



Mining diversity: How great minds *not* thinking alike can drive the next phase of innovation in the mining industry



The better the question.
The better the answer.
The better the world works.



Shape the future
with confidence

Rio Tinto

Foreword

from
Rio Tinto Iron Ore

The world's focus on energy transition is disrupting the resources industry, with demand for existing and new minerals expected to surge.¹ The industry needs to transform quickly to address a complex, interlinked set of challenges in meeting this demand.

At the same time, there is an unprecedented skills shortage because of an aging population, a growing need for new skills, and a diminishing supply of traditional graduates. To top it off, the resources industry suffers from a poor brand image and a lack of awareness of emerging career opportunities beyond traditional operational roles. The lack of diversity in the industry is a longstanding challenge and is receiving stakeholder attention, albeit predominantly still focused on achieving gender diversity.

The industry has identified 'future' roles that are needed across the value chain; to best fill these roles

means embracing a broader, more diverse pool of potential talent. Ultimately, the ability to innovate and meet demand across various industries hinges on the presence of a workforce that is highly skilled, diverse and resilient.

To recruit this 'future' workforce, the industry must address and then showcase what it's like to work in modern resources, including non-traditional career paths, offering incentives for education and training, and creating a safe and inclusive workforce culture.

Rio Tinto Iron Ore (Rio Tinto) started the journey within our business to embrace the benefits a more diverse talent pool can provide, but neither EY nor Rio Tinto offer 'best practice', as we don't think anyone has cracked what's best yet. But we do share, with transparency, our journeys so far, the highlights, where we have struggled, and what we have learned.

¹ "The rare metals war" Guillaume Pitron, 2024. (updated version)

Foreword

from
EY

Neurodiverse individuals can significantly benefit organizations. The EY paper *What happens when great minds don't think alike*² highlights the value a neurodiverse workforce brings to organisations competing for talent, including a diverse range of thinking styles and unique perspectives that can shed light on new solutions to old and new problems. And research consistently shows that diverse teams outperform homogeneous ones.

In addition, organisations that prioritise diversity create a more inclusive and innovative work environment for everyone. According to the *EY Asia-Pacific Belonging Barometer 2022*³, employees who feel a strong sense of belonging are three times more likely to stay with their organisation.

Many of the skills needed to solve these complex business problems are well suited to neurodivergent thinking. While neurodiversity is a broad category, with each neurodistinct person having their own 'spiky profile' of traits, there are some general aspects that can apply. People with autism can have higher savant skills, e.g., strong pattern recognition, visual, spatial and mathematical skills; dyslexic people tend to be creative and come up with new ideas.⁴

EY, too, is on a journey of including more neurodiversity in our workforce, and by inference, a more inclusive workplace for neurodiversity. We see the results when we make efforts to recruit and retain talent that can bring innovation, new thinking, and better ideas for ourselves and clients. We believe neurodiversity, and diversity on a broader scale, brings benefits that help us build a better working world.

² EY Asia-Pacific What happens when great minds don't think alike | 2024, https://assets.ey.com/content/dam/ey-sites/ey-com/en_gl/topics/financial-services-asia-pacific/ey-what-happens-when-great-minds-dont-think-alike.pdf.

³ EY Asia-Pacific Belonging Barometer 2022 EY Asia-Pacific Belonging Barometer 2022 | December 2022, https://www.ey.com/en_au/newsroom/2022/12/growing-gap-in-asia-pacific-between-employees-needs-and-experiences-ey-report, accessed August 2024.

⁴ Martin McKay, co-founder and CEO of Texthelp, EY World Entrepreneur of the Year winner.

The future of work in the resources industry

Traditionally, roles in the resources industry have not been designed for flexibility or accessibility. The broad range of locations (both head offices but also the often-remote locations of mining operations) means there will be varying levels of awareness and inclusion of neurodiversity. Some regions have little recognition of common neurodiverse experiences. But things are changing.

A range of factors, including technological transformation and more sustainable practices, are driving demand for new skills. Today's resources enterprises increasingly need employees with leading-edge technical and technological skills, including advanced engineering and mathematics, robotics and communication skills, all the while continuing to value the conventional roles in engineering, trades, chemistry, and environmental science. Mining operations are also becoming more data-driven, requiring programming and analytical skills.

