

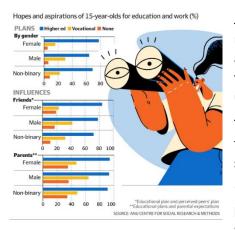
News Service 124 – Boys in trades and girls for doctors, Feedback wanted skills priority list, JSA Report shows VET has positive outcomes for students, Online job ads decline, NSW VET Review closes 24 Nov, Crisis in engineering skills, Advanced Diploma forum outcomes, Smart and Skilled 217-218, Powering skills newsletter, Trade Assistant program update, Safe Work Australia interactive WHS construction tool, Asbestos awareness month, Solar inverter recall, Wearable technology for safety improvement, Strategy to help workplace sexual harassment, Electrician fined, Changing role of an electrician, Do you smell battery smoke, Electrical licencing disciplinary actions, Online learning history, Access top Electrotechnology training resources, Electrical fatality, and solar and EV latest report.

Dear Colleagues and Friends,

- 1. BOYS HEAD INTO THE TRADES, WHILE GIRLS WANT TO BE DOCTORS
- 2. JSA SEEKS FEEDBACK ON SKILLS PRIORITY LIST STAKEHOLDER SURVEY
- 3. <u>NEW REPORT DEMONSTRATES POSITIVE OUTCOMES FOR VET STUDENTS</u>
- 4. ONLINE JOB ADVERTISEMENTS DECREASE IN OCT 2023
- 5. NSW VET REVIEW SUBMISSION CLOSE 24 NOV 2023
- 6. ENGINEERING SKILLS CRISIS DEEPENS
- 7. ADV-DIPLOMA FORUM 25 OCT 2023 OUTCOMES
- 8. <u>SMART & SKILLED UPDATE NO 217-218 NOV 2023</u>
- 9. POWERING SKILLS ORGANISATION'S INAUGURAL NEWSLETTER
- 10. UPDATE ELECTROTECHNOLOGY TRADES ASSISTANT UPSKILLING PROGRAM (ETAUP) NSW
- 11. <u>NEW INTERACTIVE WHS TOOL FOR THE CONSTRUCTION INDUSTRY</u>
- 12. NATIONAL ASBESTOS AWARENESS MONTH ENTERS TENTH YEAR
- 13. <u>RECALL GROWATT NEW ENERGY AUSTRALIA SOLAR POWER INVERTERS</u>
- 14. FUTURE OF SAFETY COULD BE WEARABLE TECHNOLOGY
- 15. STRATEGY TO HELP PREVENT WORKPLACE SEXUAL HARASSMENT
- 16. <u>ELECTRICIAN FINED AFTER HOME OWNER RECEIVES ELECTRIC SHOCKS</u>
- 17. WHAT MORE CAN AN ELECTRICIAN DO?
- 18. <u>"DO YOU SMELL SMOKE?" YOUR EVERYDAY TECH CAN CAUSE BATTERY FIRES</u>
- 19. ELECTRICAL LICENSING DISCIPLINARY ACTION
- 20. <u>A SHORT HISTORY OF ONLINE LEARNING</u>
- 21. INSTALLATION TESTING FAULTBOARD V3 FAQS UPDATED
- 22. ELECTRIC MOTOR EDUCATION RELEASES UPDATED PRODUCTS
- 23. POWERLINE FATALITY LEADS TO GUILTY PLEA
- 24. SOLAR REPORT THIRD QUARTER 2023
 - 24.1. ELECTRIC VEHICLES



1. BOYS HEAD INTO THE TRADES, WHILE GIRLS WANT TO BE DOCTORS



Julie Hare, education editor at the Financial Review reported in a 17 November 2023 article that parental aspirations were driving their teenagers' career dreams, with many more girls than boys saying they plan to go to university.

The article stated, "Just 16 per cent of girls say they want to go to TAFE or vocational education after finishing school, compared with 30 per cent of boys.

"The most popular career choices fall into the professional category and their choices align with current skill shortages in the economy," said Ben Edwards, a

professor of child and youth development at Australian National University.

But with just over **50 per cent of school-leavers going to university**, a good many students, particularly girls, will have their hopes dashed, Dr Edwards said, noting they either will not get the academic marks to get into the courses they want or change their minds during senior high school.

While 94 per cent of girls said their parents were strongly supportive of their desire to go to university, less than half with plans to go to TAFE had their parents' backing, the study, by ANU's Centre for Social Research and Methods, found.

About 5 per cent said they had no career plans in mind – and one in three parents supported that position. "It might be these families just see value in going out and getting a job," Professor Edwards said.

Nearly half of all teenagers surveyed identified just three broad fields in which they saw themselves working by the time they reach 30: health; design, engineering, science and transport; and legal and social welfare roles.

•••

An OECD study, Dream Jobs, found many young people were very limited in their understanding of career possibilities.

"The high, and increasing, concentration of students' career expectations raises questions about the extent to which young people are aware of the availability of current and future jobs," the report says."

READ MORE HERE

2. JSA SEEKS FEEDBACK ON SKILLS PRIORITY LIST – STAKEHOLDER SURVEY



Australian Government Jobs and Skills Australia

Jobs and Skills Australia (JSA) is seeking input into the development of the 2024 Skills Priority List (SPL). Information is being collected by Jobs and Skills Australia to better understand the skills profile in

Australia which informs the development of the 2024 SPL.



The SPL assists policy makers to understand the skills needs of the Australian economy and informs the Jobs and Skills Australia's analysis and advice on potential policy responses to shortages in the Australian labour market. It also assists government decision making in relation to funded training and apprentice incentive support payments.

The JSA recently released the 2023 SPL, which revealed that 36% of occupations assessed were in shortage, and that Technicians and Trade Workers, and Professional occupations (health, engineering, information communication technology (ICT) and science roles) had the highest shortages, particularly in regional and remote areas. The 2023 SPL is available <u>HERE</u>.

The 2024 survey collects information on all occupations in the 2022 Australian and New Zealand Standard Classification of Occupations (ANZSCO). More information on ANZSCO classifications and skill levels is available at the <u>Australian Bureau of Statistics website</u>.



