables growth and productivity for globally competitive industries. They work to four key objectives: supporting science and commercialisation, growing business investment and improving business capability, streamlining regulation and building a high performance organisation.

Globally competitive industries are important contributors to Australia's economic growth and productivity. The jobs and prosperity of today, tomorrow and the future can be secured through competitive businesses and industries, attracting investment and opening new markets for Australian resources. The Australian Government's approach continues to be to build an agile economy powered by strong, self-reliant and innovative businesses in a challenging environment in which our population is ageing, terms of trade have fallen from record highs, the global outlook is uncertain and businesses face intense global competition and disruptive technological change.

The department works closely with industry, businesses, the science community and other stakeholders, and across governments to help build a globally confident and outward looking Australian economy.

NEWCASTLE INSTITUTE FOR ENERGY AND RESOURCES (NIER)

NIER was established to augment the University of Newcastle's existing reputation of research excellence and expertise within the minerals, energy and resources fields. NIER exists as an industry engaged research precinct in the heart of the METS sector. Integrating the University's innovative energy and resources researchers with national and international research and industry leaders, NIER is well positioned to accelerate ground breaking, world standard research to achieve both practical and viable benefits to industry, the community, the economy and the environment.

Technology developments and the applied research expertise within NIER and across its institutional and industry partners play a key role in the growth of the METS sector in Australia. The NIER precinct is a showcase of METS development, housing leading METS innovators in the area of minerals processing, transport, bulk materials handling, and technologies and services for optimisation, productivity and efficiency.

FFIC

Finance for Australian Exporters - EFIC is Australia's export credit agency. EFIC operates on a commercial basis and partners with banks to provide financial solutions for:

- Small and medium enterprises (SMEs) that are exporters
- Australian companies in an export supply chain
- Australian companies looking to expand their business operations overseas to better service their clients
- Australian companies operating in emerging and frontier markets

HUNTERNET

HunterNet is widely recognised as a successful industry 'cluster'. Incorporated in 1992, HunterNet is a network of manufacturing, engineering and specialist services companies located in the Hunter and Central Coast Regions of NSW. Formed as a non-trading, not for profit co-operative, HunterNet involves over 200 companies, active in national and international markets in power generation, mineral processing, defence, transportation and major resource projects.

The network provides member companies with the opportunity to take part in activities previously out of reach for smaller enterprises including training and development, networking, joint marketing initiatives, joint project bids, focused task forces, trade missions and tendering. HunterNet is dedicated to supporting the development of the METS sector through collaboration and innovation that drives sustainable and competitive business in the global marketplace.

i3NET

The i3net is a powerful network of industry based companies working from the Illawarra. The network was established to promote the collective capability of industry to local, national and international markets. The i3net provides members with a highly valued vehicle for fostering relationships and strengthening Illawarra business capabilities.

The power behind The Network is undoubtedly the depth of capability and skills that can be provided by one powerful industry resource. The i3net builds trust between its members which ultimately fosters a collaborative approach and with collaboration comes benchmarking, the sharing of knowledge to upgrade skills and the ability to provide. World Class Industrial Solutions.

The network actively seeks out new market opportunities; not only for individual members but also for members to combine their resources. From bolts to blast furnaces, i3net can deliver, working individually or collaboratively i3net members can provide innovative industrial solutions for all opportunities.

AUSINDUSTRY

AusIndustry is a division of the Department of Industry, Innovation and Science, and is helping Australian businesses by simplifying and streamlining access to information and advice.

REGIONAL DEVELOPMENT AUSTRALIA

Regional Development Australia (RDA) is a national network of 55 committees made up of local leaders who work with all levels of government, business and community groups to support the development of their regions.

INDUSTRY CAPABILITY NETWORK

Industry Capability Network (ICN) is a business network that helps Australian and New Zealand companies grow. They do this through a powerful online database and our network of consultants, giving companies access to:

- projects large and small
- partnership opportunities and supply chain development
- channels to promote company capabilities to our business network.

ADVANTAGE WOLLONGONG

Advantage Wollongong is a partnership between the NSW Department of Premier and Cabinet, Wollongong City Council and the University of Wollongong. Serious about attracting new business to the city, the Advantage Wollongong partners work together to assist businesses and investors interested in Wollongong.

AI GROUP

The Australian Industry Group (Ai Group) is Australia's peak industry association. Acting on behalf of business for more than 140 years, AI Group represents the interests of more than 60,000 businesses employing more than 1 million staff. They support diverse industry sectors including manufacturing, construction, transport, labour hire, mining services, defence, airlines and ICT, meaning they are genuinely representative of Australian industry.

Ai Group also offers members a voice at all levels of government through their policy leadership and influence. Their deep experience of industrial relations and workplace law positions Ai Group as the leading advocate on behalf of enterprises large and small across Australia.

Al Group intrinsically appreciates the challenges facing industry and remain at the cutting edge of policy debate and legislative change - and strategic business management.

Industry Forums

METS NSW took the Growing METS Matters Forum to Dubbo, Parkes, Muswellbrook (for the Upper Hunter) and Wollongong (for the Illawarra) during March and April. These locations were chosen following previous engagement with METS NSW or partners, and the knowledge that these towns were METS hubs and central to METS businesses in the region.

In the lead up to these events, METS NSW sought input from its strategic partners to develop a program of content that would be relevant and valuable, justifying time away from work for participants. METS NSW also worked closely with local councils and business chambers to attract relevant local businesses and to identify specific local challenges that could be incorporated into the program content.



Showcase Speaker Bede Boyle speaks to the participants at the Muswellbrook Growing METS Matters Forum on Friday 31 March 2017.

The program followed a similar schedule for each town, with slight adjustments to meet local needs. (Note: Programs for each regional centre are provided in the appendix.)

PROGRAM

The program ran for approximately four hours, and included presentations, interactive sessions and facilitated workshops. The completion of a Business Diagnostic, prepared by Austmine, was an important part of the Forum, allowing participants to review and understand the strengths and weaknesses of their businesses. A sample of this diagnostic is provided in the appendix.

The schedule generally followed the following format:

Arrive & welcome

• Welcome & Introduction from the NSW Energy and Resources Knowledge Hub

Introduction

- METS NSW
- Overview of METS Map

- Introduce Key Agencies
- Introduce and hand over to facilitator Mark Jones from METS Ignited.

Mark Jones - Facilitated discussion

- Set the scene
- Overview of METS Ignited
- Sector Competitiveness Plan
- Introduce METS Ignited Thought Leadership Series
- Focus on key local METS challenges (diagnostic)
- Introduce Showcase Speaker

Speaker

- Showcase Speaker
- Q&A

Mark Jones - Facilitated discussion

- Focus on key regional mining challenges METS firms can address as part of their growth strategy
- Where to next?

