## Australia-India 20 TRADE INVESTMENT 23



## PAUL HODGSON

Scaling Green Hydrogen

## STRENGTHENING EDUCATIONAL BONDS

India-Australia Reciprocal Recognition of Qualifications

## **GREEN ENERGY**

Can Green Steel Turn Trash into Cash?

## THE GROWING TRADE OF LITHIUM BETWEEN A USTRALIA & INDIA The Quest for a Sustainable Future

## INTERNATIONAL TRADE INVESTMENT

## PROF. MOHAN YELLISHETTY

Crtitical Next Steps in Australia-India Critical Minerals Partnership

## CELEBR ATING 15 YEARS OF COLLABOR ATION

The Australia-India Strategic Research Fund

THE SO ARING
WHISKEY TRADE
IN A USTRALIA
A Spirited Revolution

## SUMO IV & SIV FUND

Our bespoke managed funds span the spectrum of assets Đ from venture capital to property

Managed by a team of veteran venture capitalists, our early-stage venture capital fund in innovative technology businesses, focuses on the blockchain, fintech and online market place investment.

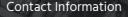
SUMO Group principals also operate a number of Property Managed Investment Schemes that allow investors to participate with renowned developers in property development and land sub-division.

## **OPPORTUNITIES**

We currently have the following investment opportunities:

- Land Subdivision Projects in Sydney
- Preferred Equity Funds
- Lending to Property Developers
- Venture Capital Fund focusing on technology, fintech and online market places companies
- Agricultural investment in Australia





Sumo IV & SIV P ty Ltd ACN 663 210 188 Level 10. Suite 1005, 4 Bridge Street Sydney NSW 2000 Telephone +61 (0) 412 650 515 Email suren@sumogroup.com.au Web sumoivsiv.com.au

sumoivsiv.com.au





## A Warm Welcome from **Our Organisers**

### Dear Readers,

It is with great pleasure that we welcome you to the Australia India Trade and Investment Magazine and Conference.

We extend our thanks to all those that have played a role in this exciting project, sharing a vision for a more connected and prosperous future.

In particular, we would like to offer our appreciation to the sponsors - Your support has brought this event and magazine to life. So many different groups and individuals have contributed to this endeavour, we are eternally grateful.

May this publication serve as a useful catalyst, assisting the growing partnership between India and Australia

Warm regards,

David Collett

Australia-India Trade & **Investment Magazine &** Conference

**Australia-India** [20] trade investment | 23

## Australia-India 20 TRADE INVESTMENT 23

## **PUBLISHER**

### **David Collett**



International Trade Investment Level 1, 261 George Street Telephone +612 9165 0800 A MARKETING ADVISORY COMPANY

MANAGING EDITOR Dominic Cadden

**PUBLICATION & DESIGN DIRECTOR** Kelly Haskins Germs

SOCIAL MEDIA **DIRECTOR** Roxy Swart

**JUNIOR EDITOR** Ren Norton

**PUBLICATION** MANAGER Greystone

Mpetemova WRITER

Julia Brightman

FREELANCE WRITER Cassey Harding

JUNIOR DESIGNER Myers Madubansi

Akakandelwa **ADMINISTRATION** 

Inambao

MANAGER Michyla Van Wyk

SALES, CONFERENCE & EVENT MANAGER David Collett

WEBSITE DEVELOPER Suwilanji Phiri



**PRINTED BY** 



### **COPYRIGHT**

The contents of this publication are the copyright and intellectual property of International Trade Investment and may not be reproduced in part or in full in any format whatsoever without full written permission of the publisher.

## DISCLAIMER

Whilst every attempt has been made to ensure that the information contained herein is accurate on the date of publication International Trade Investment accepts no liability for any loss or damage of any kind caused by the information contained herein. The views and opinions expressed herein are those of the authors and do not necessarily reflect the official policy or position of International Trade Investment

We would like to acknowledge the following organisations for their support in making the campaign a

Invest India, IABCA, Indo-Federation (IIF), Business Group Chamber possible. of Commerce (IBC), Scaling Green Hydrogen CRC, Critical

Minerals Consortium, AAERI, English Australia, Independent Higher Education Australia, Multiconexions, Punjab Chamber of Commerce & Industry, Taj Yashwetpur.

**Special mention to** Sheba Nandkeolyar, Sonia Ghandi, Australian Chamber of Dianne Tipping, Thushara Commerce, Confederation Liyanarachchi from Taj Group, of Indian Industry (CII) Export Rtn. Manpreet Singh and Dalip Council of Australia (ECA), India Sharma for their unwavering Chamber for International support, help advice and Business (ICIB) India Investors guidance whom without India this would never have been



- Academies Australasia Group Limited comprises 18 separately licensed colleges - 17 in Australia, one in Singapore
- Mainly Bachelor degrees and VET Certificates, Diplomas and Advanced Diplomas (Australia, Singapore or UK qualifications)
- Also English language and other courses
- Established in 1908
- Listed on Australian Securities Exchange for 46 years

Seeking partners to offer courses in India with pathways to Academies Australasia courses in Australia and beyond. Interested education institutions in India please email IndiaPartnerships@academies.edu.au

- 150+ courses in various fields of study
- Bachelor degrees in Tourism and Hospitality Management, and Business - specialising in Cyber Security, Digital Marketing or Leadership and Management
- Colleges have taught 200,000+ students from 136 countries
- Also successfully delivered courses outside Australia (Cambodia, China, Indonesia, Papua New Guinea, South Korea, etc)





### **FOREWARD**

7 The IABCA Boosting **Bilateral Growth Between** India & Australia

> Sonia Sadiq Gandhi, Founder - India Australia **Business & Community** Alliance (IABCA)

**Greetings from the Indian Investors Federation** 

> Mr Dalip Sharma, Director General Indian Investors Federation

**11** A Word from the Export **Council of Australia** 

> Dianne Tipping, Chair, Export Council of Australia

14 India Celebrates 75 Years of Independence

> A journey of resilience and progress

### TRADE

**Economic Cooperation as** a "Catalyst" for Deepening **India-Australia Ties** Confederation of Indian Industry

24 Nominate Today for the 2024 IABCA Awards

> Sonia Sadiq Gandhi, Founder - India Australia **Business & Community** Alliance (IABCA)

The Australia-India **Strategic Research Fund** 

Celebrating 15 years of collaboration

**Seamless Export-Import Model Through ICIB** 

> Nikhil Guriar, Indian Chamber of International

**32** Cultural Exchanges to **Strengthen Bilateral Ties** 

Dalip Sharma - Secretary General - Punjab Chamber of Commerce and

33 The Digital Industry Boom in Australia

> Unlocking opportunities at home and abroad

**Unveiling Australia's Edge** in Financial Services

> Ben Norton Staff Writer & Junior Editor

Tat Capital Paving the Way

> Ram Gorlamandala Founder & CEO, Tat Capital

## **TASMANIA IN FOCUS**

**Trade & Investment Opportunities in Tasmania** Offering an impressive array of opportunities for investors

## FINANCE

India - What's All the **Excitement About?** Rufus Pinto: Country Head -India ANZ Institutional

Sumo Group: Financial Well-Being

Suren Pather, Founder & CEO, SUMO Group

**Q&A Session with Empire** Securities

Gerard Farley. Executive Chairman Empire Securities

### EDUCATION

India-Australia: **Reciprocal Recognition of** Qualifications India-Australia expanding collaborations

**The Allianz Care Student Experience: A Case Study** Allianz Partners Australia

**Box Hill Institute: Preparing Forward Thinkers of Tomorrow** Box Hill Institute Melbourne, Australia

The Association of **Australian Education** Representatives in India Assuring the credibility of recruiting agents

CIT International **Empowering Global Minds** Gateway to the world of global learning

**Unlocking Your Potential** with CIT Solutions Empowering students to

unlock potential

FREIGHT & **FORWARDING** 

72 Building a Brighter **Future Together** Synergy Freight Management

MINING

**Critical Steps in Australia-India Critical Minerals Partnership** 

Mohan Yellishetty, Associate

Innovation in Mine Closure is Key

By Dr Guy Boggs, CEO, CRC TIME

## **ROBOTICS & MEDICAL**

Collaboration Uniting the **Robotics Industry** 

The Advanced Robotics for Manufacturing (ARM) Hub

**Delivering Access** to Medical Bionic **Innovations** 

Dr Robvn Stokes

## **CLEAN & GREEN ENERGY**

**Opportunities for** Collaboration in Scaling Green Hydrogen

> Paul Hodgson, CEO, Scaling Green Hydrogen Cooperative Research

The Growing Lithium **Trade Between Australia** and India

> Driving the growth of the electric vehicles market

**Creating a Circular Model** in Production of Plastics Reducing the impact of

plastic waste Can Green Steel Turn Trash into Cash?

> The growth of the green steel market

### **SPACE & DEFENCE**

Reaching for the Stars Together

Australia playing vital role in India's space programs

**Bringing Space Closer: Full Stream Technology** Solutions

> Hex 20 Satellite Systems

A Defence Partnership **Going Beyond Borders** 

Australia & India's long history of cooperation

## **AGRIBUSINESS**

The Soaring Whiskey **Industry in Australia** The Rye Revolution

**AUSTRALIA STATES & TERRITORIES** 

106 Trade Between India and each Australian State

> Trade partnerships between India and each state









## FROM CERTIFICATES TO DEGREES

- > Accounting & Commerce
- > Automotive
- > Biosecurity Science
- > Building Design (Architecture)
- > Community Services
- > Cookery & Hospitality

- > Cyber Security & IT
- Digital Design
- > Early Childhood Education
- > Fashion
- > Music
- > Nursing

For a decade, the India Australia Business & Community Alliance has navigated Australia's relationship with India through our people-to-people links. IABCA has steadily engaged in cultural diplomacy and bilateral growth through people, organisations and businesses.

We recognise that Australia-India Trade Investment - Bringing Australia & India Together 2023 shares these goals, and welcome this initiative and wish it every success.

The extent of the growth between our two nations has been reflected across a range of initiatives that IABCA annually delivers across our two nations. Having recently played host to Prime Minister Modi's Australia Community reception with 30,000 patrons, IABCA has received international recognition as a tool for cultural diplomacy, bilateral trade enhancement, and an avenue for stimulating new business investment.

The India Australia Business and Community Alliance today stands as the leading platform that builds awareness and understanding between the peoples and institutions of Australia and India.

In 2023, the IABCA Awards and Global Leaders Forum, held in Delhi and Mumbai, grew to become a five-day immersive dialogue allies that was welcomed by both the Indian and Australian governments. The Global Leaders Forum engaged over 5000 people across India and Australia, and featured panel discussions with our expansive alumni group exploring range of sectors in the India-

## The IABCA Boosting Bilateral Growth Between India & Australia

Australia relationship, such as the STEM, soft power, food and agribusiness. We look forward to more discourse on these topics at the Australia-India Trade Investment Conference in Bengaluru.

The Indian Diaspora in Australia is the nation's second-largest diaspora community, according to the recent census. Over the 10 vears of the IABCA Awards. we have honoured more than 1400 business and community leaders, and we continue to celebrate the entrepreneurship. innovation. and contribution of the Australian-Indian community. The depth of the Indian engagement in the Australian community and business was a key factor in the invitation by the Australian Department of Foreign Affairs and Trade Centre for Australia-India Relations inviting me to attend a focussed roundtable meeting with Senator Hon. Penny Wong MP, Foreign Minister of Australia, to discuss Australia-India business engagement, with a focus on how to deepen economic ties between the two nations.

Consequently, the IABCA welcomed the ratification of the Australia-India Economic Cooperation and Trade Agreement (ECTA), and we are pleased to say that the success of this platform is testament to the direct engagement and commitment towards the bilateral relationship from our key stakeholders, Advisory, Alumni and our Alliance Partners. We urge you will take advantage of the resources presented by Australia-India Trade Investment



Sonia Sadiq Gandhi Founder - IABCA & Advisory Board NSW Government Multicultural NSW

- Bringing Australia & India Together 2023 in this publication, the conference in Bengaluru and all the associated Web resources to learn more about the opportunities presented by the ECTA and how you may better engage with Australia.

We also invite you to engage across the 2024 iteration of IABCA in Australia so that you can experience the warmth of the Australian-Indian relationship for yourself.

Sonia Sadiq Gandhi , Founder - India Australia Business & Community Alliance (IABCA) & Advisory Board, NSW Government, Multicultural





## Today's Mantra Business Goes Global



## Connect with MultiConnexions Group

Australia's Leading
Diaspora & International Marketing Agency

Telecom | Financial Service | FMCG | Travel & Tourism | Technology Media & Entertainment | Sports | Health & Wellbeing | Luxury & Life Style

## Greetings from the Indian Investors Federation

On behalf of the Indian Investors Federation, it is my privilege to extend warm greetings and appreciation for organizing the Australia-India Trade and Investment Opportunities Summit, which holds great promise for both our nations. This landmark event brings together key stakeholders from both Australia and India to explore, deliberate, and capitalize on the tremendous potential for trade and investment collaborations.

As esteemed representatives of the business community we recognize the significance of fostering robust economic ties between our countries.

India and Australia have a long-standing history of cooperation and this summit serves as a crucial platform to further strengthen our bilateral relationship. In light of the recent global economic shifts, the strategic partnership between India and Australia holds immense importance and untapped opportunities for growth and prosperity.

The exploration of untapped sectors with the potential to drive economic growth and technological advancement will be at the forefront of our discussions. Both nations boast economies driven by innovation, entrepreneurship, and skilled labour forces. The summit must focus on nurturing partnerships in sectors such as advanced manufacturing, renewable energy, agriculture, healthcare, information technology, and infrastructure development. By combining India's expertise in software development and Australia's strengths in biotechnology, we can also

create a powerful force for research and development, ultimately benefiting both nations and the world at large.

Moreover, as the world transitions towards sustainable practices and green technologies, it is in both nations' interests to develop sustainable solutions to meet the emerging needs of



Mr Dalip Sharma Director General Indian Investors Federation

the investor community. As India and Australia work together to share best practices, knowledge, and investments, together we can address environmental challenges and contribute to global efforts in combating climate change.

The summit should also lay emphasis on facilitating ease of doing business between our countries: streamlining regulations, reducing trade barriers, and addressing bureaucrat-



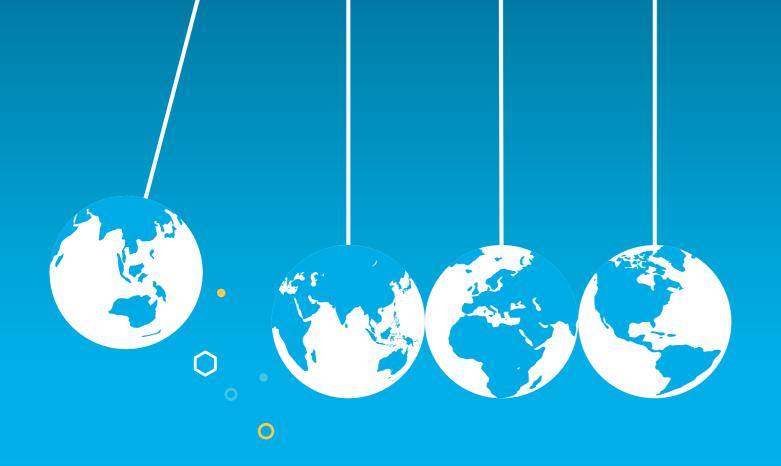
ic hurdles. Furthermore, promoting bilateral investments through mutual recognition of qualifications and certifications will encourage skilled professionals to collaborate, boosting innovation and productivity.

We must not overlook the cultural exchange between our nations. Cultivating cultural ties through academic exchanges, tourism, and people-to-people interactions can create a more inclusive and cohesive bilateral relationship and help meet our mission to Engage, Enable and Empower Indian investors.

Lastly, the summit should actively encourage collaboration between start-ups and established companies. Start-ups are the engines of innovation, and by facilitating knowledge-sharing, access to markets, and investment opportunities, we can create a thriving ecosystem for entrepreneurs in both countries.

The Indian Investors Federation is constantly working to improve the general conditions of operating investments to facilitate access and investment opportunities within and beyond local boundaries. By fostering a culture of collaboration we can unlock vast potential and embark on a journey towards sustained economic growth and prosperity. The Indian Investors Federation pledges its full support and commitment to making this summit a resounding success, resulting in tangible outcomes that benefit the businesses and citizens of both our great nations.

Thank you for your efforts in organizing this significant event, and we eagerly await the commencement of the summit.



## STAY ON TOP OF AN EVER CHANGING WORLD

As your business needs evolve, it pays to have a partner with the right connections. Access global opportunities with Asia's #1 institutional bank for relationships.

anz.com/institutional

#NO.1 Overall Relationship Quality in the Coalition Greenwich Asian Large Corporate Banking Study, 2017-2022. Australia and New Zealand Banking Group Limited ABN 11 005 357 522 and/or used under licence "ANZ", ANZ's logo and ANZ's colour blue are trademarks of ANZ.



By Dianne Tipping Chair Export Council of Australia

## There has never been a better time to do business with Australia.

India is one of the most important growth markets for Australian exporters and education providers, so the Australia India Economic Cooperation and Trade Agreement is a significant milestone in the India-Australia economic relationship.

For more than 65 years, the Export Council of Australia (ECA) has been the leading provider of education and training for Australian businesses engaged in global trade. Now in 2023, Australian exporters are at an inflection point for technologies in trade. The Export Council of Australia supports Australian small, medium and large enterprises from different industries and sectors. Our work benefits our trading partners by advocating for an open and competitive environment in the development and adoption of technologies to ensure ongoing efficiency of the system.

Australian exporters are set to benefit from many reforms that have been advocated by the ECA. For example, international businesses will be supported through various initiatives such as the Export Market Development Grants (EMDG) scheme, and the enhancement of the Simplified Trade System.

Our member exporters are involved in both the manufacturing of goods and delivery of services in a variety of



Dianne Tipping Chair Export Council of Australia

## A Word from the Export Council of Australia

industries such as agrifood, wellbeing and health, wine, defence, entertainment, information technology, cyber security, construction and much more. They export to a diverse range of markets across every continent of the world. Now they are ready for India.

We believe that the Australia-India Economic Cooperation and Trade Agreement (AI-ECTA) will deliver new market access opportunities for both Indian and Australian businesses to make trade between the two nations easier and more rewarding. The ECA will continue to facilitate this process by advocating for and assisting Australian businesses by working towards streamlined international trade processes and reduced costs,

decreased barriers to trade, and helping traders achieve enhanced networks and supportive ecosystems.

The Export Council of Australia is committed to facilitating crucial business relationships that help exporters progress opportunities, and so we welcome Australia-India Trade Investment - Bringing Australia & India Together 2023. This aligns with our mission to set new benchmarks in influencing policies that impact trade, while delivering offerings that are excellent, innovative and current.







**Australia-India Trade Investment** is an international B2B campaign launching on the 29 August at the Taj Yeshwantpur in Bengaluru.

The campaign is supported by various agencies, chambers of commerce, councils and peak industry bodies. The launch conference features a series of events each offering a high-level business-to-business networking opportunity in relation to trade between India & Australia.

- Conference
- · Launch of Annual Publication
- . Exhibition
- Networking Canapé and Drinks Sessions
- VIP Invitational Dinner

## **TOPICS**

- State Showcase
- Banking & Finance
- · Funds Management
- Mining Investment & Private Equity
- Professional Services
- Immigration
- Critical Minerals
- Green Energy
- Space Exploration & Technology

### INOUIRIES

David Collett: david@marketingadvisory.co



## **Empire Securities Group Pty Limited**

Corporate Authorized Representative of Novus Capital Ltd AFSL 238-168 Corporate Authorized Representative Number: 326 226



Empire securities group is a boutique corporate advisory firm based in the Sydney CBD. Our primary focus is the resources sector in Australia, Asia and Africa and we also work with early stage ventures in agriculture, biotech, payment systems social media and webtech

The company was founded by Gerard Farley who has had over 25 years experience in the financial services march of this in the resources sector. Gerard has a long and successful history of picking companies at their most junior stage. He was an early investor and promoter of companies such as Kingsgate and fortescue Metals Group

## **Empire securities offers these services**

- Share trading buying and selling shares on the Australian and selected international exchanges
- Corporate advice
- Capital Raising raising capital for mining exploration for listed and unlisted companies is the company's forte. In the last 5 years, empire securities has played a leading role in raising over \$200 million for listed and unlisted companies in Australia, Africa, Canada, USA and Southeast Asia.

## For more information contact

Empire securities group pty limited level 5, 2 Bligh street Sydney NSW 2000 Tel: + 61 2 8252 9223 | Fax: + 61 2 9475 5435

Web: empiresecuritiesgroup.com



Sydney NSW 2000

Tel: +612 9165 0800



On August 15, 2022, India achieved an historic milestone, celebrating 75 years of independence from British colonial rule.

This momentous occasion marks a significant milestone in the nation's history, reflecting upon its remarkable journey of resilience, progress, and unwavering commitment to democracy and diversity. As the world's largest democracy, India's

75th year of independence is a time to honour the sacrifices of the past and envision a brighter, more inclusive future.

## REFLECTION ON HISTORICAL SIGNIFICANCE:

India's independence struggle was a saga of courage, unity, and determination. The country's freedom fighters, led by Mahatma Gandhi, Jawaharlal Nehru, and countless others, braved all odds to secure India's sovereignty. The celebration of 75 years of independence is an opportunity for citizens to reflect on the sacrifices made by these visionaries and the countless

anonymous heroes who fought for the nation's freedom.

### SHOWCASING INDIA'S CULTURAL HERITAGE:

This milestone is a grand occasion to showcase India's rich cultural heritage and diversity. From vibrant traditional dances to melodious folk music, the celebrations resonate with the spirit of unity in diversity. Each state and region brings its unique flavours to the festivities, creating a colourful tapestry that exemplifies India's pluralistic ethos.

## **REAFFIRMING DEMOCRATIC VALUES:**

India's commitment to democratic values has been the cornerstone of its progress. As the world's most populous democracy, the nation celebrates its independence with a reiteration of its commitment to freedom of speech, equality, and fundamental rights. The significance of this moment lies in the renewal of citizens' pledges to uphold democratic principles and safeguard the nation's democratic fabric

## ECONOMIC PROGRESS AND TECHNOLOGICAL ADVANCEMENTS:

Over the past seven decades, India has witnessed remarkable economic progress and technological advancements. The nation's transformation from an agrarian economy to a global IT hub is a testament to its potential and growth. These celebrations

acknowledge the strides made in various sectors, including space exploration, information technology, and renewable energy.