2024 Skills Priority List (SPL) stakeholder survey.

The survey is open until 23 February 2024.

The survey is open to an array of stakeholders as indicated on the survey webpage. To complete the survey visit the following link:

3. NEW REPORT DEMONSTRATES POSITIVE OUTCOMES FOR VET STUDENTS



Jobs and Skills Australia (JSA) released its latest report confirming that VET students experience positive outcomes for the VET system. The Report released 16 November 2023 and titled "<u>VET Student</u> <u>Outcomes 2018-19 – Top 100 Courses</u>", tracks VET student outcomes for the top 100 courses (by completion).

JSA webpage states, "This innovative approach to uncovering this data is the result of a collaborative project between Jobs and Skills

Australia, the Australian Bureau of Statistics (ABS) and the National Centre for Vocational Education Research (NCVER)." ... the "data will assist Jobs and Skills Australia to provide advice on the adequacy of the Australian VET system, unlocking new insights and analysis possibilities." ...

"Everyone has an interest in knowing how the vocational education and training (VET) system is contributing to the economic, employment and social outcomes in Australia.

For individuals, there's a substantial commitment of time and resources when you take on study. Meanwhile, industries across the country are reliant on the VET system to provide a flow of qualified skilled workers, and Australian Governments contributed around \$5.5 billion in 20221 supporting the delivery of the system. ...

"The report demonstrates that completing a VET course has the potential to change lives for the better; increasing employment opportunities, preparing students for the workforce of the future, and paving the way for ongoing learning.

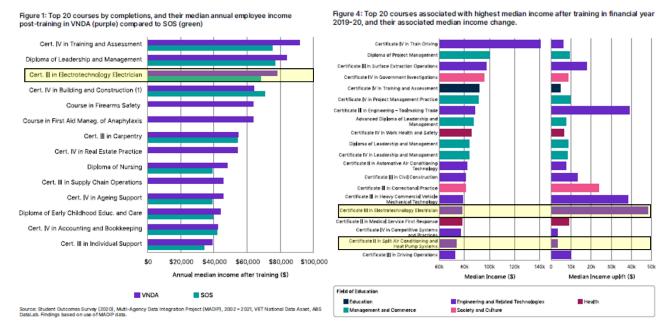
Particularly, for those who have previously faced barriers to entering the workforce, such as women, First Nations People and those with a disability, this report shows that a VET qualification can make a significant difference to key measures such as employment, income, and future learning.



At the national level 82.7% of students were employed after VET training in the 2018-19 financial year. For the women included in the study, there was a significant change in employment rate of 15.2 percentage points, which was higher than the national average of 12.4 percentage points.

For many students, the completion of a VET qualification has the transformative financial impact, with a median employee income uplift of more than \$10,000 for graduates (with an even larger uplift for the First Nations cohort), representing a step towards financial security.

The future looks bright for those considering a career in the clean energy workforce, with several courses in this field reporting the highest levels of employment and increases to median income after training." ...



"The Jobs and Skills Australia Clean Energy Generation Capacity Study released in October 2023, demonstrated that we have an urgent need to grow our clean energy workforce. Australia will likely need 32,000 more electricians in the next seven years and close to 2 million workers in building and engineering trades by 2050.

With that in mind, it's no surprise that the courses with the highest levels of employment after training, and changes to median income, are in the Engineering and Related Technologies fields. The income uplift for these courses can be as high as \$48,369 for Certificate III in Electrotechnology Electrician and \$38,969 for Certificate III in Engineering – Toolmaking Trade."

READ MORE HERE

4. ONLINE JOB ADVERTISEMENTS DECREASE IN OCT 2023



Australian Government Jobs and Skills Australia

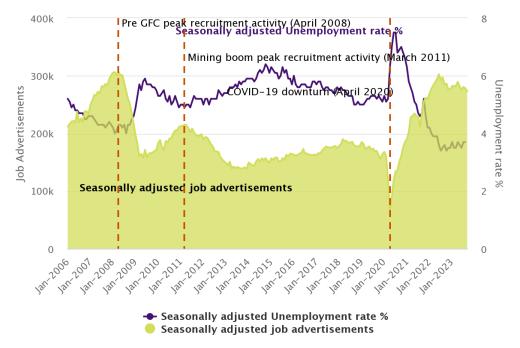
Jobs and Skills Australia (JSA) reports in its latest 15 November 2023, <u>Internet Vacancy Index</u> (IVI) of a decline at the national level in online job advertisements in the month of October.

The Media Release states, "Latest data from Jobs and Skills Australia's October Internet Vacancy Index (IVI) show underlying labour market conditions weakening with online job advertisements decreasing nationally and across most regions. That said, the number of internet vacancies remains at relatively high levels historically.



In seasonally adjusted terms, online job advertisements at the national level decreased in October 2023 (down 3.8% or 10,400 job advertisements) to 261,200. By contrast, vacancy numbers were up in three jurisdictions – Northern Territory, Western Australia and South Australia.

Over the month to October 2023, decreases in vacancies for all Major Occupation and Skill Level groups were recorded. Internet advertisements in regional Australia decreased over the year (down 1.8%) but in capital cities, vacancies decreased by 10.1%.



Job Advertisements and Unemployment Rate – January 2006 to October 2023

Monthly spotlight - Too much off the top? Online jobs advertisements for hairdressers are declining.

While hairdressing job ads rocketed immediately post COVID-19, online job advertisements for Hairdressers have been declining steadily over the past decade. Nevertheless, skill shortage research finds employers struggle to find suitable candidates for available work. This article explores recent trends in the recruitment market for Hairdressers, including what employers are telling us, and apprenticeship commencements and completions data."

READ MORE HERE

5. NSW VET REVIEW SUBMISSION CLOSE 24 NOV 2023



The latest NSW VET Review Newsletter reports that the VET Review team with be hosting the NSW VET Review Skills Symposium on Friday 24 November, the final day of the consultation phase. This symposium will bring together key VET experts and leaders to discuss the work of the review, listen to different voices across the VET sector, and engage on VET's role in meeting future skills demands. NSW Minister for Skills, TAFE and Tertiary Education, Steve Whan, will

deliver the Symposium's opening address. We will bring you key moments from the event in our final newsletter of the year.