Marketplace (Capability development & Support available to METS)

- Introduce the marketplace
- Participants get 15 mins at each table (Max 4 per session)
- Each table has a market place rep will explain:
 - o Introduce/overview of their organisation
 - o Problems METS firms come to them to address
 - What they can do to support METS & value added
 - What next steps to take

Mark Jones Short Wrap up, Thankyou from Knowledge Hub and Close



"We've got to look at things a lot differently today than we have in the past." Brad Neilson, President, Hard Rock Mining at Joy Global speaks to the participants at the Illawarra forum on Thursday 6 April 2017.

FACILITATED DISCUSSION

At each event, facilitator Mark Jones guided participants though a discussion to explore local challenges and barriers to innovation and collaboration, and where opportunities and solutions can be found in a changing landscape.

Discussions were linked to key messages and themes raised by the showcase speaker, therefore giving the conversation some context and direction. Mark worked to reenergise SME's with information to help them sell, identify opportunities for development and create growth.

Some discussion topics included:

Opportunities to add value to OEMs

- Structures round operating frameworks
- Platforms for commercialisation
- Changing mindsets ~ education on new tools and markets
- Holding IP within Australia
- Using licensing agreements to build value for both parties
- Face to face contact and trust
- Understanding the risk framework to assist in building value
- Collaborating to leverage solutions

Opportunities for collaboration

- Collaborating for sales add value for the end user
- Defence, rail and construction
- Sharing non-IP information
- Leverage contacts
- Better understanding of the sector
- Trusted advisors / collaborate to improve business case
- Work with researchers to convert academic knowledge to practical outcomes
- Closer relationships between supplier and the end user
- Moving away from reaction and product supplier towards partner and advisor
- Knowledge sharing ~ EG, automotive industry has devices to monitor fatigue why not adapt to mining.
- Company exposure
- New contacts
- Bride the communication gap
- Online forum to bring together METS
- Regional businesses want to collaborate but don't have opportunities or don't come to
 events where they can interact with researchers.

Challenges in identifying and communicating buyers needs

- Can't pre-package a solution
- Need a conduit to communicate problems needing a solution
- Need to coordinate all players
- Cultural handbrake
- Bringing the right combination of skills
- Need a framework / toolkit to enable collaboration

METS businesses need to get better at messaging and marketing. They gather data then they
need to get the message out to the community to dispel myths and share truths.

"We're good at what we do, but not so good at planning."

"This is a nudge to be more proactive than reactive using these programs."

"If everyone is being reactive all the time, it's too hard."

"The question is what do we want to create? And what do we need for that?"

"Collaboration is the single biggest thing we can use to grow the industry."

"How do we leverage what we've done before to lower the risk profile and get to market quicker?"

"Why does the engineering and manufacturing happen elsewhere?"

"We're good at doing the work but not chasing it."



Attendees listen to Mark Jones present at the Wollongong Forum, Thursday 6 April 2017.

OUTCOMES AND RECOMMENDATIONS

- All action items will be tabled at the METS NSW Steering Committee Meeting. Those
 accepted will be written into the METS NSW priority actions plan.
- Engagement was positive overall and attendees were very receptive to the concept.
- In some cases low numbers of attendees meant the effort and resources that went into the coordination and delivery of the Forum did not give a return on investment.
- There is the opportunity to develop an online forum that connects METS organisations
 across the state. An active digital forum would provide participants the ongoing and
 accessible opportunity to collaborate, solve problems and workshop idea together. This
 could be incorporated into the ERKH Portal and phase two of the METS NSW Map.

Dubbo

- Time will be better spent building a knowledge base and making core connections in Dubbo than planning a follow up event
- Need to improve base level participants in METS NSW thought the use of the METS NSW Map
- Engage Dubbo METS through social media / video showcase

Parkes

- The Forum was very well received in Parkes and participants seemed to enjoy the connection and collaboration
- A follow up event targeting SME's would be beneficial in Parkes sharing information on Austmine's Entrepreneurs Programme, METS Ignited Project Funds and inviting other agencies that can assist business.
- Recommend an event (possibly around a block caving theme in partnership with Austmine?)
- Use this Forum to pilot/test a "Growing METS Matters Forum" further to the west (Cobar and Broken Hill).

Muswellbrook / Upper Hunter

- The Upper Hunter region has a mature METS baseline so any events held here need to have a strong point of difference.
- There is the potential to further explore opportunities within the Muswellbrook Innovation
 Hub, diversification of energy technology and agribusiness in the local region and how METS
 can feed into that.
- Follow up the Austmine / Bengala link Supply Chain
- Collaborate and promote other industry events occurring.
- Promote METS Ignited Thought Leadership Series

Wollongong / Illawarra

- The collaborative strength of i3net combined with Advantage SME is a powerful tool to boost SME access to programs, activities and project funds.
- I3net have joined the METS NSW steering committee.
- Great opportunity for METS NSW to support and promote the upcoming 13net showcase.
- Potential opportunity to run a follow up workshop with Joy Global on supply chain access or accessing and leveraging OEMs. (Austmine / i3Net)
- Good base for the rollout of METS Ignited Thought Leadership Series

Success Measures

From the METS Tour Project Application, success measurements for this project are outlined below, alongside an assessment of achievement.

Success measure	Assessment
Increase in Hub subscribers to 500 (currently 348)	Hub Subscribers have increased to 393.
Participation of METS in the NSW METS map (METS map is populated with METS organisations)	The METS NSW Map has 63 entries.
Local feedback is positive and there is opportunity for further engagement (session feedback form)	On average, participants rated the "usefulness" of the Forums as 8.7 out of ten. See outcomes and recommendations (p16) for information on further engagement. See feedback (p22) for further comments from participants.
Growth of collaborative projects in the METS and Energy Sectors (Hub participants collaborating)	Following these forums, Kate Fagan, Hub Coordinator received 4 requests from participants to be connected to other participants to continue collaborative discussions. At least three participants also attended the Energy NSW Industry Forum hosted by the NSW Energy and Resources Knowledge Hub in June 2017. Many requested access to content presented on during the forums. Videos will be released to share this information.

17

Participants have a greater understanding of METS services, programs and opportunities (engagement with the Hub / METS NSW)	Agree that this was very much the case for those who participated in the forums. Comments from attendees suggested they had not known the extent of the METS programs available and were enthused by the support available.	
We have increased understanding of local issues, cluster strengths and gaps.	See Outcomes and recommendations (p16)	

Promotion & Media

Promotion

An invitation (attached in appendix) was sent via email to current participants of the NSW Energy and Resources Knowledge Hub. Stakeholders such as Austmine, Hunternet and i3net also sent the invitation to their members. Local councils and Business chambers were also contacted to reach out locally to businesses that would benefit from attending.

