

Virtual Manufacturing in Indonesia

Opportunities for Australian Businesses

November 2023

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Preface



The global green-energy transformation presents a once in a century opportunity to rethink the way we approach energy generation, transport and manufacturing. Across southeast Asia, the electric mobility market is rapidly changing in response to the increased market demand for electric products of all persuasions, from electric skateboards to motorcycles and passenger cars.

Already a core manufacturing hub for global automotive giants and with the largest motorcycle fleet in ASEAN, Indonesia offers an attractive market for Australian electric mobility businesses seeking offshore manufacturing opportunities.

At the same time, there are a growing number of innovative Australian enterprises with manufacturing aspirations that may be interested to engage with Indonesian manufacturers, for prototyping, scale up or component supply.

In the context of the Indonesia-Australia Comprehensive Economic Partnership Agreement, our mandate is to support closer trade and investment between Indonesia and Australia. Given the size of the value pool for personal transport, Katalis is investigating the potential for a virtual manufacturing partnership with a focus on electric mobility.

Think of the possibility of innovative Australian design capabilities meeting Indonesian competitive, cost-effective, offshore manufacturing.

“Virtual Manufacturing in Indonesia: Opportunities for Australian Businesses” is a brief exploration into the opportunities for Australian and Indonesian companies to partner in this space and we trust that you will find the contents of this report thought-provoking and informative.

Dr David Mitchell
Lead Adviser, Market Integration

Acronyms

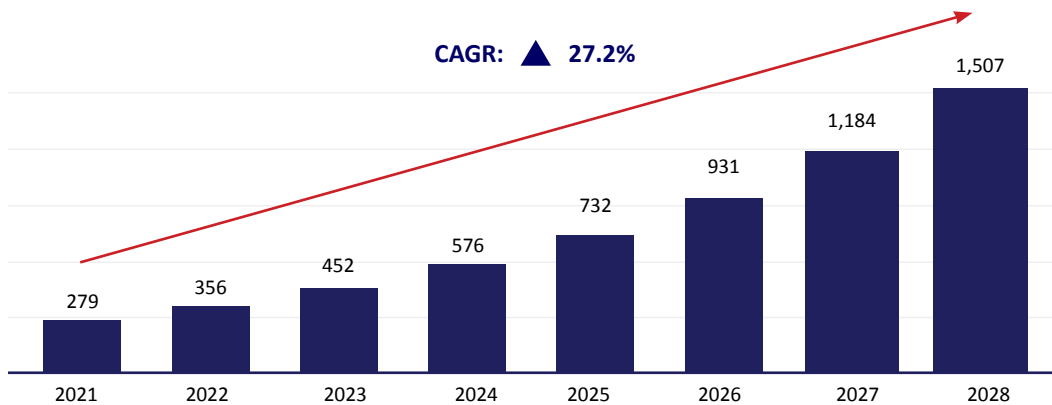
ACT	Australian Capital Territory
AANZFTA	ASEAN-Australia-New Zealand Free Trade Area
ATV	All-terrain vehicle
CAGR	Compound annual growth rate
DFAT	Department of Foreign Affairs and Trade
EV	Electric Vehicle
FTA	Free Trade Agreement
GDP	Gross Domestic Product
IA-CEPA	Indonesia-Australia Comprehensive Economic Partnership Agreement
ICE	Internal Combustion Engine
IMIP	Indonesia Morowali Industrial Park
PMI	Purchasing Managers Index
SEZ	Special Economic Zone

Executive Summary

The Electric Mobility Market is Growing and Indonesia is Ready

The global electric mobility market is surging. A shift towards renewable energies by governments around the world, the rise of electric mobility and falling battery costs, presents a prime opportunity for Australian businesses to emerge and expand within the sector.

Figure ES 1. Global Electric Mobility Market Share
2021- 2028, billion, US \$



Source: Fortune Business Insights Electric Mobility Report 2022

Indonesian manufacturing provides:



Reduced Time-to-Market

Indonesian manufacturing enables rapid prototyping and testing, reducing the time needed to bring new products to market, keeping Australian businesses ahead of competitors.



Reduced Capital Investment

Indonesian manufacturing reduces the need for heavy capital investment in physical infrastructure, allowing Australian businesses to allocate resources more efficiently for research, development, and expansion.



Cooperative Trade Agreements (IA-CEPA)

Indonesia not only provides Australian companies with a strategic manufacturing location due to its proximity, but also boasts corporate-friendly trade agreements between the IA-CEPA and the ASEAN FTA¹.



¹ Australian Government Department of Foreign Affairs and Trade, Indonesia-Australia Comprehensive Economic Partnership Agreement: Outcomes. Available at: <https://www.dfat.gov.au/trade/agreements/not-yet-in-force/iacepa/ia-cepa-key-outcomes-for-australia> (Accessed: 1 October 2023)

Why Should You Consider Manufacturing in Indonesia?

Indonesia is known for its automotive manufacturing capability, with global giants such as Toyota, Honda, Nissan, and Hyundai selecting Indonesia as a manufacturing hub. This validates the desirability of the Indonesian market for Australian electric mobility businesses seeking offshore manufacturing opportunities.



Low Labour Costs

Indonesia offers a cost-effective labour force compared to some Southeast Asian countries, providing experienced workers at competitive rates². This cost efficiency can significantly reduce production expenses for Australian businesses and creates a more competitive environment for Indonesian manufacturers compared to Southeast Asian neighbours.



Government Support for Manufacturing

The Indonesian government is committed to continuing to expand the manufacturing sector through a combination of government investment, tax incentives, and favourable trade agreements with partners like Australia³.



Experienced & Growing Labour Force

Indonesia possesses a growing pool of engineers and technicians in the manufacturing sector. Indonesian manufacturers also have an abundance of experience within the automotive industry, having worked with market leaders in vehicle production e.g., Toyota and Nissan⁴.



Capacity to Scale Production

Australian businesses can harness Indonesian manufacturing and assembly capabilities and efficiently scale production- valuable for those looking to create prototypes or build a greater market footprint with higher output of mobility vehicle⁵.



Expanding Market & Infrastructure

Indonesia is actively investing in infrastructure development, including transportation networks and ports. This infrastructure development can streamline the supply chain, reduce logistics costs, and ensure efficient product distribution. Indonesia also aims to grow their advanced manufacturing and technological capabilities through Industry 4.0 objectives⁶.



Strategic Location

Indonesia's strategic location in Southeast Asia provides closer access to markets in the region. Australian businesses can tap into growing demand for electric mobility solutions across the region with efficient distribution and opportunities for market expansion.

2 Trading Economics, Australia Average Weekly Wages in Manufacturing. Available at: <https://tradingeconomics.com/australia/wages-in-manufacturing> (Accessed: 1 October 2023)

3 Asialink Business, Manufacturing in Indonesia. Available at: <https://asialinkbusiness.com.au/indonesia/business-practicalities-in-indonesia/manufacturing-in-indonesia?doNothing=1> (Accessed: 20 October 2023)

4 Indonesia Investments, Automotive Manufacturing Industry Indonesia. Available at: <https://www.indonesia-investments.com/business/industries-sectors/automotive-industry/item6047> (Accessed: 1 October 2023)

5 Asialink Business, Manufacturing in Indonesia. Available at: <https://asialinkbusiness.com.au/indonesia/business-practicalities-in-indonesia/manufacturing-in-indonesia?doNothing=1> (Accessed: 20 October 2023)

6 GovDelivery – Indonesia 4.0 Objectives, Indonesia 4.0: Advanced Manufacturing Opportunities. Available at: https://content.govdelivery.com/attachments/USITATRADE/2022/04/06/file_attachments/2125144/Market%20Intelligence_Indonesia%204.0%20-%20Advanced%20Manufacturing%20Opportunities.pdf (Accessed: 10 October 2023)

Electric Mobility Manufacturing Opportunities

What Opportunities Exist For Australian Businesses?