In *The Future of Work: the Changing Skills Landscape for Miners*⁵, a report commissioned by the Minerals Council of Australia, EY Australia uses the example of 'driverless trucks', which results in shifting skills profiles from heavy-license drivers to employees with data processing, digital literacy and technical planning skills. This innovation has changed the modality of work, from the mine site to remote and integrated operating centres, leading to benefits in terms of accessibility,

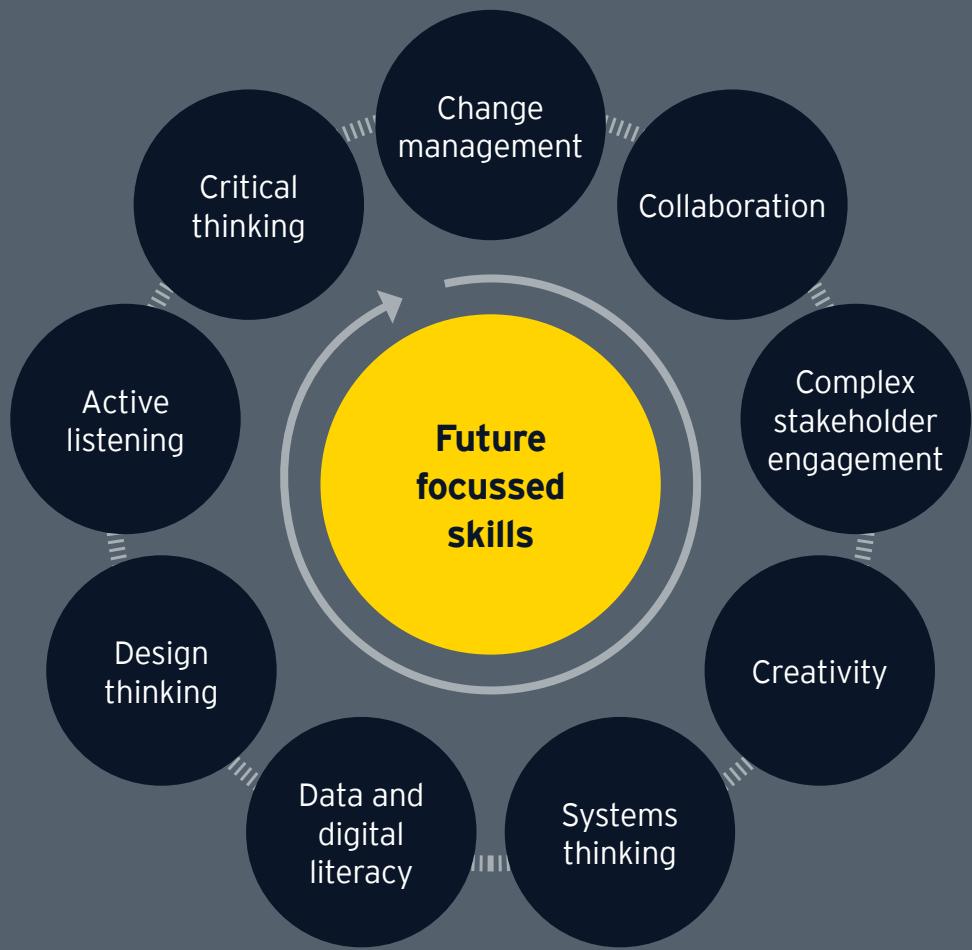
increased employee safety, and improved recruitment and retention outcomes, achieving greater diversity and more efficient operations.

Some of the new career paths, roles and skills needed today in mining and metals include:

- **Automation and Digitalization:** Roles involve monitoring, maintaining, and troubleshooting automated systems, with the need for advanced digital literacy. Employees may not even need to be located on a mine site but rather in a remote operating centre.
- **Data and Analysis:** Roles are becoming increasingly data-driven, leveraging technology, like IoT sensors, AI and predictive analytics to optimise and improve safety and performance.
- **Sustainability:** Roles minimising the ecological impact of mining, ensuring compliance with environmental regulations and seeking sustainable alternatives.
- **Community Relations:** With increased scrutiny of the social impact of mining, roles focused on community engagement and social responsibility are likely to become more prominent.