Hub Coordinator, Kate Fagan, also attended sessions run by Hunternet, Singleton Business Chamber 1804 in Newcastle to promote the event with a mini-presentation and networking.



Hi Kate.

METS NSW, along with its strategic partners including Austmine, invite you to attend the upcoming <u>Growing METS Matters</u> - Mining Equipment, Technology and Services Forums.

These collaborative events will provide an opportunity to gain industry insight, explore and propose ideas to solve local challenges, establish support networks and build innovation capacity. They will examine the key issues affecting regional NSW METS sectors, featuring local experts who will introduce topics, analyse thought-provoking case studies and provide a scope for discussion from attendees.

The regional forums are free to attend and places are limited. Please use the links below to register.

Register to Attend the Dubbo Forum - Tuesday 28 March

Register to Attend the Parkes Forum - Wednesday 29 March

Register to Attend the Upper Hunter Forum - Friday 31 March

Register to Attend the Illawarra Forum - Thursday 6 April

The invitation sent by Austmine to its member database, supporting the Growing METS Matters Forums.

Media

A news story about the Illawarra Forum was filmed at the event and aired on WIN (9) News Illawarra on the evening of Tuesday 6 April. Showcase speaker Brad Nielson and Facilitator Mark Jones were both interviewed as part of this news package.

Tweets

METS NSW was tagged in 24 tweets from various stakeholders, which received numerous re-tweets and likes.



Collaboration is the single biggest tool we can use to grow the METS sector.

@METSIgnited @Austmine @hub_energy @i3Net_Illawarra



Retweets 2 Like 1



4:01 PM - 5 Apr 2017

Q

17 2

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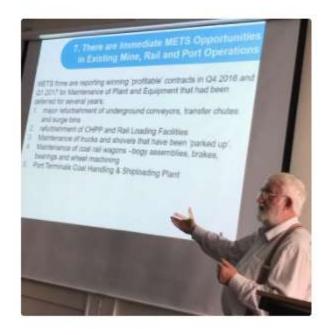
ili



For METS firms in the maintenance space in the Hunter there's opportunity

@METSIgnited

@METSNSW



12:20pm - 31 Mar 2017 · Twitter for iPhone





Feedback

We asked forum participants to complete a feedback form before the session ended. A summary of the feedback received is as follows.

Dubbo

Overall, how useful did you find this forum? 8.6 /10

What are the key points you will take away from this forum?

"Networking & opportunities for business growth and development."

"Consider research opportunities to be market leader in 10 years."

"A good insight into where our company can improve."

"Better awareness of training and activities available to companies."

"Some local businesses are keen to collaborate."

"Exchange of information."

"The fact that you are talking to and listening to industry should prove invaluable."

"Collaboration is the key to growth moving into a new world."

What would you like to see done differently for future events?

"More workshops to help develop SME capability"

"More one on one time with agencies and experts."

"I would have liked the facilitator to use more case studies or examples to trigger more ideas."

"Specific examples of innovation and how METS has helped a project move forward."

"Government / industry groups listed on a visual aid."

Parkes

Overall, how useful did you find this forum? 8.6 / 10

What are the key points you will take away from this forum?

"Assistance with furthering our technology."

"Insights on problems faced by the people and companies attending this session."

"I got a lot of great contacts and ideas."

"METS Map is a great idea."

"Great for regional businesses."

"To be inclusive. The benefit of engaging others to share, inform, bounce ideas and needs of the industry and break away from the practise of floundering in isolation."

"Getting companies, agencies and universities together is extremely valuable in short cutting and expediting innovative thought."

"Opportunity to collaborate directly with representatives of mines to understand specific problems."

"Finding networks to help fix problems"

What would you like to see done differently for future events?

"Show case studies from regional NSW."

"Longer panels to sufficiently explore the potential for future collaborations."

"More than just one forum is needed to get traction."

"Allow participants to introduce themselves, share the participant list and contact details."

"A number of suppliers were missing – more invites were needed!"



Participants discuss challenges and solution at the Muswellbrook event Friday 31 March 2017

Muswellbrook / Upper Hunter

Overall, how useful did you find this forum? 8.7 / 10

What are the key points you will take away from this forum?

"Collaboration to solve customer problems."

"Serve your customer through partnerships and knowing their business."

"Support services available. Opportunities for the future and weaknesses in the industry to overcome"

"Help navigating the METS sector."

"I am not alone with the questions I have about my business. Knowing that enables me to utilise the organisations to presented as they have experience in the topics."

"I don't need to improve and develop our business on my own."

What would you like to see done differently for future events?

"More transparency on organisational capabilities"

"Less sell or promotion by some speakers."

"Hold one in Newcastle."

"Content was broad and strategic. Perhaps breakdown to how SME's can achieve growth and harness opportunity."

Wollongong / Illawarra

Overall, how useful did you find this forum? 8.8 / 10

What are the key points you will take away from this forum?

"Collaboration with local SMEs to offer greater value to OEMs and Mines."

"The overlapping nature of METS with manufacturing."

"There are common fundamental problems experienced by many industries and organisations to get a foot in the door."

"Collaboration within the METS sector is critical, particularly for SMEs."

"The wide spectrum of services that small companies can offer as well as the need to encourage commercialisation."

"Better understanding of how to engage as a small consulting firm with the mining sector."

"Need to collaborate and join with other companies to present an overall solution to a miner / OEM."

"New smaller companies can be relevant for the OEM's when they are reducing their suppliers."

What would you like to see done differently for future events?

"Breakout session could have been longer. Use post it notes for short idea capture."

"SME's need more access centrally to the help available."

"Longer with business advisors."

"More interactive sessions and clear funding opportunities."

"Organise collaborative sessions with SMEs and see what develops. We have the capability in the Illawarra, we just need to get together. But how do SMEs fund this?"



METS NSVV, along with its strategic partners Austmine, METS Ignited, Austrade, Hunternet and i3net invite METS organisations to connect at one of a number of regional events this March and April. Join one of these collaborative forums to gain industry insight, overcome local challenges, establish support networks and build innovation capacity. Join us to:

- · Participate in the METS Ignited Thought Leadership Series
- Identify opportunities for Growth and Collaboration
- Identify how your strategy could be positively impacted by new insights into the future of mining and METS
- Meet various Stakeholders/Agencies/Groups to gain increased awareness of METS support available
- Deepen your level of engagement with established collaborative platforms.

Places are limited! Follow the links below to register your attendance.