Manufacturing can help Australian businesses translate design concepts into reality. By considering Indonesia as an offshore manufacturing destination, Australian businesses can capitalise on cost effectiveness and opportunities to scale.

Startup Company Prototyping

Australian startups can work with Indonesian manufacturers to create a more cost effective prototype. Manufacturing small quantities of vehicle components and their assembly can easily be supported by Indonesian manufacturing partners quickly and affordably.

Part-Component Manufacturing

Work with Indonesian suppliers to manufacture mobility vehicle component parts. Partnering with local Indonesian companies to produce essential components including chassis's, batteries, power inverters, traction motors, transmissions and other components is favourable in a country known for the fast assembly of products.

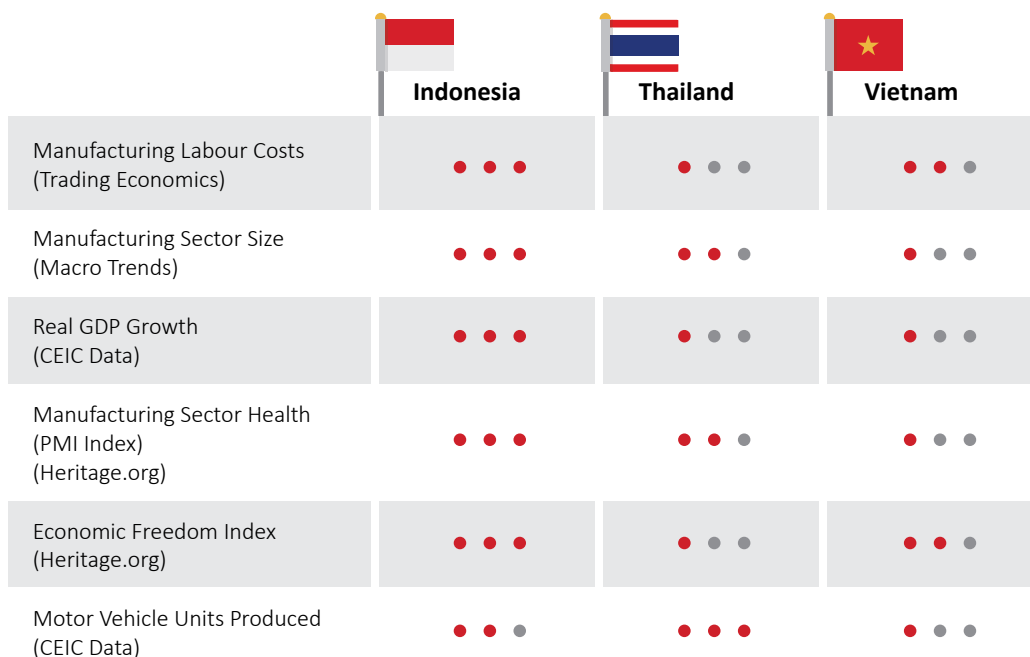
Scale-Up Production

Australian companies wanting to scale their production as the electric mobility market grows, and expands beyond EVs. For example, a growing Australian company that wants to increase their production from 50 to 100 units could see this achieved more cost-effectively due to lower input costs than those in Australia.

How does Indonesia Compare for Manufacturing?

Indonesia emerges as a top choice for diversifying supply chains, outperforming some neighbouring countries within the ASEAN region:

Figure ES 2. Comparative Analysis of Manufacturing Capabilities in Southeast Asia



Chapter 1

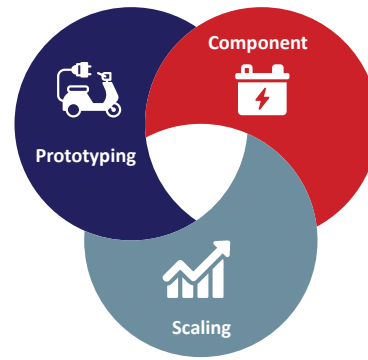
Virtual Manufacturing Opportunities



Virtual Manufacturing Opportunities for Australian Businesses

Translating innovative Australian design concepts into reality through lower cost offshore manufacturing represents a more cost-effective means of production than is currently available in Australia.

How an Australian business might work with an overseas manufacturer:



You're a....

Startup Company Prototyping

Description

Helping Australian startups with minimal capital to test and manufacture their innovations.

Example

An Australian startup company wants to prototype 10 units of their new electric scooter.

You're looking for...

Part-Component Manufacturing

Description

Manufacturing individual components of an electric mobility vehicle.

Example

An Australian company manufactures the battery component in Indonesia.

You're wanting to....

Scale-up Production

Description

Australian companies wanting to scale-up their production as the electric mobility market grows.

Example

An Australian startup company wants to prototype 10 units of their new electric scooter.

Global automotive giants have selected Indonesia as a core manufacturing hub, validating the Indonesian market attractiveness for Australian electric mobility businesses seeking offshore manufacturing opportunities.

Box 1. Automotive Leaders Currently Manufacturing in Indonesia



- **Indonesian EV Manufacturing Hub:** Hyundai Motor Group plans to commence EV production in Karawang, Indonesia from August 2024, totalling a \$1.1 billion investment⁷. The manufacturing plant in Indonesia will also produce battery packs for these EVs.
- **Government Incentives:** To encourage local EV production, the Indonesian government has implemented tax incentives. This includes reducing the value-added tax (VAT) from 11 percent to 1 percent and providing exemptions on the 15 percent luxury tax, subject to meeting the 40 percent local manufacturing requirement⁸.

Source: Indonesia Investments, Automotive Manufacturing Industry Indonesia. Available at: <https://www.indonesia-investments.com/business/industries-sectors/automotive-industry/item6047> (Accessed: 1 October 2023)

⁷ Maulia, E. (2023), Hyundai and LG start building \$1.1bn EV battery plant in Indonesia, Nikkei Asia. Available at: <https://asia.nikkei.com/Business/Technology/Hyundai-and-LG-start-building-1.1bn-EV-battery-plant-in-Indonesia> (Accessed: 24 October 2023)

⁸ Hye-jin, B. (2023), [Exclusive] Hyundai to ramp up EV production in Indonesia, Korea Herald. Available at: <https://www.koreaherald.com/view.php?ud=20230725000706> (Accessed: 24 October 2023)

Why Manufacturing In Indonesia is a Good Choice for Australian Businesses

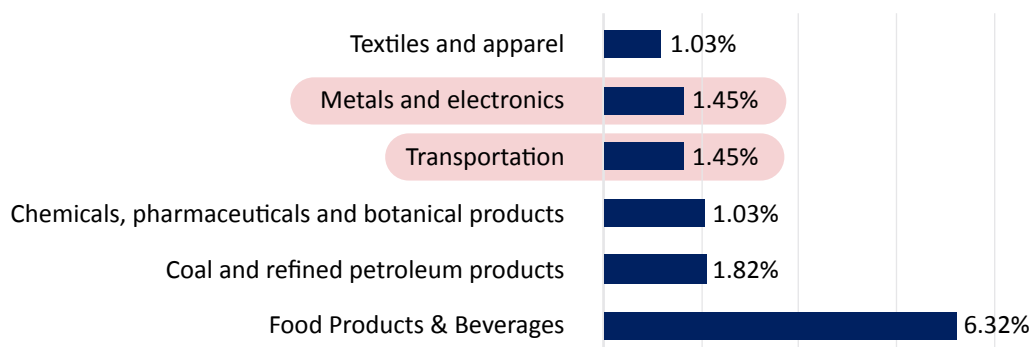
Indonesia is known for its manufacturing capability, with the sector being the largest contributor to Indonesia's GDP over the last decade. Local and foreign investment is supporting this growth, alongside ambitious policy and incentives to ramp up EV production.