## COMMITMENT TO SUSTAINABLE DEVELOPMENT:

India's pursuit of sustainable development is another focal point of the celebrations. The nation is actively embracing renewable energy sources, promoting environmental conservation, and striving to achieve a greener future. The celebration serves as a platform to reiterate India's commitment to preserving its natural resources for future generations.



As India commemorates 75 years of independence, it looks forward to a vision of an inclusive and prosperous future. The celebrations offer an opportunity for the government and citizens to rededicate themselves to eradicating poverty, promoting gender equality, and building a robust and equitable economy.

The 75 Years of Independence celebrations are not merely a tribute to the past but a collective endeavour to shape a better tomorrow. It is a celebration of the nation's journey of resilience, progress, and diversity - a journey that continues to inspire hope and optimism. As India looks to the future, it embraces the challenges with determination, guided by the principles of democracy, equality, and sustainable development. The celebrations unite the nation in the spirit of patriotism and dedication to building a prosperous and inclusive India

for generations to come.





## and Trade Agreement as a "Catalyst" for Deepening India-Australia Ties

The first half of 2023 have proved momentous in defining the future course of trade and economic ties between India and Australia. From the activation of Economic Cooperation and Trade Agreement (ECTA) on December 29, 2022 to bi-directional State visits, the earnest efforts and focused steering at the highest levels of decision making in both the countries, has set the stage for early conclusion of Comprehensive Economic Cooperation Agreement (CECA).

As the voice of Indian Industry, the Confederation of Indian Industry (CII) being the voice of Indian industry, it has remained at the forefront to advocating and articulating the economic agenda between the two countries. Being the India secretariat of India-Australia CEOs Forum, CII hosted the crème-de-le-crème of Australian and Indian business leaders on 9 March 2023 in Mumbai. Prime Australian Anthony Albanese, graced the interaction with his presence and keynote address. Mr Don Farrell (Minister of Trade and Tourism, Australia) and Shri Piyush Goyal (Hon. Minister of Commerce and Industry, Consumer Affairs, Food and Public Distribution and Textiles, Government of India), praised the efforts made by both sides to keep economic dialogue on the fast track to success.

CII has been continually undertaking sectoral and regional initiatives for seeding business, investment and

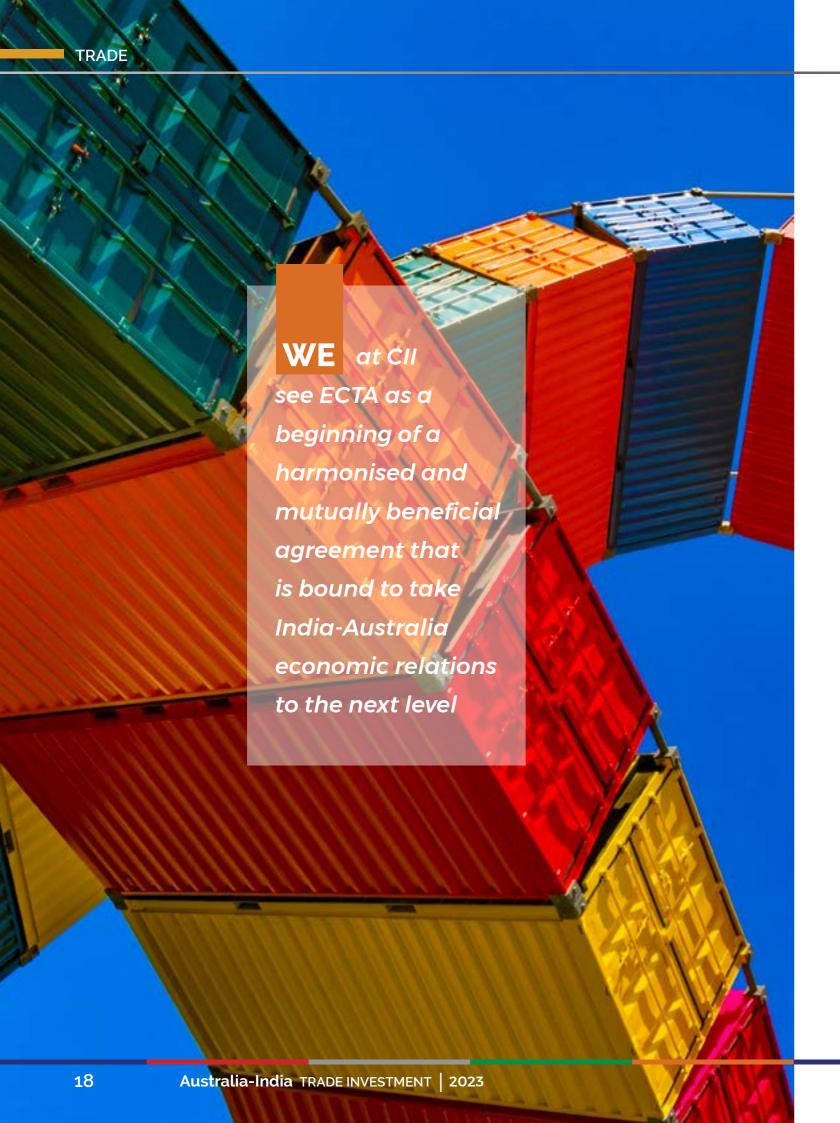
economic opportunities for Indian industry in Australia.

Indian industry has favourably received the agreement since IA ECTA is the first agreement which India has signed with a large, developed economy in over a decade. Australia is also the third OECD country after Japan and Korea, with whom India has signed a trade deal.

The key gains for India include immediate duty elimination on 96.4% value of Indian exports in Australian market, easing out the labour market test, easier visa and lengthy stay for Indian professionals in Australia. India has agreed to eliminate duty on coal, major exports from Australia to India, which would help our steel and power sector.

Indian exports face a tariff disadvantage of 4-5% in many labour-intensive sectors vis-à-vis competitors with Australia such as China, Thailand, Vietnam, South Korea, Indonesia, Malaysia, and Japan. Removing this barrier would certainly enhance merchandise exports. Bilateral trade in goods and services for both the countries is expected to rise from the existing US\$27.5bn to US\$45bn in 5 years. There will be consolidation and growth of market shares of Indian products and services and India's exports in goods and services is expected to increase from US\$10.5bn in 2021 to US\$20bn by 2026-27 and to cross US\$35bn by 2035.

The trade agreement with Australia assumes significance



not only from an economic perspective but also for strategic reasons. India has entered into the trilateral Supply Chain Resilience Initiative (SCRI) arrangement with Australia and Japan, which seeks to enhance the resilience of supply chains in the Indo-Pacific Region and develop dependable sources of supply and attract investment. India is also part of the Quad, which comprises US, Australia, India, and Japan, to further enhance cooperation and develop partnership across several issues of common concerns.

Moreover, since Australian exports are more concentrated in raw materials and intermediates, many industries in India will get cheaper raw materials and become more competitive, particularly for sectors like steel, aluminium, fabric/garments etc.

On products of export interest of Australia, India is offering concessions mostly on raw materials and intermediates either in the form of tariff elimination, tariff reduction (TR) with or without a tariff-rate quota (TRQ). India's offer includes immediate tariff elimination on 40% of its tariff lines comprising of 85% of Australia's exports in value terms to India and another 30.3% of its tariff lines for elimination or reduction of tariffs in 3/5/7/10 years time period. Only a few agricultural products such as oranges, mandarins, almonds, pears and cotton among others have been allowed with limited quota.

Tariffs on wine, one of the key Australian exports to India, with a minimum import price of US\$5 per bottle will be reduced from 150% to 100% by India on the implementation of the deal and subsequently to 50% over 10 years. Similarly, the duty on bottles with a minimum import

price of US\$15bn per bottle will be reduced from 150% to 75% and subsequently to 25% over 10 years.

India has kept many sensitive products in the exclusion category (29.8% of tariff lines) without offering any concession. Some of these are Milk and other dairy products, chickpeas, walnut, pistachio nut, wheat, rice, bajra, apple, sunflowers seed oil, sugar, oil cake, gold, silver, platinum, jewellery, iron ore and most medical devices. This is a major gain for India in this Agreement.

Pharmaceuticals is another

sector that stands to gain from ECTA. Currently the market size of Australia Pharma products is estimated at \$12bn and Indian exports only amount to US\$345m. After the agreement Australia has agreed to an Annex on Pharmaceutical products which shall allow for fast track approval for patented, generic, and biosimilar medicines using the Comparable Overseas Regulator pathway. Fast track quality assessment/inspections of manufacturing facilities would also be made available to Indian pharmaceuticals. This will benefit all Indian Units/ medicines which have EU/ Canada FDA approvals. This is a major breakthrough for India, which can be used in future FTAs.

India's 70% of textile products and 90% of apparel products face duty on export to Australia. Our exports face a tariff disadvantage of 5% in these sectors vis-àvis competitors having FTAs with Australia such as China, Vietnam, and Bangladesh. With the elimination of duty, India's exports textiles and apparels are expected to gain from US\$392mn to US\$1.1bn in the next 3 years.

India's engineering export to Australia was US\$801mn in 2020-

21 which is likely to be US\$1.2bn in 2021-22, thereby showing a growth of 51%. At present, most of our engineering goods export to Australia suffer from 5% customs tariff disadvantage. These products include flat and value-added iron and steel products, scientific and medical instruments, parts, transport equipment, non-electrical and electrical machinery etc. With the elimination of tariffs, it is expected that engineering products exports may grow by around 15% per year, increasing by around \$1.5bn in 5 years to reach at \$2.7bn in 5 years.

In trade in services, from quota for chefs and yoga teachers, post study work visa of 2-4 Years for students on reciprocal basis to mutual recognition of professional services and other licensed/regulated occupations, the agreement is bound to unleash number of avenues and concessions to Indians and Indian companies.

The proposed amendment of Australian domestic taxation law to halt the taxation of offshore income of Indian firms that provide technical services to Australia, will have a positive effect on the presence and operations of Indian IT and service providers.

We at CII see ECTA as a beginning of a harmonised and mutually beneficial agreement that is bound to take India-Australia economic relations to the next level. Through its multi-layered engagements with Australia, CII is fully geared to transform insurmountable tasks into realised economic opportunities for Indian industry.



Confederation of Indian Industry



Every corner of Taj Yeshwantpur, Bengaluru, is infused with the warmth, grandeur and legendary hospitality distinctive of Tajness. Built around a majestic banyan tree, a lush courtyard welcomes you into a show-stopping lobby. Bask in an ambience of timeless luxury and grace under a chic chandelier or the striking stairway that swirls around it. Experience a stay that transcends the ordinary with 327 exquisitely appointed rooms and lavish suites, each space a symphony of indulgence and sophistication.

35-minute drive from the international airport

in a city that has gracefully evolved into India's

iconic Silicon Valley, the hotel complements the

city's appetite for success with a vibrant unison

of intelligent work environment, luxurious

spaces and intuitive services.

Savour an exquisite spread of culinary delights at our restaurants, which offer some of the finest dining the city has to offer. Connoisseurs of Punjabi cuisine will find new delicacies that add a unique twist to their gourmet journey at Paranda. For heartwarming catch-ups over unforgettable brews, Palette has much to offer. Evenings in the Garden City witness an electrifying ambience at Shimmer, where foot-tapping music accompanies delicious beverages.

For fitness enthusiasts, exclusive access to our well-equipped health club is a great way to unwind and recharge, while an immersive visit to J Wellness Circle offers a rejuvenating experience of unprecedented wellness.

Spanning 18,000 square feet, our state-of-the-art conference and event venues provide an idyllic setting to curate resplendent gatherings for your most important occasions and celebrations. An independent convention centre offers a myriad of amenities to ensure that your milestone events leave a lasting impression.

A stone's throw from the Yeshwantpur Railway Terminus and the metro terminus, at Taj Yeshwantpur, Bengaluru, you are perfectly positioned to embrace all that the city has to offer. Business travellers and vacationing families will find themselves comfortably situated to step out into an explorative wonderland, each corner a unique narrative waiting to be discovered.

Stroll along pathways brimming with captivating tales as you traverse guided walks through the city's hidden gems. Lose yourself amidst the bustling streets, admire remarkable cultural landmarks such as The National Gallery of Modern Art, the Aeronautical Museum and more. And through every step of discovery and delight, our concierge will be happy to assist you.

Be pampered by us, celebrate extraordinary events, and uncover the Garden City — a canvas of inspiration waiting to be painted upon with your sojourn at Taj Yeshwantpur, Bengaluru.

## **DINING**



Paranda – North Indian Speciality - The essence of Punjab comes alive at Paranda, where forest, soil, water, fire and charcoal unite for an authentic culinary odyssey. Surrounded by rustic charm, savour Amritsari dhaba-inspired cuisine, relishing heritage textures and tastes.



La Patisserie - Savour delectable confections at our sweet haven, La Patisserie. Discover heavenly bliss through our signature cakes and indulgent desserts, a true taste of paradise. **Palette** – All Day Diner - Revel in a spacious setting adorned with chic interiors, offering organic cafe-style and alfresco seating. Enjoy garden views, a vibrant display kitchen and a dedicated deli enclave with easy porch access.



Shimmer - Bar, Indian, Tapas - Shimmering with unique blends, lively beats and an eclectic menu, our vibrant bar embodies Bengaluru's cosmopolitan aura. A high-energy, hi-fashion-themed retreat, this is your one-stop destination for socialising, signature beverages and an exquisite dining experience.





Fusing age-old Indian wisdom with modern therapies, J Wellness Circle presents premier Indian rejuvenation. From aromatherapy massages to traditional treatments, herbal skincare to yoga retreats, immerse in holistic rejuvenation — redefined.

## niu&nau

Unveil a new you at Niu & Nau. With a niche sense of exquisite style, Niu & Nau brings a full regimen of services spanning hair, beauty and skincare. Unwind with a cup of freshly brewed coffee or indulge in a day of pampering with a group of friends.

Taj Yeshwantpur, Bengaluru, Where Memories Find Their Perfect Backdrop

## **ACCOMODATION**



Embrace the seamless blend of modern elegance and advanced technology, ensuring your utmost comfort and convenience. Each room and suite at our Bengaluru 5-star hotel is meticulously designed to cater to your unique preferences and requirements. Surrounded by a world of refined elegance and modern sophistication from the moment you step into our exquisite haven, each room is a testament to luxury.

## **EVENT SPACES**



**Aura** - Encompassing 749 sqm, our majestic ballroom seamlessly divides into three sections, ideal for hosting smaller gatherings with ease.



**Agenda Board Room** - For intimate gatherings, Agenda is your answer. This sophisticated hall caters for up to 20 guests, ensuring every detail is met flawlessly.

PARTNERS FOR PROGRESS PARTNERS FOR PROGRESS

## Nominate Today for the 2024 IABCA Awards

The India Australia Business & Community Alliance exists to celebrate the India-Australia relationship whilst simultaneously contributing to its development.

In collaboration with our partners, the IABCA Awards. invites leaders and organisations to share stories of bi-lateral success across social impact initiatives and trade & investment. Featuring 11 categories recognising excellence across the fields of science, research. innovation and our circular economy, IABCA presents a major opportunity to further strengthen the India- Australia relationship by acknowledging achievements on a global stage.

The IABCA platform continues to deep dive into the state of our existing bilateral ties. It also drives policy and help examine roadmaps for continued growth in the future. IABCA is pleased to partner with Australia-India Trade Investment in driving this agenda further.

### **MILESTONES**

22

I. In 2023 India Australia Business & Community Alliance celebrated its 10th Year. To mark this milestone, IABCA in collaboration with Australian High Commission



IABCA Indigenous Ambassador and Business Partner, Danielle Mate, meets with Prime Minister of India, Shri Narendra Modi, in Australia

New Delhi, Austrade, our state government partner, Investment NSW, education partner Deakin University, established an international footprint by delivering its inaugural IABCA Showcase in India, across a five-day India Immersion Program

in Delhi and Mumbai. Attended by 47 travelling delegates from Australia this event showcased commerce, culture, and cricket across a tasteful business format with 1200 in attendance across 5 days.

- In 2023 IABCA played host partner to Prime Minister Narendra Modi's Australia Community reception in collaboration with IADF, welcoming 30,000 patrons.
- 3. IABCA 2023 India **Immersion** Indigenous Ambassador and Business Partner, Danielle Mate (descendant of Murrawari people through her mother's maternal side, and Euahlayi people through her mother's paternal grandmother) had the opportunity through Indian High Commission, Canberra, to meet with Prime Minister Shri Narendra Modi, in Australia. IABCA was pleased to initiate these first nations connections. Danielle presented the PM with a unique ball. The artwork created on the ball

represents Prime Minister Modi's journey to Australia. A connection between our two countries. On one side there is an orange circle which represents India. This is connected by journey lines to the red circle on the opposite side, being Australia. Prime Minister Modi as the 14th Prime Minister for India is represented through the 14 U shapes in light blue, which are a traditional symbol for people. The ball also depicts the country, through the trees and mountains surrounding it, and the water that is in the background of the work.

- 4. The depth of IABCA's India engagement in the Australian community and business was a key factor in the invitation by the Australian Department of Foreign Affairs and Trade, Centre for Australia-India Relations, inviting IABCA founder to attend an intimate roundtable meeting with Senator Hon. Penny Wong MP, Foreign Minister of Australia, to discuss Australia-India business engagement, with a focus on how to deepen economic ties between the two nations.
- 5. IABCA in collaboration with Deakin University held its first IABCA Victoria Roundtable. Discussing engagement with Deakin-IABCA alumni, identifying strengths and weaknesses of IABCA's presence in Australia and India, and how to build upon existing India-Australia relationship while supporting people-to-people connections on both sides. The roundtable was facilitated Ravneet Pawha, Vice President Global Alliances, and CEO South Asia, Deakin University Australia.
- 6. IABCA Alumni and Leaders were hosted in the Australia Parliament, Canberra by Dr Andrew Charlton MP, Chair Parliamentary Friends of India, Federal Member for Parramatta. They participated in parliamentary question time in the Australian PM's chambers as well as in the annual IABCA Alumni Winners Roundtable Discussion in the Parliament of Australia, Canberra.



IABCA Australia Delegation, Global Leaders

IABCA Australia Delegation, Global Leaders Forum in Delhi and Mumbai supported by both governments



IABCA hosting India Minister for Commerce and Industry, Shri Piyush Goyal in Australia in collaboration with DFAT.



IABCA Awards Opening Ceremony with both Australian and Indian government representation



IABCA being hosted at the Senator Penny Wong, Foreign Minister of Australia and Andrew Charlton MP, CAIR Roundtable

23

Australia-India Trade investment | 2023 | Australia-India Trade investment



For 15 years, the Australia-India Strategic Research Fund (AISRF) has fostered scientific and innovative partnerships between the two nations and provided a catalyst for cutting-edge research in strategically important areas.

Since its establishment, the AISRF has supported more than 360 collaborative activities across various priority domains, including agriculture, renewable energy, nanotechnology, food and water security, and vaccines. As the Australian Government's largest bilateral science program, this fund is jointly administered by India's Department of Science and Technology and the Department of Biotechnology.

The AISRF operates through two key components:

- 1. Collaborative Research Projects: By bringing together research institutions from both Australia and India, this component drives groundbreaking scientific research and technology projects. Through the fusion of resources and expertise, these collaborations have yielded impactful outcomes with global implications.
- 2. Early and Mid-Career Researcher Fellowships: In its commitment to fostering talent, the AISRF empowers high-performing researchers by providing opportunities to work alongside leading experts at major science and technology organisations. This initiative nurtures emerging researchers and enhances the overall research landscape.

A pivotal development in the history of the AISRF came with its recent transition to ongoing funding. This decision ensures that the program continues to address evolving priorities and challenges, providing researchers from both countries with the confidence to pursue impactful work.

As we celebrate this momentous occasion, we invite you to embark on a retrospective journey through 15 projects that epitomise the vast breadth and depth of research enabled by the AISRF. From transformative advances in agricultural practices to revolutionary breakthroughs in renewable energy and nanotechnology, these collaborations have solidified the scientific bonds between Australia and India.

Looking ahead, the AISRF symbolises an enduring commitment to collaboration, mutual respect, and the pursuit of knowledge and innovation. A new funding round will open in early 2023, with the promise of even more remarkable breakthroughs as researchers from both nations unite to tackle pressing challenges to create a

brighter, sustainable future for all.



## R ECENT GRANT WINNERS

- Australian National University:
  A project focused on quantumenhanced atomic gravimetry to
  enhance sensing capabilities for
  underground water aquifers and
  mineral deposits. Grant amount:
  \$1,000,000.
- The University of Sydney: A project focused on developing low-cost, portable, and solar-powered optical sensing technology to monitor contaminants in groundwater online. Grant amount: \$979,931.
- The University of Notre Dame Australia, Fremantle: This project aims to prevent blindness using digital technologies at primary care centres. Grant amount: \$912.000.
- University of South Australia:
  This project aims to advance the recovery of battery materials and rare earth elements from ores and waste materials. Grant amount: \$905.881.
- The University of Melbourne:
  A research project focused on exploring the structural dynamics of SARS-CoV-2. Grant amount: \$894,513.
- Royal Melbourne Institute of Technology: A project centred on developing a versatile protein mimicry platform to deliver innovative bioadhesives for soft tissue mending. Grant amount: \$525,380.
- The Indian Government will provide support to the Indian partners involved in these projects.

PARTNERS FOR PROGRESS

## Transitioning to a Seamless Export-Import Model Between India & Australia Through ICIB

Nikhil Gurjar, Indian Chamber of International **Business** 

### **ABOUT THE ICIB**

Started in 2007 by leading industrialists, Indian Chamber of International Business is present in about 42 countries globally and in 12 states within India to service the MSME industry and its changing needs. As a chamber, one can get in touch with any of the core team members to support your business and growth. We welcome you to be a part of this journey and help the Indian industry and trade grow with your support.

The scope for development is immense and we strive to bring up the industry and services sector of India by bringing them at par with the world. The Indian Chamber of International Business is also known as International Chamber of Investment and Business which is a registered Trust / NGO in the jurisdiction of New Delhi.

## **OUR MISSION IS THE FOLLOWING:**

- 1. To consolidate and organise the MSME sector of India.
- 2. To take Indian companies global.
- 3. To interact and take up causes of MSME with the government authorities, interaction with

foreign governments, agencies and associations.

4. To partner with global chambers and organisations for betterment of Indian businesses.

The Indian Chamber of International Business provides a platform for both import and export activities. As an institutional member with several chambers, we provide very strong networking opportunities and business connections. However, our focus and forte lies in leveraging our global presence with offices across several countries and our close ties and activities with major consulates across the

The Chamber offers a wide range of resources and support services to its members. These include business education and training programs, mentoring initiatives, access to market research, legal and regulatory guidance, and marketing opportunities. Such resources help businesses enhance their skills, knowledge, and competitiveness. We do this on a periodic basis with several programs across our centers all over the country.