<u>Dubbo - Tuesday 28 March</u>
<u>Parkes - Wednesday 29 March</u>
<u>Upper Hunter - Friday 31 March</u>
<u>Illawarra Thursday 6 April</u>

This program is an initiative of the NSW Energy and Resources Knowledge Hub and is supported by the NSW Government. The Hub and METS NSW aims to boost productivity through collaboration and knowledge transfer, and by building stronger links between research, industry and government.

www.energyinnovation.net.au

Enquiries to: kate@energyinnovation.net.au/(02) 4985 4499



PARTICIPANTS / RSVP LISTS

Dubbo

23 registered participants

			NSW Energy and Resources Knowledge
Kate	Fagan	Hub Coordinator	Hub
Clare	Sykes	Senior Project Officer - METS	NSW Department of Industry
Grayson	Wolfgang	Regional Manager	AusIndustry
Megan	Dixon	Executive Officer	RDA Orana
Jim	Montague	Manager	Mining Camps Australia
Hanson	Chen	General Manager	Roobuck Pty Ltd
Stephen	Jia	Supply and Distribution Manager	Roobuck Pty Ltd
Dean	Christensen	NOV mining	NOV
Juliet	Duffy	Director	Regional Enviroscience Pty Ltd
Vinesa	Walker	Director	A1 Earthworx Mining and Civil
Chris	Pilley	General Manager	A1 Earthworx Mining and Civil
David	Baker	Director Engineering Solutions	Trang Imagination
Richard	Twentyman	Business Development Manager	ARA Electrical
lan	Hudson	Regional Manager	Industry Capability Network (ICN)
Michael	Reznikov	Associate Director, SME	EFIC
Chris	Dennisc	Business Development Manger	ORD
Jacki	Parish	Economic Development	Dubbo Regional Council
		General Manager - Stakeholder	
Mark	Jones	Engagement	METS Ignited
		Business Facilitator –	
Anthony		Entrepreneurs Programme	Austmine
Donald	McCallum	Development Manager	NSW Smart Sensing Network
Wade	Lewis	Transport And Logistics	Fletcher International
Shaun	Mace	Director	Maceco Engineering

Parkes

40 registered participants

Kate	Fagan		
Clare	Sykes	Senior Project Officer - METS	NSW Department of Industry Industry Capability Network
lan	Hudson	Regional Manager	(NSW) Ltd
Hanson	Chen	General Manager	Roobuck Pty Ltd
Stephen	Jia	supply and distribution manager	Roobuck Pty Ltd
Greg	Buckley	Area Manager	Weir Minerals
Michael	Wilkinson	Mill Lining Expert	Weir Minerals
Kris	Kent	RM	Spinifex Recruiting
Ray	GRIFFITH	WHS Manager	Telescope Tyres & Batteries
Dean	Christensen	NOV mining	NOV
Dane	Horwood	Director	R N Baker Switchboards
Thomas	Rivett	Process Engineer	Weir

james	Haddin	Manager	Bosmac
Rob	Ehsman	Partner	Signs You See
Jason	Robinson	Employee	Signs You See
Richard			
Twentyman	Twentyman	Business Development Manager	ARA Electrical
Geoff	Bennett	Project Manager	ARA Electrical
alan	sharpe	Regional Manager WNSW	Atlas Cocpo
alan	sharpe	Regional Manager WNSW	Atlas Cocpo
Peter	Magill	Manager	Griffins Leading Edge
Khristie	Murray	Sourcing Analyst	CMOC
Ivan	Caceres	Engineer	Jindex Pty Ltd
Kelly	Hendry	Destination Development Manager	Parkes Shire Council
		Economic & Business Development	
Anna	Wyllie	Manager	Parkes Shire Council
David	Baker	Director Engineering Solutions	Trang Imagination
			Department of Industry,
Sabrena	King	Assistant Manager	Innovation and Science
Bec	McPhee	Policy Officer	Department of Industry, Innovation and Science
Colin	Woodforth	•	
Pauline	Woodforth	Manager/Director	Midwest Fabrication & Welding
Richard		Manager/Director	Midwest Fabrication & Welding ARA Electrical
	Twentyman Nelson	Business Development Manager	
Peter		Operations Manager	Oz Health Safety & Training
Annette	Nelson	Administration Manager	Oz Health Safety & Training
Hamish	Shannon	Production Manager	Cudal Lime Products
Simon	Shannon	Production Manager	Cudal Lime Products
Philip	Branwhite	Technical Representative Business Facilitator – Entrepreneurs	Pentair Valves & Controls
Anthony	Holzwart	Programme	Austmine
, .	Tomonori		
Tomonori Hu,	Hu,	Research Associate	NSW Smart Sensing Network
Ardian	Abazi	Business Developement Manager	Eaton Industries Pty Ltd
Mathew	Clarke	General Manager	Westech Industrial Controls
		<u>-</u>	

Muswellbrook / Upper Hunter

61 Registered participants

			Newcastle Institute for Energy and
Justine	Ulph	Research Development Office	Resources
Clare	Sykes	Senior Project Officer - METS	NSW Department of Industry
ROHITH	KRISHNA	Business Development Manager	NETZSCH PUMPS & SYSTEMS
Stephen	Bowhill	Executive Director	JA Martin
	Kunchu		
Viaml	Madathil	Sales Engineer	Pacific Controls Pty Ltd
Leon	Fabrikanov	Business Development Manger	Engenium
Mark	Gream	Global Products Manager	Hedweld
IAN	TRESIDDER	MANAGING DIRECTOR	RELIANCEHEXHAM
Jane	Graham	Acting Industry Program Manager	Newcastle Innovation