Investments into Indonesia's manufacturing sector grew 52 per cent in 2022 on the previous year, including continuing to operationalise many of the government's 19 Special Economic Zones (SEZs) and adjacent Industrial Parks.

Indonesia manufacturing industry workers accounted for approximately 14.13 percent of Indonesia's total workers in 2022⁹, with much of the automotive industry centred around Jakarta and West Java more generally.

Indonesia has the largest reserve of the world's nickel (ASEAN Briefing – Indonesian Nickel 2023). A recent government ban on exports of the raw material, has led to billions in foreign investment to expand EV production facilities, alongside an ambition to be a global supply chain hub for EVs¹⁰.

Figure 1.1 Manufacturing Contribution to Indonesia GDP 2021



Source: Statista

Benefits of manufacturing in Indonesia:



Growing player in the EV market

Global automotive firms such as Hyundai are building production facilities in Indonesia to capitalise on access to rich stores of minerals crucial to EV battery manufacture, with the government trying to attract Tesla and VW.



Producing more for less

Manufacturing in Indonesia taps into a large workforce that is increasingly experienced in the automotive sector as it continues to grow. Labour costs consistently remain lower than other countries in the region.



Cooperative Trade Agreements (IA-CEPA)

Australia is a beneficiary of trade agreements including the Indonesia Australia-Comprehensive Economic Partnership Agreement (IA-CEPA) and the ASEAN Free Trade Agreement which makes doing business in Indonesia easier.

⁹ Indonesian Ministry of Industry, Manufacturing Overview. Available at: <https://business-indonesia.org/submanufacturing#:~:text=As%20of%20the%20third%20quarter,to%20the%20Ministry%20of%20Industry> (Accessed: 1 October 2023)

¹⁰ Ann, Q.J. (2023). Indonesia's EV ambitions could help boost investments in the rest of Southeast Asia, CNBC. Available at: <https://www.cnbc.com/2023/09/25/indonesia-could-be-the-gateway-to-ev-investments-in-asean.html> (Accessed: 1 October 2023)



Continued Investment is Attracting Businesses and Growing the Sector

The Indonesian government is continuing to invest in advancing the country's capability across 19 decentralised Special Economic Zones. These are at varying stages of development but provide an opportunity to work with established local business in these centres of growth.

- 1 Increasing International Presence**
 International organisations are already tapping into Indonesia's manufacturing capability, while foreign governments increase infrastructure investment to access and process critical minerals.
- 2 Critical Access**
 The location of many of the SEZs and industrial parks is intentionally close to major shipping facilities, deep seaports, toll roads and airports.
- 3 Financial Incentives**
 Significant tax incentives for companies focused on EV production with >40 per cent domestic component parts.
- 4 Strategic Location**
 Access to the Indian and Pacific Oceans and the South China Sea, places Indonesia in a strategically important location relative to its SEA and Oceania neighbours.

Box 2. Indonesian Special Economic Zones and Industrial Parks Known for Manufacturing Capability

Batam

- Close proximity to Singapore & Malaysia
- Alternative manufacturing hub for Singapore
- Multinational presence, e.g. Caterpillar

Automotive Manufacturing Hub (Jakarta & West Java)



Kendal SEZ

- 70 international businesses setup here since 2019
- Designated for export-oriented manufacturing
- Joint investment from Singapore to develop Kendal Industrial Park

Sulawesi

- Large nickel deposits
- IMIP Industrial Park known for EV battery production
- Significant Chinese investment in infrastructure through Belt & Road Initiative



Chapter 2

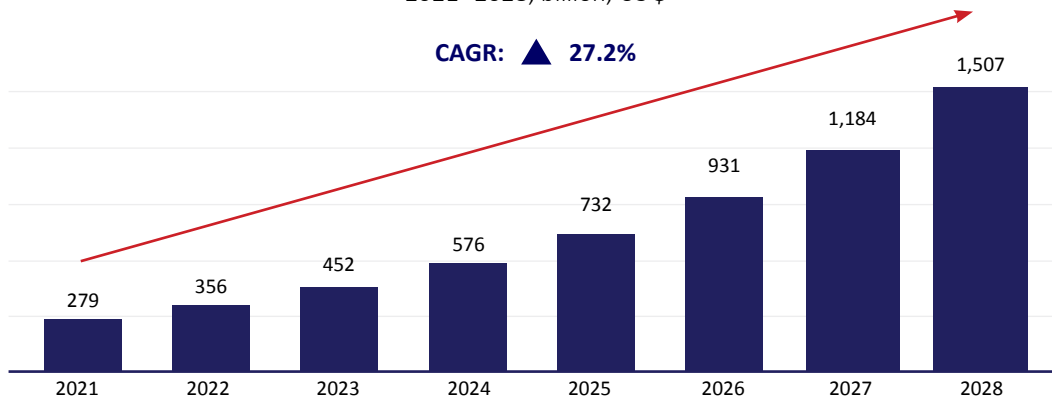
**Growth Drivers of the
Electric Mobility Market**

The Electric Mobility Market Landscape and Growth Drivers

The global and Australian electric mobility market is surging, presenting an opportunity for Australian businesses to expand their footprint in the sector. The Global Electric Mobility Market is on track to reach \$1.5 trillion by 2028 with an annual growth rate of 27.2 per cent.

Figure 2.1 Global Electric Mobility Market Share

2021- 2028, billion, US \$



Source: Fortune Business Insights Electric Mobility Report 2022

Electric Mobility Adoption: Growth Drivers¹¹

Government Initiatives

Governments globally are committing to achieving carbon-neutral economies. To achieve this, many have plans to phase out sales of fossil-fuel powered vehicles and are actively promoting the transition to electric mobility by offering tax incentives, offsets and investments in infrastructure.

Electric Micro-Mobility

Governments globally are committing to achieving carbon-neutral economies. To achieve this, many have plans to phase out sales of fossil-fuel powered vehicles and are actively promoting the transition to electric mobility by offering tax incentives, offsets and investments in infrastructure.

Lower Battery Costs

Consumer costs have been a major hurdle for electric mobility adoption, though ongoing technological advancements are steadily lowering battery costs. This reduction in the battery cost-component is expected to persist, bolstering demand and market growth.

Urbanisation

Rapid urbanisation is driving the need for electric mobility solutions that are more efficient and environmentally friendly. The synergy between EVs and clean energy grids as economies transition, is becoming a powerful driver for electric mobility adoption.