One of the strong points of the Indian Chamber of International Business is in organizing trade shows and official delegations to various countries. In India too.



we organize events, trade shows, and conferences that provide members with opportunities to showcase their products and services. In particular, we facilitate visiting delegations meet with the right partners in the country.

## **ENGAGING ICIB FOR INDO-AUSTRALIAN TRADE**

When engaging in importexport activities with Indian companies, many overseas companies face challenges. Fortunately, ICIB has the potential to help overseas partners who wish to engage with them.

Quality Control and Product Consistency are two of the biggest problems that importers and exporters face. Ensuring consistent product quality can be a challenge when dealing with overseas partners. ICIB assists its members, as well as overseas agencies in conducting thorough due diligence, implementing quality control measures, and performing product inspections to help mitigate such risks. ICIB provides services through its member organizations and third party service providers to ensure that the trade experience remains smooth and rewarding to both the engaging organizations.

Communication and Language Barriers, including Cultural Preferences are another set of challenges in overseas partnerships. ICIB relies on a simple format of physical meetings through trade delegations and business visits. Our overseas offices also provide for an additional mechanism to communicate with Indian partners. This avoids misunderstandings, delays, and errors in communication, that potentially impact the importexport process.

In addition, ICIB provides support through member organizations to maneuvre around the complex legal and regulatory framework that can pose challenges for importexport activities. Businesses need to ensure compliance with customs regulations, import duties, product standards, and other legal requirements. ICIB has engaged legal advisors with expertise in international trade and customs regulations to help navigate the legal landscape and mitigate compliance risks.

PARTNERS FOR PROGRESS

One of the issues of cardinal importance is that of the Supply Chains. ICIB has advisory agencies among its members, that ensure that the suppliers' issues around supply chain management, such as delays in production, shipping, or customs clearance are properly

addressed and taken care of. These challenges can disrupt the import-export process and impact delivery timelines. ICIB helps conduct thorough due diligence on suppliers and has consultants that help streamline and enable a smooth performing supply chain.

It's important to note that these risks may not apply to all export-import business transactions, and many businesses successfully engage in import-export activities with their overseas counterparts. Conducting proper due diligence, building strong relationships, and employing risk mitigation strategies can help mitigate risks and foster successful business partnerships. And the Indian Chamber of International Business offers a platform along with an ecosystem to take things ahead smoothly.







## COME CELEBRATE 4) The

www.barpatron.com.















## **AUSTRALIAN HOSPITALITY PARTNERS**

www.pacificconcepts.com.au







India and Australia share a unique relationship that is steeped in history and mutual respect. As representatives of the business community in Punjab, we recognize the immense potential upcoming Australia-India Trade and Investment Opportunities Summit holds for the growth and development of our region and the broader economies of India and Australia.

Our state of Punjab has long been known as the agricultural heartland of India, contributing significantly to the nation's food security. Today, Punjab has a significant impact across the Indian economy through our expertise food processing, light engineering, textiles, THE Punjab Chamber
of Commerce and
Industries firmly believes
that fostering cultural
exchanges between India
and Australia is essential
to strengthening our
bilateral ties

Dalip Sharma - Secretary General -

Punjab Chamber of Commerce and Industries

mitigating the impact of climate change.

The Punjab Chamber of Commerce and Industries firmly believes that fostering cultural exchanges between India and Australia is essential to strengthening our bilateral ties. These cultural connections provide a foundation for understanding, trust, long-term collaboration. encourage initiatives that promote tourism, student exchanges, and cultural events to enrich the ties between our nations and promote people-topeople relationships.

We are confident that the Australia-India Trade and Investment Opportunities Summit will mark the beginning

## Fostering Cultural Exchanges to Strengthen Bilateral Ties

cycles and cycle parts, skill development and education, leather, and sports goods. Now Punjab stands ready to explore partnerships and opportunities with Australia, having also emerged as a leading hub for manufacturing and industrial activities in India. We take pride in our skilled workforce and robust infrastructure, making Punjab an ideal destination for Australian companies seeking to expand their manufacturing operations in India. By facilitating investments and joint ventures, we can create win-win situations that will bolster economic growth in both countries.

The Australia-India Trade and Investment Opportunities Summit will present a golden opportunity to delve into the vast potential of the services sector. India's IT and software industry, in particular, has garnered international acclaim for its innovation and agility. Collaborations between Australian companies and Indian IT firms can drive digital transformation and create new avenues for growth in various industries.

As the world grapples with climate change and environmental concerns, our collective responsibility to adopt sustainable practices becomes even more crucial. Punjab has been at the forefront of renewable energy adoption, with significant investments in solar power and other green initiatives. Through partnerships with Australian experts in clean energy, we can create a cleaner and greener future while

of a new era of cooperation and economic growth between our countries. The Punjab Chamber of Commerce and Industries wholeheartedly supports this summit and remains committed to actively participating in the discussions and collaborative efforts.

Once again, we extend our best wishes for the success of the summit and express our gratitude for your efforts in bringing together stakeholders from India and Australia. Together, we can unleash the tremendous potential of our nations and create a prosperous future for our citizens.





### **Government Initiatives:**

The Australian government has played a pivotal role in promoting the digital industry. Various policies and programs have been introduced to support research and development, cybersecurity, and digital skills training. Initiatives like the National Innovation and Science Agenda (NISA) and the Digital Transformation Strategy have provided essential support to nurture startups and technology-driven ventures.

## **OPPORTUNITIES CREATED IN AUSTRALIA:**

Economic Growth: The digital industry boom has become a driving force for economic growth in Australia. It contributes significantly to the country's Gross Domestic Product (GDP) and attracts substantial foreign direct investment. The rise of tech startups and digital enterprises has spurred competition and innovation, fostering a dynamic business environment. In 2021 alone, Australia's digital economy was estimated to contribute over AUD 122 billion to the GDP

Job Creation: The burgeoning digital industry has created a surge in demand for skilled professionals, including software developers, data analysts, cybersecurity experts, digital marketers, and more. This has opened up diverse employment opportunities for the Australian workforce, reducing unemployment rates and fostering economic prosperity. In recent years, the digital industry has accounted for approximately 7.5% of total employment in Australia.

Innovation and Research: The digital revolution has sparked a culture of innovation and research in Australia. Universities

and research institutions collaborate with industry leaders to drive cutting-edge discoveries and technologies. This intellectual capital strengthens the nation's global competitiveness and attracts international collaborations. Startups, incubators, and accelerators play a crucial role in fostering innovation and nurturing the next generation of digital pioneers.



## **OPPORTUNITIES ABROAD:**

**Export of Digital Services:** The digital industry boom has enabled Australian businesses to export their digital services and products globally. With the removal of geographical barriers, startups and established firms can reach international markets efficiently, scaling their operations and generating foreign revenue. In 2020, Australia's digital exports were valued at over AUD 9 billion, reflecting the country's growing prowess in the global digital

International Collaborations: The booming digital industry has opened avenues for cross-border partnerships and collaborations. Australian companies team up with international counterparts to share expertise, technologies,

and resources, leading to the development of innovative solutions with a global impact. Collaborations with technology giants from Silicon Valley to emerging tech hubs in Asia have further strengthened Australia's position in the global digital landscape.

Digital Diplomacy: Australia's prowess in the digital industry has strengthened its position in the global arena. The country leverages its digital expertise to foster diplomatic relations, promote technology-driven development, and contribute to the United Nations Sustainable Development Goals. Digital diplomacy initiatives, such as the Australia-India Cyber and Critical Technology Partnership and the Digital Trade Standards Initiative, showcase Australia's commitment to international cooperation and digital governance.

### A LOOK INTO THE FUTURE:

The digital industry boom in Australia has ignited a transformative wave, creating immense opportunities within the country and abroad. As technological advancements continue to shape the future, Australia remains at the forefront of digital innovation and serves as a beacon of opportunity for businesses, entrepreneurs, and skilled professionals. Embracing the digital revolution will unlock unprecedented growth, prosperity, and global collaborations, positioning Australia as a leading player in the digital economy. With a commitment to nurturing talent, supporting innovation. and fostering international partnerships, the country is well on its way to building a sustainable and prosperous digital future that will propel it towards becoming a global digital powerhouse.







India's surging economy and rising incomes are expected to fuel a surge in demand for financial services, extending across various income brackets, including insurance and retail banking.

The growth projection for High Net Worth Individuals (HNWIs) predicts a threefold increase to over 1.2 million by 2030, and the economies of India's five largest cities are anticipated to rival those of middle-income countries. However, the Indian retail banking sector faces challenges, including high competition. dominance by state-owned banks, and regulatory directives for lending to specific sectors.

Australia possesses a trifecta competitive advantages that could enable fruitfu collaboration: an efficiently regulated domestic sector, a substantial volume of managed funds, and specialised expertise complements aspirations. Despite differences in advantages, market drivers between the two nations could limit the direct transferability of Australian expertise to the Indian context.

## AUSTRALIA'S COMPETITIVE EDGE: CAPITAL, EXPERTISE, AND REGULATION

Australia's financial services boasts substantial competitive advantages that could resonate with India's growth ambitions. With a financial assets sector worth four and a half times its GDP and \$2.7 trillion under management, Australia's funds management sector stands as Asia's largest and the sixth largest globally. Furthermore, Australia's wellregulated pension system leads the Asia-Pacific region on penetration, scoring ahead

of other developed nations on adequacy, sustainability, and integrity measures.

The country's reputation for financial acumen and product development has solidified its position as a global fintech hub. Ranked fifth in the world for fintech adoption, Australia presents an enticing market for the launch and expansion of fintech products.

ustralia possesses a trifecta of competitive advantages that could enable fruitful collaboration: an efficiently regulated domestic sector, a substantial volume of managed funds, and specialised expertise that complements India's aspirations.

## EMBRACING DIGITAL ADOPTION IN INDIA

a rapid growth trajectory, driven by widespread digital adoption and the presence of skilled IT clusters in cities such as Hyderabad and Bengaluru. Fintech startups specialising in specific segments of the value chain have disrupted the market, offering exciting opportunities for growth. Additionally, India's mutual funds segment is sizable, driven by a high savings rate and a well-developed equity market.

India's fintech industry is on

The emerging pension market in India faces challenges related to customer awareness, penetration, and regulation. Nevertheless, the demand for pension services is projected to rise significantly in the coming years due to factors such as an ageing population and changes in family structures.

## OPPORTUNITIES IN THE INSURANCE INDUSTRY

In the insurance market, India's Life Insurance Corporation holds a significant share, with other firms competing for the remaining market. Opportunities exist for private and foreign players in general insurance, where markets are comparable to those abroad. However, the untapped potential in the lowerend market, serving micro and SMEs, demands expertise — an area in which Australian firms currently lack experience.

## LEVERAGING AUSTRALIA'S STRENGTHS IN INDIA'S FINANCIAL MARKET

While Australia's competitive advantages seem well-matched with India's financial ambitions, the differences in market drivers and regulatory landscapes may necessitate strategic adaptability and collaboration. With its expertise in niche sectors, efficiently regulated domestic sector, and vast funds under management, Australia has a unique opportunity to forge fruitful collaborations and tap into India's burgeoning market.

Australia's competitive edge in financial services holds the potential to complement India's ambitious goals for the sector's growth and improvement. Collaborative efforts, combined with an understanding of India's distinctive market dynamics, will be key to capitalising on Australia's strengths in the Indian financial landscape.



FUTURE OF TRADE FUTURE OF TRADE

Tat Capital was established in 2013 with a vision to assist growing companies across Australia and India to scale with purpose in its epicentre of its strategy.

We started this business in 2013 with a vision to steer the uncharted waters and assist the growing companies most appropriate go to market strategy.

There is significant momentum that is currently building on back of the economic cooperation agreement signed between the two countries and this is a significant agreement and is executed very timely.

If you look at the geo political movement we are experiencing across the world today - it is not difficult to see the rising visibility of India not only as an economic super power but also emerging as the voice of the Global south.

India has the youngest work force with an average

working age of 29 years. The post Pandemic world around us has changed dramatically and there is growing urge globally on decentralizing supply chains and manufacturing companies are seriously contemplating on implementing a China plus one strategy.

As there is reset of the political and economic might that is currently happening where we are witnessing greater action in the Asia Pacific regions - Australia and India are perfectly positioned to provide leadership and greater economic benefits to the region. Australia and India have a complementary strengths and are a natural partners in building the bridge for greater supply chain resilience and achieving the supply chain decentralization aspirations.

In 2047, India is going to turn 100 years post independence and India is aiming to be second largest economy in the world. Consequently, there will be a significant focus on building world class infrastructure, Australia can play a huge role not only key supplier of critical raw materials like iron ore, coal, copper, lithium, hydrogen, and many other critical minerals but also contribute towards nation

building in a big way. Australia & India are also aspiring for an aggressive roll-out of renewable energy infrastructure over the next few decades and there is room for participation in a significant way. Australian is one of the most wealthy nations with a large pool of superannuation funds, but sadly has no exposure to India private or public market in a considerable manner till date and in the current hyper inflationary environment, India is one of the few nations in the world which is still growing at 6.8\*% YOY. There is room for substantial wealth creation for Australian

Institutional and private investors in backing India

Tat Capital was established a decade ago to facilitate a deep dialogue of many of these initiatives in a meaningful way, Be it the Australian startups who can potential build their products and services both Australia and India or large trade dialogue around corporate development for larger companies across the region, Tat Capital can assist. See below a snapshot of our services and track record of our deliverables in the last 10 years across these markets.





Ram Gorlamandala Founder & CEO, Tat Capital





Australia's island state of Tasmania is becoming known around the world for quality, a reputation which is growing year by year.

With both existing and emerging expertise across a wide variety of sectors, Tasmania offers a diverse and dynamic trade and investment landscape.

We've been quietly building something quite extraordinary in this island, with a focus on innovation and environmental sustainability.

For the shrewd investor, the savvy businessperson, the outstanding student or the intrepid tourist, Tasmania offers an impressive array of opportunities.

## RENEWABLE ENERGY: PIONEERING SUSTAINABILITY

Tasmania is Australia's leader in renewable energy and offers a compelling location for forwardthinking investors who either wish to invest in the renewable energy sector or achieve real sustainability targets through renewable energy generation and use.

Tasmania is already 100 per cent self-sufficient in renewable electricity generation, a rare feat globally, and has a legislated commitment to generate 200 per cent of its current electricity needs by 2040.

Tasmania's natural advantages make it a strong location for on and offshore wind, hydrogen production, bioenergy and battery storage. As a result of this potential, it is leading the way with a number of large-scale energy sector infrastructure projects including the Battery of the Nation hydropower capacity initiative and the proposed Marinus Link undersea transmission cable to mainland Australia.

Resultingly, there is a strong pipeline of proposed projects and opportunities in Tasmania in renewable energy generation and green hydrogen production.

## MINING AND MINERALS: A WEALTH OF RESOURCES

Tasmania is one of the most mineralised places on the planet, with remarkable geological diversity and an abundance or rich and high-grade mineral deposits.

This is a sector that currently employs nearly 5,900 Tasmanians with a mercantile export value of some \$3 billion a year, or 65 per cent of all Tasmanian exports.

There are currently investment opportunities involving the following mineral resources, rare earths, lithium, tungsten trioxide, tin, nickel, gold, silver, lead, zinc, iron, and silica.

These resources, coupled with easy accessibility and robust infrastructure, provide a unique opportunity for mineral exploration and investment.

## AGRIBUSINESS AND FOOD: CULTIVATING EXCELLENCE

Tasmania is an ideal destination for food manufacturing and agri-

business due to its ideal growing conditions, affordable land, relative freedom from disease and pests, abundant water resources and strong research and development capability.

The state's conditions are ripe for food production and processing, with emerging sectors like seaweed and plant proteins capturing attention.

Opportunities exist for investors interested in food production and processing, animal feed production, nutraceuticals and the thriving wine and spirits sector.

## EDUCATION: FOSTERING TALENT

Tasmania has all the ingredients to help international students accomplish their goals and achieve their very best. Students can take advantage of Tasmania's natural strengths: safe and friendly culture, world-renowned natural environment, modern and connected city and country living, high-quality food and a healthy lifestyle in an English-speaking community.

In Tasmania, education is valued and is strongly supported by government, the research community and industry. Education in Tasmania is globally recognised with premier learning institutions such as the University of Tasmania.

Tasmania's strengths are in the Antarctic, marine, medicine, agriculture, and tourism sectors. With education institutions located across the state, Tasmania is well positioned to offer high demand, industry specific qualifications in sectors such as advanced manufacturing, agri-tech and innovation, tourism, medicine, and teaching.

## SCIENCE & TECHNOLOGY: IGNITING INNOVATION

Tasmania's science and technology community is thriving. Many internationally renowned institutions such as the University of Tasmania's Menzies Institute for Medical Research, Institute for Marine and Antarctic Studies (IMAS), Australian Research Council Centres of Excellence in Ore Deposits and Australian Maritime College are located here.

Key national research bodies located in Tasmania include Australian Antarctic Division, and Commonwealth Scientific and Industrial Research Organisation, addressing challenges of local and global significance. The Tasmanian Antarctic Gateway is one example of a Science and Technology cluster that has already achieved unique global significance and will continue to grow our export dollars and numbers of internationally acclaimed scientists to Tasmania.

As the most internetconnected jurisdiction in Australia, Tasmania also has many established and start-up technology and service companies, which are experiencing success in international markets.

## SPACE: REACHING FOR THE STARS

Tasmania's geographical advantages coupled with its unique space research infrastructure and expertise is set to play a key role in Australia's ambitions to participate in the human exploration of our solar system.

Tasmania's capabilities in space domain awareness, spacecraft tracking and communications is globally recognised and is underpinned by the University of Tasmania's unique continent-wide network of telescope infrastructure.

Tasmania is becoming a centre for human spaceflight training, testing and research. Our state's technology companies are developing a range of technologies to address human spaceflight and space exploration challenges, including astronaut biometrics, space edge-computing, space flight simulators and mission decision support systems.

## WHY TASMANIA?

Tasmania's compelling investment and trade landscape is underpinned by a robust supporting infrastructure.

A skilled and stable workforce, advanced manufacturing capabilities, integrated transport networks, and reliable communication through fibre optic connectivity ensure a conducive environment for growth. The state's geopolitical stability and natural deep-water harbours further enhance its appeal to global investors.

Whether you seek to embrace the winds of renewable energy, delve into Tasmania's rich mineral deposits, innovate in agribusiness, harness the power of education, explore the frontiers of science and technology, Tasmania welcomes you.

To find out more visit: https://tasmanian.com. au/invest-in-tasmania/



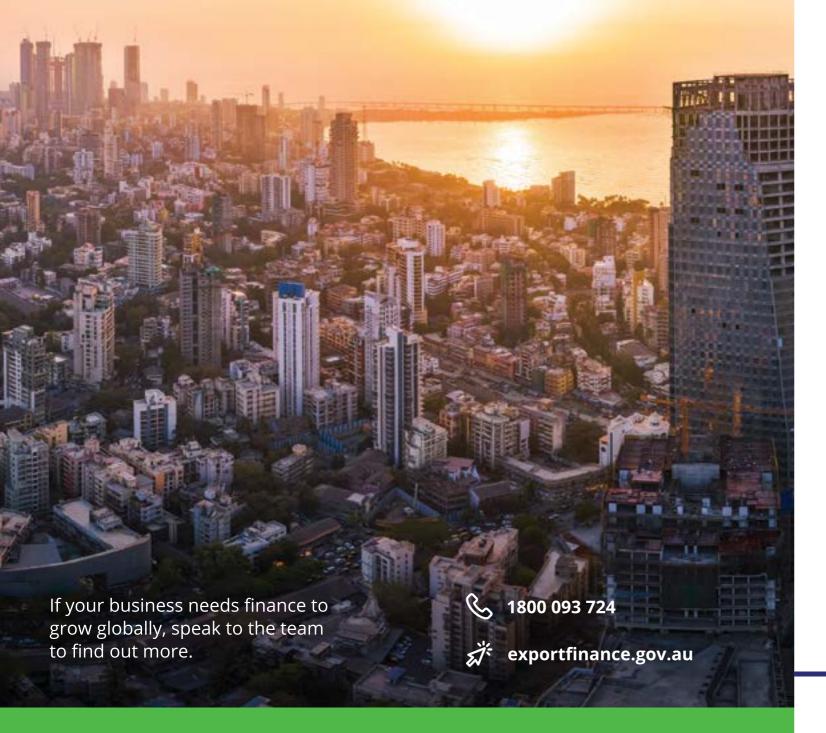
38 Australia-India TRADE INVESTMENT 2023 2023 Australia-India TRADE INVESTMENT 39





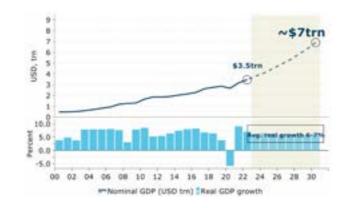
## Supporting small and medium-sized businesses

Export Finance Australia supports a wide range of Australian businesses to take on global opportunities with its finance solutions.



India recently surpassed China to become the world's most populous nation. As a country of over 1.4 billion people, more than two thirds of whom are working age, it has certainly got its skates on. Aspirations are running high here to claim the title of world's third largest economy by 2030, a feat considered achievable even by conservative forecasts

## INDIA WILL SCALE TO #3 BY 2030, WITH A GDP OF ~\$US7 TRILLION



Source: IMF WEO, Macrobond, ANZ Research

India's economic history is however chequered with dramatic highs and lows. From commanding 25 per cent of global industrial output and trade in the early 18th century, it was reduced to merely 4 per cent of global gross domestic product (GDP) under colonial rule.

And then the tide turned in 1947. An ambitious quest began for a newly independent democratic country - despite stiff challenges. Poverty, low levels of industrialisation, weak human capital and virtually all areas of economic existence needed meticulous policy attention.

By any measure, the achievement has been remarkable. India today is one of the world's most promising markets and investment destinations. Many of its products and services are world renowned, its people in great demand, its opportunity immense. However, much still needs to be done

History tells us how remarkable the story is. For nearly four decades after 1947, India pursued a closed economy model focused on import substitution and industrialisation until it hit an economic roadblock in the 1990s. A balance of payments crisis forced it to embrace "liberalisation, privatisation and globalisation." It was a watershed moment in India's economic history.

India was now open to global businesses and capital. Its own large consumer base was also becoming aspirational and global. Whilst a new

## India – What's All the Excitement About?

Rufus Pinto: Country Head - India ANZ Institutional

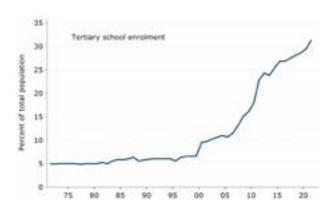
economic dream was taking shape, it was still clouded with anxiety and unease.