⁵ EY Australia The Future of Work: the Changing Skills Landscape for Miners | 2019, <https://minerals.org.au/wp-content/uploads/2022/12/The-Future-of-Work-The-Changing-Skills-Landscape-for-Miners-February-2019.pdf>.

What skillsets do you think will be required in the future?



Source: The Future of Work: the Changing Skills Landscape for Miners.

Embracing neurodivergent talent offers a triple benefit: it brings unique perspectives and innovative thinking to businesses, it increases employment of neurodivergent individuals, and contributes to societal progress by breaking down stigmas and barriers and expanding opportunities for everyone.

While 15-20%⁶ of the world's population is neurodivergent, only 20%⁷ of neurodivergent thinkers are employed – the opportunity appears untapped.

So, the 'why' – the benefits – are clear. The next question is 'how'. To maximise neurodiversity in the workforce, companies need to create inclusive environments where employees feel safe to express different viewpoints and remove barriers to neurodiversity across the end-to-end employee lifecycle.

⁶ 'Neurodiversity in the Workplace | Statistics', My Disability Jobs, January 2024, <https://mydisabilityjobs.com/statistics/neurodiversity-in-the-workplace/>, accessed July 2024.

⁷ 'Is Your Company Inclusive of Neurodivergent Employees?', Harvard Business Review, February 2022, <https://hbr.org/2022/02/is-your-company-inclusive-of-neurodivergent-employees>, accessed July 2024.

Strategies to unlock the power of neurodiversity

The first step in accessing the neurodivergent population is making it known that the resources industry is now welcoming people with neurodivergent thinking. In 2023, Rio Tinto Iron Ore began a pilot program hiring neurodivergent talent to approach business challenges differently and remove barriers.

Rio Tinto Iron Ore – Journey of neuro-inclusion pilot program

Began a pilot program hiring interns with Autism Spectrum Disorder to approach business challenges from new perspectives.



Strong results from the internship pilot program

5 interns
hired since January 2023

2 interns moved to graduate program and will begin a series of rotations

2 interns continuing their internships in the 'digital' division

1 intern directly offered a permanent role

Diverse thinking brings another dimension to the Rio Tinto Iron Ore culture, enabling it to better approach business challenges.

Source: Rio Tinto.

To foster a neuro-inclusive environment, organisations must take proactive steps across the whole talent life cycle, from a base of strong leadership buy-in.

Some organisations are also linking this with integrating psychological health and safety into all aspects of their employee experience.

“

We had to change our entire HR processes to [offer a neurodiversity internship program] and then make it practical for our use cases that we were specifically going after. You can't have a neurodiversity program that caters for everybody. It must be very specific.

Chris Ware

General Manager Digital,
Rio Tinto Iron Ore

EY's *Neurodiversity November* initiative raised awareness across the organisation and the market, boosting both understanding of neurodiversity in the financial services sector and growing the community of support for neurodiverse individuals. Activation activities included events and resource toolkits and

went beyond the theoretical by sharing lived experiences from neurodistinct team members. New digital accessibility tools were launched, and highlights of new office features being deployed rounded out the key messages that neurodiverse people have a home at EY.

Leadership

Leaders play a pivotal role in advocating for diversity and thoughtfully establishing psychologically safe spaces where employees of all backgrounds and experiences feel safe, welcome and valued in the mining industry. This requires a shift in the mining industry's culture, from a relatively homogenous workforce and associated values, to celebrating the strengths a heterogeneous workforce, inclusive of neurodivergent talent, delivers. From the top, mining organisations need to encourage empathy, clear and open communication, expectation management, and permission to think differently. This includes role modelling these behaviours.



Operations

Building a neuro-inclusive workplace requires focused strategies and coordinated effort at various parts of the organisation. Recruitment is a big first step. EY Australia's award-winning program, *SwitchedOn*, found that job advertisements that mentioned a role was appropriate for neurodivergent talent increased applications.