Australian Landscape

- The appeal of electric mobility vehicles in Australia is growing with government incentives and helping to reduce ownership costs. Australia’s commitment to achieving net-zero emissions by 2050, with certain states like the ACT proactively phasing out ICE vehicle sales by 2035, accelerates the shift toward EVs¹².
- EVs now represent 8.4 per cent of all new cars sold in Australia, a 120.5 per cent increase compared to 2022, highlighting a market primed for electric mobility companies to emerge and expand¹³.

11 International Energy Agency, Global EV Outlook 2023. Available at: <https://www.iea.org/reports/global-ev-outlook-2023> (Accessed: 12 October 2023)

12 Australian Government Department of Climate Change, Energy, the Environment and Water, National Electric Vehicle Strategy. Available at: <https://www.dcceew.gov.au/sites/default/files/documents/national-electric-vehicle-strategy.pdf> (Accessed: 1 October 2023)

13 Electric Vehicle Council, State of Electric Vehicles July 2023. Available at: https://electricvehiclecouncil.com.au/wp-content/uploads/2023/07/State-of-EVs_July-2023_.pdf (Accessed: 24 October 2023)

How Australian Business Can Leverage the Electric Mobility Sector's Growth

Optimising production and production costs and being clear on your target markets and end customer experience can help to support sustainable, profitable growth.



1 Know Your Supply Chain, Customer, and Where to Sell

Understanding your customer base and target markets can help identify opportunities to expand and scale beyond Australia.

Customer Insights

Conduct in-depth market research to know consumer preferences, behaviours, and expectations in Australia and beyond. This knowledge can help tailor product offerings to meet the needs of specific markets and customer segments.

Explore Emerging Markets

Explore emerging markets and regions with high electric mobility adoption rates. Markets in Southeast Asia, offer significant potential for smaller mobility vehicles. Work with trusted local partners to navigate diverse market dynamics effectively.

A robust supply chain is critical to any successful manufacturing operation. Know your suppliers and the quality and source of your products.

Supplier Collaboration

Forge strong partnerships with local Indonesian suppliers. Collaborative, trusted relationships can help you access critical components in an increasingly competitive market, ensure quality products, and reduce production bottlenecks.

Logistics Efficiency

Optimise your logistics network to minimise lead times and reduce costs. Select a manufacturing site that is near established, developed infrastructure for ease of export.

2 Understand Your Cost Inputs

Understand and compare input costs to support a cost-efficient production base. Here are some examples worth considering.

Raw Materials

- Confirm the availability and cost of essential materials, including nickel and cobalt used in battery production and stainless steel.
- Collaborate with Indonesian suppliers to secure a stable local supply chain where possible to minimise dependency on overseas providers.

Labour Costs

- Assess the labour landscape in Indonesia and identify those manufacturers with automotive or EV experience and stable workforce.
- Test the quality and see it for yourself. In the absence of automation, automotive assembly requires a trusted and careful workforce.

Energy Costs

- Indonesia has a net zero aspiration by 2060¹⁴, but there is continued dependence on traditional energy sources (60 per cent comes from coal¹⁵).
- Renewable energy options are increasingly coming into focus, and the technology and ambition exists to support the transition, but more reforms are needed to support wider, longer term adoption¹⁶.



Australian Landscape

- Indonesia's abundant critical minerals, competitive labour costs, and favourable manufacturing policy make it an attractive destination for Australian businesses looking to grow in the electric mobility sector¹⁷.
- Collaborative efforts, market research, and a keen understanding of cost drivers, will empower Australian companies to navigate the evolving landscape of electric mobility manufacturing in Indonesia successfully.

14 Australian Prime Minister's Office, Joint Communiqué – Australia-Indonesia Annual Leaders' Meeting, 4 July 2023. Available at: <https://www.pm.gov.au/media/joint-communicue-australia-indonesia-annual-leaders-meeting> (Accessed: 30 September 2023)

15 International Energy Agency, Global EV Outlook 2023. Available at: <https://www.iea.org/reports/global-ev-outlook-2023> (Accessed: 12 October 2023)

16 *Idem*

17 Asialink Business, Manufacturing in Indonesia. Available at: <https://asialinkbusiness.com.au/indonesia/business-practicalities-in-indonesia/manufacturing-in-indonesia?doNothing=1> (Accessed: 20 October 2023)

Australian Businesses Innovating in The Electric Mobility Sector

Australian companies investing and innovating in the electric mobility sector often receive government support to manufacture onshore. Offshore manufacturing may be a commercially viable alternative for new entrants looking for a cost-effective, sustainable production.

Box 3. A Sample of Australian Businesses in the Electric Mobility Market

	Outsourced Manufacturing				Australian Manufacturing				
Outsourced Manufacturing	 Electric Forklifts and Equipment	 Electric Vehicle Conversions	 Electric Farming UTV (Side-by-Side)	 Electric Motorbikes	 Electric bike	 Electric Delivery Bicycles and Quads			
	 Electric Boats	 Electric All-terrain Vehicles (Quads/Side-by-sides)	 Electric Vans	 Electric bike	 Electric Scooters	 Electric Delivery Bicycles and Quads			
			 Electric Vehicle Conversions	 Electric Surfboards	 Electric bike	 Wheelchairs			
Australian Manufacturing	 Electric Trains	 Electric Utility Vehicles (e.g. tow trucks, shuttles, etc)	 Electric Commercial Vehicles (e.g. trucks)	 Electric motorcycles					
	 Electric Busses	 Electric Ute's (Mining Ute)	 Electric Ute's (Mining Ute)						
	 Electric Busses	 Electric Trucks (Heavy Vehicle), Utes / Vans (Light Vehicle)	 Electric Cars	 Electric Scooters	 Electric Skateboards				
Public Transport	Heavy Vehicles (Commercial)	Light Vehicles (Personal)	Micro-Mobility						

Source: Company websites – manufacturing locations are subject to change and the comprehensive manufacturing details in most cases are not publicly available and Tracxn Technologies.

 Supported by the Australian Government

Key Insights

- Australia’s trajectory towards electrification in the mobility sector is underpinned by the nations objectives of reducing emissions by 43 per cent before 2030 and to achieve net-zero by 2050¹⁸, indicating that demand for electric mobility will only continue to increase.
- ‘Light Vehicles’ and ‘Micro-Mobility’ are prevalent among Australia’s EV companies; most of whom are privately-owned startups.
- ‘Micro-mobility’ startups are likely to explore offshore manufacturing in Indonesia as these startups generally prioritise profitability and speed, which Indonesian manufacturing can facilitate.
- Onshoring manufacturing is uncommon amongst Australian electric mobility companies. The companies localising their manufacturing efforts are generally receiving government support. For example, Savic Motorcycles received a \$1.83 million government grant in 2022 to bolster manufacturing operations¹⁹.

18 Electric Vehicle Council, State of Electric Vehicles July 2023. Available at: https://electricvehiclecouncil.com.au/wp-content/uploads/2023/07/State-of-EVs_July-2023_.pdf (Accessed: 24 October 2023)

19 EV Brief, Australian EV startup Savic Motorcycles receives \$1.83 million grant ahead of late-2022 customer deliveries. Available at: <https://evbrief.com/ev-news-brief1/australian-ev-startup-savic-motorcycles-receives-183-million-grant-ahead-of-late-2022-customer-deliveries> (Accessed: 7 October 2023)



Chapter 3

Why Should Australian Businesses Manufacture in Indonesia?