			NSW Energy and Resources
Kate	Fagan	Hub Coordinator	Knowledge Hub
Sonya	Castle	Relationship Manager	Damstra Technology
Chris	Cork	Director	Forsythes Recruitment
•			MCLANAHAN CORPORATION PTY
Neil	Hunt	MD Asia Pacific	LIMITED
			MCLANAHAN CORPORATION PTY
Chris	Knowles	Director Sales & Marketing	LIMITED
			MCLANAHAN CORPORATION PTY
Brad	Anstess	Sales Speclialist	LIMITED
MIKE	KELLY	MANAGING DIRECTOR	Wear Parts Services
Phillip	Farquharson	Manager	Hunter plant mechanics
Mark	Duncan	Sales Engineer	Schenck Process
Simon	Orton	General manager	NERA - national energy resources
Martin	Rush	Mayor	Muswellbrook Shire Council
Renae	Gifford	Project Director	HunterNet
Wayne	Diemar	Project Director	HunterNet
Bill	Sidwell	Branch Manager	Custom Fluidpower
Ric	Gros	CEO	METS Ignited Australia Ltd
Howard	James	Director	Howard James Career & Recruitment
Alan	Reid	General Manager	Hofmann Engineering
			Industrial Monitoring & Control Pty
Tim	Snell	Director	Ltd Northern Instrument and Calibration
Kamran Syed	Syed	Director	Services
Jycu	Van der	Director	Services
Nicolas	Voort	Business Development Manager	NSW Office Regional Development
		Regional Sales Manager - Northern	
Sonya	Matthews	NSW	Rexel Industrial Automation
Tony	Gaughan	Account Manager	Rexel Industrial Automation
	_		Department of Industry, Innovation
Murray	Fearn	Manager	and Science
Bec	McPhee	Policy Officer	Department of Industry, Innovation and Science
MIKE	KELLY	MANAGING DIRECTOR	WEAR PARTS SERVICES
John	O'Malley	Business Development	UGL Limited
Leandro	Valenzuela	Laboratory Manager	Techenomics
Marianne	Cummings	Business Advisor	Austmine
iviariariic	Cummings	Business Auvisor	Northern Instrument & Calibration
Jessica	Green	Operations Manager	Services
Michael	Reznikov	Associate Director, SME	EFIC
Steven	Gooch	BDM	Light Mounting Systems Australia
Wayne	Diemar	Project Director	HunterNet
Renae	Gifford	Project Director	HunterNet
Bill	Clifton	Group Managing Director	Banlaw P/L
Paul	Svetec	BDM South Eastern Australia	Banlaw P/L
Willy	Cole	Salesman	Nupress Tools
Bede	Boyle	Chairman	Manufacturship
	-		-

Michael	McLean	СРО	Manufacturship
		General Manager - Stakeholder	
Mark	Jones	Engagement	METS Ignited
Natalie	Gillam	Assistant Regional Manager	AusIndustry
Larry	Platt	Executive Chairman	Advitech Group
Scott	Fairbairn	Business Development Mngr	National Pump & Energy
Paul	Zuljan	mining and industrial sales	Bambach
Shaun	Deverson	Managing Director	DC Rowe
Wayne	Kruger	BDM	Hunter Cargo & Customs
Jelinda	Millgate	Business Advisor	The Business Centre
Bradley	Galea	Sales / Engineering Assistant	Archer Enterprises
Bradley	Byrne	Managing Director	Archer Enterprises
Shaelie			
Carroll	Carroll	Business Engagement Advisor	C-Res
Jeremy	Pola	Managing Director Regional Account Manager for	Novecom Pty Ltd
Mark	Kisza	NSW and ACT	Coolon LED Lighting

Wollongong / Illawarra

109 Registered participants

Sushant	Kadam		
Clare	Sykes	Senior Project Officer - METS	NSW Department of Industry
Shivakumar	Karekal	Associate Professor	University of Wollongong
ROHITH	KRISHNA	Business Development Manager	NETZSCH PUMPS & SYSTEMS
Bruce	Thomson	Business Development Manager	University of Wollongong
Senevi	Kiridena	Senior Lecturer	University of Wollongong
Ting	Ren	A/Professor in Mining	UOW
Jef	Pennings	Technical Analyst	University of Wollongong
Alex	Taylor	Project Officer (Knowledge Hubs)	Department of Industry
			NSW Energy and Resources
Kate	Fagan	Hub Coordinator	Knowledge Hub
- 1			NSW Office of Regional
Rob	Little	Business Development Manager	Development
John	Koenig	General Manager	C&C Industries Pty Ltd
Erich	Beerenwinkel	Sales - Engineering	Leussink Engineering
Martin	Kimber	Mining consultant	Kimbex
michael	minns	CEO	MMHR
ROBERT	LEE	CEO	GEOINTERACTIVE PTY LTD
Jim	Allan	Chief Operating Officer	SOTO Consulting Engineers
Peter	Webster	Executive Director	ICNNSW
Zahra	Shahbazian	Advantage SME Manager	ICR/ UOW
Tony	Green	Executive Officer	i3net
Leon	Drury	Executive Officer	MSA NSW ITAB
Robert	Donsante	General Manager	Klondu
Chez	cignarella	Managing Director	Klondu
Richard	Talbot	Business Development Manager	BlueScope Steel

Mitch	Heffernan	Managing Director	Arex Precision
Alexander	Flegg	Manager	Arex Precision
Terry	Askew	Managing Director	M&S Engineering
John	Soden	BDM - NSW & QLD	Fusion Broadband Pty Ltd
Anthony	Cuoco	COO	Micromax Pty Ltd
-		Director	Optrix Pty Ltd
Gary	Harding Buchanan		CFO Centre
Peter		Regional Director	
Colin	Seaborn	Director	SOS Initiatives
Randall	Stone	Sales Development Co-ordinator	Pipe and Engineering Supply Co Fibre Optics Design & Construct
Michael	McKeogh	Director	Pty Ltd
Ross	Bain	Policy Manager	Illawarra Business Chamber
		. cc,a.age.	Senator the Hon. Concetta
Wade	McInerney	Advisor	Fierravanti-Wells
	•		Senator the Hon. Concetta
Gab	Habib	Electorate officer	Fierravanti-Wells
Robert	Terpening	Industry Advocate	Advantage Wollongong
Rory	McAlester	Export Adviser	Tradestart
Neil	Balbirnie	executive manager- new ventures	Taylor Rail Australia
Peter	Buttenshaw	Head Teacher Engineering Trades	TAFE NSW Illawarra
Michael	Moran	Head Treacher Engineering	TAFE NSW
sharon	sutherland	Director	PIRTEK ILLAWARRA
Glenn	Sutherland	Director	PIRTEK ILLAWARRA
			NSW Office of Regional
Rob	Little	Business Development Manager	Development
Rodney	Howard	Operations Manager	Bis Industries
Adrian	van de Ven	Managing Director	Cammthane Pty Ltd
Stephen	Lucas	Sales / Technical Representative	Cammthane Pty Ltd
Anthony	Willoughby	Employment Liaison Officer	Department of Employment
Matt	Rozyn	Associate Director	Alpin Group
Philip	Walls	Director	Hitech Materials
Peter	Masterson	Regional Manager	AusIndustry
Michael	Pitt	Faculty Director	TAFE NSW
Craig	Poulsen	Assistant Faculty Director	TAFE NSW
Vange	Mourmourakis	CEO	CompuEase Consulting Services
Brett	Ingle-Olson	Asset Finance Specialist	Commonwealth Bank of Australia
			Department of Industry,
Rebecca	Mackenzie	Senior Policy Officer	Innovation and Science
Ben	Hobby	CEO	Itree
Marianne	Cummings	Business Advisor	Austmine
Brad	Neilson	President, Hard Rock Mining	Joy Global
Theresa	Day	Business Development	Kwik Kopy
Lyndal	Kennedy	CFO	Conpuease Consulting Services
Charith	Amarasinghe	Associate Director, SME	EFIC
David	Bridge	Director	Bridge Project Solutions Pty Ltd
Angelo	Versace	Business Development Manager	ARA Electrical
Ken	Brown	Senior Estimator	ARA Electrical