Those who could access education could easily move up the value chain, not only domestically but abroad. The great Indian diaspora is now the stuff of movies and novels.

An available workforce, cheap by global standards, competitively skilled in information technology (IT) and with immaculate English, became the mainstay of an IT services boom. Unfortunately, those who could not upskill themselves away from sectors like agriculture or manufacturing, remained stuck.

Thankfully tertiary school enrolment ratios have now tripled to nearly 30 per cent since the turn of the century. Education continues to be the most trusted route to prosperity and an important policy tool to create a level economic playing field.

## HUMAN CAPITAL DEVELOPMENT NEEDS FOCUS



Source: World Bank, Macrobond, ANZ Research

Riding the wave of global economic growth in the early 2000s, India hit its first trillion dollars in GDP by 2006-07. Today it is the fifth largest economy with a size of roughly \$US3.6 trillion.

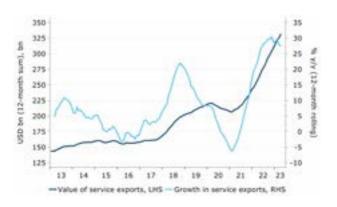
Some old challenges persist. Most importantly, human capital development still needs a lot of focus and spending. Yet, with rapid economic growth, some alluring aspects have also emerged.

Entrepreneurship has gathered steam. During COVID, India became home to over 100 unicorn start-ups with a cumulative valuation of about \$US350 billion.

India also became the favoured destination for multi-national corporations (MNCs) to set up their global capability centres (GCCs), a market expected to touch \$US85 billion by 2026. India now supports nearly 43 per cent of the world's financial

service industry in areas like operations and research.

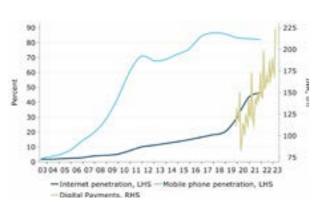
## **EXPANDING GCC PRESENCE BOLSTERING SERVICE EXPORTS**



Source: RBI, Macrobond, ANZ Research

The rate of digital technology adoption is soaring in India as rapidly rising mobile phone and internet penetration have taken digital tools to the grassroots of the country.

### INDIA IS RAPIDLY ADOPTING THE DIGITAL



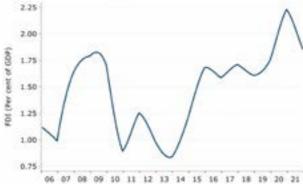
The renewed focus on boosting manufacturing and export capacities means India may achieve a global role, beyond its own vast consumer market.

ndia has a remarkable history and story unlike any other. As it becomes the world's most populous nation, it's greatest chapter may still to be written.

Government has taken up a complementary role to provide the infrastructure and incentives. Global investors are taking notice and India is now one of the most preferred foreign direct investment (FDI) destinations in

In addition New Delhi is negotiating free trade deals after a hiatus of nearly a decade. One with Australia, concluded in 2022, created excitement about the scope of opportunities it

offers for trade, capital and human capital flows. Several others are in the pipeline.



Source: RBI. MOSPI. Macrobond. ANZ Research

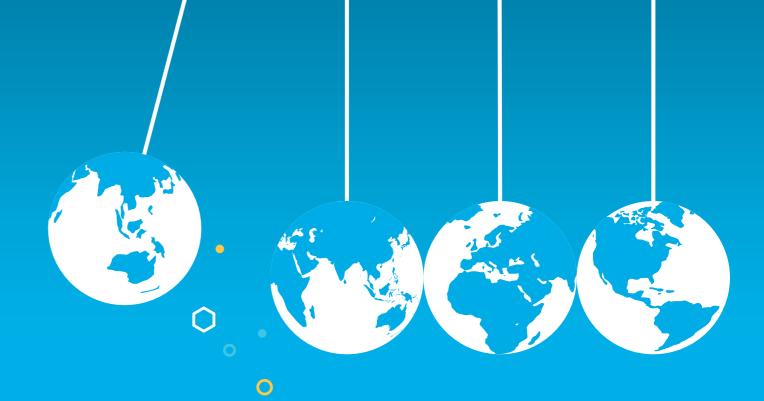
ANZ started our India operations in 1986 through the acquisition of Grindlays Bank and we refocussed our business in 2008. In 2011 we received a license to operate our first branch in Mumbai and we now operate in three Indian states with over 200 Institutional clients.

A disciplined, focussed game is our strength. To underline the opportunity, the ANZ Board visited India in June. They visited ANZ's Global Service Centre in Bengaluru which represents 20 per cent of our global workforce.

It's a great example of how our commitment to India has never been stronger. And we believe the opportunity has never been greater.

Rufus Pinto is Country Head, India at **ANZ Institutional.** 





## STAY ON TOP OF AN EVER **CHANGING WORLD**

As your business needs evolve, it pays to have a partner with the right connections. Access global opportunities with Asia's #1 institutional bank for relationships.

anz.com/institutional

#No.1 Overall Relationship Quality in the Coalition Greenwich Asian Large Corporate Banking Study, 2017-2022. Australia and New Zealand Banking Group Limited ABN 11 005 357 522 and/or used under licence "ANZ", ANZ's logo and ANZ's colour blue are trademarks of ANZ.



FINANCIAL SERVICES FINANCIAL SERVICES

From health and wealth management to leisure experiences, life philosophy, and educational support for international students, the Sumo Group strives to provide a comprehensive and seamless journey for its clients.

### COMPREHENSIVE **OFFERINGS: A FIVE-FOLD APPROACH**

The Sumo Group's offerings are categorised into five key areas:



Suren Pather Founder & CEO Sumo Group

## Sumo Group: A Holistic Approach to Financial Well-Being

Health, Wealth, Leisure, Life, and Education, each catering to different aspects of its clients'

- 1. Health: Under the banner of Sumo Health & Harmony, the group provides medical an holistic healthcare solutions. Clients can access health assessments, personalised health plans, nutrition advice, and genetic testing, promoting overall well-being.
- 2. Wealth: The financial arm of the Sumo Group offers a wide array of financial products and services. From financial planning and portfolio management to mortgages, insurance, international investments, and superannuation products, clients can find tailored solutions to build and protect their wealth.
- 3. Leisure: For those seeking adventure and experiences. the Sumo Group arranges captivating tours and thrilling adventure experiences, providing unforgettable memories for its clients.
- 4. Life: Sumo Life & Wisdom focuses on philosophy, philan-

1992, Sumo International, a financial advisory company, marked the beginning of what would later become the Sumo Group. Over the years, this dynamic conglomerate has evolved, encompassing various entities that offer a diverse range of financial products and services.

thropy, and motivation, guiding clients to find meaning and fulfilment beyond financial independence.

5. **Education**: The Sumo Group operates as an education agency, assisting international students in their pursuit of quality education.

## **VISION:** A HOLISTIC JOURNEY

At the heart of the Sumo Group's vision lies a commitment to offering a holistic, cradle-to-grave

experience for its clients. The goal is to transcend traditional wealth management and generation, providing relevant products and services that cater to people at every stage of life. Founder and CEO, Suren Pather, emphasizes that financial independence should be an opportunity to seek fulfilment and contribute to others' well-being.

### **VALUES AND POSITIONING**

Integrity and excellence are core values that underpin the Sumo Group's commitment to its clients. With a strong relationship focus, the group aims to cater to sophisticated (wholesale) clients from around the world. Leveraging its international bases in multiple locations, including China, Hong Kong, India, South Africa, Malaysia, Singapore, and beyond, the Sumo Group ensures global accessibility to its diverse offerings.

## **CORE AND SUPPLEMENTARY OFFERINGS**

While investment products like property and managed funds form the core of the Sumo Group's offerings, its holistic vision extends to supplementary offerings in health, leisure, and life services. This unique approach sets the Sumo Group apart, positioning it as a investment bank for the masses with a broader scope.

### **GLOBAL REACH: FROM AUSTRALIA TO INDIA**

Having expanded from its Australian bases in Sydney, Melbourne, and Queensland, the Sumo Group has established a presence in numerous international locations, including India, Azerbaijan, China, Hong Kong, South Africa, Malaysia, Singapore, and Nairobi. N matter where clients are located, the Sumo Group is ready to support them in their journey towards financial well-being and personal fulfilment.

Q1: What services does the Sumo Group offer to its clients?

The Sumo Group offers a diverse range of financial products and services, falling within five categories: Health, Wealth, Leisure, Life, and Education. These offerings cater to various aspects of its clients' lives. providing a comprehensive and holistic approach to their well-being.

Q2: How does the Sumo Group aim to provide a holistic journey for its clients?

The Sumo Group aims to provide a holistic journey for its clients by encompassing products and services that go beyond traditional wealth generation and management. Their vision is to be relevant to individuals at every phase of life, contributing to their overall fulfillment and well-

Q.3: What is the founder and CEO, Suren Pather's, vision for financial independence and fulfilment?

Founder and CEO. Suren Pather, believes that financial independence should not solely be the end result of wealth creation, but rather an opportunity to seek meaning and fulfillment in life. He emphasises true satisfaction in contributing to others' well-being.

Q4: What are the core and supplementary offerings of the Sumo Group beyond investment products?

The Sumo Group's core offerings include investment products such as property and managed funds. However, their holistic vision extends to supplementary offerings in health, leisure, and life services, enriching their clients' lives beyond financial matters.

Q5: In which countries does the Sumo Group have its international bases, and how does it ensure accessibility to its diverse offerings worldwide?

The Sumo Group has expanded its reach internationally with bases in various countries, including China (Shenzhen, Guangzhou, Shanghai, Beijing, Henan, and Ürümqi), Hong Kong, India (Bangalore, Mumbai, Ahmadabad, Delhi), South Africa, Malaysia, Singapore, Nairobi, and Azerbaijan. With this global presence, the Sumo Group ensures accessibility to its diverse offerings, making their products and services available to clients worldwide.



Australia-India TRADE INVESTMENT | 2023

Australia-India TRADE INVESTMENT

44



## India-UAE 20 TRADE INVESTMENT 24

## LAUNCHING IN DUBAI MARCH 2024



## PRODUCED BY ITI, A MAPS COMPANY



For more details contact David Collett david@ marketingadvisory.co



## **Empire Securities Group Pty Limited**

Corporate Authorized Representative of Novus Capital Ltd AFSL 238-168 Corporate Authorized Representative Number: 326 226



Empire securities group is a boutique corporate advisory firm based in the Sydney CBD. Our primary focus is the resources sector in Australia, Asia and Africa and we also work with early stage ventures in agriculture, biotech, payment systems social media and webtech

The company was founded by Gerard Farley who has had over 25 years experience in the financial services march of this in the resources sector. Gerard has a long and successful history of picking companies at their most junior stage. He was an early investor and promoter of companies such as Kingsgate and fortescue Metals Group

## **Empire securities offers these services**

- Share trading buying and selling shares on the Australian and selected international exchanges
- Corporate advice
- Capital Raising raising capital for mining exploration for listed and unlisted companies is the company's forte. In the last 5 years, empire securities has played a leading role in raising over \$200 million for listed and unlisted companies in Australia, Africa, Canada, USA and Southeast Asia.

## For more information contact

Empire securities group pty limited level 5, 2 Bligh street Sydney NSW 2000

Tel: + 61 2 8252 9223 | Fax: + 61 2 9475 5435

### What exactly does Empire Securities Group do?

We are a team of experienced experts that offer financial services to companies that need to raise capital through their initial public offering in the natural resources industry. Although our mandate usually revolves around assisting younger corporations, we work with businesses of all sizes to help them obtain the resources they need to scale up. This usually requires finding the right growing enterprises and guiding them through the IPO process as they enter the public realm for the first time. We are also trusted by innovators and implementers from around the world to link their organisations with venture capitalists that they can partner with successfully.

## Where do you operate from?

Our headquarters are located in Sydney's bustling CBD. We find it is a great place to operate from as we can rely on seamless business services. Our partners have projects around the globe, so travel is a large part of our week-to-week experience.

## Who constitutes your team?

Gerald Farley founded the company in 2007. He has over 30 years of experience in the financial services industry. Gerard worked in New York as Director of International Institutional Research Sales at Merrill Lynch (Bank of America ML) and as a Senior Vice President of International Equities at James Capel (HSBC) before founding ESG. Tom (UT BBA), Gerald's oldest son, worked with the firm before joining a hedge fund in New York. His second son, Felix (LSE BSC) has now joined the firm as well. ESG also relies on a team of worldclass analysts to gather and organise the data that they rely on.

### What is your company's mission?

We are determined to mitigate as much risk as possible for companies looking to become large-scale operators in the natural resources industry. By guiding companies through the crucial IPO stage and linking them to the right venture capitalists, we can ensure a new firm launches off of a stable base. Our team gets great satisfaction from helping a new company grow from a small startup into a far more substantial business.

## Do you have any other affiliated businesses?

We work closely with Mining.com, which offers outstanding research and current news in the natural resources industry. They educate, inform, connect, and influence this sector – providing people with reliable and up-to-date information. We find them to be an excellent research resource and partner.

## How do you stand out from similar companies?

We are an information-driven company. Although we have a seasoned team of analysts working around the clock to gather hard data, we use information in all forms to guide our decision-making process. For example, Gerald Farley has three decades of experience in the industry. This means that we have a network of connections

that few other companies can offer. We gain knowledge of market movements in a way that other groups cannot. This helps us predict changes in the industry, see opportunities and guide our partners through a delicate stage of their growth.











24/7 emergency helpline



Innovative health and wellbeing tools



Access to our extensive direct billing network



## Study English in Australia with an English Australia college





## Support

## **Assurance**

## Provide the highest quality support services

Students have access to quality orientation, homestay and social programs to help them feel safe and secure in their environment. All English Australia member colleges provide detailed information to support students with all aspects of their lifestyle including living arrangements, climate, cuisine, customs, medical and travel arrangements and lifestyle options.

## Assure tuition protection for all students

All students of English Australia member colleges are protected in the unlikely case of a college closure. In addition to Australian legislation that protects the tuition fees of all student visa holders, English Australia also guarantees to place students with other visas into other colleges if their college is unable to deliver their course. No other country offers the same level of protection for tuition fees of international students as Australia. The ESOS Act 2000 protects students on student visas. English Australia protects students with other visas.

## Did you know



## Australia is ranked #2 in the world as a study abroad destination

(source: educations.com 2023 survey of 20,000 international students)

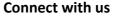
The delivery of English language programs to international students is one sector of Australia's third largest export industry





English Australia PO Box 1437 DARLINGHURST NSW 1300 AUSTRALIA

T: + 61 2 9264 4700 E: easec@englishaustralia.com.au www.englishaustralia.com.au











ustralia & India have embarked on a transformative journey to enhance educational ties between the two nations

The signing of the Framework Mechanism for Mutual Recognition of Qualifications marks a significant milestone in promoting the two-way mobility of students and professionals. These collaborative efforts seek to create a seamless pathway for education and employment, ushering in a new era of bilateral relations. In this article, we delve into the highlights of the agreement and the myriad opportunities it presents for both nations.

54

## FACILITATING QUALIFICATION RECOGNITION

The signing of the Framework Mechanism for Mutual Recognition of Qualifications paves the way for recognizing Indian degrees in Australia and vice- versa. This mechanism will streamline the process for students and professionals to pursue higher education and career opportunities in each other's countries. The mutual recognition of qualifications will provide students and job seekers with the assurance that their credentials are valued and respected in the partner country.

The agreement eliminates the need for students and professionals to undergo lengthy and complex recognition procedures, making cross-border educational pursuits more accessible and efficient. By simplifying the qualification recognition process, the partnership between India and Australia aims to boost student

enrolment and promote the exchange of skilled professionals, ultimately benefiting both economies.

## FOSTERING TWO-WAY MOBILITY

The agreement on mutual recognition of qualifications and the exchange of institutional-level Memorandums of Understanding (MoUs) set the stage for fostering two-way mobility between India and Australia. Students from both nations can now explore diverse educational opportunities, experience different cultures, and gain exposure to global perspectives.

Indian students, known for their academic excellence and cultural diversity, have been increasingly choosing Australia as their study destination in recent years. The recognition of Indian degrees in Australia enhances the appeal of pursuing higher education in the Land Down Under.

Similarly, Australian students seeking unique and enriching educational experiences can explore the vibrant academic landscape of India, known for its rich heritage and innovative learning programs.

Moreover, skilled professionals from both countries can leverage their expertise and contribute to the growth and development of various industries in each other's countries. The enhanced mobility will lead to a vibrant exchange of knowledge and ideas, enriching the educational landscape in both nations.

## STRENGTHENING EDUCATIONAL AND RESEARCH COLLABORATIONS

The Framework Mechanism is not the only achievement in educational relations. Eleven institutionallevel Memorandums of Understanding (MoUs) exchanged between India and Australia's university sectors underscore a commitment to promote research and academic collaborations. This collaboration extends beyond the traditional boundaries of education, encompassing cutting-edge research, skill development, and deep-tech initiatives.

The joint collaborations between Indian and Australian universities will facilitate knowledge exchange and cross-disciplinary research. Students and faculty members will have the opportunity to collaborate on projects, exchange best practices, and contribute to breakthrough innovations. These collaborations will pave the way for addressing global challenges and creating solutions that benefit both nations and the world at large.

## EXPANDING THE SCOPE OF EDUCATION COOPERATION:

The scope of the Australia India Education Council (AIEC) has been expanded to

include cooperation in skill development. This reflects the shared commitment to nurturing a skilled workforce and fostering employability. The education ministers' dedication to boosting engagements in skill development aligns with India's ambitious goal of providing 50% of its youth with higher education or skill education by 2035. This collaboration aims to create a competent and agile workforce capable of meeting the demands of a rapidly evolving job market.

The expanded scope of the AIEC presents opportunities for collaboration between vocational institutions and industry stakeholders. Skill development initiatives will focus on addressing emerging industry needs and equipping students with relevant and indemand skills. As technology and industries continue to evolve, this collaboration will ensure that the workforce remains adaptable and future-ready.

## IMPLICATIONS FOR INDIA-AUSTRALIA RELATIONS

The strengthening of educational ties between India and Australia holds immense significance for bilateral relations. Education Minister Jason Clare emphasised that Australia is eager to contribute to India's transformative National Education Policy, which aims to create new opportunities for jobs and businesses. The collaborative efforts in education serve as a stepping stone towards realising shared aspirations and further deepening the long-standing relationship between the two

By fostering partnerships in the education sector, both countries can strengthen people-to-people ties, cultural exchanges, and diplomatic relations. As students and professionals interact and collaborate, mutual understanding and respect

for each other's cultures and traditions will flourish. These connections form the bedrock of enduring friendships and collaborations, nurturing a bond that extends beyond the realms of academia.

### **CONCLUSION**

The signing of the Framework Mechanism for Mutual Recognition of Qualifications and the exchange of institutional-level MoUs between India and Australia's university sectors herald a new era of educational collaboration. These landmark agreements create ample opportunities for students and professionals to embrace the global educational landscape and contribute to the growth and prosperity of both nations.

The recognition of Indian degrees in Australia and vice versa, coupled with expanded cooperation in skill development, promises a robust and inclusive educational ecosystem that will shape a skilled and globally competitive workforce. The deepening ties between India and Australia in education not only strengthen bilateral relations but also hold the potential to unlock endless possibilities for future generations.

Through a shared commitment to knowledge exchange, cutting-edge research, and skill development, India and Australia are poised to jointly address global challenges and create a more sustainable and prosperous future. As the partnership between the two nations continues to flourish, education will remain a cornerstone in building stronger people-to-people connections and elevating the bilateral relationship to greater heights.





### THE PROBLEM

What if your child was on the other side of the world in intensive care and not expected to live?

In this particular case, we had a 21-year-old student, for the sake of his privacy will call him 'Ben', who had travelled from Boston in the United States to study abroad for a year at Griffith University located in Brisbane, Queensland.

'Ben' for all intents and purposes was a young, vivacious, popular young man. However, a number of years prior he had suffered with mental illness and at the time, with the support of his parents, received treatment. Ben was medicated and managing his symptoms, so his parents had been comfortable with his decision to be part of the study abroad program.

A number of months after his arrival to Australia, 'Ben's' mental health began to rapidly decline. As a result, Ben took matters into his own hands and purchased a vial of fentanyl with the intention to inject the drug and end his own life.

Thankfully, shortly following the attempt to take his own life, 'Ben's' housemates returned to the apartment where they were living and found Ben unresponsive. An ambulance was called.

The university contacted 'Ben's' parents to advise of what had happened and they both travelled immediately from Boston to Australia to be by their son's side. Ben required intubation and was unresponsive in intensive care for six weeks.

Another laver of complexity in this situation was 'Ben' had taken out a travel insurance policy with another provider who had declined his claim on the basis he intended to take his own life.

In consultation with the university, Allianz Care met with 'Ben's' parents on several occasions to offer reassurance that 'Ben' would receive the best possible care. Ben's parents had expressed their wish to return to Boston with Ben where he could continue to receive medical treatment in their home country.

At this point, 'Ben' was still requiring a ventilator and the costs to fly him home to the United States was quoted at \$380,000 as he would require a team of doctors and nurses to monitor him for the duration of the flight due to his inability to breathe unassisted.

A couple of weeks later, 'Ben' was weaned off his ventilator meaning he would be able to travel home without the need to be monitored by a medical team for the duration of the flight.

Working with our medical desk we were able to find a flight out of Brisbane, stopping in Texas where 'Ben' could stay in the Airside hospital and be observed before boarding his connecting flight home to Boston where he was able to be transferred to his local hospital.

Within two days of 'Ben's' medical team clearing him for air travel, our medical repatriation team travelled directly to the hospital where 'Ben' was admitted, helped him and his parents pack their belongings and transported him to the Brisbane airport.

'Ben' remained in hospital for another five months where he remained in intensive rehabilitation. He was then able to start part time work and transition back into daily life. Two years later, 'Ben' has been able to recommence his degree at his local university.

When we think about how we approach our students at Allianz Care, we continue to demonstrate how we put people first. In 'Ben's' situation, we were able to put his and his family's welfare first, and in collaboration with his Australian university, went above and beyond his policy offering to secure his

### WHAT WE KNOW

Indian students are the second largest cohort of international students living in Australia, with over 128,000 enrolments as of February 2023.

International students in Australia face challenges such

- Language barriers
- Cultural adjustment
- Academic differences
- Financial pressure
- Accommodation issues
- Navigating the Australian healthcare system
- Social integration difficulties
- Potential discrimination
- Visa complexities
- Mental health concerns

46% of Australian undergraduate students knew nothing if very little about where to seek support or assistance for harassment. An alarming statistic when considering 16% of university students have experienced sexual harassment in a university setting in 2021/2.