Why Manufacture in Indonesia?

Summary of Competitive Advantages

Manufacturing in Indonesia can offer cost-effectiveness and scalability that is difficult to match in Australia in the current conditions. The competitive advantages offered by Indonesian manufacturers are outlined below and will be expanded upon in the subsequent pages.

01

Cost-Competitiveness and Capability

- Indonesia provides Australian businesses with an established and experienced manufacturing hub that is also cost-effective.
- This eases the financial barriers for Australian startups, while also helping businesses scale production within the electric mobility sector.

02

Ease of Accessibility

- Indonesia's strategic proximity to Australia provides a valuable advantage for Australian businesses, offering ease of access to critical raw materials, regional markets, and a resilient supply chain.
- Indonesia presents a desirable manufacturing hub destination, offering an alternate manufacturing solution unencumbered by geopolitical tension and ready access to critical raw materials for EV production.

03

Expanding Market and Developing Infrastructure

- Indonesia is on track to become one of the world's largest economies by 2030, with manufacturing as a leading sector²⁰.
- Indonesia is one of the world's fastest growing manufacturing hubs²¹. The country has an abundance of experience within the automotive sector (manufacturing for Toyota, Nissan, Hyundai and more) and are increasingly rivalling Thailand to be the 'Detroit of Asia'.

04

Government Support for Electric Mobility Production

- Indonesia is actively enhancing its existing manufacturing capabilities through government policies, investment in education and training, and supply-side regulatory incentives.
- The IA-CEPA and the ASEAN FTA encourages and supports cooperation between Australian and Indonesian businesses²².



20 Business HSBC, Indonesia: a rising global economy that's open for business. Available at: <https://www.business.hsbc.com/en-gb/insights/growing-my-business/indonesia-a-rising-global-economy-thats-open-for-business#:~:text=It%20is%20projected%20to%20become%20one%20of%20the,to%20attract%20more%20multinational%20to%20the%20country.%2011> (Accessed: 24 October 2023)

21 Macro Trends, Manufacturing Output 1983-2023. Available at: <https://www.macrotrends.net/countries/IDN/indonesia/manufacturing-output> (Accessed: 12 October 2023)

22 Australian Government Department of Foreign Affairs and Trade, Indonesia-Australia Comprehensive Economic Partnership Agreement: Outcomes. Available at: <https://www.dfat.gov.au/trade/agreements/not-yet-in-force/ia-cepa/ia-cepa-key-outcomes-for-australia> (Accessed: 1 October 2023)

Cost-Competitiveness and Capability



Indonesia provides Australian businesses with an established and experienced manufacturing hub that is also cost-effective. This eases the financial barriers of entry for Australian startups, while also helping businesses scale production within the electric mobility sector.

Indonesia provides a low-cost and efficient manufacturing hub for Australian businesses in the electric mobility sector:

Cost-Competitiveness



Low Labour Costs

- Indonesia offers the lowest labour costs in Southeast Asia (\$296 AUD / month)²³.
- Cost-efficient labour may enable Australian businesses to manufacture electric mobility components and vehicles more competitively.



Low Energy Costs

- Indonesia's electricity costs are well below the global average and are the 8th cheapest in the world out of a study on 100 countries. Indonesia's cost per kWh is US \$0.09, compared to Australia's cost of US \$0.21²⁴.
- These comparatively low energy costs contribute to creating a cost-competitive environment for electric mobility vehicle production.



Strong Global Competitiveness Ranking

- Indonesia's 2023 global competitiveness ranking is 34th out of 63 (this index considers 336 data-points within the following categories: Economic Performance, Government Efficiency, Business Efficiency, Infrastructure)²⁵.
- Indonesia's ranking is a significant improvement from 2022's rank of 44th, indicating a rapidly-improving market landscape for manufacturing²⁶.

²³ Trading Economics, Australia Average Weekly Wages in Manufacturing. Available at: <https://tradingeconomics.com/australia/wages-in-manufacturing> (Accessed: 1 October 2023)

²⁴ *Idem*

²⁵ International Institute for Management Development, IMD World Competitiveness Booklet 2023. Available at: https://www.imd.org/wp-content/uploads/2023/06/WCY_Booklet_2023-FINAL.pdf (Accessed: 12 October 2023)

²⁶ *Idem*

Capability (Efficiency and Scale)

Large and Growing Manufacturing Labour Force

- Indonesia has a population of 278 million with a median age of 31.1 years and projected to have the fifth largest population globally by 2030²⁷.
- Indonesia's expanding labour force provides Australian businesses with access to an experienced workforce, particularly in manufacturing which has the third largest workforce in Indonesia (25 million employees)²⁸.



Strong Business Efficiency Competitiveness

- Indonesia's 2023 business efficiency index ranks them 20th out of 63 countries, a major increase from their 2022 ranking of 31st ²⁹.
- Key drivers of this ranking is Indonesia's labour market that considers wages and growth (ranked 1st in the world), Indonesia's 'attitudes and values' (ranked 12th) and their management practices (ranked 15th)³⁰.



Strong Production Scaling Capacity

- Indonesia have the capability and capacity to scale-up production cost-competitively to meet growing market demands.
- This is evidenced by Hyundai who made a \$1.1 billion investment into scaling their new EV production line in Indonesia, taking advantage of the local value-added tax incentives and exemptions³¹.

27 World Population Review, Indonesia Population 2023. Available at: <https://worldpopulationreview.com/countries/indonesia-population> (Accessed: 12 August 2023)

28 Asialink Business, Manufacturing in Indonesia. Available at: <https://asialinkbusiness.com.au/indonesia/business-practicalities-in-indonesia/manufacturing-in-indonesia?doNothing=1> (Accessed: 20 October 2023)

29 International Institute for Management Development, IMD World Competitiveness Booklet 2023. Available at: https://www.imd.org/wp-content/uploads/2023/06/WCY_Booklet_2023-FINAL.pdf (Accessed: 12 October 2023)

30 Idem

31 Hye-jin, B. (2023), [Exclusive] Hyundai to ramp up EV production in Indonesia, Korea Herald. Available at: <https://www.koreaherald.com/view.php?ud=20230725000706> (Accessed: 24 October 2023)



Ease of Accessibility

With several countries across the region with established manufacturing capability, it can be hard to discern which is the most favourable. Indonesia provides access to critical minerals for EV production, has geographical proximity to Australia and comparable time zones, creating an ease of access and doing business that is more favourable than some other Southeast Asian nations.

Indonesia's strategic proximity to Australia provides many opportunities and advantages that Australian businesses can leverage by collaborating with electric mobility manufacturing



Access to Raw Materials

- Indonesia's nickel reserves account for 22 per cent of global reserves, and the country is a leader in cobalt production; both are essential minerals for EV battery production³².
- With recent efforts by the Indonesian government to cease export of critical minerals, establishing a trusted partnership with local firms could support a more stable supply for what will increasingly become a hyper-competitive commodity.



Supply Chain Resilience / Diversifying Risk

- Manufacturing in Indonesia allows Australian businesses to diversify from what currently be a single production location or look to have selected components manufactured elsewhere.
- Amid geopolitical challenges, diversifying beyond traditional manufacturing hubs can provide some mitigation of the concentration risk associated with offshoring or nearshoring manufacturing in one location alone.