		General Manager - Stakeholder	
Mark	Jones	Engagement	METS Ignited
simon	orton	GM	NERA
Brent	Percy	Chief Electrical Engineer	Roobuck Pty Ltd
alex	lester	GM	Nautitech
Ross	Carter	Specialist	Tailored Solutions
Roger	Summerill	BDM	High Risk Safety
Yvonne	Walker	Director	HR with ease
Steve	Styles	Program Manager	Joy Global
Tim	Webster	Manager - Engineering	Joy Global
Daniel	Henricson	Operations Manager	Enterprise Improvement Solutions Manufacturing Industry Liaison
Neil	MacFarlane	Project Coordinator	Unit - TAFE NSW
Simon	Bruce	CEO	Stabilco nsw Pty Ltd
Kim	Bruce	Business Manager	Stabilco nsw Pty Ltd
Paul	Chen	Sales Consultant	Aggreko Rental Solution
Christian	Samways	NSW Sales Manager	Aggreko Rental Solution
Adam	Poole	CEO	Safety Compass
Roger	Bowman	Organisation Capability Manager	Project Portfolio Management
Sheldon	Varcoe	Membership Services Officer	Austmine
John	Hinchliffe	Sales	SEW
Michael	McLean	Managing Director	MMC Pty Ltd
John	Zagame	Managing Director	R.Stahl Australia Pty Ltd
Simon	Cubbo	Relationship Executive	CBA
Jonathan	Pelham	Associate & Branch Manager	360HR - Wollongong
Brendon	Cohen	Managing Director	Chromax Hard Chrome Pty Ltd
Kevin	Morgan	CTO Electrical	Dynamic Efficiency
Peter	Mastalir	CEO	Dynamic Efficiency
Mark	Wroblewski	Managing Director	Taylor Rail
Daniel	Jordison	Team Manager	Injury Treatment
Alison	DeBoer	Team Manager	Injury Treatment
Ross			
Kennedy	Ross Kennedy	CTPM	СТРМ
Fran Arthur	Fran Arthur	Wilbartec Consulting Engineers	Wilbartec Consulting Engineers
Lothar	Wilkens	Wilbartec Consulting Engineers	Wilbartec Consulting Engineers
Wulf	Wilkens	Wilbartec Consulting Engineers	Wilbartec Consulting Engineers
Ric	Boyd	Senior Engineer Senior Engineer, Control and	Joy Blobal
Christian	Baloch	Automation	Joy Global
Andrew	Clayton	Engineer – Control and Automation Engineering – Control and	Joy Global
Muri	Uckan	Automation	Joy Global
Simon	Fransen	Mechanical Engineer	Joy Global
Callum	Tyler	Student Engineer	Joy Global
Mike	Leask	Director INDUSTRIAL GEAR PRODUCTS	SV Strategic Solutions
John	Elchaar	MANAGER NSW	SEW

Ryan Cousins Director Futran Australia





GROWING METS MATTERS

MINING EQUIPMENT, TECHNOLOGY & SERVICES (METS) FORUM

DUBBO AGENDA

7:30am-8:00am Arrive

Welcome from The NSW Energy and Resources Knowledge Hub

Welcome from Dubbo Regional Council

Breakfast is served

8:00am-9:00am Introduction

NSW Energy and Resources Knowledge Hub

METS NSW

Overview of METS Map Introduce Key Agencies Mark Jones - Facilitated discussion

Set the scene

Overview of METS Ignited Sector Competitiveness Plan

Introduce METS Ignited Thought Leadership Series Focus on key local METS challenges (diagnostic)

9:00am-9:30am Showcase Speaker ~ NSW Smart Sensing Network (NSSN)

9:30am-9:45am Break

9:45am-10:45am Facilitated discussion

What are the key regional challenges that METS firms can address as part of their

growth strategy? Where to next?

11:00 am -12:00 pm

Marketplace - Support available to METS for industry development and growth

12:00pm Thank you and close

We'd like to thank the following partners for their participation in today's Forum;

THE UNIVERSITY OF NEW CASTLE INTER

NEW CASTLE INTER

MAKING IT HAPPEN

AMERICAN



Event Facilitator:

Mark Jones, General Manager - Stakeholder Engagement, METS Ignited

Mark has more than 30 years' experience in various new technologies in diverse industries including professional services, telecommunications, FMCG, consulting, and mining.

Throughout 2015, Mark was involved in the startup of METS Ignited, through his partnership at Whittle Consulting - a founding member of the company. Prior to entering the mining industry,

Mark was a Partner at PwC in Amsterdam for 12 years. He was involved in the change management practice, including facilitation strategy and implementation, throughout Europe for multinational companies headquartered in Europe. He has facilitated the global implementation of head office innovations in operating subsidiaries for Unilever, Heineken, ING, Elsevier.

He has held a number of board positions including an incorporated community association and, more recently, company secretary. Mark is currently completing his Masters in Sustainable Mineral Beneficiation at the University of Cape Town.



Showcase Speaker:

Dr Donald McCallum, B.Eng (Hons) ANU 1996, Ph. D. (Engineering) ARU 2006 NSW Smart Sensing Network Development Manager

Don brings experience in industrial high tech applications, having developed wear and corrosion resistant ceramics and super hard metals for mining applications. His research work into 3D printing commenced in 1999. He worked on advanced inkjet processes at the leading edge of printing technology, printings cells and the cell matrix and producing 3D tactile maps and Braille.

Don has supported technology for medical humanitarian operations throughout Africa and the Middle-East.



This program is an initiative of the NSW Energy and Resources Knowledge. Hub and is supported by the NSW Government. The Hub and METS NSWaim's to boost productivity through collaboration and knowledge transfer, and by building stronger links between research, industry and government.

www.energyinnovation.net.au

Enquiries to: kate@energyinnovation.net.au / (02) 4985 4499





GROWING METS MATTERS

MINING EQUIPMENT, TECHNOLOGY & SERVICES (METS) FORUM

PARKES AGENDA

9:00am-10:00am Arrive

Welcome from The NSW Energy and Resources Knowledge Hub

Welcome from Parkes Shire Council

Introduction

NSW Energy and Resources Knowledge Hub

METS NSW

Overview of METS Map Introduce Key Agencies Mark Jones - Facilitated discussion

Set the scene

Overview of METS Ignited Sector Competitiveness Plan

Introduce METS Ignited Thought Leadership Series Focus on key local METS challenges (diagnostic)

10:00am-11:00am Facilitated discussion

What are the key regional challenges that METS firms can address as part of their

growth strategy? Where to next?