Have your say

There's still time to provide a submission or complete the <u>Have Your Say survey</u>.

Submissions close Friday 24 November at 11:59 pm.

The NSW VET Review aims to identify current strengths of NSW VET, gaps and opportunities for improvement.

The NSW VET Review is led by former federal education department secretary Michele Bruniges, who is leading a three-member expert panel that will undertake the major review of VET in NSW.

Stakeholders are invited to read the <u>review's discussion paper</u>, developed from the deep research and analysis conducted during phase 1 of the review. It's designed to stimulate conversation and pose questions for consideration.

There are 4 key themes:

- boosting student success
- placing TAFE NSW at the heart of the system
- delivering VET in NSW
- preparing VET for the future.

"Landmark National Skills Agreement signed

Also in October, Minister Whan and NSW Premier, Chris Minns, signed a new 5-year National Skills Agreement with the Australian Government. Taking effect from January 2024, this landmark agreement embeds a model for collective action and stewardship and lifts investment in NSW's skills system. The agreement creates the conditions needed to strengthen our national VET system and ensure it provides high quality, responsive and accessible education and training, to support NSW citizens in obtaining the skills they need to attain well-paid and secure jobs."

Download a copy of the National Skills Agreement - HERE

If you are considering making a submission, email it to <u>NSWVETReview@det.nsw.edu.au</u> or complete the short and simple <u>Have Your Say survey</u>.

See more on the <u>review</u> and the <u>Terms of Reference</u>. Full terms of reference attached.

NATIONAL SKILLS AGREEMENT SUPPORTING NSW JOURNEY TO NET ZERO - NSW

The NSW Government issued a Media Release on 23 October 2023 linking the National Skills Agreement with the net zero journey, stating on its media release webpage, "Following the signing of the National Skills Agreement the NSW Government is continuing to bolster its commitment to reskill NSW and transform the economy to net zero with TAFE NSW launching 8 (eight) new microskills related to renewables.

The 5- year National Skills Agreement (NSA) will deliver a Commonwealth investment of up to \$3.8 billion into the skills and training sector in NSW, supporting the Minns Labor government's commitment to rebuild TAFE and training in NSW.

•••

NSW TAFE are today announcing 8 new microskills. These are short self-directed online courses aimed at developing a specific skill.

The courses to be rolled out over the next 6 months include:

• Emergency responder electric vehicle incident and emergency response



- Introduction to fuel-cell electric vehicles
- Contextualised fuel-cell electric vehicle
- Hydrogen energy fundamentals
- Electric vehicle charging station baseline knowledge
- Refuelling fuel-cell electric vehicles
- Prepare to work in the renewable energy sector
- Introduction to wind farms."

Media Release - HERE

6. ENGINEERING SKILLS CRISIS DEEPENS



Sandra Rossi, Editor at Climate Control News (CCN) reports in the 15 November 2023 edition that Engineers Australia has confirmed a critical state of affairs in Australia's engineering workforce.

The articles states, "Engineers Australia has today released the <u>Statistical Overview of the Engineering Profession</u> report, shedding light on the critical state of Australia's engineering workforce.

Speaking at the Parliament House launch today, Engineers Australia CEO Romilly Madew, said the analysis highlights the important role engineers play in driving every sector of the economy while revealing a deepening engineering skills crisis.

"The report serves as a critical resource for policy and decision-makers, offering insights into the challenges and opportunities facing the Australian engineering landscape," Madew said.

"As the world continues to embrace technology and systems, becoming more sophisticated and interdependent, our economy and society are more reliant than ever on the engineering profession. This report reveals a growing gulf, with Australia sliding towards a 'new norm" of an economy hampered by an engineering skills shortage.

"The implications range from delays to nation-building projects, stifled productivity, and low growth; failing to reach our net-zero goals and missing out on the next wave of wealth creation in eco-technology and innovation."

•••

Despite a significant increase in the number of qualified engineers between 2016 and 2021, demand outpaces supply, growing at three times the rate of the general workforce.

The report underscores the need for coordinated national efforts, focusing on increasing engineering graduates, retaining women in engineering, addressing the impending retirement cliff, removing barriers for migrant engineers, and lifting the voice of engineering in the public sector to support practical decision-making.

The report found around 75 per cent of engineering students graduate within six years.

There is a five per cent attrition rate in the first year, with a further 20 per cent attrition over later years."

READ MORE HERE



NSW Utilities & Electrotechnology Industry Training Advisory Body (ITAB)

7. ADV-DIPLOMA FORUM 25 OCT 2023 - OUTCOMES



The NSW UE ITAB with the assistance of Training Services NSW held a second Forum in Newcastle on the 25th of October 2023 to discuss post trade training prospects, particularly pathways to Advanced Diploma qualifications.

The Forum discussed a series of training delivery issues including possible solutions associated with access and career pathways to Advanced Diploma Electrotechnology qualifications. The Forum

provided a venue for developing better understanding of the issues and problems that were created when the nested CIII Electrician's qualification was removed from the standalone CIV electrician's special class qualification as well as Diploma and Advance Diploma.

The Forum discussed possible alternative pathways that could be used as an interim measure to assist learners and employers address their skill shortage needs. This included a range of Electrotechnology Training Package higher level qualifications that did not require CIII Electrician's qualification as a prerequisite as well as possible skill sets.

The Forum agreed that the NSW UE ITAB and TAFE NSW would undertake a review of the Electrotechnology Training Package units of competency and endeavour to identify a range of possible skill sets a 3rd or 4th year apprentice could undertake at evening classes at TAFE NSW in the Newcastle region to augment their apprenticeship competency development program they were close to completing and graduating from. Acquiring the skill sets would assist them should they then choose to undertake post trade programs in higher level qualifications.

Employers at the same time would gain higher skilled personnel they required in order to ensure their operations were supported and maintained by appropriately skilled and qualified labour.

Work is now underway to identify and finalise a list of skills sets to present to a further Forum in the new year.