Ease of Doing Business Index

- Indonesia is ranked #9 in the world out of 25 East Asia & Pacific countries³³.
- The index is based on 10 scores that analyse potential difficulties such as: taxes, contracts, permits, registrations, and more.



Geographical Proximity to Australia

- Reduced transportation costs and transit times for components and finished electric mobility products when sourced locally.
- Shorter supply chains can support faster response to market demands and coordination between suppliers, facilities and ports.



Access to Asian and Oceania Markets

- Indonesia's strategic location within Southeast Asia offers proximity to regional markets via the Indian and Pacific Oceans, and the South China Sea making it an important gateway to larger markets.

32 Medina, A.F. (2023). Unleashing Nickel's Potential: Indonesia's Journey to Global Prominence, ASEAN Briefing. Available at: <https://www.aseanbriefing.com/news/unleashing-nickels-potential-indonesias-journey-to-global-prominence/> (Accessed: 1 October 2023)

33 World Bank, Ease of Doing Business rankings. Available at: <https://archive.doingbusiness.org/en/rankings> (Accessed: 2 September 2023)

Expanding Market and Developing Infrastructure

Indonesia is on track to become one of the world's largest economies by 2030 and expected to be the fourth largest economy by 2050, with manufacturing as the driving force³⁴.

Large – and growing manufacturing market size



Manufacturing
Contribution to GDP

18.3%

of Indonesia's GDP is from manufacturing, making this the highest contributing sector to GDP in the economy³⁵



Electric Mobility
Manufacturing
Relevance

3rd Transportation

4th Metals & Electronics



Real GDP Economic
Growth

5.1%

YoY growth yearly average:
1994 – 2022³⁶

Indonesia's economic growth is, in part, being driven by a surge of foreign investment (US\$43 billion in 2022, an increase of 44% from 2021³⁷). It represents a growing presence of multinational and mid-sized organisations who have already seen the possibilities of diversifying from traditional manufacturing hubs.

High manufacturing global ranking



Global Manufacturing
Ranking

10th

Largest manufacturing hub in the world³⁸



Global Manufacturing
Growth

4th

fastest growing manufacturing hub out of the top 10 (17% growth from 2018 – 2022)³⁹



Automotive
Manufacturing
Prevalence

1.34 million

vehicles were manufactured in 2022

Indonesia is one of the world's fastest growing automotive manufacturing hubs with multinational OEM's including Toyota, Hyundai and Nissan with existing operations and others being lured by the government.

Established manufacturing Infrastructure



Investment into
Infrastructure (\$)

\$429.7 billion US

investment into infrastructure (2020 – 2024)⁴⁰



Infrastructure
Investment Growth

20%

increase of infrastructure investment levels from 2015 – 2019 period (359.2 billion USD)⁴¹



Manufacturing
Capability Building
Subsidy

up to 300%

Gross income tax deduction on costs incurred in R&D⁴²

The growing Indonesian manufacturing sector recorded US\$241bn of output in 2022⁴³. This is underpinned by an Indonesian government that is actively investing into infrastructure and building towards Industry 4.0 by 2030⁴⁴.

34 Business HSBC, Indonesia: a rising global economy that's open for business. Available at: <https://www.business.hsbc.com/en-gb/insights/growing-my-business/indonesia-a-rising-global-economy-thats-open-for-business#:~:text=It%20is%20projected%20to%20become%20one%20of%20the,to%20attract%20more%20multinationals%20to%20the%20country.%2011> (Accessed: 24 October 2023)

35 Statista, Manufacturing sector in Indonesia- statistics & facts. Available at: <https://www.statista.com/topics/9307/manufacturing-industry-in-indonesia/#topicOverview> (Accessed: 24 October 2023)

36 CEIC Data, Global Economic Data, Indicators, Charts & Forecasts. Available at: <https://www.ceicdata.com/en> (Accessed: 24 October 2023)

37 Medina, A.F. (2019), Indonesia's New Tax Incentives: What it Means for Investors, ASEAN Briefing. Available at: <https://www.aseanbriefing.com/news/indonesias-new-tax-incentives/> (Accessed: 30 September 2023)

38 Macro Trends, Manufacturing Output by Country. Available at: <https://www.macrotrends.net/countries/ranking/manufacturing-output> (Accessed: 1 October 2023)

39 *Idem*

40 Mordor Intelligence, Infrastructure Sector in Indonesia. Available at: <https://www.mordorintelligence.com/industry-reports/infrastructure-sector-in-indonesia> (Accessed: 1 October 2023)

41 *Idem*

42 Medina, A.F. (2019), Indonesia's New Tax Incentives: What it Means for Investors, ASEAN Briefing. Available at: <https://www.aseanbriefing.com/news/indonesias-new-tax-incentives/> (Accessed: 30 September 2023)

43 Macro Trends, Manufacturing Output by Country. Available at: <https://www.macrotrends.net/countries/ranking/manufacturing-output> (Accessed: 1 October 2023)

44 GovDelivery – Indonesia 4.0 Objectives, Indonesia 4.0: Advanced Manufacturing Opportunities. Available at: https://content.govdelivery.com/attachments/USITATRADE/2022/04/06/file_attachments/2125144/Market%20Intelligence_Indonesia%204.0%20-%20Advanced%20Manufacturing%20Opportunities.pdf (Accessed: 10 October 2023)

Government Support for Electric Mobility Production

Indonesia is building on its current manufacturing capability through policy, supply-side tax and regulatory support, and trade agreements – making the country an increasingly attractive option for businesses looking to manufacture in the electric mobility sector.

Indonesian Government Objectives



National Industry Development Masterplan 2015 - 2035⁴⁵

Indonesia's National Industry Development Masterplan (2015-2035) aims to streamline regulations to attract private investment, build up infrastructure within and between regions, and foster innovation.



Promotion of Electric Mobility Production⁴⁶

- The Indonesian government has introduced policies to encourage the production of EVs within the country.
- Initiatives such as tax incentives, research and development support, and streamlined regulations aim to attract foreign investment and facilitate EV manufacturing.



Indonesia's commitment to continuous growth and upskilling⁴⁷

- Indonesia is actively pursuing Industry 4.0 technologies, with initiatives like the Digital Industry Centre 4.0 (PIDI 4.0), to build technological and organisational capabilities⁴⁸.
- Simultaneously, Indonesia is committed to achieving net-zero emissions by 2060, with a focus on electrification of the mobility sector and transitioning to renewable energy⁴⁹.