## **WE PUT OUR STUDENTS FIRST**

In the education sector, Allianz Care Australia have been leaders in the Overseas Student Health Care market since 2001.

Allianz Care Australia are committed to providing students

with innovative policy inclusions that address all aspects of wellbeing, above the governmentmandated health insurance product. We provide wellbeing, 24/7 safety and assistance services as well as increased access to gap free medical services to support students as they study in Australia.

## **WE PROVIDE UNPARALLELED ASSISTANCE THROUGH:**

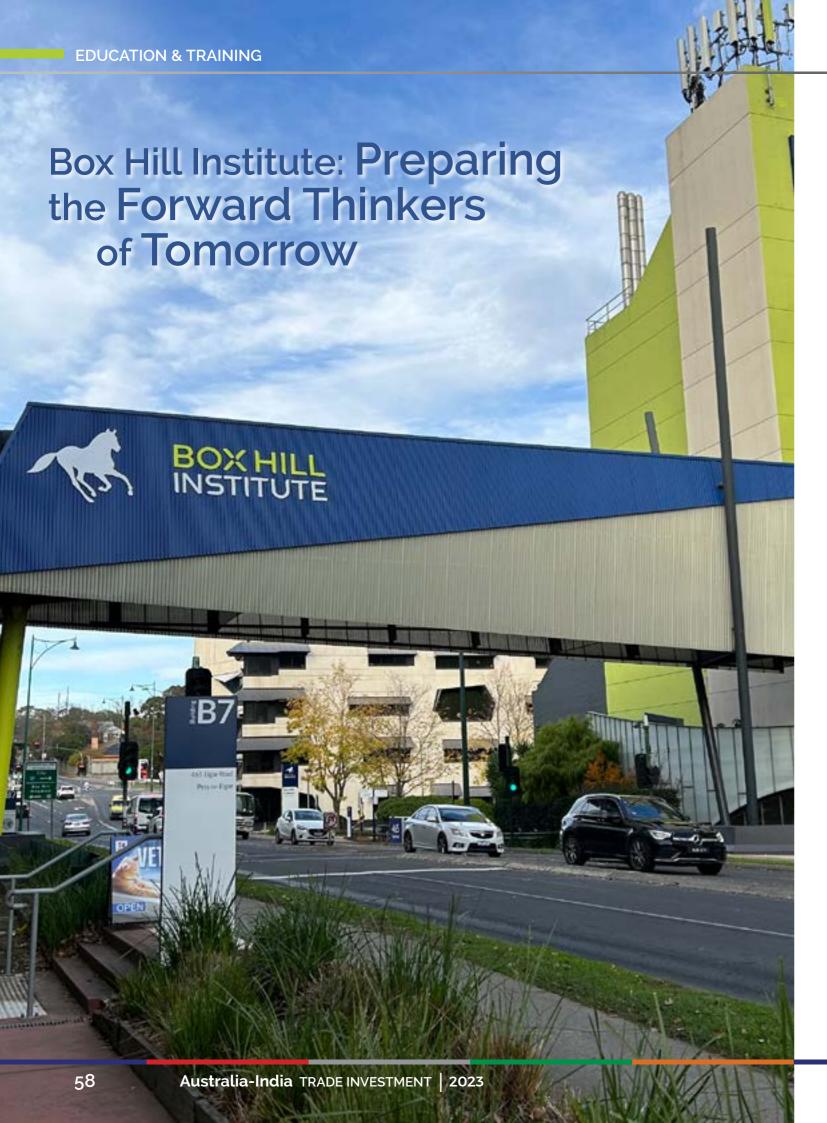
- Providing quality health coverage for international students,
- Best in market health and well-being tools,
- Critical health and incident management support.
- Expert resources across every industry including education, health care and insurance.
- Over 1,000 medical providers, 250 public hospitals and 550 contracted private hospitals and day surgeries in Australia.
- Data and insights from digital interactions, claims patterns and service utilisation rates to better understand our customers.
- Drive personalisation and better experiences. systems, platforms and applications to simplify information, processes and connection to support.

The case study highlights our best-in-class service. We ensure our policy offering is intentional and genuinely empathises with the international student experience. We believe in prevention over cure, care over claims and making the complex simple for everyone.



Australia-India TRADE INVESTMENT | 2023

Australia-India TRADE INVESTMENT



Box Hill Institute is a premier education provider. established in 1924, based in Melbourne, Australia with an annual enrolment base of more than 30.000 students.

We are government registered and funded to deliver professional education across the secondary, vocational education and training (VET) and higher education (HE) sectors. We offer a diverse range of courses to students, businesses and community groups, working hand-in-hand with industry.

Box Hill Institute's modern facilities, high standard courses and credentialed teaching staff, emphasise practical, personal and flexible learning that simulates iob environments and experiences. Students work on relevant projects and use tools and equipment from their chosen industry, in situations that are part of everyday employment. In addition, we deliver training and services in many workplace locations.

Students can choose a range of study pathways from certificates, diplomas to higherlevel qualifications, including bachelor's degrees, that are recognised in Australia and overseas.

## INTERNATIONAL STUDY **AREAS**

Box Hill Institute offers over 150 accredited courses, including a range of diverse courses available to international students, in the following study areas:

- Accounting and Commerce
- Automotive
- **Biosecurity Science**
- **Building Design** (Architectural)

- Community Services and Nursing
- Cookery and Hospitality
- Cyber Security and Information Technology
- Digital Design
- Early Childhood Education
- Fashion and Music

Box Hill Institute's courses ensure students gain knowledge and skills that are nationally and internationally recognised, making them work-ready and equipped to apply their learning to the workplace, which employers highly value. Our quality training combines theory with hands-on learning and practical activities, and many courses include work placements where time is spent working in the industry as part of the curriculum.

## WHY CHOOSE BOX HILL **INSTITUTE?**

- Practical focused courses
- Industry standards and connections
- Personalised attention
- Work-ready graduate outcomes
- Affordable fees

## **COURSE PROFILE EXAMPLE: Bachelor of Information** Technology (CRICOS: 107931A)

This IT course has four majors: Cyber Security, Data Analytics and AI, Cloud Computing and IoT. and Software Engineering. In partnership with IT industry giants such as Cisco, AWS and Microsoft, we deliver a course based on current and future industry requirements.

In this degree, students will learn:

- Cyber security
- Network security
- Cloud computing

- Virtualisation
- System administration
- Network administration
- Internet of Things

Gain hands-on, practical experience using real equipment as well as the theoretical knowledge to be productive in the workforce from day one. You'll learn using courseware from industry academies, which can also lead to industry certifications. You'll be ready to demonstrate your value to an employer with this evidencebased approach.

The Australian Government Job Outlook site rates these as job areas expected to grow strongly to very strongly to 2023. High profile companies such as Telstra, IBM, NAB and Dimension Data have employed our recent graduates.

## **Bachelor of Early Childhood Education** (CRICOS: 075815G)

Our early childhood education course is ideal for teachers who aspire to meet the needs of contemporary early childhood services. Students will study philosophies, principles and practices of early childhood teaching, and how teaching and learning in discipline areas of language and literacy, mathematics. arts. science. and health and well-being are integrated across early childhood education play-based

Develop the knowledge and skills you need to be an effective early childhood teacher and leader with our early childhood education course. In our course, you'll learn how to demonstrate an exemplary standard of teaching, and how to be adaptable and highly proficient in critical and future thinking with a sound grasp of early childhood teaching and pedagogy.



Studying our early childhood education course will assist you in further developing your leadership and management skills to lead programs across a range of early childhood service types and allow you to gain an indepth knowledge of exemplary practice in early childhood service provision in areas such as:

- Child development
- Early childhood pedagogy and play
- Child and family-centred practice
- Legal and regulatory compliance requirements
- Provision of inclusive environments
- Early childhood leadership

Students will gain skills in research methods, professional practice, project management, and professional communication.

This course has national accreditation with the Australian Children's Education and Care Quality Authority (ACECQA) and is recognised by the Victorian

60

Institute of Teaching for Early Childhood Teacher registration on graduation.

## **INTERNATIONAL** TRAINING DELIVERY AND **CONSULTANCY**

Over the past 30 years, Box Hill Institute has developed a strong and recognised reputation for designing and delivering complex international projects for a range of clients. Our capacity to manage international projects has expanded and become more sophisticated.

Our International Business Development team consists of experienced business executives, project managers and coordinators who develop and manage international projects and consultancy services. Our training and consulting services include:

- Project advice and manage-
- Education and training design
- Training needs analysis

- Competency and curriculum frameworks
- Training and assessment
- Research and evaluation
- Enterprise training solutions

International

**Box Hill Institute** 

Building B6, Ground Floor, Elgar Campus

465 Elgar Road, Box Hill VIC 3128, Australia

**P**: 61 3 9286 9425

W: boxhill.edu.au

E: international@boxhill.



The Association of Australian Education Representatives in India (AAERI) was formed in October 1996 to assure the integrity and credibility of agents who are recruiting students on behalf of Australian education and training institutions. The establishment of AAERI was an initiative of Australian Education International (AEI) although AAERI is an independent organisation, registered under the Societies Registration Act of India.

## **AIM OF THE AAERI**

"To function as the true representative body of Australian Education in India, for safeguarding the interest of the sector and contributing to quality improvement on a continuing basis"

## **OUR MAIN OBJECTIVES ARE**

- 1. Act as a central force bringing together the stakeholder of Australian Education Industry
- 2. To regulate the Indian subcontinent market, in the interest of Australian Education brand. International students and the Governments of India and Australia
- 3. Assure integrity and credibility of education agents who are recruiting students for **Australian Education Providers**

## THE ABOVE CENTRAL AIMS / **OBJECTIVES ARE MANAGED** THROUGH:

- Rigid and transparent selection process including due integrity check by third party
- Continuous knowledge enhancement programs to all the representatives and their staff highlighting
  - Australian Education
  - Program details
  - Visa norms

ralia-India TRADE I

EDUCATION & TRAINING EDUCATION & TRAINING

- Act as a nodal point and bring together
- Australian Govt The policy maker
- Dept of Home Affairs Policy executor
- Education Providers Nodal body
- Agent Representatives Indian Arm of Australian Education
- Aspiring students Ultimate Beneficiary on the same platform to exchange, assimilate, fix norms and policies based on core grassroots information on Indian market
- Knowledge dissipated through quarterly webinars by Home Affairs, ongoing newsletters, general body meetings, conferences & road shows by education providers and monthly meetings of regional heads.
- Project South Asia Education Strategy 2025 - AAERI has commissioned an independent review to explore the issues, challenges and opportunities facing Australian Education sector in South Asia over the next five years and beyond. AAERI's report has set a roadmap for the international education sector to prepare for the changes that will come as South-East Asian Economies transform and grow.

## CODE OF ETHICAL PRACTICES (COEP) FOR AAERI MEMBERS

All AAERI members agree to abide by a Code of Ethical Practices (COEP) which stipulate that they must provide services to students in a manner which reflects the established practices of Australian education and training institutions. The COEP also safeguards the interests of prospective students.



AAERI's Code of Ethics is based on the Australian Governments's **Education Services for Overseas** Students Act (ESOS Act) and London Statement, which makes Australian education institutions accountable for the activities of their overseas agents which stipulates that they must provide services to students in a manner which reflects the established practices of Australian education and training institutions and which safeguards the interests of prospective students on the other.

The AAERI's COEP requires that AAERI members provide accurate and realistic counselling to prospective students who have selected Australia as their study destination and disseminate authentic information on:

- The totality of finances required for study in Australia;
- Conditions governing a student's ability to work, and the availability of work; the scholarships available to overseas students:

- Institutional academic matters, living arrangements, legal requirements and entitlement's, fees and refund policies and student support services.
- Education agents can assist students by:
  - Guiding them in choosing a course of study;
  - Assisting them to complete a student visa application and
  - Facilitate their enrolment in an Australian education institution



ASSOCIATION OF AUSTRALIAN EDUCATION REPRESENTATIVES IN INDIA

### **INTRODUCTION**

In an interconnected world, the importance of global education cannot be overstated. It is an era where cultural understanding, international collaboration, and cross-border opportunities shape our personal and professional lives. At CIT International, we recognise the transformative power of international education. In this editorial, we delve into the enriching experiences and endless possibilities that await students

### YOUR GATEWAY TO GLOBAL LEARNING

CIT International serves as a gateway to a world of global learning. We welcome students from all corners of the globe, providing them with a rich, diverse practical learning environment. With a wide range of courses tailored to international students, CIT offers opportunities to gain valuable

skills, knowledge, and cultural experiences that extend beyond the classroom.

## EDUCATIONAL EXCELLENCE AND INDUSTRY RELEVANCE

CIT takes pride in its commitment to delivering high-quality education. Our programs are designed to meet the ever-changing demands of the global workforce. Through collaborations with industry partners (including industry placements), we ensure that our courses are relevant, up-to-date, and aligned with market trends. Whether it's in the fields of business, ICT, health / nursing, hospitality, or creative arts, our international

students receive training that prepares them in realising their dreams in chosen careers.

### SUPPORTIVE LEARNING ENVIRONMENT

At CIT, we understand the challenges and adjustments that international students may face when studying abroad. That's why we provide a supportive learning environment that nurtures growth and fosters a sense of belonging. Our dedicated staff and student support services offer guidance, assistance, and resources to help students make a seamless transition and thrive academically and personally.

## CULTURAL IMMERSION AND GLOBAL NETWORKS

Studying at CIT goes beyond academics; it's an opportunity for cultural and work immersion as well as building global connections. Canberra, Australia's capital city, is known for its vibrant multicultural community and rich cultural heritage. CIT encourages students to engage in diverse cultural activities, events, and festivals, creating an environment where cross-cultural exchange is

## CIT International - Empowering Global Minds

celebrated. Additionally, our international students benefit from networking opportunities with local and international professionals, establishing connections that can shape their future career paths.

### **PATHWAYS TO SUCCESS**

CIT is dedicated to empowering international students with pathways to success. From language proficiency courses to vocational education and



training programs, we provide stepping stones for academic and career progression. Our strong relationships with Australian universities enable smooth credit transfers and further educational opportunities, allowing students to continue their academic journey seamlessly.

## CONCLUSION

The world is becoming increasingly interconnected, and international education is at the forefront of this global transformation. At CIT, we strive to empower students with quality education, cultural / work experiences, and global connections. By providing a supportive learning environment and diverse

range of programs, we equip international students with the skills and knowledge necessary to thrive in an everchanging world. Join us at CIT and embark on a transformative journey that will broaden your horizons and open doors to a world of possibilities.



62 Australia-India TRADE INVESTMENT | 2023 Australia-India TRADE INVESTMENT

## **Embracing Lifelong** Learning: Unlocking Your Potential with **CIT Solutions**

### INTRODUCTION

In today's fast-paced and ever-evolving world, the pursuit of knowledge and skills has become paramount. CIT Solutions is a wholly owned subsidiary of the prestigious Canberra Institute of Technology (CIT) group, a Technical and Further Education (TAFE) institution that has been a leading provider of education in Australia for over 90 years. Together, CIT and CIT Solutions offer a unique and integrated learning experience that empowers



learners to unlock their potential, adapt to an ever-changing world, and achieve their personal aspirations while serving their communities, country, and the world.

### **WORKFORCE TRANSFORMATION THROUGH LEARNING**

CIT Solutions is a trusted training provider with a flexible workforce of over 300 staff: trainers, subject matter experts, programme delivery and business support. Combining our history and reliability with our agility and commercial responsiveness, we offer client-centric workforce capability development solutions in the areas of language and cultural training, accredited qualifications, online learning, employee capability assessment, professional workshops, and recreational short courses.

At CIT Solutions, we firmly believe that education opens doors to endless possibilities. Whether you are a recent graduate looking to kickstart your career, a seasoned professional seeking to upskill,

or an individual eager to explore new interests, our wide range of courses and programmes cater to diverse needs.

## **UNLOCKING LEARNING OPPORTUNITIES**

From business and technology to creative arts and lifestyle, we offer an extensive selection of courses, all designed to equip you with the knowledge and skills necessary to thrive in today's dynamic world. Simultaneously, we recognise unique circumstances and commitments and offers flexible learning options that fit seamlessly into your busy schedule. Our expert facilitators ensure that you receive guidance and assistance throughout the mode of learning that suits you best.

### **INDUSTRY-RELEVANT EDUCATION**

At CIT Solutions, we take pride in our strong industry connections and partnerships. We collaborate closely with employers, industry experts, and professional bodies to develop courses that are

> aligned with current market demands. This ensures that the knowledge and skills you acquire are relevant, up-todate, and directly applicable to realworld situations. Our goal is to bridge the gap between theory and practice, equipping you with the tools to excel in your chosen field.

### **COMMUNITY AND NETWORKING**

Education is more than acquiring and applying knowledge and skills; it is also about building connections and fostering a sense of community. CIT Solutions provides a supportive learning environment that encourages collaboration and networking among students. Our interactive classes and extracurricular activities create

opportunities for meaningful engagement, enabling you to learn from your peers and expand your professional network.

### CONCLUSION

In a world where change is the only constant, embracing lifelong learning is the key to personal and professional growth. CIT Solutions is dedicated to empowering individuals with the education and skills they need to navigate the ever-evolving landscape successfully. Through our diverse range of courses, flexible learning options, industry-relevant education, and community-driven approach, we aim to unlock your full potential and help you thrive in the 21st century. Embrace the power of lifelong learning with CIT Solutions and embark on a transformative journey towards success.





Global Reach celebrates the India-Australia ECTA, a visionary partnership fostering ties between two nations for a brighter tomorrow in education and research.

We take immense pride in contributing to this historic association and extend our heartfelt wishes for a promising future of knowledge exchange and academic excellence.

Global Reach is proud to represent ALL Australian Universities and facilitating admission access to Indian students through its 37 offices across South Asia.

## **QS Top 100 Universities** represented by Global Reach:

- The University of Melbourne
- The University of New South Wales
- The University of Sydney
- Australian National University
- Monash University
- The University of Queensland
- The University of Western Australia
- The University of Adelaide
- University of Technology, Sydney

### Other Universities:

- Macquarie University
- RMIT University

- University of Wollongong
- University of Newcastle
- Curtin University
- Queensland University of Technology
- Deakin University
- La Trobe University
- Griffith University
- Swinburne University of Technology
- University of Tasmania
- University of South Australia
- Western Sydney University
- Flinders University
- University of Southern Queensland
- James Cook University
- University of Canberra

- Murdoch University
- Edith Cowan University
- Bond University
- CQ University
- Charles Darwin University
- Southern Cross University
- Victoria University
- Australian Catholic University
- Charles Sturt University
- University of New England
- Carnegie Mellon University University of the Sunshine Coast
- University of Notre Dame Australia
- Federation University of Australia
- Torrens University Australia

## Call for any assistance: 1800 571 1177 (TOLL FREE)

## 40 Offices in 6 Countries

Head Office (Kolkata): Ground Floor, The Millennium, 235/2A AJC Bose Road, Kolkata 700 020

Ahmedabad • Anand • Bangalore • Baroda • Bhopal • Bhubaneswar • Chandigarh • Chennai • Coimbatore • Delhi • Guwahati Hyderabad • Indore • Jaipur • Karnal • Kochi • Kottayam • Lucknow • Nagpur • Patna • Pune • Raipur • Salt Lake • Siliguri Udaipur • Vijayawada • Vizag • Kathmandu • Chitwan • Pokhara • Butwal • Thimphu • Phuentsholing • Colombo • Dhaka • Sydney

> Opening soon at: Navi Mumbai • Surat • Kurukshetra www.globalreachonline.com



Many boarding schools set up their rooms so that senior students in final years of study have their own private area. Those seniors not in their final years of study may share with one other and the junior students usually love their social time and as such share with perhaps two or three other students.

Friendships are an important component of boarding and you will always find a friend to share your stories and to help you with a homework piece or even to listen to some music with. Boys have a great time at boarding schools because they are able to use the full facilities of the gymnasium,

basketball courts, soccer, football and cricket fields; and in today's boarding schools they have chefs that cater to every taste of every student from all countries. Boarding is definitely a wonderful environment for students and a reassuring environment for families - knowing their children are being fully supervised and cared for at

## LOCATIONS AS WELL AS SCHOOLS ARE IMPORTANT

The locations of ABSI schools also offer individual students their own chance to shine! Locations - just the

same as schools - may suit one person but not another. Allow ABSI to assist you in deciding on which is the best location and the best school for you. For example: is your child a budding sports star? One school may suit you better than another. Are they a talented musician? One school may suit you better than another. Are you a little shy? One school and location may suit you better than another. Are you wishing to pathway to a particular university? One school or location may suit you better than another. •

## Working with families to choose the right school

AUSTRALIAN BOARDING SCHOOLS INTERNATIONAL, provides families and education agents an assured, safe and effective way of choosing a school - whether you are looking at Sydney, Melbourne, Hobart, Adelaide, Brisbane, the Gold Coast or Perth.

The Australian Boarding Schools International team has been assisting families, students and selected The schools presented by ABSI are day agents with their enrolment enquiries and questions, and further supporting and guiding them through each step of the enrolment procedure for some of the best boarding schools in Australia for over 25 years collectively.

ABSI offers to you expertise and advice about the care, safety, social and personal needs which is of utmost importance for each student. Academic choices and pathways, the professionalism, quality and dedication of teaching staff; and the facilities and opportunities offered at each of the schools represented by ABSI is outstanding.

66

## **ABSI DELIVERS SOLUTIONS AND** CHOICE

and boarding schools in Australia and have outstanding reputations and long proud histories and traditions. They focus on quality education outcomes. provide a safe, supervised and caring environment. The development of a student's 'whole character' is of importance to these schools. With so many schools in Australia opening their doors to international students, make sure you choose the right school. A8SI assists you free of charge with the enrolment process into one of these leading schools and matches your child to a school most suited to character. interests, endeavours and location.

### THE EXPERT ABSITEAM

The ABSI team has been appointed by schools to manage international admissions. The team have professional skills and expertise to assist families. Annie Weatherburn heads up the team and has been helping families. schools and agents world-wide for over 15 years. The team is mostly based in Australia but travels extensively to meet with families and agents. With a team member also based in Asia, ABSI have further expertise in understanding how to advise your family, and are waiting to help you find the right boarding school in Australia for your child.

### WHY CHOOSE A BOARDING SCHOOL?

All ABSI boarding schools have highly regarded reputations and offer excellent supervision and care. Boarding schools ensure that there are many tutors and supervisors who also live in and therefore are on hand 24/7 to assist students with their needs, arrangements, academic work, social or pastoral needs. The residence of schools also have a nurse (often referred to as Matron).