Inclusive job titles and descriptions in advertising for open positions are helpful, and educating interview panels and recruitment teams about neurodiverse traits will be important for more successful placements.

Next, workplace accommodations need to address diverse sensory perceptions, foster comfort, and improve productivity. Examples include adjustable lighting, sound-proof spaces, simple signage, and minimal patterns.

Job design, flexibility of working location, work settings, teaming styles, career development policies and performance measures will all need to be evaluated for fit and adjusted as necessary. It's also crucial to think of the different networks and connections that enable a better flow of information, including current role information, stretch opportunities and career advice.

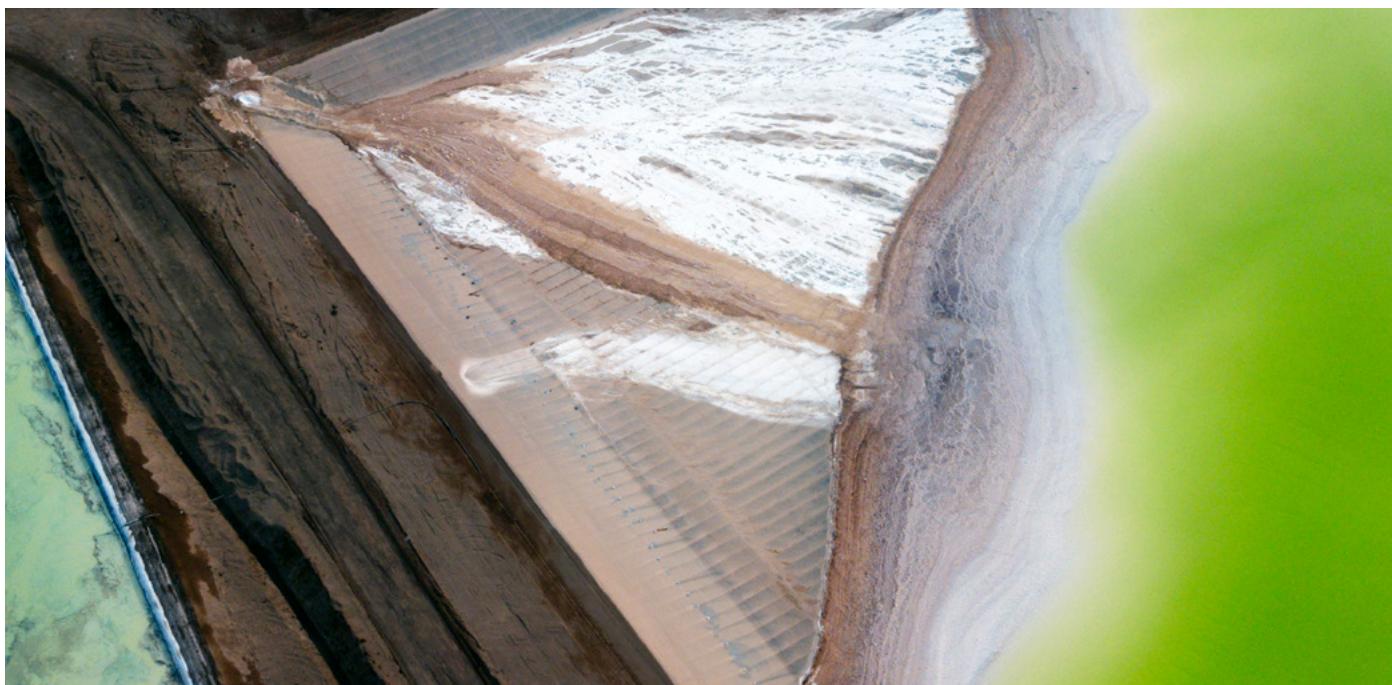
Advocacy

Building a cohesive network of neurodivergent talent where people can connect and share experiences boosts psychological safety. These networks are great for advice and support, as well as access to role models. In today's rapidly evolving resources landscape, celebrating neurodiversity through storytelling, designated events and allyship fosters an environment of trust, empowering neurodivergent individuals to build their identities and enhance their long-term skills.