45 Indonesian Ministry of Industry, Manufacturing Overview. Available at: <https://business-indonesia.org/submanufacturing#:~:text=As%20of%20the%20third%20quarter,to%20the%20Ministry%20of%20Industry> (Accessed: 1 October 2023)

46 Medina, A.F. (2019), Indonesia's New Tax Incentives: What it Means for Investors, ASEAN Briefing. Available at: <https://www.aseanbriefing.com/news/indonesias-new-tax-incentives/> (Accessed: 30 September 2023)

47 In Corp Indonesia 2023, Indonesia Company Tax Rate: Calculate Personal & Corporate Tax. Available at: <https://www.cekindo.com/blog/indonesia-company-tax-rate> (Accessed: 1 October 2023) and Australian Prime Minister's Office, Joint Communique – Australia-Indonesia Annual Leaders' Meeting, 4 July 2023. Available at: <https://www.pm.gov.au/media/joint-communique-australia-indonesia-annual-leaders-meeting> (Accessed: 30 September 2023)

48 *Idem*

49 *Idem*

Incentives for Indonesian manufacturers have been introduced to stimulate production within the electric mobility sector⁵⁰

Supply-side Initiatives

Corporate tax & tax allowance

- Corporate tax exemptions/reductions of 5-20 years applicable on investment value from US \$7.2 million to US \$2.1 billion
- Up to 30% from investment value calculated based on valuation of tangible fixed assets + reduction of corporate income tax by 5% per year, for 6 years (total 30%)

Import duty exemption on machinery

- Exemption of import duty on imported capital goods (machines) for 2 years
- Exemption of import duty on imported goods and material for production for 2 years during initial production (or 4 years if locally produced machines min. 30% from total value)

Capability building

- Gross income tax deduction of up to 300% of costs incurred in R&D and 200% of funds spent for vocational training
- A net income reduction of 60% of invested capital for fixed assets in labour-intensive industries

Indonesia / Australia Trade Agreements⁵¹

IA-CEPA | Indonesia-Australia Comprehensive Economic Partnership Agreement

- IA-CEPA is a bilateral trade agreement between Indonesia and Australia.
- This agreement offers Australian company's advantages such as reduced tariffs and improved market access in Indonesia, enhancing the appeal of Indonesia as a manufacturing hub for Australian electric mobility businesses.

AANZFTA | ASEAN Australia New Zealand FTA

- AANZFTA is a regional trade agreement between Australia, NZ, and ASEAN member countries such as Indonesia.
- This agreement provides Australian companies with improved access to ASEAN markets, reducing trade barriers and facilitating greater market entry for Australian businesses to use Indonesian electric mobility manufacturers.

50 Medina, A.F. (2019), Indonesia's New Tax Incentives: What it Means for Investors, ASEAN Briefing. Available at: <https://www.aseanbriefing.com/news/indonesias-new-tax-incentives/> (Accessed: 30 September 2023) and In Corp Indonesia 2023, Indonesia Company Tax Rate: Calculate Personal & Corporate Tax. Available at: <https://www.cekindo.com/blog/indonesia-company-tax-rate> (Accessed: 1 October 2023)

51 Australian Government Department of Foreign Affairs and Trade, Indonesia-Australia Comprehensive Economic Partnership Agreement: Outcomes. Available at: <https://www.dfat.gov.au/trade/agreements/not-yet-in-force/iacepa/ia-cepa-key-outcomes-for-australia> (Accessed: 1 October 2023)

Comparative Analysis

Indonesia emerges as a top choice for offshore manufacturing solutions, outperforming neighbouring countries such as Thailand and Vietnam, largely due to its location relative to Australia and major shipping lanes, cost-competitiveness, and manufacturing capabilities.

Figure 3.1 Comparative Analysis of Manufacturing Capabilities in Southeast Asia

	 Indonesia	 Thailand	 Vietnam
Manufacturing Average Wage (Trading Economics)	✓ 2023 Manufacturing Average Monthly Wage: \$296 AUD (lowest Labour costs in Southeast Asia)	2023 Manufacturing Average Monthly Wage: \$617.12 AUD	2022 Manufacturing Sector Size: \$101.22 billion USD
Manufacturing Sector Size (Macro Trends)	✓ 2022 Manufacturing Sector Size: \$241.87 billion USD	2022 Manufacturing Sector Size: \$133.86 billion USD	2022 Manufacturing Sector Size: \$101.22 billion USD
Real GDP Growth % (CEIC Data)	✓ Real GDP Growth Average (1994–2022): 5.1%	Real GDP Growth Average (1994–2023): 3.8%	Real GDP Growth Average (2010–2023): 3.0%
*Purchasing Managers Index (PMI) (Trading Economics)	✓ Economic Health / Trend of the Manufacturing Sector (2023): World Rank: 9 th	Economic Health / Trend of the Manufacturing Sector (2023): World Rank: 34 th	Economic Health / Trend of the Manufacturing Sector (2023): World Rank: 22 nd
**Economic Freedom Index (Heritage.org)	✓ 2023 Economic Freedom Index: World Rank: 60 / 176	Economic Health / Trend of the Manufacturing Sector (2023): World Rank: 34 th	Economic Health / Trend of the Manufacturing Sector (2023): World Rank: 22 nd
Motor Vehicle Units Produced (CEIC Data)	Units Manufactured 2022: 1,470,146 units	✓ Units Manufactured 2022: 1,883,515 units	Units Manufactured 2022: 232,410 units

Note:

*Manufacturing 'Purchasing Managers Index' (PMI) = measures the activity level of purchasing managers in the manufacturing sector which can be used to draw conclusions on the direction of economic trends in the manufacturing sector. The PMI is based on five major survey areas: (1) new orders (2) inventory levels (3) production (4) supplier deliveries (5) employment.

**Economic Freedom Index = based on 12 quantitative and qualitative factors, grouped into four categories of economic freedom: (1) Rule of Law: property rights, government integrity, judicial effectiveness (2) Government Size: government spending, tax burden, fiscal health (3) Regulatory Efficiency: business freedom, labour freedom, monetary freedom (4) Open Markets: trade freedom, investment freedom, financial freedom.



Chapter 4

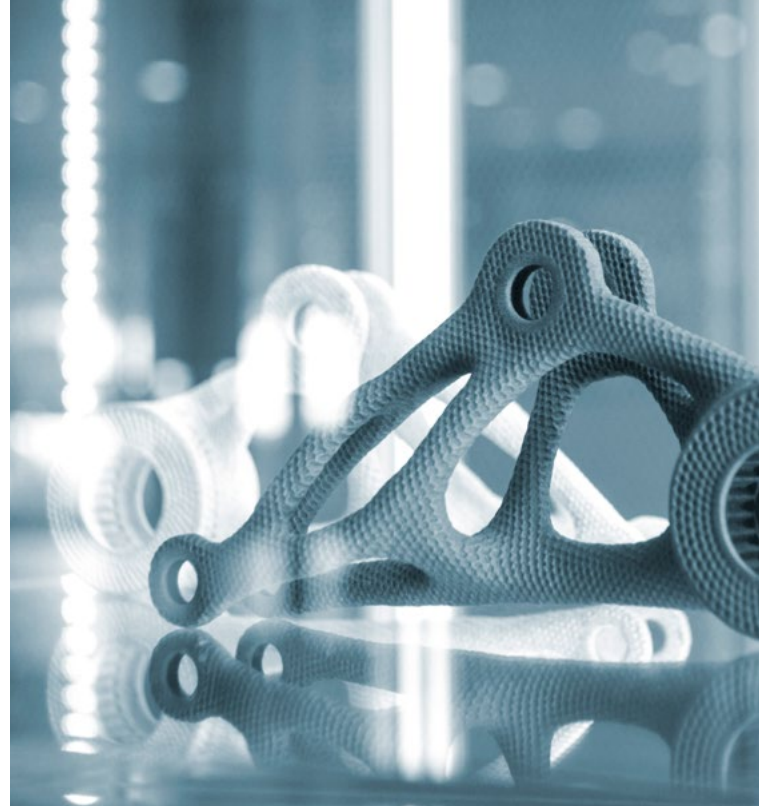
Opportunities for Australian Businesses

Startup Company Prototyping

Indonesian manufacturers can prototype, assisting Australian startups with minimal capital to test their new product innovations.