For more information:

enrol@australianboardingschools.com.au www.australianboardingschools.com.au



Australian Boarding Schools International represents schools located around Australia.

BRISBANE

QUEENSLAND COAST

**SYDNEY** 

**MELBOURNE** 

**TASMANIA** 

**PERTH** 

**ADELAIDE** 

**PLUS REGIONAL** 

Australia-India TRADE INVESTMENT | 2023 Australia-India TRADE INVESTMENT 67

# Building a Brighter Future Together

Welcome to Synergy Freight Management Pty Ltd, your premier freight partner with 35+ years of experience. Our reputation as a reliable player in the industry is built on excellent service, competitive rates, a global network, and industry knowledge, making us the top choice in Australia.

### YOUR SUCCESS IS OUR PRIORITY

At Synergy Freight Management, we prioritize customer satisfaction with transparency and open communication. We're dedicated to understanding your unique needs and exceeding your expectations, ensuring your success.

## **TAILORED SOLUTIONS**

Every business is unique, and our services are meticulously tailored to suit your requirements. Our experts devise customized solutions aligned with your objectives, simplifying freight management while you focus on your business.

### **UNLOCKING POSSIBILITIES TOGETHER**

Partner with us to unlock new possibilities and propel your business to greater achievements. Our proactive approach and dedication to excellence set us apart, making us the ideal choice for streamlined logistics solutions.

### INTRODUCING SYNERGY SOLUTIONS

Experience efficient global air and ocean freight forwarding, seamless customs clearance, comprehensive transport, and logistics services. Say goodbye to importing headaches with our expert handling.

## **CLARITY AND PEACE OF MIND**

Empowering clients with knowledge is our belief. Our experts educate and inform you about the freight forwarding process, ensuring clarity and peace of mind.

### **AVOIDING UNEXPECTED COSTS**

Withourcustomsknowledge and dutyminimization strategies, we ensure you avoid unexpected costs and pitfalls, optimizing your bottom line.

### **SMOOTH CUSTOMS CLEARANCE**

Navigating customs clearance seamlessly, we ensure your cargo reaches its destination on time.

### **DUTY AND TAX MINIMIZATION**

Our effective strategies help you save costs while remaining compliant with regulations.

### DOOR-TO-DOOR SERVICE

Enjoy a hassle-free process with our comprehensive door-to-door service, from origin to destination.

Contact us to unlock your business's potential through seamless freight management.

Together, we'll build a brighter future for your enterprise.



www.synergyfreight.com.au



MINING & CRITICAL MINERALS

MINING & CRITICAL MINERALS

The Indian government has ambitious plans to expand manufacturing capabilities and transition to a low-carbon economy. Several sectors have been set ambitious goals by the Indian government, for example, the country has set a renewable energy production target of 175 GW by 2022 and 450 GW by 2030. The country also aims to have 30 percent of vehicles powered by electricity by 2030, which requires critical minerals. Many government programmes such as Atmanirbhar Bharat and Make in India depend on India maintaining a constant supply chain of critical minerals.



Mohan Yellishetty Associate Professor Resources Engineering Monash University

## Critical Next Steps in Australia-India Critical Minerals Partnership

Australia and India are major suppliers and /or consumers of critical minerals and are uniquely placed to enact strategies that can maintain long-term supply resilience. Transition to renewable energy reduces exposure to global energy markets because the vast majority of renewable energy will be produced and consumed in-country, and another country can't stop the sun shining and the wind blowing.

Resource scarcity, supply chain vulnerability and concern over environmental impacts of mining and geopolitical uncertainty are driving major economies to strategically manage their supply and use of 'critical' metals needed for modern technologies and green energy transitions. Australia is known to host abundant critical metal resources, and India's demand is skyrocketing, however the roles these countries will play in international critical metal supply chains remains undefined while key aspects of critical metal ex-

72

he Indian
government has
ambitious plans to
expand manufacturing
capabilities and transition to a low-carbon
economy.



traction, processing and recoverability remain unknown.

Operating renewable energy capacity is the goal, building that capacity requires a lot of raw materials. It requires some basic materials such as copper, steel, and concrete. It also requires more exotic materials such as lithium, cobalt, cadmium, indium,

selenium, rare earth elements, vanadium, and others. These are used to make solar panels, wind turbines, and batteries. Many of these are 'critical minerals'.

Australia and India are key players across several of these supply stages, but both rely heavily on China for the intermediate processing of refined lithium materials, exposing both of them to increased risks of supply disruption. For example, the lithium-ion battery industry chain can be divided into five main stages, 1) Mining for materials, 2) Refining and processing, 3) Making battery materials, 4) Manufacturing the cells, 5) Assembling the cells into battery packs. China has a major contribution to the global refining and electro chemical stages with 89% and 75%, respectively.

The COVID-19 pandemic has revealed many fragilities in such critical metal supply chains. This bilateral trade conference therefore gathers Australian and Indian expertise in critical minerals production, processing and recycling across academia and government-industry.

It means there is a risk of a significant supply disruption, and the impacts of such a disruption would be high. Copper isn't generally considered critical because although the impact of a supply disruption would be high, the risk of a significant supply disruption is relatively low.

The cure to supply concentration is obviously supply diversification, and that's where Australia and India can play a significant role. Not only is Australia a significant current and potential supplier of a wide range of minerals, it is also the home to tremendous mining knowhow. Where as India is the most populous country with rapidly growing market.

However, establishing a new large-scale industry requires a concerted effort on behalf of both the Indian and Australian partners. Identifying and establishing these relationships is a daunting prospect for the in-

dividual domestic mining and manufacturing companies in both nations, and unlikely to succeed without external support. Government assistance will therefore be required to help guide industry members from both countries and reveal potential development opportunities.

As a Co-Founder of the Critical Minerals Consortium (CMC) and Co-Convenor of Critical Minerals National Industry Working Group at Australia-India Chamber, Associate Professor Mohan Yellishetty has been fostering collaborations and establishing and cementing partnerships and networks through a number of initiatives, such as 'Critical Minerals Consortium', 'Australia-India Critical Minerals Research Hub' and 'Indo-Pacific Critical Minerals Group'.

#### **Critical Minerals Consortium**

Monash led the establishment of the CMC to improve our understanding of minerals criticality and to provide advice, ideas and expertise to assist policymakers. The CMC is particularly interested in understanding the reliability of global supply chains for minerals and mineral-derived raw materials.

The consortium draws on the expertise of a number of researchers and practitioners from academia, research and industry. The consortium brings a group of researchers from RMIT University, the University of Melbourne, Deakin University, CSIRO Minerals, University of Queensland, Federation University and Latrobe University.

#### Supply Chains for Critical Minerals - Workshop Series Report

During 2021/22, the Critical Minerals Consortium, Monash University, the Australia India Chamber of Commerce, MinterEllison and Austrade conducted a series of workshops with the objective to bring together stakeholders from government, industry, corporate and research

sectors across the regions, to work through the opportunities and the challenges involved in building an additional and diversified supply chain for critical minerals. The recommendation of these workshops is to develop a Critical Minerals International Alliance (CMIA), with representatives from each participating region with an interest in a critical minerals supply chain across the Indo-Pacific.

A CMIA is in line with the federal government's 2022 Critical Minerals Strategy: With the hope to position Australia as a "global critical minerals powerhouse by 2030", the Critical Minerals Office is working with international partners to strengthening engagement with key countries such as the US, India, Japan, Korea, the UK, and European Union members.

hub will oversee collaboration with researchers from several other Indian and Australian universities and research organisations industry partner organisations and leading international researchers. In due course, the Hub will be expanded to Indo-Pacific region by including researchers from other countries in the region.

The AICMRH has been undertaking various collaborative activities which includes submitting grant applications under the coveted "Australia-India Strategic Research Fund (2019 and 2022)" and the "Australia India Council Grants Program". The AICMRH organised a joint India-Australia workshop "Critical Minerals Research for Sustainable Transition to Green Energy" during 3-4, March 2023.



#### Australia-India Critical Mineral Research Hub

Taking cognizance of the recent geopolitical developments and partnership agreements between India and Australia, IIT Bombay is spearheading the establishment of 'Australia-India Critical Minerals Research Hub (AICMRH)'. Moreover, in India, there is no dedicated research group conducting research into critical minerals. The proposed hub will initially bring together leading academicians, researchers and industry leaders from both sides to work on several issues related to the development of methodology for exploration and the extraction of critical minerals.

Jointly led by IIT Bombay and Monash University, Australia, the I sincerely hope and wish that the Australia-India Trade Summit builds an understanding of key risks and opportunities for Australian and Indian lithium value chains. The success of the summit will be measured through the development of new collaborative research projects, and sustainable partnerships between participating universities, government bodies, research organizations and industry.

Mohan Yellishetty Associate Professor

Co-Convener, National Industry Working Group (Critical Minerals), Australia India Chamber of Commerce

Co-Founder, Critical Minerals Consortium, Monash University

Australia-India TRADE INVESTMENT | 2023 | Australia-India TRADE INVESTMENT | 73

MINING & CRITICAL MINERALS MINING & CRITICAL MINERALS

#### Innovation in Mine Closure is Key to Maximising Long-term Value from Critical Minerals Development

By Dr Guy Boggs, CEO, Cooperative Research Centre for Transformations in Mining Economies (CRC TiME)

Unlocking innovation, knowledge-sharing and technology transfer in mine closure and transitions offers enormous potential to drive further value from critical minerals development.

Despite the opportunity - for mining and mining technology, services, and technology companies as well as communities and governments - closure has traditionally been less focussed on innovation than other parts of the mining value chain.

Rebalancing this focus is more important than ever.

The scale of critical minerals development required to support global decarbonisation brings with it real environmental risks. Furthermore, there is a need to maximise enduring benefits for communities and regions, ensuring that gains continue long after operations end.

There is a social and environmental imperative to address these challenges. It also presents significant opportunity for new

technology, businesses and partnerships.

#### UNLOCKING INNOVATION

74

CRC TiME is proud to be part of Australia's research and innovation ecosystem, working alongside our peer Cooperative Research Centres to drive transformative change on industry-defined challenges.

Our work is possible because of a A\$30 million investment by the Australian Government as well as financial and in-kind support from more than 75 partners. This support has created the world's only research organisation dedicated to improving mine closure and transitions for the benefit of people, communities, the environment and industry.

Over our first three years, a landmark foundational research and engagement portfolio examined current knowledge of mine closure, nationally and globally. These findings shaped our current A\$16 million research portfolio and identified lessons for new developments.

Below we outline three key areas emerging from our research that are particularly relevant as Australia and India seek to deepen economic cooperation around critical minerals development. These align with goals under the India-Australia Critical Minerals Research Partnership and other shared initiatives.

#### 1. Fostering growth of the specialised mine closure solutions industry

We know that minerals are finite resources and all mines will eventually close. Achieving positive

outcomes requires access to specialist skills, services and technology. This extends what is traditionally involved in mining - earthworks and land revegetation, for example - to hydrology, business analysis, asset recycling to facilitation and community engagement, to name but a few.

At the same time, focus on the circular economy also provides a new lens for considering how mining wastes can be used for inputs into new commercial purposes, or how residual minerals in mine wastes, such as

tailings, can be reprocessed.

Building on initial modelling demonstrating the potential for a multi-billion dollar mine closure industry, CRC TiME engaged CSIRO Futures to undertake the first detailed national study. This examines opportunities in extracting value from mine wastes, improving rehabilitation outcomes, and establishing post-mine land uses. Due for release in late 2023, the study will also provide



refined estimates of the economic potential of a mine closure solutions industry as well as export pathways.

#### 2. Recognising mining-related assets as regional infrastructure

Research commissioned by CRC TiME highlights the diversity of uses for mining-related infrastructure post-operations. Global examples range across most sectors, from tourism to biodiversity and conversation, to new business enterprises and even scientific research.

There's also examples in Australia. Two well-known examples: deep underground alongside Stawell Gold Mine's operations in Victoria is the Southern Hemisphere's only dark matter physics lab. A pit void in Queensland is also being considered for hydro power.

Yet, there remains low awareness that mines and related infrastructure - from logistics, energy and waste facilities, to buildings and even underground waters - are significant regional assets.

Without this awareness - and policy frameworks that incentivise repurposing - investments in new economic, social and environmental activity are lost - and with them, opportunities to maximise the value of mining infrastructure.

Together with our partners, CRC TiME will undertake further research to understand how to unlock the potential of these assets – including how to identify commercial and non-commercial future uses, attract investors, and integrate into regional planning.

#### 3. Addressing some of the most significant environmental mine closure challenges

While significant investments have led to major improvements in land restoration after mining ends, serious environmental impacts continue at many sites post-operations. In addition to causing harm, these impacts affect the industry's social licence to operate, directly impact ESG investment attractiveness, prevent a transition to next use and create ongoing liabilities for companies.

Our flagship projects on Acid Mine Drainage, seed engineering and sourcing in ecological restoration, and post mine pit lake development are focused to address these complex challenges. Importantly, our leading researchers are working with industry, community and government representatives in collaborative partnerships that will test and fast track the implementation of new approaches.

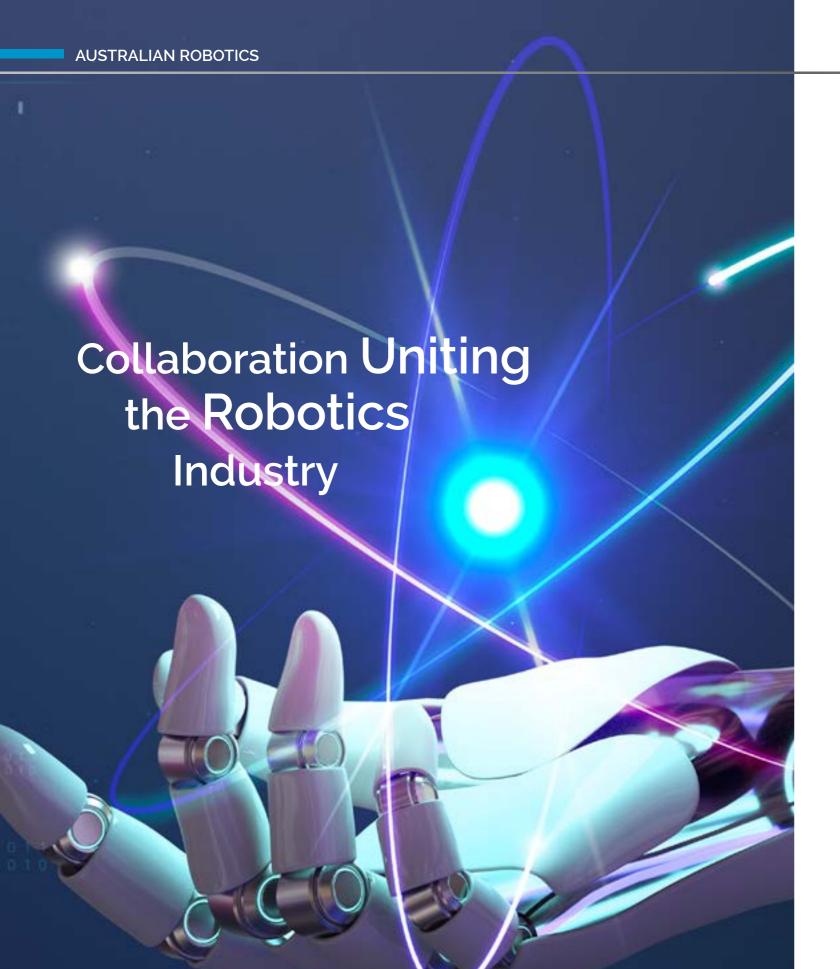
#### KNOWLEDGE-SHARING AND TECHNOLOGY TRANSFER

Driving innovation in mine closure and transitions presents some of the most exciting opportunities for knowledge-sharing, technology transfer and innovation between Australia and India.

The potential is huge, with long-term benefits for both countries by extending focus beyond initial development to what happens after mining ends.



Australia-India TRADE INVESTMENT | 2023 | Australia-India TRADE INVESTMENT | 75



76

The Advanced Robotics for Manufacturing (ARM) Hub is a collaborative initiative that brings together industry, research, and government agencies to advance robotics and automation technologies in the Australian manufacturing sector.

Its goal is to promote innovation and drive the adoption of cutting-edge robotics solutions to help companies increase productivity and become more competitive.

The organisation, based in Queensland, is the only independent not-for-profit to offer in-house expertise to achieve these objectives in Australia.

#### **ARM HUB KEY OBJECTIVES**

The ARM Hub focuses on addressing the specific needs and challenges faced by the manufacturing industry.

By understanding industry requirements, the research and development efforts can be tailored to have real-world applications and impact.

Research and development: The ARM Hub facilitates research and development efforts to create and improve robotic technologies that can be applied to various manufacturing industries. This includes exploring areas such as robot dexterity, collaborative robotics, machine learning, and computer vision.

Technology transfer and adoption: The ARM Hub aims to foster the transfer of technology from research institutions to the industrial sector. It seeks to accelerate the adoption of robotic solutions by providing resources and support to manufacturers interested in implementing automation in their production processes.

**Collaboration:** The ARM Hub acts as a platform for

collaboration between industry partners, academic institutions, and government agencies. By pooling resources and expertise, participants can work together to tackle industry challenges and drive advancements in robotic technology.

Project delivery: The ARM Hub has an in-house technical team of roboticists and designers as well as a commercial project management team that deliver projects on time and within budget. The team augments researchers in the delivery of commercial project outcomes.

#### **FOCUS AREAS**

Australia is using its national and competitive advantages to build advanced industries to respond to global supply chain opportunities.

The role of ARM Hub is to provide the technical capability and networks for businesses to secure these opportunities, and those on the horizon.

The ARM Hub is focused on advancing the following priority sectors:

- Digital
- Defence
- Biomedical
- Energy.

#### **CAPABILITIES**

The ARM Hub's capabilities include:

- Robotics, collaborative robots (cobots), and industrial automation
- Data science and analytics
- Artificial intelligence and machine learning
- Computer vision
- Industrial design, human centred design, and design for manufacturing
- Material science, cybersecurity, and supply chain innovation.

Combined with our academic capabilities, we are a unique

nexus of commercialisation and research.

#### **SUCCESS STORIES**

In its three years of operation, the ARM Hub has worked with (or are working with) almost 70 Australian companies on their digital transformation journeys.

Al-driven building façade inspection: Australian company Voltin has developed a world-leading artificially enabled building façade inspection system.

**AutoBAT2.0** is a tethered robotic drone technology that captures visual and thermographic data to accurately scan a façade, identifying the location and nature of critical defects.

The ARM Hub has worked with company to evolve its AutoBAT technology from prototype to commercial production model and investigated robotic tooling from the manufacturing of the AutoBAT 2.0.

Since their launch at ARM Hub in 2020, the company has forecast extraordinary growth, launched a new product to market, received three international standards certifications, and employed seven new staff.

#### Increasing productivity and safety

Young Guns Container Crew has been working with the ARM Hub on a project that will deliver a multi-million gain in productivity and value-add across the supply chain.

The company approached the ARM Hub to investigate how automation could improve safety, productivity, and efficiency in the supply chain.

Those discussions have led to a three-year project of a new automated system for loading and unloading container ships that has the potential to deliver between 25-50% savings.

77

Australia-India TRADE INVESTMENT | 2023 | Australia-India TRADE INVESTMENT

AUSTRALIAN ROBOTICS
AUSTRALIAN ROBOTICS



#### Harvesting bananas with robots

In collaboration with Australian industry groups and farmers, the ARM Hub investigated the potential to use robots with computer vision to automate banana de-handing. Banana de-handing is the action of separating the banana from the stalk.

The research project found that computer vision, machine learning, and robotic handling methods provide promising opportunities.

#### Helping a start-up enter the space race

Start-up company Valiant has developed a component of a new rocket thruster that has been used in a SpaceX test mission in America.

The company began its journey to superstardom at the ARM Hub in 2020.

Since its involvement in the rocket launch, Valiant has been integrating their technology into a propulsion system for their first customer.

The equipment is Australia's first in-space chemical thruster for satellites made from non-toxic propellants.

#### Collecting carbon dioxide

Southern Green Gas is a pioneering company that is based at the ARM Hub.

The company has developed Direct Air Capture technologies that capture CO2 from the atmosphere and make it available for subsequent sequestration, or as a component in several sustainable production pathways.

The ARM Hub is playing an important role in the scaling of Southern Green as it looks to commercialise its product for companies across the world to use.

#### PARTNERSHIPS AND COLLABORATIONS

The ARM Hub is a partnership model consisting of industry, academia, and government.

It has created a tightly woven network of research institutions, facilities, and commercial companies across Australia.

The university partners include:

- Queensland University of Technology
- The University of Queensland
- Griffith University
- University of Southern Queensland

- Central Queensland University
- University of Sunshine Coast.

#### Our founding partners are:

- Queensland University of Technology
- UAP
- CSIRO
- IMCRC
- World Economic Forum
- Fraunhofer
- Oueensland Government.

The ARM Hub also has a membership program for industry and universities.

Collectively, the partners contribute to modernising manufacturing and strengthening capability in high-tech areas, such as robotics and artificial intelligence.

Examples of this include the establishment of:

- The Australian Research Council Centre for Collaborative Robotics in Advanced Manufacturing (Australian Cobotics Centre)
- The National Infrastructure for Federated Learning in Digital Health (NINA).

The Australian Cobotics Centre is a collaboration between the Queensland University of Technology, the University of Technology Sydney, Swinburne University of Technology, and the Technical University of Dortmund. The ARM Hub is one of its industry partners.

The Cobotics Centre research is focused on the implementation of cobots to create a safer, more efficient, and globally competitive manufacturing sector.

Its projects range from medical (developing insights into how cobotic systems can help the soldering and inspection of barbs attached to wires when manufacturing stent grafts) to industrial (developing a high-speed sensing and control system that can identify and differentiate between steel bars and coils on a conveyor belt and work safety within relative proximity to its operator).

NINA is a project that will unlock digital health data on debilitating diseases, such as diabetes, rheumatoid arthritis, and osteoarthritis.

The role of the ARM Hub is to create a tool that will enable industry to safety access data.

#### WHERE ARM HUB IS HEADED

The ARM Hub mission is to accelerate Australian industry's creation and adoption of next generation technologies, including robotics, artificial intelligence, assistive technologies.

Success can be measured through the funding secured for industry-led projects and our engagement with the manufacturing community.

In our three years of operation, the ARM Hub has:

- Secured \$54 million for industry to undertake projects that will grow and scale their business
- Secured \$200 million through partnership programs that will lead to industry growth
- Worked with, or are working with, a total of 68 businesses
- Helped with the development and delivery of four new products
- Hosted 156 visits to our facility in Brisbane
- Engaged with 5500 people in events

 Upskilled 53 STEM and design interns and graduates from vocational training institutes and universities.