11:00am-11:15am Break

11:15am-11:45am Showcase Speaker ~ NSW Smart Sensing Network (NSSN)

11:45am-1:00pm Marketplace - Support available to METS for industry development and growth

1:00pm Light lunch and networking





Event Facilitator:

Mark Jones, General Manager - Stakeholder Engagement, METS Ignited

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Showcase Speaker:

Dr Tomonori Hu, Research Associate - NSW Smart Sensing Network

Tomonori Hu completed his graduate and Ph.D. studies at the University of Sydney. His research has focused on the development of ultrafast mid-infrared fiber lasers for trace gas detection and applications in medical surgery.

After completing his first post-doctorate position he started up his own company, Miriad Technologies Pty Ltd, which provides

mid-infrared light sensing systems.

He is now interested in combining his research expertise with his work in commercialisation to solve the challenges addressed by the NSW Smart Sensing Network.



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GROWING METS MATTERS

MINING EQUIPMENT, TECHNOLOGY & SERVICES (METS) FORUM

UPPER HUNTER AGENDA

10:30am-12:30pm Arrive

Welcome from The NSW Energy and Resources Knowledge Hub

Welcome from Muswellbrook Mayor, Martin Rush

Introduction

NSW Energy and Resources Knowledge Hub

METS NSW

Overview of METS Map Introduce Key Agencies

Mark Jones - Facilitated discussion

Set the scene

Overview of METS Ignited Sector Competitiveness Plan

Introduce METS Ignited Thought Leadership Series Focus on key local METS challenges (diagnostic)

Showcase Speakers ~ "Advancing METS in a changing landscape."

Bede Boyle, Chairman Manufacturship Group

Michael McLean, Founder. McLean Management Consultants

12:30pm-12:50pm Break and grab a sandwich

12:50pm-1:50pm Facilitated discussion

What are the key regional challenges that METS firms can address as part of their

growth strategy? Where to next?

1:50pm-2:00pm 8 reak and afternoon tea

2:00pm-3:00pm Marketplace - Support available to METS for industry development and growth

3:00pm Thank you and close

We'd like to thank the following partners for their participation in today's Forum;

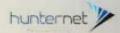






















Event Facilitator:

Mark Jones, General Manager - Stakeholder Engagement, METS Ignited

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practice, including facilitation strategy and implementation, throughout Europe for multinational companies headquartered in Europe. He has facilitated the global implementation of head office innovations in operating subsidiaries for Unilever, Heineken, ING, Elsevier.

He has held a number of board positions including an incorporated community association and, more recently, company secretary. Mark is currently completing his Masters in Sustainable Mineral Beneficiation at the University of Cape Town.



Showcase Speakers:

Bede Boyle, Chairman, Manufacturship Group

Bede has over 40 years' experience in the coal industry and strategic advisory services to coal mine, rail and port development and operations. Bede was Manager Technical Services with Coal & Allied Operations and provided Technical Support to underground and open cut Project Development, Operations and Marketing. He was Chairman of Major Project Committee, Project Coordinator for Hunter Valley No 1 Mine, CHPP and Loading Point and Project Leader for Liddell Longwall Project. He founded Hivalue Strategies Pty Ltd in 1994 to provide strategic advice to Coal Industry,

Michael McLean, founder McLean Management Consultants Pty Ltd

Michael founded McLean Management Consultants in 1988 and works in collaboration with Manufacturship as Chief Performance Officer.
Michael leads assignments to embed productivity improvement in complex mine, rail and port operations including Abbot Point Coal Terminal, Anglo Coal, Asciano, BHP Billiton - Ok Tedi Mining Company, Camberwell Coal, Coal & Allied, Dalrymple Bay Coal Terminal, GVK Hancock Coal, Jemena, J&R Magnetics, MRS Group Services, Muswellbrook Coal, Newcastle Ports Corporation, Pacific National, Port Waratah Coal Services and Xstrata Coal.





This program is an initiative of the NSW Energy and Resources Knowledge Hub and is supported by the NSW Government. The Hub and METS NSW aims to boost productivity through collaboration and knowledge transfer, and by building stronger links between research, industry and government.

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GROWING METS MATTERS

MINING EQUIPMENT, TECHNOLOGY & SERVICES (METS) FORUM

ILLAWARRA AGENDA

7:30am-8:00am Arrive & Welcome from the NSW Energy and Resources Knowledge Hub

Welcome from Tony Green, i3net

Breakfast

8:00am-9:00am

Introduction from the NSVV Energy and Resources Knowledge Hub

METS NSW

Overview of METS Map Introduce Key Agencies Mark Jones - Facilitated discussion

Set the scene

Overview of METS Ignited Sector Competitiveness Plan

Introduce METS Ignited Thought Leadership Series Focus on key local METS challenges (diagnostic)

9:00am-9:30am Showcase Speaker ~ Brad Neilson – President Hard Rock Mining - Joy Global

9:30am-9:45am Break

9:45am-10:45am Facilitated discussion

What are the key regional challenges that METS firms can address as part of their

growth strategy? Where to next?

10:45am-12:00pm

Marketplace - Support available to METS for industry development and growth

12:00pm Close & Thank you

We'd like to thank the following partners for their participation in today's Forum;

THE UNIVERSITY OF NEWCASTLE | DIET NEWCA



Event Facilitator:

Mark Jones, General Manager - Stakeholder Engagement, METS Ignited

Mark has more than 30 years' experience in various new technologies in diverse industries including professional services, telecommunications, FMCG, consulting, and mining.

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He has held a number of board positions including an incorporated community association and, more recently, company secretary. Mark is currently completing his Masters in Sustainable Mineral Beneficiation at the University of Cape Town.



Showcase Speaker:

BRAD NEILSON - Joy Global - President Hard Rock Mining

Brad has held a variety of leadership roles over 16 years with Joy Global. Brad is a Mechanical Engineer and has been a part of advanced manufacturing, engineering, marketing, sales and business development for over 30 years, with a passion for Innovation, finding solutions to problems and driving improvement.

He is currently President Hard Rock Mining-Joy Global where he oversees the creation and rapid growth of new business units via acquisitions, and the development and commercialisation of transformational mining systems and markets across all mined commodities.

Brad is a Member of the Joy Global Senior Leadership team, Member of the Board of Directors – Joy Global France, Member of the Board of Directors – CMTE Mining Ltd and Member of the board of Directors – Ezymine.