The Forum approved several qualifications during the interim period. However, these qualifications were not listed on the NSW Skills List, making it unlikely that TAFE NSW would offer them. The NSW UE ITAB Board of Directors addressed this issue at their recent board meeting on November 16, 2023. Recognising the necessity of including these qualifications in the NSW Skills List, the Board sent a letter to the Training Services NSW Executive Director and Commissioner, advocating for their inclusion.

- UET20422 Certificate II in Transmission Line Construction
- UEE61720 Advanced Diploma of Engineering Technology Electronics
- UEE62022 Advanced Diploma of Engineering Technology Renewable Energy
- UEE62122 Advanced Diploma of Engineering Technology Electrical
- UEE62420 Advanced Diploma of Engineering Technology Air Conditioning and Refrigeration
- UEE62520 Advanced Diploma of Air Conditioning and Refrigeration Engineering
- UET60222- Advanced Diploma of ESI Power Systems
- UEE50722 Diploma of Renewable Energy Engineering
- UEE50920 Diploma of Industrial Electronics and Control Engineering
- UEE51120 Diploma of Engineering Technology Refrigeration and Air Conditioning

For more information contact Tony Palladino at tony@uensw.com.au



8. SMART & SKILLED UPDATE - NO 217-218 NOV 2023

Smart and Skilled

www.smartandskilled.nsw.gov.au

Training Services NSW has published the latest Smart and Skilled Update, No. 217 - 218 for November 2023 (DOWNLOAD A COPY HERE).

Smart and Skilled is an NSW Government program that helps people get qualifications in in-demand

skills and industries. It's a key part of the NSW vocational education and training system.

This Smart and Skilled Update 217 - 218 covers the following:

- 1) The 2023 NSW Student Outcomes Survey opened on Thursday 28 September 2023.
- 2) Financial Cap Review #2:
 - a) Financial Cap Review module, and
 - b) Further information.
- 3) Continued Provider educational support: Marketing and Promotion webinar.

The department is managing Financial Caps carefully, in consideration of the changing budget environment.

Find out how to access funding for vocational education and training that gives people workplace skills in high demand industries. Learn about Smart and Skilled and other government programs in NSW. For more information visit: **FUNDING AND SUPPORT – SMART AND SKILLED**

Or, for technical support in relation to this update, contact Training Market Customer Support at <u>Training.Market@det.nsw.edu.au</u>

For the Smart and Skilled – NSW Skills List visit: NSW SKILLS LIST – SMART AND SKILLED

9. POWERING SKILLS ORGANISATION'S INAUGURAL NEWSLETTER



The new Energy, Gas and Renewables Jobs and Skills Council known as the '<u>Powering</u> <u>Skills Organisation</u>' has launched its inaugural "*Energise Newsletter*".

If you did not receive a copy, sign up at this link: **<u>CONTACT US</u>** and click on the box, " *Keep me up to date with Powering Skills news*".

Powering Skills Organisation is the Jobs and Skills Council for the energy, gas, and renewables sector. The latest Energise Newsletter covers the following stories:

- Take a sneak peak at PSO's team meet up.
- Updates on our inaugural TAG Workshop.
- We've launched our initial workforce scan, offering a snapshot of the sector download a copy of the report <u>HERE</u>
- Toyota has presented a cleaner alternative with their HiAce Hydrogen Prototype.
- Panel discussion: Workforce Implications for the Clean Energy Sector.



Powering Skills Organisation is one of ten Jobs and Skills Councils (JSCs), established by the Federal Government to address skills shortages and training structures in different sectors. PSO works across the energy sector, focusing on electricity, renewables and gas.

Powering Skills Organisation Ltd Powering skills for a brighter tomorrow.

"The Australian energy workforce within PSO's remit is currently around 275,000 workers.

Challenges Confronting the Energy Workforce

These changes will disproportionately affect, and depend on, the PSO energy workforce. For instance, 11 of the 12 PSO energy occupations are critical to the recently defined clean energy labour force proposed by Jobs and Skills Australia (JSA). Few other sections of the labour market are as exposed to the transition challenge as the roles in PSO's remit.

The clean energy transition is the most profound challenge this workforce has faced in a generation, perhaps ever. Current shortages in transition critical roles mean we are already behind.

The once-in-a-generation changes the transition will have on the energy industry are well-known.

Common highlights include:

- Decarbonising the entire energy supply by dramatically scaling up renewable generation
- The emergence of new sectors like energy storage and green hydrogen
- Increased demand for electric vehicles

...

• Extensive transmission infrastructure to connect renewable energy to the grid."

Read the latest news here: www.poweringskills.com.au/news

10. UPDATE - ELECTROTECHNOLOGY TRADES ASSISTANT UPSKILLING PROGRAM (ETAUP) - NSW



THE PROGRAM

The Electrotechnology Trades Assistant Upskilling Program (ETAUP) is a joint initiative of the New South Wales Government Trade Pathways Innovation Fund and the Electrical Trade Union with assistance from Energy Skills Australia.

The Program provide a free upskilling pathway for Australian citizens and residents who work or reside in NSW and hold an overseas electrical qualification and/or equivalent overseas gained experience.

HAVE AN ELECTRICAL QUALIFICATION AND/OR EXPERIENCE FROM OVERSEAS?

Want to progress your career for FREE?

What's in it for you?

- Free training
- The program will cover all training and assessment costs including:
 - Australian Technical Competencies Statement (ATCS) assessment
 - NSW provisional trades person certificate
 - Certificate of Proficiency
 - o 10809NAT Training Course



- Workplace evidence fee
- Upon successful completion of the above, issuance of Certificate III Electrotechnology Electrician UEE30820
- Eligible in NSW for a qualified supervisor's certificate (unrestricted electrical licence)

The program is proudly funded by the NSW Government

For more information visit: <u>www.energyskillsaustralia.com.au/electrotechnology-trades-</u> assistants-upskilling-program/

11. NEW INTERACTIVE WHS TOOL FOR THE CONSTRUCTION INDUSTRY



Safe Work Australia has advised in its latest circular of 6 November 2023, that it has created a new online tool to help the construction industry understand and meet their work health and safety (WHS) duties under the model WHS laws.