#### **WORKING TOGETHER**

Australian industry is undergoing a revival and the ARM Hub is a forefront of its industrial transformation.

According to Market.us, the industrial robotics market size is expected to reach USD 142.8 billion by 2032 and it is progressing at a CAGR of of 11.4% within a forecast period from 2023 to 2032.

Over the coming years, the ARM Hub will be seeking to work with organisations and companies overseas to grow the Australian robotics, artificial intelligence, and automation sectors.

This is an opportunity for global collaboration like no other.

#### **CONTACT US**

For more information about the ARM Hub visit

www.armhub.com.au

email info@armhub.com.au

78 Australia-India TRADE INVESTMENT | 2023 2023 | Australia-India TRADE INVESTMENT 79

MEDICAL BIONICS MEDICAL BIONICS

Bionics Gamechangers Australia (launched in Brisbane in early August) is a not-for-profit entity with a powerful vision to work nationally to fast-track innovation and export of bionic devices and treatments that capitalise on Al, medtech, robotics and sports tech plus quantum computing.

Initially founded in 2019 as Bionics Queensland, the ecosystem enabler has a promising stable of early-stage ventures and university R&D leaders who have drawn \$1 million plus in grants, mentoring and publicity from its annual Bionics Challenge delivered in partnership with the Motor Accident Insurance Commission



Dr Robyn Stokes

# Delivering Local and Global Access to Medical Bionic Innovations to Change Lives

(MAIC) Queensland and others since 2020.

Founder, Dr Dimity Dornan AO says "Bionics, robotics and AI are powerful partners.... it's a three-way marriage that is transforming health and medicine, reimagining disability, fine-tuning our cognition and capabilities and with each new innovation, further extending the human life span".

While human intelligence and ingenuity are still the key drivers of bionic inventions, AI is a powerful partner. From pre-natal predictions of an 'at-risk' infant's chances of being diagnosed with a developmental delay (using movement data from wearable sensors) to the creation of new AI-enabled organs and systems, bionics is a world where the 'improbable' has become possible.

"When you look at biofabricated implants - tissues, cartilage, bone - and our ability to create 'organs on a chip' and artificial and bio-robotic



Dr Dimity Dornan

organs, Australia is among the pioneers and no doubt, we're also in the race to deliver whole organ engineering and synthetic biology," Dr Dornan said.

According to Dr Dornan, "Bionics Gamechangers Australia has a wide canvas of bionic innovations in its sights to accelerate and support with a network of partners. We've got a great array of bionics startups across Australia focused on the senses, mobility, neurotech and brain health, neural enablement of devices and limbs plus implants and organs.

"With a new era in quantum computing upon us and significant advances in medicine, neuroscience, bioelectronics, biofabrication and additive manufacturing, Australia's export of bionic devices and treatments can and should be pushed to a higher level.

"We just need to bring the projects that are game-changing out of universities more quickly and be more deliberate about connecting innovators with diverse funds and expertise at each stage of product development", she said.

"Continuing to grow a pipeline of bionic innovations, doing more manufacturing in Australia and celebrating and retaining commercially savvy startups is the key. I'm hopeful that the National Reconstruction Fund and a new era of national collaboration will help us to deliver these results"

CEO of Bionics Gamechangers Australia, Dr Robyn Stokes, said that local innovators (in particular, early-stage ventures), have greatly benefited from the education, professional mentoring and advisory work of Bionics Queensland so far and these programs will now reach a national audience.

"Keeping a close eye on the needs of clinicians, defining front end market projections and the competitive environment, managing IP, design and development and tracking regulatory changes is very challenging for R&D leaders and early-stage ventures", she said.

"All are targeting a global market and must understand regulatory changes, 'who the customer is' and how they will be reimbursed for their device or treatment in different parts of the world. Bionics Gamechangers Australia stays abreast of 'must have' insights from Australia's Therapeutic Goods Administrator (the TGA), the FDA in the United States and UK and EU medical device regulators".

In the Brisbane and Gold Coast corridors of bionic innovation alone, great strides are being made by Diabetes Neuromathix, Laronix Voice Technologies, Cortex Brainwave Technologies, the Biospine Project and many others. Diabetes Neuromathix (DNx) and Laronix are among the growing array of early-stage ventures that are set to deliver non-invasive, Alenabled organ software.

DNx is using a completely new, patented form of AI that has significant advantages over conventional artificial intelligence. Led by Dr Nigel Greenwood, DNx is building the world's first genuinely machine-intelligent artificial pancreas, a bionic pancreas that transforms the safety and effectiveness of insulin dosing

for people with highly unstable forms of type-1 diabetes. The DNx bionic solution (now gearing up for clinical trials) delivers organscale personalised medicine, using Al to 'understand' a patient's medical history and decide insulin-dosing in real time.

The Laronix voice box is another game-changing Alenabled bionic solution. The brainchild of Dr Farzane Ahmadi, the non-invasive electronic device is provided in headset form and monitors a patient's respiration using sensors placed outside the neck. Inside the headset, Al software mimics the performance of human vocal folds and generates voice automatically in response to respiration, with the voice then



transferred to the mouth via a thin tube.

According to Dr Stokes, the rising toll of road accidents across many nations (Australia and India included), other injuries and trauma, chronic and neurodegenerative diseases (including those linked to aging) and the need for new devices and implants to manage pain are innovation drivers.

"At present, the Asia-Pacific population is aging faster than any other region in the world. Currently, there are 630 million people aged 60 and up, accounting for 60% of the world's elderly. By 2050, this number is projected to increase to 1.3 billion. For these reasons, demand for bionic devices, treatments and implants in

Australia, India and elsewhere will grow.

Australia and India share a vision to fast-track medical bionic innovations. In response to rising demand in 2022, the School of Medical Research and Technology (SMRT) of IIT Kanpur launched Hridyantra, a challengebased program to develop an advanced artificial heart called the Left Ventricular Assist Device (LVAD). The Karnataka Institute of Medical Sciences has also announced plans for new cochlear implant facilities to treat more hearing-impaired children.

Right across the Asia-Pacific, bionics end users (some with multiple devices, sensors and implants) will need a faster pathway from 'hospital to home', integrated clinical care and easy access to their own e-health data. New clinical education and training programs will also be needed to 'train the brain' to respond to new bionic devices.

As a major partner to Bionics Queensland since late 2020, the Motor Accident Insurance Commission (MAIC) Queensland is especially interested in bionic innovations that give renewed hope and insights to Australians living with road trauma. In 2024 and beyond, Bionics Gamechangers Australia will build a wider national and global network to bring these new innovations to the foreground to transform the lives of those impacted by road trauma, other injuries and disease.

For more information, contact: Dr Robyn Stokes, CEO, Bionics Gamechangers Australia on robyn@bionicsgamechangers.com.au



80 Australia-India TRADE INVESTMENT | 2023

CLEAN & GREEN ENERGY CLEAN & GREEN ENERGY

We've all heard the bad news.... The effects of climate change are upon us. But in good news, renewables, particularly solar, are now the cheapest form of electricity we produce (CSIRO, GenCost 2022-23, 2023). However, while electricity is a significant and increasing part of our global energy footprint, thanks to electric vehicles, heating and cooking, there are

Although hydrogen is already a significant global commodity with about 100 million tonnes produced annually, particularly for ammonia and petrochemical refining, its current production methods strip the hydrogen from natural gas through a process called steam methane reformation, releasing significant carbon emissions.

hydrogen', this zero-emission energy carrier could extend electrification into the flexible fuels and chemicals required to decarbonise these hard-to-abate sectors of our global economy.

Until now, renewables have been focussed on domestic electricity, but to truly decarbonise we will need to significantly scale-up their



many energy uses that will be difficult if not impossible to replace with electricity such as heavy transport fuels, fertilisers, chemicals, energy exports and steel production.

Hydrogen shows potential as a flexible energy carrier that can meet those needs, and releases only water vapour when burned.

82

However, in better news, there are other ways of producing hydrogen that lead to a mammoth cut in those emissions. This includes the process of electrolysis, where electricity separates out hydrogen from water molecules, releasing only oxygen as a by-product. Known as 'green'

deployment, storage, supply chains and business models.

The Scaling Green Hydrogen Cooperative Research Centre (CRC) is being developed to tackle the job of building a competitive value chain for green hydrogen and its derivatives at scale. The challenges are broad and diverse, requiring cooperation

between all stakeholders: industry, investors, government, education and research, so the potential can only be realised if we work together.

#### THE SCALING GREEN HYDROGEN CRC WILL HELP STAKEHOLDERS:

- Develop solutions for storage, transport and distribution of hydrogen, noting that one solution won't fit all challenges;
- Adapt electrolyser technologies from global settings to Australian conditions, working on specific solutions and local production;
- Collaborate across electricity, water, chemicals, transport, infrastructure, and manufacturing sectors with systems approaches;
- Link production of green hydrogen to offtake markets such as green chemicals, sustainable fuels and green steel;
- Grow a domestic green hydrogen industry with local workforce, supply chains, standards and best-practice safety; and
- Develop small-to-medium enterprises (SMEs), emerging entrepreneurs, and the research sector to create a global Hydrogen Equipment, Technology and Services (HETS) sector.

The Centre is a major collaborative initiative with backing from 93 public and private sector partners, education, research and community organisations, who have to date committed \$AU160m of cash and in-kind expenditure. These partners represent 12 different countries, reflecting the global nature of the challenge and opportunity. The CRC has been short-listed for funding from the Australian Government with a final decision

expected in late 2023. If funded, the CRC will have over \$AU200m of resources to allocate to collaborative projects across the next decade.

Australia and India are playing a part, of this global decarbonisation agenda, but their contributions could be even more significant. India is the 5th largest economy in the world and Australia is the 12th and the size of the challenges and opportunities match this scale.

According to the International Energy Agency's India Energy Outlook 2021, India is the world's third-largest energy consuming country with 80% of demand still met by coal, oil and solid biomass. With now the world's largest population, as well as rising incomes, it is anticipated that India will need to add a power system the size of the European Union to meet growth in electricity demand over the next twenty years. Australia is the world's largest exporter of LNG, and one of the world's largest exporters of black coal. In 2020-21, coal, gas and oil represented 97.6% of its energy resources production and it exported almost 84%

Australia and India are the sixth and seventh largest countries in the world by area, with high levels of solar energy generation potential, dwarfing existing production and consumption of fossil fuels. According to the World Bank's 2020 Global Photovoltaic Power Potential study, Australia has the second highest theoretical solar potential while India ranks seventh.

Despite having the largest residential rooftop solar penetration in the world with one-in-four homes equipped with roof top solar panels, Australia's renewables made up only 2.4% of production in that year according to the Australian

Department of Climate Change, Energy, the Environment and Water's 2022 Australian Energy Statistics.

On the back of strong historical and cultural ties, Australia and India are creating platforms for further collaboration. The Australia-India Economic Cooperation and Trade Agreement (ECTA) commenced in December 2022 and the Quad Partnership, that Australia and India share with Japan and the United States, includes a commitment to developing clean energy and clean hydrogen across the Indo-Pacific.

The Scaling Green Hydrogen Cooperative Research Centre and other decarbonisation knowledge initiatives provide a strong platform for collaboration between Australia and India. Despite the massive and obvious natural resource synergies between our two countries, it is in the ingenuity, skill, friendship and commitment of our people where the most collaborative potential lies.

With a strong relationship and potential for significant growth, Australia and India can collaborate right across the new energy value chain from critical minerals and processing, to manufacturing, deployment and operations, and the circular economy. Importantly, jobs and economic development in both countries can be boosted by a focus on the knowledge economy aspects of science and research, innovation, skills and training, and commercialisation. Together, we can achieve a shared future of economic and social prosperity while addressing the existential threat of climate change.



83

Australia-India Trade investment | 2023 | Australia-India Trade investment



In the quest for a sustainable future, the trade of lithium has emerged as a crucial factor in the clean energy revolution, driving the electric vehicle (EV) industry. Australia and India, prominent players in the global lithium market, have witnessed a remarkable surge in their bilateral trade, shaping their economic, strategic, and environmental landscapes.

#### AUSTRALIA'S LITHIUM RESERVES AND PRODUCTION

Australia stands as a global leader in lithium production, boasting abundant reserves, particularly in the mineralrich Western Australia region. With vast lithium deposits and advanced mining technologies, Australia has become a major exporter of lithium, contributing significantly to the world's lithium supply. The nation's well-established position in the lithium market has garnered attention from various countries, including India, seeking to meet their burgeoning lithium demands.

#### INDIA'S EMERGING LITHIUM DEMAND

India's rapid economic growth and commitment to sustainable development have fueled a surge in lithium demand. With ambitious renewable energy and electric mobility goals, India's transition to cleaner energy solutions has accelerated, necessitating a substantial supply of lithium. The adoption of lithium-ion batteries for EVs and renewable energy storage solutions has further intensified India's demand for lithium imports.

#### THE BILATERAL TRADE RELATIONSHIP

The growing lithium demand in India has fostered a strong bilateral trade relationship with Australia. India, reliant on dependable lithium supplies to support its green energy transition, has found a suitable partner in Australia, with its robust lithium production capabilities. This trade partnership has strengthened over the years, leading to increased collaboration and mutual benefits for both nations.

#### STRATEGIC SIGNIFICANCE

The lithium trade between Australia and India holds strategic importance for both countries. India's pursuit of energy security and clean energy sources aligns perfectly with Australia's position as a reliable and dominant lithium supplier. For India, securing a stable and diverse lithium supply is crucial to achieving its renewable energy and electric mobility targets, while Australia's expanding market reach finds new opportunities in India's burgeoning clean energy market.

# INVESTMENT OPPORTUNITIES AND ECONOMIC GROWTH

The growing lithium trade between Australia and India has opened up new horizons for investment and economic growth. As India seeks to strengthen its lithiumion battery manufacturing capabilities, Australian lithium suppliers have the opportunity to invest in local production facilities, creating a symbiotic partnership that fuels economic development and technological advancements in both nations. This collaboration promotes job creation, innovation, and increased value addition in their respective economies.

#### **ENVIRONMENTAL IMPACTS**

The trade of lithium carries significant environmental implications, given its essential role in renewable energy and EV technology. As the world endeavours to combat climate

change and reduce greenhouse gas emissions, the efficient supply chain of lithium is vital for the sustainable production of lithium-ion batteries. By ensuring a steady and ecofriendly supply of lithium, the Australia-India trade partnership contributes to global efforts to mitigate environmental impacts and foster a greener future.

#### CHALLENGES AND FUTURE PROSPECTS

Despite the promising prospects of the Australia-India lithium trade, there are inherent challenges to address. These include addressing logistical complexities, harmonising regulatory frameworks, and navigating market fluctuations. Both countries must collaborate closely to ensure a smooth and reliable supply chain, explore avenues for joint research and development, and foster innovation to tackle these challenges and enhance the efficacy of their trade relationship.

#### SO WHAT DOES THIS MEAN FOR BOTH NATIONS?

The growing trade of lithium between Australia and India represents a landmark collaboration in the pursuit of a sustainable future. As India accelerates its green energy transition and Australia expands its market reach, the trade of lithium becomes a strategic alliance, fostering economic growth, technological advancement, and environmental stewardship. Through investment, technological collaboration, and sustainable practices, the Australia-India lithium trade sets a compelling example of international cooperation to pave the way for a cleaner, greener, and more prosperous global community.



CLEAN & GREEN ENERGY

CLEAN & GREEN ENERGY

Australia and India have collaborated to reduce the impact of plastic waste on the environment. This collaboration involves three research organisation each from India and Australia. From India, there is The Energy and Resources Institute, the Council of Scientific and Industrial Research and Development Alternatives. On the Australian side there is the University of New South Wales, the University of Technology Sydney and the Commonwealth Scientific and Industrial Research Organisation (CSIRO).

The CSIRO, Australia's national science agency, has its own Ending Plastic Waste Mission, which has the goal of an 80 per cent reduction in plastic entering the Australian environment by 2030. Now the Australian government seeks to leverage CSIRO's research and networks to identify opportunities for Indian authorities and Australian firms to build recycling capabilities and a circular economy of plastics.

The CSIRO is particularly focused on advanced recycling technologies, which could turn problematic plastic waste destined for landfill into valuable resources. At present, about 85 per cent of plastic waste in Australia ends up in landfill and an estimated 130,000 tonnes of plastic leaks into the marine environment each year. Advanced recycling technologies break down plastic waste into its chemical building blocks, which can then be either made back into back into plastics or used to create fuels that can be used as alternatives to fossil fuels. The process is particularly suitable for flexible or the soft 'scrunchable' plastics used for food packaging - plastics that usually cannot currently be recycled due to

ustralia and India both face the challenge to reduce the impact of plastic waste on the environment. Since July 2020, the two nations have been working together to achieve a zero plastic waste economy through the India-Australia Industry and Research Collaboration for Reducing Plastic Waste. This aims to set in motion innovation in the plastic supply chain and create a circular model for plastics.

contaminated by food or other materials.

The CSIRO is also helping to tackle the challenge to recycle polyvinyl chloride (PVC), which the Australian Plastics Recycling Survey for 2018-19 reported had one of the lowest recovery rates of any polymer. PVC is a long-lived polymer used for everything from flooring to cables and medical supplies.

The biggest issue with PVC is that in Australia alone there are aver 5000 different formulations of PVC - and the material cannot be recycled if its composition is unknown. Now a crossdisciplinary team from CSIRO is working with Sustainability Victoria and Think Fencing to create an analyser tool that will tell recyclers what additives they need to recycle the PVC material. Once this is developed, the CSIRO plans to develop a sample library that will almost act like a recipe book, providing recyclers with the 'recipe' they need to produce recycled PVC with the ingredients made available to them

The CSIRO has also been investigating whether insects can take a bite out of the plastics problem. A research team set out to explore what was happening when insects burrowed in and appeared to eat plastic waste. The team examined the digestion of three insect species - the wax moth, mealworm and black soldier fly. They found that all three insects respond differently to different plastics. Understanding how specific species of insects metabolise or bio-transform particular types of plastic could lead to the pairing of specific insect species with particular plastics or waste types and conditions. Even if the insects could not break down huge piles of plastic, they could still be used for waste separation, transforming food waste contaminating plastic into valuable protein while leaving cleaner plastic waste for recycling.

The other side of the plastics challenge for both India and Australia is the need to develop viable alternatives that are not reliant on fossil fuels for production – in 2020, the plastics industry accounted for approximately 11.3% of oil demand in the OECD. Demand for plastics has risen at an alarming rate, with one source calculating that more than half (56%) of all plastics ever made were produced between the years 2000-2020.

The CSIRO has teamed up with Western Australia's Murdoch University to establish a new Bioplastics Innovation Hub, with the goal to develop new bio-derived plastics that will be 100 per cent compostable. This new generation of plastics could be used for the sustainable

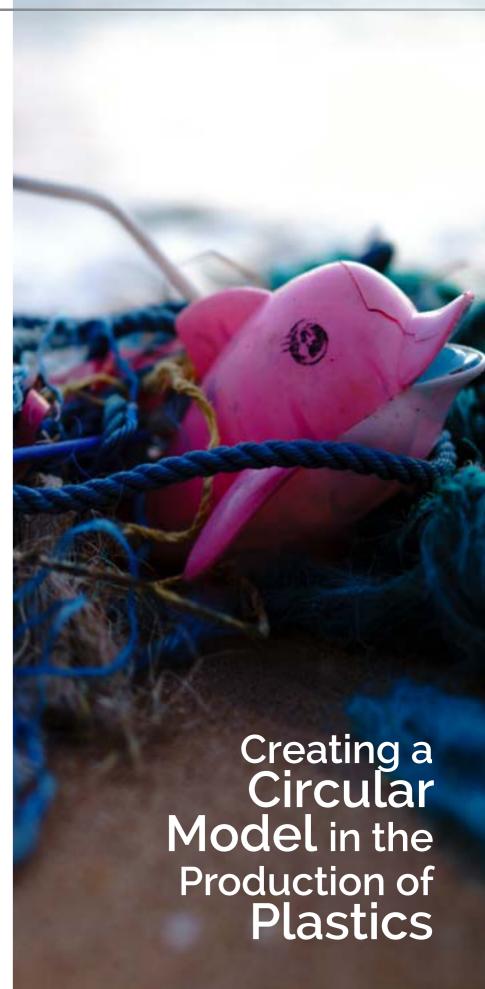
production of bottles, bottle caps, and wrappers. The Hub has already has a co-investment with Western Australia-based biotechnology company Ecopha Biotech to develop a new process for water bottle production using compostable bioplastics derived from waste products from the food industry.

The CSIRO's Kick-Start program has provided funding and research support for ULUU, another Australian business that is making an alternative to petroleum-based plastic - this time with seaweed. The process uses farmed seaweed to create pellets of a polymer called polhydroxyalkanoates, which can then be extruded into any plastic form - anything from cosmetics to fabrics and packaging. This material has a durability similar to plastic, but is biodegradable and compostable. This occurs through a two-step process in which seaweed is first converted into sugars, then it is fermented in vats to produce natural polyesters through the action of microbes.

The use of seaweed also has far-reaching effects on carbon pollution. Seaweed grows much faster than trees and removes not just carbon from the water but also nitrogen waste in the ocean that largely comes from human sewage and fertilizers. According to ULUU founder Dr Julia Reisser, every kilo of the carbon-negative material produced by seaweed offsets 5kg of carbon dioxide.

Innovations such as these provide hope that we will be able to enjoy a future with the convenience of plastics, but without feeding the carbon crisis and causing ongoing environmental disasters on both land and in our waterways.







#### STEEL IN AUSTRALIA

Dr. Veena Sahajwalla, an Indian-born Australian scientist, embarked on her quest to create green steel over two decades ago. Her pioneering work began at the University of New South Wales (UNSW), where she established the Sustainable Materials Research and Technology (SMaRT) Centre. Her vision was to find innovative ways to recycle waste materials and transform them into valuable resources, ultimately reducing the environmental impact of various industries, including steelmaking.

In the early stages of her research, Dr. Sahajwalla focused on finding suitable waste materials that could provide the necessary carbon for steel production. She identified discarded car tyres as an ideal candidate due to their high carbon content and abundance as a waste stream. Conventional steelmaking requires vast amounts of coking coal, and by substituting it with carbon-rich materials like shredded tires, Green steel effectively reduces both carbon emissions and the reliance on finite resources.

#### COMMERCIALIZING GREEN STEEL

Dr. Sahajwalla's breakthrough did not go unnoticed. Australian steelmakers recognized the potential of green steel and its positive impact on sustainability and profitability. Collaborating with industry partners, Dr. Sahajwalla's research at the SMaRT centre led to the successful commercialization of green steel in Australia.