He is currently Co-chair of the Mining3 Research Committee, and is a Member of the Australian Institute of Company Directors and Fellow Australian Institute of Management



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Enquiries to: kate@energyinnovation.net.au / (02) 4985 4499



Business Diagnostic Supplying to mining, oil & gas and energy resources projects

A quick assessment of your ability to effectively supply to these sectors

How to complete the Supplying to mining, oil & gas and energy resources projects - Diagnostic:

Read each statement and rate your business's performance for each one:

- . 1 represents low or poor performance, or it's never been considered or implemented
- 5 indicates excellent performance
- In the case where a statement is not applicable to your business, simply give it a rating of 0.

After rating each statement, total your scores to get a total survey score [//150].

Use this process to identify areas of possible improvement and to benchmark future gain against your current position.

Assessing the Opportunity								
We have an overarching strategy in place that informs the type of work/project we target	0	1	2	3	4	5		
We understand our business model and the changes required should we decide to diversify our operations	0	1	2	3	4	5		
We understand the complexities of supplying to a major project in the mining, oil & gas and energy resources sectors	0	1	2	3	4	5		
We have an organisational culture and values that typically align with the major project environment in these sectors	0	1	2	3	4	5		
We systematically research opportunities in the mining, oil & gas and energy resources sectors via a number of channels	0	1	2	3	4	5		
We understand where we would typically sit in the supply chain of a major project	0	1	2	3	4	5		
We invest time and effort into researching our buyers' procurement processes, roles and responsibilities	0	1	2	3	4	5		
We have a level of capability that makes us attractive to a major buyer	0	1	2	3	4	5		
We have the capacity to deliver the type of major project work we're seeking	0	1	2	3	4	5		
10.We have in place a well thought out go/no go decision making process with regard to the type of opportunity we're considering	0	1	2	3	4	5		
Subtotal:							/50	
Winning the Work								
11. We focus on differentiating our offer from our competitors, in line with the needs of the buyer	0	1	2	3	4	5		
12. We understand why a buyer would purchase from us and not our main competitors [and vice versa]	0	1	2	3	4	5		
13. We don't just rely on the strength of our core competencies [our technical ability] to win work in the major project environment	0	1	2	3	4	5		

14. We're confident our pricing is 'in the ballpark' when bidding on work in the mining, oil & gas and energy resources sectors	0	1	2	3	4	5	
15. We have appropriate management systems [HSE] in place for the type of opportunity we generally target	0	1	2	3	4	5	
16. We see value in, and make the effort to establish, relationships with key people pre and post release of a major project opportunity	0	1	2	3	4	5	
17. We thoroughly research the issues, motivators, definition of value and risk concerns of prospective buyers	0	1	2	3	4	5	
18. We understand our risk profile [how risky we look to a buyer] and actively work on minimising buyer concerns	0	1	2	3	4	5	
19. We follow a defined process when bidding on work in the mining, oil & gas and energy resources sectors	0	1	2	3	4	5	
 We always seek feedback on unsuccessful bids for the purpose of continual improvement 	0	1	2	3	4	5	
Subtotal:						,	50
Delivering the Work							
21. We fulfil our part in ensuring a seamless transition from bid submission to contract negotiation to commencement of work	0	1	2	3	4	5	
 We have a strong focus on contract compliance [monitoring, reporting and adherence to standards] 	0	1	2	3	4	5	
 We have documented systems and processes in place to ensure operational consistency in contract delivery 	0	1	2	3	4	5	
24. We have strategies in place for mitigating and managing risk	0	1	2	3	4	5	
25. We place strong emphasis on communication [eg progress, costs, personnel changes, etc] with the buyer at all phases of contract delivery	0	1	2	3	4	5	
 We place strong emphasis on document control and milestone planning 	0	1	2	3	4	5	
 We have systems in place to effectively manage staff, subcontractors and suppliers 	0	1	2	3	4	5	
28. We have a strong track record of avoiding delays, extensions of time, delay costs and damages	0	1	2	3	4	5	
29. Should disputes arise we have a process in place to resolve them	0	1	2	3	4	5	
30. We continually reviewand refine how we deliver contracts	0	1	2	3	4	5	
Subtotal:						,	'50
Total						1	150

How did you score?

Score Analysis					
0 to 50	May be at significant risk if operating in the mining, oil & gas and energy resources sectors				
50 - 100	'Rich with opportunity' – work on getting the fundamentals in place				
100 - 150	Potential to be a high performing supplier – focus on continuous improvement				

If you would like clarification on any of the statements in this diagnostic, or you would like to discuss your score and possible next steps, including assistance through the Entrepreneurs' Programme, please contact:



Anthony Holzwart Business Facilitator

Partner: Austmine

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Background

As an Austmine business facilitator for the Mining Equipment, Services & Technology [METS] sector Anthony develops and manages projects nationally that bridge the gap between the needs and requirements of procurement teams [mining, oil & gas] and the improved performance of their suppliers.

Anthony has a long track record in assisting small to medium businesses realise their full potential. His approach is straightforward and practical — do what matters most and, wherever possible, avoid the mistakes of others. Working in a range of private and public sector roles, Anthony has provided assistance to many hundreds of businesses, predominantly in the mining, oil & gas, civil construction and manufacturing sectors. Each of these interactions has provided practical insights into what works, what doesn't and where potential can often be found.

As a Principal Economic Development Officer within the Qld Govt Anthony has also spent a number of years working closely with a range of major proponents and upper tier suppliers to interpret their procurement needs [at both construction and operation/maintenance stages]. Equipped with this knowledge and understanding, and committed to achieving a win/win outcome, he has played a key role in developing and delivering a range of supplier improvement initiatives.

Marianne Cummings Business Advisor

Partner: Austmine Resources Technology AusIndustry — Entrepreneur Development

Based in Newcastle Mobile: 0401-029-813 marianne.cummings@austmine.com.au

Background

Marianne is an experienced business adviser who combines strong business analysis skills with a common sense approach to facilitate improvements in profitability, innovation, and productivity. Since 2012, Marianne has specialised in assisting clients from a variety of industries who supply to the resources sector, and in facilitating group industry supply chain projects.

She enjoys working with clients to identify their real issues and barriers to growth and plan strategic pathways. She uses strong networks and highly developed relationship management skills to support clients through change.

Marianne developed her business analysis skills through 15 years as a business consultant working with SME clients and organisations such as NSW Trade and Investment and HunterNet. She has held senior management roles with Lifeline Newcastle's commercial arm and senior relationship management roles in the Commonwealth Bank's Business Banking division. Marianne is qualified in accounting, business management, marketing, training, and alliance building.