Safe Work Australia states, "The interactive <u>Know Your Duties</u> <u>tool</u> provides information about duties for PCBUs and workers, how to meet these duties, common hazards and how to manage risks in construction.

There is information on duties relating to incident reporting, emergency plans, first aid, personal protection equipment, labour hire and safe design.

The tool also provides information on common WHS hazards in construction, including outdoor work, working at heights, scaffolding, electrical work, and demolition work.

Explore Know Your Duties - a tool for working safely in the construction industry.

The tool is also available for the agriculture industry.

For WHS information for other industries, please see our industry and business information.

Please contact your <u>WHS regulator</u> for information about how WHS laws apply in your workplace."

READ MORE HERE

12. NATIONAL ASBESTOS AWARENESS MONTH ENTERS TENTH YEAR



San Williams reports in the 8 November 2023 edition of Electrical Connection that November is National Asbestos Awareness Month. It is Australia tenth annual month of promoting awareness of the dangers and required safeguards of asbestos.

The article states, "Australia's tenth annual National Asbestos Awareness Month has released an asbestos education resource to help save lives.

National Asbestos Awareness Month's Asbestos 101 for Residential Property Owners, Managers and Tradies will help reduce the incidences of asbestos-related diseases as Australia continues to



face significant health risks of asbestos-related diseases due to asbestos-containing materials (ACMs) remaining hidden in one-third of Aussie homes.

"Having identified the need for this new, unique education resource for those most likely to come into contact with asbestos in residential properties (homeowners, renovators, property managers and tradies), the Asbestos Education Committee continues to increase community awareness by providing vital free resources to help save lives," Asbestos Education Committee and Advocacy Australia chair Clare Collins says.

"While Australia faces the serious wave of silicosis disease, a preventable occupational lung disease predominantly impacting workers from a wide range of industries, Australians must never forget that asbestos lurking in homes continues to pose serious health risks to anyone exposed to fibres when asbestos is not managed safely during renovations, maintenance or demolition including mums, dads and children."

READ MORE HERE

13. RECALL GROWATT NEW ENERGY AUSTRALIA SOLAR POWER INVERTERS



<u>Product Safety Australia</u> has issued a recall notice for the following Solar power inverter models, used in domestic rooftop solar systems.

- SPH3000TL BL-UP
- SPH3600TL BL-UP
- SPH4000TL BL-UP
- SPH4600TL BL-UP
- SPH5000TL BL-UP
- SPH6000TL BL-UP

Why the product is recalled

The inverters have been supplied with an emergency power supply (EPS) port plug that can be removed by hand without the use of a tool. If the plug is removed or if it is not connected during the installation process the user has access to live hazardous voltage.

What the hazards are to consumers

There is a risk of serious injury or death from electric shock if consumers remove the EPS port plug and access live parts.

What consumers should do

Consumers should switch the inverter off immediately and contact Growatt Australia on <u>australia@ginverter.com</u> or by phone on 1800 476 928 to arrange for the permanent securement of the EPS port connector so that it cannot be removed without a tool.

A warning label will be affixed to the connector advising of the dangers of live parts if removed.

Solar power inverter used in domestic rooftop solar systems.

Sold at: Go Solar (https://gosolar.com.au/) and Solar Mart (https://www.solamart.com.au/)



NSW Utilities & Electrotechnology Industry Training Advisory Body (ITAB)

14. FUTURE OF SAFETY COULD BE WEARABLE TECHNOLOGY



Master Electricians Australia (MEA) newsletter of 8 November 2023 draws attention to the prosects that the future of safety could be through the use of wearable technology.

The article states, "Wearable tech is advancing to enhance our workdays with safety and intelligence. These devices have crucial roles in industries, especially safety. From construction sites to electrical environments, wearables offer real-time insights and alerts, transforming workplace protocols. Join us as

we explore safety wearables' applications, challenges, and future prospects.

From fitness enthusiasts to tech aficionados, wearable tech has become essential for workplace safety. These devices monitor and guide workers, offering added protection in dynamic environments. Wearables provide protection and insight for construction workers and electricians, enhancing safety protocols and productivity in various industries. This article explores the evolution and impact of these technologies.

The world of wearables

When we think of wearables, it's easy to picture smartwatches or fitness bands. But the world of safety wearables is vast and varied, tailored to the unique challenges of different industries. Here's a glimpse into the range of devices making a difference:

- Personal protective equipment (PPE) with a twist.
- Smartwatches beyond fitness.
- Smart glasses and augmented reality.
- Environmental sensors.

The beauty of these wearables lies in their adaptability. They can be tailored to specific industries, ensuring that the challenges unique to each sector are addressed effectively.

Construction site safety:

- Real-time alerts
- Health monitoring
- Environmental checks
- Enhanced communication

Electrical safety:

- Proximity alerts
- Health metrics
- Environmental monitoring
- Data logging

Challenges and concerns

While wearables offer a plethora of benefits, they're not without their challenges."

READ MORE HERE



15. STRATEGY TO HELP PREVENT WORKPLACE SEXUAL HARASSMENT



The NSCA Foundation's Safe-T-Bulletin reported in its 26 October 2026 edition that SafeWork NSW has released a <u>four-year strategy</u> (2023 – 2027) to help NSW businesses prevent workplace sexual harassment and other gender-based harmful workplace behaviours.

The article states, "Through the Strategy, SafeWork NSW will educate NSW businesses on their duties to prevent and respond to

workplace sexual harassment before it occurs and take appropriate enforcement action to protect workers.

The Strategy will be led by the SafeWork NSW Respect at Work Taskforce, reportedly one of the first Australian WHS regulators to establish a dedicated team focused on addressing genderbased harmful workplace behaviours. SafeWork NSW consulted over 60 stakeholders including worker, union, government and businesses representatives across 18 industries, who provided insights to inform the Strategy.

The Strategy features a dedicated <u>NSW Government website</u> with resources for workers and businesses on how they can help prevent sexual harassment in their workplaces and what they can do if they experience workplace sexual harassment. The SafeWork NSW Respect at Work Taskforce and NSW Government's Centre for Work Health and Safety have also invested in research on evidence-based and prevention-led interventions to address workplace sexual harassment. The research project is a collaboration between the Respect at Work Taskforce, the Centre for Work Health and Safety, RMIT University and the University of Newcastle.