Rio Tinto's Neurodiverse Voices Employee Resource Group (ERG) was launched in 2023 to advocate for the needs and wellbeing of individuals with distinct cognitive profiles. The ERG is open to all employees and includes those with lived experience as well as allies. The ERG works to promote awareness and help identify and address the existing structural

barriers to foster an environment that can unleash the potential of everyone. The ERG supports neurodiverse employees and leaders with practical support, such as the Neurodiverse Disclosure Guides that allows people (neurodistinct or not) to have tailored support from leaders. They also run open 'Ask me anything' virtual sessions, creating a safe space for conversations that helps to increase awareness and understanding.

With increased awareness of neurodiversity and inclusion we can design better and more pragmatic solutions for ourselves and other resources organisations. Embracing neurodiversity and adopting inclusive practices, resources companies can spur innovation, find scarce talent in tough-to-fill skills categories, cultivate belonging and be the employer of choice for neurodivergent talent, creating a profound competitive advantage.





Conclusion

For a sector in the thick of transformation and experiencing a severe skills shortage, increasing the diversity of the workforce – and all the proven benefits it brings – is too big an opportunity to ignore. How the resources industry embraces change and finds ways to break new ground in the race for talent will bring value to the sector, individual organisations, people and communities.

For those looking to learn more, please reach out to the authors or read more on ey.com/Diversity

Source: EY Insights.



Contacts

EY



Holly McGhee
EY Asia-Pacific
Diversity Equity & Inclusion
Leader
holly.mcghee@au.ey.com



Matt Lovegrove
EY Rio Tinto Global People
Advisory Services Account
Leader
matt.lovegrove@au.ey.com

Rio Tinto



Chantelle Thom
Rio Tinto Senior Manager
Equity, Inclusion & Diversity
(Global)
chantelle.thom@riotinto.com



Chris Macrae
Rio Tinto General Manager
Workforce Strategy,
Area of Expertise
chris.macrae@riotinto.com

Acknowledging our valued contributors

EY

Angie Beifus, EY Mining & Metals Insights Leader, Oceania
Caroline Stephen, EY Global Account Manager for Rio Tinto
Martha Raupp, EY Knowledge Leader Asia Pacific and DE&I

Rio Tinto

Chris Ware, General Manager Digital, Rio Tinto Iron Ore
Greta McCloy, Principal Advisor Global Equity, Inclusion and Diversity Rio Tinto
Dom Hannigan, Co-Chair Neurodiverse Voices Rio Tinto
Aaron Le Page, Programme Lead, Neurodiverse Voices Rio Tinto
Jonathon Clark, Regional Lead Asia Pacific Neurodiverse Voices Rio Tinto

EY is building a better working world by creating new value for clients, people, society and the planet, while building trust in capital markets.

Enabled by data, AI and advanced technology, EY teams help clients shape the future with confidence and develop answers for the most pressing issues of today and tomorrow.

EY teams work across a full spectrum of services in assurance, consulting, tax, strategy and transactions. Fueled by sector insights, a globally connected, multi-disciplinary network and diverse ecosystem partners, EY teams can provide services in more than 150 countries and territories.

All in to shape the future with confidence.

EY refers to the global organization, and may refer to one or more, of the member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. Information about how EY collects and uses personal data and a description of the rights individuals have under data protection legislation are available via ey.com/privacy. EY member firms do not practice law where prohibited by local laws. For more information about our organization, please visit ey.com.

© 2024 Ernst & Young, Australia.
All Rights Reserved.

EYSCORE 009442-24-AUNZ
PH2900500
ED None

This communication provides general information which is current at the time of production. The information contained in this communication does not constitute advice and should not be relied on as such. Professional advice should be sought prior to any action being taken in reliance on any of the information. Ernst & Young disclaims all responsibility and liability (including, without limitation, for any direct or indirect or consequential costs, loss or damage or loss of profits) arising from anything done or omitted to be done by any party in reliance, whether wholly or partially, on any of the information. Any party that relies on the information does so at its own risk.

ey.com