One of the key players in adopting green steel technology was the steel mill located in Newcastle, New South Wales. This mill, owned by the US company Moly-Cop, embraced Dr. Sahajwalla's innovations and began incorporating shredded tires into their steelmaking process. The switch to green steel proved to be more efficient and cost-effective for the company, leading

to significant reductions in carbon emissions and landfill waste.

#### ADVANTAGES OF GREEN STEEL

**Reduced Carbon Emissions:** One of the most significant advantages of green steel lies in its ability to revolutionize the steel industry's environmental impact. By ingeniously utilizing waste materials as a carbon source instead of relying on coking coal, green steel paves the way for substantial reductions in the carbon footprint of steel production. This not only contributes to Australia's commitment to combating climate change but also aligns with global efforts to curb greenhouse gas emissions.

Waste Reduction: Green steel is a game-changer when it comes to waste management. Embracing discarded materials, such as used car tyres, as a valuable resource in the steelmaking process, green steel effectively diverts vast amounts of waste from overflowing landfills. By giving these materials a second life and transforming them into essential components of steel production, green steel mitigates the environmental impact of waste disposal, promoting a more responsible and eco-friendly approach to resource utilization.

Energy Efficiency: Traditional steelmaking processes often come at a high energy cost, straining finite resources and contributing to environmental degradation. However, green steel ushers in an era of enhanced energy efficiency. By employing waste materials rich in carbon as an alternative to energy-intensive coking coal, green steel significantly reduces the overall energy consumption reguired for steel production. This not only translates to substantial cost savings for manufacturers but also reflects a more sustainable approach to resource utili-

**Enhanced Competitiveness:** The adoption of green steel is not only an environmental tri-

umph but also a strategic business move for steel manufacturers. As sustainability becomes an increasingly crucial factor in consumer decision-making, companies embracing green steel gain a significant competitive advantage. By demonstrating a commitment to environmentally responsible practices, these steel manufacturers appeal to a growing market of environmentally conscious consumers and stakeholders.

Circular Economy: Green steel embodies the very essence of a circular economy, an economic model that emphasizes waste reduction, resource efficiency, and closed-loop systems. By incorporating discarded waste materials, such as shredded plastics and used tires, into the steelmaking process, green steel exemplifies the principles of recycling and resource regeneration. Instead of viewing waste as a burden. Green steel transforms it into a valuable resource, effectively closing the loop on materials that would otherwise end up as environmental hazards in landfills. This circular approach to steel production not only minimizes waste generation but also fosters a more sustainable and responsible industrial ecosystem, creating a positive ripple effect throughout the global economy.

#### **GLOBAL IMPLICATIONS**

The success of green steel in Australia has garnered international attention and interest from steelmakers worldwide. Dr. Sahajwalla's work has sparked a global conversation about the potential of recycling science to transform industries and address the pressing issue of climate change. As countries seek innovative solutions to reduce carbon emissions, green steel provides a viable model for sustainable steel production.



Australia-India TRADE INVESTMENT



On Earth, India and Australia may be oceans apart, but when it comes to space, the two nations are very much side by side.

Head of the Australian Space Agency Enrico Palermo has that "Australia and India's commercial space sectors are at similar levels of development, making us perfect partners."

In July 2023, Mr Palermo met with Chairman Somanath of the Indian Space Research Organisation (ISRO) at the G20 Space Economy Leaders Meeting (SELM) in Bengaluru. At the SELM, Mr Palermo said, "Space is a global industry that relies on strong international partnerships. Our Agency is the gateway for the global space sector to engage with Australia – through space, climate, exploration, or industry-to-industry collaboration."

Mr Palermo's discussions with Chairman Somanath included the topic of Australia's role in supporting India's Gaganyaan Human Space Flight Program via tracking facilities on the Cocos Keeling Islands. The Gaganyaan Mission (Gaganyaan is Sanskrit for 'sky vehicle') is significant because it will demonstrate human spaceflight to Low Earth Orbit (LEO), which will lav the foundation for a sustained Indian human space exploration. When the first crewed flight is launched, India will become just the fourth nation to send humans into space.

Australia has a rapidly growing commercial space sector that produces unique and innovative space technologies that can, and will, support the future space missions of nations such as India. More directly, Australia stimulates India's space sector through the International Space Investments India Project, which offers grants that enable Australian businesses and research organisations to

pace is a global industry that relies on strong international partnerships.

Our Agency is the gateway for the global space sector to engage with Australia – through space, climate, exploration, or industry-to-industry

collaboration."

Enrico Palermo Head of the Australian Space Agency

participate in joint projects and closer relationships with the Indian space sector. These grants offer valuable opportunities for collaboration in mutual priority areas, such as Earth observation, position navigation and timing, advanced manufacturing for space, and artificial intelligence for space-based applications. Mr Palermo has described the purpose of the grants is to "generate projects that leverage our respective expertise to

ultimately strengthen our space sectors, enhance our capabilities and boost jobs and growth across our countries".

At the University of South Australia, the Australia-India Space Alliance program of exchange is housed within the Innovation & Collaboration Centre (ICC), which serves as the University's technology startup incubator. Here participants collaborate with likeminded people at an international level to build networks and share knowledge, as well as creating opportunities to accelerate business in both Australia and India. It is also a place where Indian startup companies can connect and have access to critical areas of emerging Australian technology and exchange technical and business expertise.

Through a series of online networking events, technology demonstrations, and a trade tour, the Australia-India Space Alliance provides an opportunity to develop mutually beneficial relationships between emerging deep tech companies, supported by both Australia and India.

In all these ways and many more, Australia and India have emerged as complementary partners in space projects. This will create many opportunities for technology startups, with a focus on space and deep technology, particularly in the fields of Earth observation, satellite navigation, space situational awareness, and weather and climate studies using satellite data.













HEX20's products are derived from flight heritage programs and have a proven assurance for successful mission completion.

HEX20 aims to provide small satellite systems platforms, systems, and services. HEX20 specializes in researching, designing, and developing cutting-edge, scalable platforms and subsystems for small satellites and provides clients with launch services, mission operations, and data services. HEX20 aims to deliver solutions to the LEO and Cislunar market with a strong focus on making these qualified hardware platforms more intelligent, costeffective, reliable, and easily accessible for commercial, defense, and academic applications.

Reliability is a cornerstone of HEX20 platforms, from component selection to proven thermal management and space heritage from multiple missions. The platform design balances flexibility, performance, and reliability, allowing your team to focus on the mission and payload, reducing the time-to-orbit. From our most compact 3U platform for academic missions to the largest 27U design for missioncritical projects, we offer a range of payload space, computing, power, avionics, pointing accuracy, and communication options that can be mixed and matched to your specific mission application.

HEX20 is an innovative Australian Small-Sat company providing cost-effective platforms, customized hardware, and advanced sensor technologies for the CubeSat and SmallSat markets.

#### **HEX20 IS BUILDING**

- 3U platform for National Central University
  Taiwan to fly an Automatic Identification
  System (AIS) Payload
  for tracking ships.
- 2 Committee on Space Research (COSPAR) Satellite, a collaboration between five countries US, France, Taiwan, Australia & India.
- 3 Satellite simulator and training platform for the UAE Space Agency supporting the UAE Asteroid Mission.
- 4 3U & 6U HEX20 tech demo missions with an Electronic Warfare (EW) signals Intelligence Payload and in the process of signing a second project with Taiwan's National Central University.





### A Defence **Partnership** Going **Beyond Borders**

Australia and India have a long history of defence cooperation, and today that relationship is underpinned by extensive agreements such as the 2006 Memorandum on Defence Cooperation, the 2009 Joint Declaration on Security Co-operation, and the re-establishment of The Quad, with partners Japan and the USA. The Quad partnership has a positive, practical agenda to respond to the region's most pressing challenges. These include health security, climate change, infrastructure, critical and emerging technology, cyber security, humanitarian assistance and disaster relief, space, maritime security, countering disinformation, and counter-terrorism.

Following the agreement in 2014 of a bilateral Framework for Security Cooperation, the defence relationship has grown to include a range of forums for strategic dialogue, as well as regular interactions between Australian and Indian defence services through senior visits, staff talks, and training exchanges. The Australia-India defence relationship now encompasses almost every major function of the military, including joint military exercises involving ground, air and maritime forces.

The Australian and Indian defence forces have become increasingly interoperable through the growing number of shared platforms, thereby increasing opportunities for joint training. These include C-17 strategic transport aircraft, C-130 tactical transport aircraft, and Chinook heavy-lift helicopters.

The Australian and Indian defence forces continue to build links through regular personnel and training exchanges. Every year, Australia sends officers to attend India's premiere military educational institutions (the Defence Services Staff College and the National Defence College). India sends officers to study in Australia at the Command and Staff College and the Defence and Strategic Studies course.

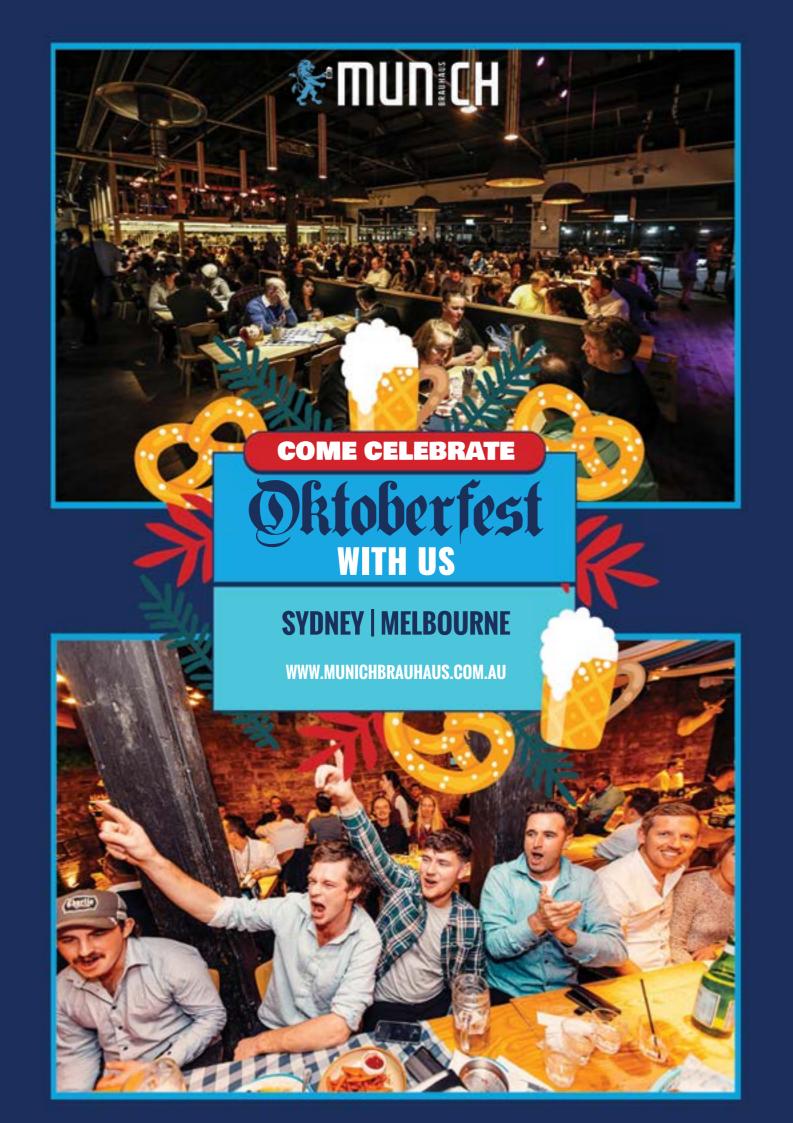
The Australia-India defence relationship has the potential to have a positive impact both nations far beyond defence alone. For example, the 2020 Mutual Logistic Support Arrangement (MLSA) facilitates more sophisticated operational cooperation that enables the defence services of the respective nations to have a greater combined responsiveness to regional humanitarian disasters. The Defence Science & Technology Implementing Arrangement (DSTIA) also demonstrates how the defence partnership filters down to everyday life. The DSTIA exists to facilitate interaction between the Indian and Australian

defence research organisations, both of which made important contributions to addressing the COVID-19 pandemic.

The depth of the defence cooperation also brings opportunities for investment and private enterprise on both sides of the Indian Ocean, particularly in the fields of global supply chains, technology transfer research and development, technology-sharing research and development, and cybersecurity. The Indian Government has opened up the defence industry for private investment, which means Australian manufacturers of defence equipment could enter into arrangements with their Indian counterparts, and viceversa. This move also unlocks the potential for Australian businesses to invest in or establish joint ventures with Indian companies to help satisfy India's defence services requirements. Conversely, Australia has a need for skilled technological staff in the fields of cybersecurity and digitisation, which India can supply. Once again, this demonstrates the complementary nature of shared strategy and resources for both India and Australia.



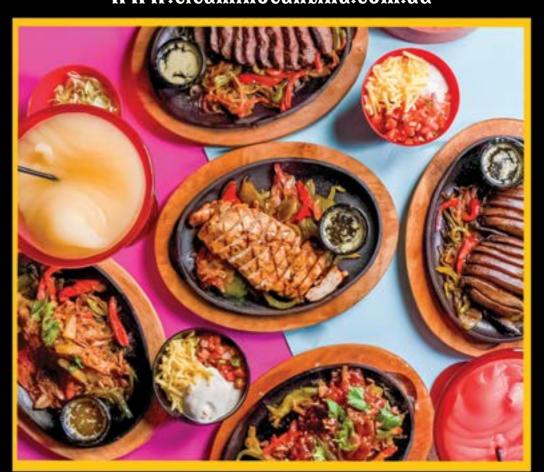






# COME CELEBRATE WITH US

www.elcaminocantina.com.au



Bowen Hills | Chermside | South Bank | Sunshine Plaza | Surfers Paradise | Fitzroy The Rocks | Miranda | Entertainment Quarter | Manly Wharf



Australia, known for its picturesque landscapes and thriving wine industry, has quietly been witnessing a remarkable resurgence in a sector once overshadowed by its alcoholic counterparts - the whiskey industry.

As the popularity of whiskey continues to grow globally, Australia has embraced this golden elixir with open arms, establishing itself as a force to be reckoned with in the world of spirits. In this article, we delve into the burgeoning whiskey scene in Australia, exploring the statistics and specifics that highlight its exponential growth.

#### AN EXPLOSIVE GROWTH

Over the past decade, the Australian whiskey industry has witnessed explosive growth, with distilleries popping up in every corner of the country. From established brands to craft distilleries, the number of whiskey producers has more than doubled, reflecting a newfound appreciation for this traditional spirit. According to the Australian Distillers Association, there are currently over 280 licensed distilleries in Australia, a significant increase from just 120 a few years ago.

#### AWARD-WINNING RECOGNITION

The rise of Australian whiskey has not gone unnoticed on the global stage. Australian distilleries are consistently earning international acclaim, winning prestigious awards at renowned competitions. Distilleries like Sullivans Cove and Starward have received top honours at the World Whiskies Awards and the San Francisco World Spirits Competition, putting Australian whiskey firmly on the world map.

#### CRAFTSMANSHIP AND INNOVATION

What sets Australian whiskey apart is its commitment to craftsmanship and innovation. Distilleries are experimenting with unique ageing techniques, blending locally-sourced grains, and utilising distinct native ingredients to create signature flavours.

The vast and diverse landscapes of Australia provide a rich canvas for experimenting with various maturation conditions, resulting in complex and distinctive expressions.

#### RYE REVOLUTION

Rye whiskey, a less common variant in other whiskey-producing regions, has emerged as a focal point of Australia's whiskey renaissance.

The demand for rye whiskey has skyrocketed, with consumers appreciating its bold and spicy character. Many distilleries are now exclusively focusing on crafting high-quality rye expressions, catering to the evolving palates of whiskey enthusiasts.

#### TOURISM & WHISKEY TRAILS

The growth of the whiskey industry has led to the development of whiskey trails and distillery tours across the country.

Regions like Tasmania, Victoria, and New South Wales have become hotspots for whiskey tourism, attracting enthusiasts from all over the world.

Visitors can immerse themselves in the art of whiskeymaking, learn about the ageing process, and sample an array of handcrafted expressions.









Australia and India have enjoyed a thriving trade relationship over the years, strengthening economic ties and fostering mutual growth. This article explores the trade partnerships between each Australian state and India, highlighting the key industries and commodities driving the collaboration. As both nations continue to prioritise economic diversification and international trade, their commitment to sustainable development and innovation paves the way for a promising future.

## KEY TRADE COMMODITIES ACROSS THE BOARD

India's increasing demand for raw materials and natural resources has led to substantial exports from Australia. Minerals like coal, iron ore, and gold constitute a significant portion of these exports. In exchange, India supplies Australia with various goods, including textiles, pharmaceuticals, and information technology services.

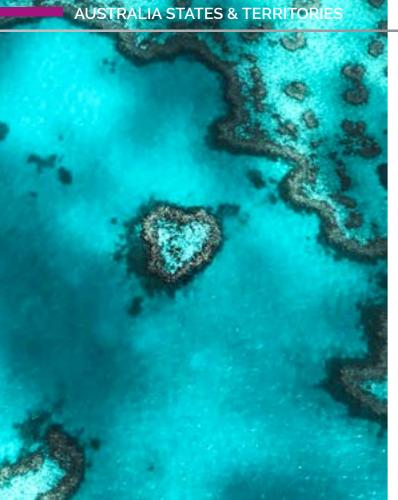
#### **NEW SOUTH WALES**

As Australia's most populous state, New South Wales (NSW) plays a crucial role in the country's trade relationship with India. NSW's diverse economy and strategic location make it an ideal partner for India.

#### **Key Industries**

Information Technology: NSW is home to several technology hubs, attracting Indian IT companies to set up offices and collaborate on various projects. The exchange of expertise and technology benefits both economies. Indian companies have established their presence in the Sydney Tech Hub, leading to a dynamic exchange of ideas and innovations.





nerships with Indian counterparts, promoting knowledge sharing and technology transfer.

Pharmaceuticals and Biotechnology: The state's expertise in the pharmaceutical and biotechnology sectors has led to partnerships with Indian companies, benefiting both nations. Joint research ventures and drug development initiatives have been on the rise, addressing critical health challenges faced by both countries.

Automotive and Manufacturing: Victoria's automotive industry has collaborated with Indian manufacturers, exploring opportunities for technology sharing and market access. Additionally, the state's manufacturing sector has been supplying components and machinery to various Indian industries, further strengthening the economic

#### **OUEENSLAND**

Many believe that Queensland is perfectly positioned for a close trade relationship with India due to its wide variety of useful industries. We have highlighted some of their strongest attributes below:

Education: NSW universities attract a large number of Indian students seeking quality education, contributing significantly to the state's economy. The strong education ties between India and NSW have led to research collaborations and academic exchanges, enriching both nations' knowledge ecosystems.

Agricultural Products: NSW exports high-quality agricultural products such as wool, grains, and meat, which are in demand in the Indian market. The Indian population's increasing purchasing power and changing dietary preferences have created a significant market for Australian agricultural exports.

#### **VICTORIA**

The State of Victoria offers a wide range of products and services in demand in India. Below is a list of their greatest opportunities for trade.

Services Sector: Victoria's service sector, including finance, education, and tourism, has experienced substantial growth through Indian investments and collaborations. The state's financial and educational institutions have fostered part-





Mining and Energy Resources: Western Australia is a major supplier of iron ore and liquefied natural gas to India, driving significant export revenues. The state's mining industry has been a cornerstone of the trade partnership between India and Australia, meeting India's energy and infrastructure needs.

Education and Tourism: Indian students choosing to study in Western Australia and the growing number of Indian tourists have contributed to the state's economic growth. The cross-cultural exchanges resulting from these interactions have strengthened people-to-people ties, fostering mutual understanding and friendship.

Renewable Energy and Sustainable Technologies: Western Australia's expertise in renewable energy, including solar and wind power, has attracted Indian investors and companies looking to harness sustainable technologies. Collaborations in this sector have helped India advance its clean energy goals, benefiting both nations in the fight against climate change.

Natural Resources: Oueensland's rich reserves of coal and other minerals are in high demand in India's growing economy, making it a vital source of exports. The mining industry in Queensland has contributed significantly to India's energy requirements and infrastructure development.

Agricultural Trade: The state's tropical climate enables the production of fruits and vegetables that are popular in India. Queensland's agriculture sector has tapped into the Indian market, catering to the increasing demand for fresh produce and speciality crops.

**Education and Research Collaborations:** Queensland's research institutions have collaborated with Indian universities and research centres on projects related to marine sciences, environmental studies, and sustainable development. These research partnerships have addressed common challenges faced by both regions and yielded innovative solutions.

#### **WESTERN AUSTRALIA**

From natural resources to a booming tourism industry, Western Australia has it all:



#### **AUSTRALIA STATES & TERRITORIES**



projects. These collaborations have resulted in sustainable practices and technological advancements beneficial to both regions.

#### **CONCLUSION**

The trade relationship between each Australian state and India continues to thrive, supported by a shared commitment to economic growth and sustainability. The exchange of goods, services, and investments has led to a win-win situation for both nations, fostering innovation and job creation.

In conclusion, the flourishing trade relationship between Australian states and India stands as a testament to the power of international cooperation and mutual benefit. The continued strengthening of these economic ties holds immense potential for fostering prosperity, driving innovation, and forging lasting bonds between two nations that share a vision for a brighter future.



#### **SOUTH AUSTRALIA:**

Laying on either side of the spectrum, South Australia predominantly offers wine exports and opportunities in defence. Only time will tell us how this state works with the nation of India.

Wine Exports: South Australia's renowned wine industry has gained popularity in the Indian market, boosting its exports and enhancing bilateral relations. The Indian middle class's growing interest in wine consumption has opened up new market opportunities for South Australian winering.

**Defence Collaboration:** Both nations have shown interest in collaborating in the defence sector, presenting opportunities for technology transfer and joint ventures. South Australia's defence industry capabilities, combined with India's manufacturing expertise, have the potential to create a robust defence partnership.

**Science and Innovation:** South Australia's research institutions and innovation hubs have partnered with Indian counterparts on water management, agriculture, and biotechnology



# We secure our students' future

Allianz (II) Care



Join one of Australia's largest
Overseas Student Health Cover providers





# STAY ON TOP OF AN EVER CHANGING WORLD

As your business needs evolve, it pays to have a partner with the right connections. Access global opportunities with Asia's #1 institutional bank for relationships.

anz.com/institutional

RNo.1 Overall Relationship Quality in the Enablish Greenwich Assant arge Corporate Banking Study, 2017 2022, Australia and New Zealand Banking Group Limited ASN 11 005 307 522 and/or used under licence "ANZ", ANZ's logo and ANZ's colors have are trademarks of ANZ.