READ MORE HERE

16. ELECTRICIAN FINED AFTER HOME OWNER RECEIVES ELECTRIC SHOCKS



- Supervising electrician did not check apprentice's wiring work
- Transposed conductors caused earthed metal objects to become live
- Potential for serious or even fatal injuries

The Government of Western Australia's Building and Energy Division of the Department of Mines, Industry Regulation and Safety reports in its latest media release of 8 November 2023, that a Bridgetown homeowner

was lucky to avoid serious injury after receiving multiple electric shocks from a dangerous wiring error that a Manjimup electrician failed to detect.

The medial release states, "Licensed electrical worker Nicola Terrigno (EW140723) of NTE Contracting Pty Ltd (EC008914), trading as NT Electrics, was fined \$5,000 at Manjimup Magistrates Court after pleading guilty to breaching WA's electricity licensing regulations.

Information presented in court by Building and Energy showed Mr Terrigno and an electrical apprentice under his supervision attended the property in February 2022 to replace a private power pole.



The work included connecting overhead sub-mains cables to the house from a mains connection box on the new pole. The apprentice carried out the wiring work in the mains connection box.

Two days later, the property owner contacted Western Power to report receiving electric shocks from the oven and shower. An inspection by Western Power revealed the active and neutral conductors were transposed at the mains connection box, causing earthed metal components in the house to become live with electricity.

Mr Terrigno was found to have breached WA's Electricity (Licensing) Regulations 1991 by not visually inspecting the electrical installation work to verify its compliance with wiring rules.

As the supervising electrical worker, Mr Terrigno was responsible for inspecting the apprentice's wiring. The court was told a visual check would have clearly identified the transposed active and neutral conductors.

On 26 October 2023, Magistrate Michelle Harries ordered Mr Terrigno to pay costs of \$537.15 in addition to the fine.

Her Honour noted Mr Terrigno's early guilty plea, remorse and lack of prior misconduct, but emphasised the seriousness of the offence, which had potentially life-threatening consequences.

READ MORE HERE

17. WHAT MORE CAN AN ELECTRICIAN DO?



Editor, Sean Carrol, in the 20 October 2023 edition of Electrical Connection, explores the changing role of electricians in relation to their work scope and responsibilities.

The article states, "The role of the electrician is changing as the technology around us continues to grow. Sean Carroll looks at proposed changes to the definition of a 'sparkie'.

The Australian digital economy is transforming as our homes, offices and shops become more and more connected. New

technologies like the Internet of Things (IoT), smart homes, 5G networks and advances in areas like Power over Ethernet (PoE) and fibre networks have changed the way we go about our day-to-day lives.

These technologies are making our lives easier, but there's also a greater awareness of cybersecurity and its concerns and the ability to build on occupational health and safety areas.

Because of this, there's an industry demand to upskill technical workers to help install this technology, and the humble electrician is perfectly placed to fill this need.

With upskilling, a range of new training programs and a reimagining of the role of the electrician, the industry is primed to grow with these booming technologies while also reaping the financial benefits of offering a greater service.

But how's it going to happen?

Stephen Elston and Gabriele Giofre co-authored a discussion paper for the Australian Digital & Telecommunications Industry Association (ADTIA), called the Integrated Digital Technician. It aims to start a conversation about the role of the electrician, garner industry insights into what would potentially be needed for the role and land on skill requirements and suggested pathways for the future of the electricial worker.



"We've got most of our industries trained to a reasonable level, which is an open registration that enables them to work on customer's premises," Gabriele says.

"The Integrated Digital Technician paper is about looking at what's missing. What additional skills do our workers need to connect people to the digital network and what does it look like? From there, it's about finding ways to upskill the industry to a level where they can go in and connect customers digitally."

If an electrician is coming to a property to install lights, then it's a straightforward job. If the customer wants to control the lights through their smart device or through a wired smart home hub, then they might not be the right person for the task.

If that customer also wants a hard-wired smart doorbell, wants to ensure WiFi signals reach the entire household or even add some audio-visual capabilities, an electrician isn't the right person for the job without some upskilling. ...

The discussion paper ends with a brief pathway of where the new role would fit. The authors propose that it slides in after the open registered cabler, ensuring electricians enter the workforce with the same core knowledge but build on top of it to suit an ever-changing environment.

While still a projection, it issues a warning to the electrical industry. The industry is changing and by standing still, not only will sparkies miss out on the financial benefits, but they might also miss the chance to stay current.

"We have a very closed view of what we see as an electrician," Stephen says.

"But if that becomes a technician, we can look at it from a domestic, commercial, industrial and agricultural point of view. The technology is there to boost these different aspects, but we just need somebody to tie it all together."

READ MORE HERE

18. "DO YOU SMELL SMOKE?" YOUR EVERYDAY TECH CAN CAUSE BATTERY FIRES



eSAFE Electrical, a publication of the Electrical Safety Office, Queensland reported in its 30 October 2023 of 47 residential structural fires between January and September 2023.

The article states, "From January to September 2023, QFES recorded 47 residential structure fires, eight non-residential structure fires, and 38 other fires that were reported as having

been due to lithium-ion batteries.

Rechargeable lithium-ion battery (RLIB) powered devices can cause explosions and intense fires, leaving little time to escape.

Fast facts:

- 60% of people surveyed by QFES said they owned an RLIB device—when in fact the average for Queensland households is six devices.
- 78% of respondents said they sometimes leave batteries and devices charging when they go out or go to sleep, while 45% said they do this always or often.



- Almost half (48%) of Queenslanders charge devices on soft surfaces or in direct sunlight, which is a significant fire risk.
- Younger Queenslanders (18-29 years) are less likely to turn the charger off when their device battery is full (32%) compared to the 45–65 years cohort (47%).
- Only 12% of respondents strongly agree they have a good knowledge of the fire risks from RLIBs."

The potential risk of battery related fires is real and high, and every effort should be made to be vigilant and act safely around batteries and where they are housed.

READ MORE HERE

19. ELECTRICAL LICENSING DISCIPLINARY ACTION



eSAFE Electrical, latest bulletin from the Queensland Electrical Safety Office of 30 October 2023 also reports on Electrical Licensing Committee deliberations in October.

The Office reports that in October 2023, the Electrical Licensing Committee took disciplinary action against 10 licence holders. The

following are several examples of the incidents and actions:

 An electrical contractor and worker performed electrical work including the installation of a new main switchboard, extension of the existing consumer mains and completion of the electrical installation within a detached dwelling at a domestic property. The electrical worker failed to ensure the installation work was electrically safe and compliant with the wiring rules, creating an electrical risk when it was energised.

The contractor's licence was suspended for six months.

• An electrical worker performed electrical work on a switchboard identifying the circuit protective devices that protected the sub-circuit cables originating at the switchboard. The electrical worker failed to identify and de-energise the correct circuit where the electrical work was to be carried out. ...

As a result of this failure, the electrical worker received an electric shock while contacting an energised bare conductor.

• An electrical worker performed electrical work which included replacing multiple distribution switchboards. The electrical worker failed to conduct testing and verification to ensure the installation was electrically safe and compliant with the wiring rules.

As a result, a distribution switchboard was energised with an open circuit sub mains neutral. An electrical contractor performed electrical work which included replacing multiple distribution switchboards. The electrical contractor failed to ensure the installation, to the extent it was affected by the electrical work, was electrically safe and compliant with the wiring rules.

 An electrical worker performed electrical work, which involved disconnecting the consumer mains neutral conductor, to confirm the polarity of the mains conductors. The electrical worker failed to test and verify the electrical installation was safe and compliant with the wiring rules.



 An electrical worker responsible for supervising and managing workers, and operating and making decisions for a business, including allocating electrical work performed by workers, failed to take reasonable care that their acts or omissions did not adversely affect the electrical safety of other people. As a result, people including apprentices were not adequately supervised for the tasks being performed and were exposed to electrical risk.

The worker's licence was suspended for three months, and the worker is required to complete mandatory training in competency units before the suspension is lifted.

- While performing electrical work at multiple locations in Queensland, an electrical contractor:
 - failed to test and verify electrical installation work was safe and compliant with the Wiring Rules.
 - failed to ensure that before electrical work was carried out on electrical equipment, it was tested by a competent person to decide whether or not it was energised.
 - failed to ensure that before electrical work was carried out on energised electrical equipment, it was permitted under one of the circumstances outlined in Electrical Safety Regulation 2013 section s18.
 - failed to ensure electrical work on energised equipment was completed by a competent person with the correct tools, testing equipment and personal protective equipment for that work, resulting in unsafe electrical work.
 - failed to ensure electrical work was supervised by a competent person and the level of supervision complied with the Electrical Safety Regulation 2013 section 279.

READ MORE HERE

20. A SHORT HISTORY OF ONLINE LEARNING



On Target Work Skills' Alan Maguire, provides a short precis of the history of online learning. For those interested in the evolution of online learning, Alan steps back into time to provide us with the changes that have ensued over the years from paper based correspondence distance learning to the internet and onto ubiquitous electronic mediums like digital phone or smart phones.

It's worthy of a read as it also delves into how through the crisis

of COVID19 there were an array of opportunities that arose including trainers being empowered to develop their capability to deliver online learning. Whilst there was some resistance in the past much of it dissipated during the crisis.

Alan concludes, by highlighting the fact that there remain barriers to using online learning and points to the reasoning that the TAE40122 Certificate IV in Training and Assessment qualification has recognised that many trainers and assessor will need the capability to deliver online learning and conduct assessments using online methods, and to that end there is likely to be two units added to the qualification to reflect the potential demand.

READ MORE HERE



21. INSTALLATION TESTING FAULTBOARD V3 – FAQS UPDATED



Infinispark advises that it has updated its Installation Testing Fault Board Questions and Answers (Q&A) section of the website after it received feedback from customers asking to prepare an onboarding program to share the capabilities of FBV3 with their teams.

In response to this request Infinispark has updated the list and also set up a video to personalise the answering some of Frequently Asked Questions (FAQ). It was felt this might be a great way to provide some initial information.

Please watch the video from the link: FAQ Video Link

This video covers 19 questions that include:

- How our unique equipment design process benefits our customers.
- Functionalities, like how easy it is to program the faults and how we overcome cross faults issue.
- Innovations, like battery operation, appliance testing, overhead and underground mains selection.
- And many more points are covered.

They have also prepared a video transcript if users prefer to read the Q&A instead. Users can find the list of written Q&As below the video.

CONTINUITY OF THE EARTHING SYSTEM TEST

Infinispark has also have prepared Mandatory Testing training videos using the Installation Testing Faultboard Version 3 (FBV3) to continue supporting users with useful content.

Please watch one of these videos from the link below:

Continuity of the Earthing System Test Video

All of these videos follow a similar format:

- Purpose of the test
- How to perform the test and what does a pass look like
- What does a fail look like with a simulated fault

Infinispark's CEO, Husnen, was being coached by a highly experienced Electrician while shooting these videos. After publishing, they received valuable suggestions for improvement from a few trainers, electricians and an inspector.

They would love your feedback. Please let them know if they can improve them in any way.

For more information contact, Husnen Rupani, CEO and Learning and Technical Consultant at Infinispark on 1300 15 22 99 or visit the website for more information: <u>www.infinispark.com.au</u>



22. ELECTRIC MOTOR EDUCATION RELEASES UPDATED PRODUCTS



Ian R Holder, Managing Director at Electric Motor Education, and former TAFE Teacher, advises of updated products that are now available on the Electric Motor Education website.

Electric Motor Education manufactures bespoke electrical motor education products and resources for Registered Training Organisations (RTOs) who deliver electrotechnology programs involving electric machines and accessories.

The electric machines and accessories are designed to operate at "Exrta-Low-Voltage" (ELV) / Low-Power system. The advantages are that it is much simpler to use, OH&S compliant, more robust and less cumbersome to manage in the classroom environment. Plus, it has the electrical and mechanical flexibility to adapt and conform with any of the continually changing(evolving) syllabus requirements.

In practice, the classroom safety of the ELV system and equipment has proven to be superior to other more expensive, commercially available systems, which operate at the higher (less desirable) standard mains Voltage: "Low-Voltage" (LV).

After considerable research, the equipment Ian is now producing, and further developing, is a result of the ongoing request and feedback from RTO teachers and students. It is fourth generation product that has evolved from its humble beginnings, with Betts Electric Motors.

The success and popularity of this equipment is student driven. Beginning with the original machines' students found this equipment to be extremely "student friendly" (or tolerant).

It's about product that supports "HANDS ON" Learning

Concept Behind ELV Machines

1. Using an "Extra-Low-Voltage supply:

This in terms of classroom OH&S: Minimises the possibility of electric shock due to inadvertent physical contact with live conductors. The voltage selected was derived from the then standard (1970) NSW(Australia) 3 phase + Neutral, 4 wire, MEN, distribution system of 415/240 Vac. 50 Hz supply.

In order to make the apprentice/student experimental meter readings and their associated calculations appear more realistic/representative of actual industrial practice, the supply voltage of 41.5/24.0 Vac, 50Hz was selected (i.e. 1/10th of the actual distribution voltage, or in mathematical terms the decimal point has simply been moved one place).



2. Reduction of Output Power at the shaft:

the machines have been designed to have a nominal full load torque of 0.31Nm, and Dependent on motor type, and full load speed, having a nominal output power of 50 Watt.

The reduction of energy levels in terms of classroom OH&S: minimises arcing flash, skin burns, material burning &/or fire due to inadvertent incorrect &/or short-circuit connections. The output shafts are fitted with relatively large smooth surface steel couplings which enable the apprentice/student, with relative safety.

These are outcomes which cannot be reproduced using full voltage (LV) high power machines.

Notwithstanding, motors can be supplied to operate on Low voltages(LV) supplies (415V, 240V, 120V etc) and/or other frequencies if required. However, output power (torque) will also increase making them unsuitable for students to stall the motors with their hand.

If you would like to learn more about the educational products and accessories lan manufactures visit the website and review the resources on offer at <u>www.electricmotoreducation.com.au</u>

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(M) 04 49 806 842.

23. POWERLINE FATALITY LEADS TO GUILTY PLEA



Electrical Comms Data reports of a fatality in its 8 November 2023 edition of ecdonline after a Queensland energy supplier failed to ensure an overhead powerline was safe.

The article states, "An energy supplier in Queensland has pleaded guilty to a Category 2 offence for failing to ensure an overhead powerline and its supporting structures spanning farmland were safe.

The supplier was fined \$300,000 in a decision handed down in the Rockhampton Magistrates Court.

The site in question was a field where a power pole was kept vertical by a number of stay wires, each of which were separately attached to the ground. There were guards at the bottom of each stay wire obscuring a portion of it.

During an inspection of the power pole in late September 2020, corrosion was noted and given a Priority 3 rating, meaning it did not require rectification within a particular time frame.

Ten months later, employees operating a harvester were working underneath the overhead powerline when the top of the harvester either contacted or came very close to the powerline.

One worker was electrocuted and died, and another five received electric shocks and were hospitalised."

READ MORE HERE



24. SOLAR REPORT - THIRD QUARTER 2023



EnergyInsider, a joint publication of Energy Networks Australia (ENA) and Australian Energy Council (AEC), in its 9 November 2023 edition referred to the latest third quarter Solar Report, which shows a continued rise in solar PV installations.

The article states, that "Our appetite for solar PV continues. At the end of the third quarter, Australia's total installed solar rooftop capacity had reached 21.2GW.

More than 68,000 new installations were added to the grid in the quarter with a total installed capacity of 620MW."

In addition to the latest installation statistics, the report looks at other developments in the sector, including its levelised cost of energy and the average payback period for solar PV systems.

"During the third quarter, New South Wales maintained its leading position in the country, boasting the highest capacity for newly installed rooftop solar systems accounting for 34.8 per cent of total nationally installed capacity (or 216 MW installed capacity). Following closely behind were Queensland and Victoria, contributing 26.6 per cent and 16.4 per cent, respectively, to the overall new installations. South Australia accounted for 9 per cent of the total installed rooftop solar systems across the country, while Western Australia accounted for 8.3 per cent of new installations. There continues to be a sustained nationwide interest in the adoption of rooftop solar."

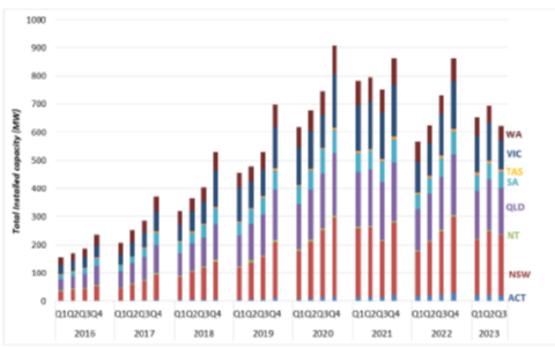


Figure 1: Quarterly installed capacity of rooftop solar PV in Australia since 2016 (unadjusted data)

Source: Clean Energy Regulator data, Australian Energy Council analysis, data as of 25 October 2023



NSW Utilities & Electrotechnology Industry Training Advisory Body (ITAB)

24.1. ELECTRIC VEHICLES



READ MORE HERE

The most recent State of Electric Vehicles report showed that by June 2023, Australia had seen the sale of 46,624 electric vehicles (EVs), representing a 269 per cent surge compared to the same period in 2022. The total sales figure now indicate that EVs account for 8.4 per cent of all new car sales in Australia, representing a substantial 120.5 per cent increase when compared to the full 2022 year.

If you would like to contribute to this News Service, please feel free to write to the undersigned accordingly. Thank you.

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WEBSITE: Electrical Safety Project: <u>www.esproject.com.au</u> - provides information about improving electrical Safe Work Practice and exemplar Safe Work Procedures (SWPs) for use in training, or adaptation by micro-businesses and self-employed in the utilities and electrotechnology industries.