Opportunity Summary

Australian startups in the electric mobility sector can work with Indonesian manufacturers to develop a prototype EV in small quantities for further market testing, or specific components. It can be a more cost-effective scenario when a product is still being tested and perfected and offers an early test for the quality of the output.



Potential Scenario (Illustrative Example)

Scenario

An Australian startup aims to develop a cutting-edge, high-performance electric skateboard, however they face high prototyping costs in Australia. To overcome this challenge, they partner with an Indonesian manufacturing firm known for its expertise in manufacturing and assembling electric mobility components. This collaboration allows them to cost-effectively prototype and manufacture their electric skateboard's unique propulsion system, reducing development costs and accelerating time-to-market.

Key Considerations

- Assess and confirm manufacturing costs comparison.
- Intellectual property protection and agreements.
- Establish quality control procedures and processes during the prototyping phase.
- Confirm regulatory requirements for importing prototypes.
- Component sourcing and end to end supply chain management.
- Establishing communication channels and contractual agreements.
- Evaluation of local suppliers' capabilities.

Potential Opportunity Outcomes

Startup businesses and entrepreneurs are often early in their commercialisation journey, therefore **cost and speed to market** is one of the most important to these types of organisations.

Refining and perfecting a prototype

Affordable Alternative

Indonesian manufacturing offers Australian startups a cost-effective platform to test and refine their innovative electric mobility components, including batteries and motors.

Bringing product to market faster

Rapid Product Development

With Indonesian automotive manufacturing knowledge, startups can potentially expedite their product development cycles.

Experienced Workforce

Access to Experienced Labour

Indonesia has a pool of experienced workers in automotive and electronics manufacturing.

Part-Component Manufacturing

Manufacturing part-components for electric mobility vehicles is increasingly coming into focus as a core offering for Indonesia, with significant tax incentives already for multinationals who use more than 40 percent local Indonesian content in their vehicles.

Opportunity Summary

Australian businesses can engage with Indonesian suppliers to manufacture specific component parts; for example, partnering with local Indonesian companies to produce batteries, transmissions, motors and other componentry for electric mobility vehicles.

Potential Scenario (Illustrative Example)

Scenario

An Australian EV company aims to optimise their production costs while maintaining high-quality standards. They partner with an Indonesian battery manufacturer known for its cost-efficient and experienced workforce. This collaboration allows the Australian company to outsource battery production, resulting in reduced costs, reliable access to critical components, and improved operational efficiency.

Key Considerations

- Partner selection and due diligence.
- Intellectual property protection.
- Quality control and regulatory compliance.
- Cost-benefit analysis of outsourcing.
- Supply chain logistics and lead times.
- Communication and collaboration agreements.
- Production capacity and scalability.

Potential Opportunity Outcomes

Organisations that are looking for part-component manufacturing may likely most value **customisation, quality and value** when considering manufacturing partnerships.

Cost Efficiency and Labour Expertise

- **Cost Efficiency:** Indonesian manufacturing offers cost advantages, particularly in labour costs, which is an important component to overall production costs and often a barrier to scaling production onshore in Australia.
- **Experienced Labour Force:** Indonesia has a pool of experienced manufacturing workers, particularly in Jakarta, greater West Java and selected SEZs.

Raw Materials Access

Access to Raw Materials: Indonesia is rich in essential raw materials such as nickel and cobalt. With recent export restrictions on the raw materials, aligning with local processors or manufacturers can shore up a more reliable supply.

Customisation Flexibility

Customisation: Indonesian suppliers can adapt production processes to accommodate specific design and customisation requirements, offering flexibility in component manufacturing. In Australia small volumes can be quite costly due to the cost to configure automated/robotics systems and labour.

Scale-Up Production

Indonesia can help Australian companies scale-up their production as the demands for their electric mobility vehicle grows.

Opportunity Summary

A growing Australian company wants to increase their production from 50 to 100 units. Indonesia's extensive manufacturing capacity can support a more cost-effective production scaling solution compared to Australia.

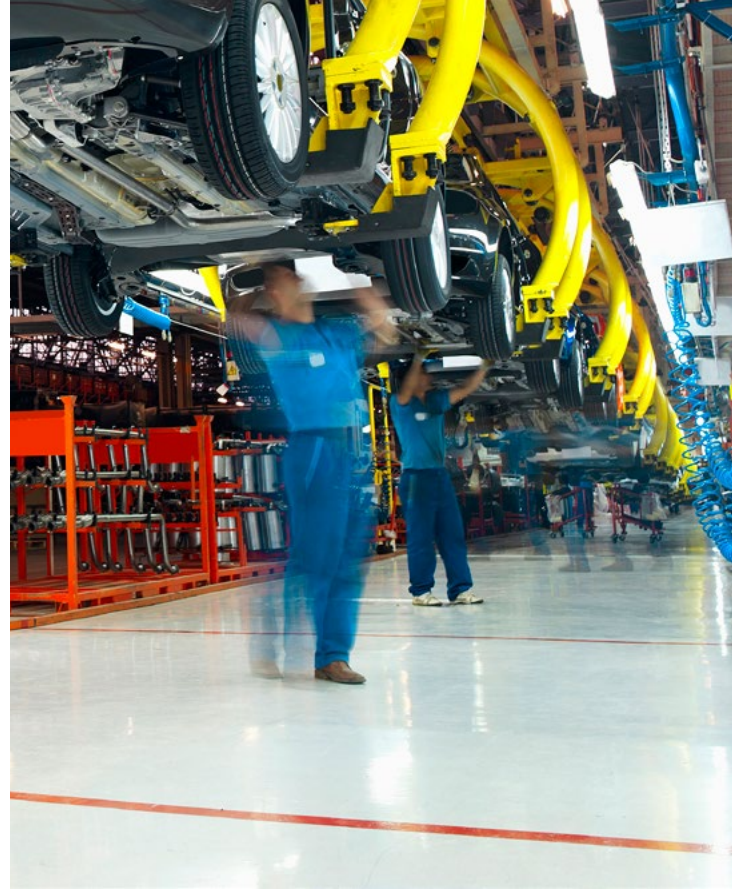
Potential Scenario (Illustrative Example)

Scenario

An Australian side-by-side all-terrain vehicle (ATV) company experiences increasing demand in both domestic and export markets. To meet this demand cost-effectively, they collaborate with an Indonesian manufacturing organisation. This partnership enables the Australian company to scale up production from 50 to 100 units within a shorter timeframe and at a reduced cost compared to attempting the same opportunity in Australia.

Key Considerations

- Local Expertise: Assess partner's experience in ATV manufacturing.
- Customisation: Ability to customise ATV designs.
- Logistics: Access to seaports for efficient distribution strategies.
- Compliance: Meeting Australian Standards, Design Rules and legislative requirements.
- Cost Analysis: Evaluate financial implications of scaling up.



Potential Opportunity Outcomes

Organisations that are looking for to scale up production are likely to look at **speed, quality and the ease of doing business** in comparison to onshore or alternative manufacturing hubs.

Cost-Effective Scaling

Economies of Scale:

As with most manufacturing, scale typically leads to improved cost as the volume allows for mass production of the same componentry or more efficient production of the product.

Experienced Workforce

Access to Experienced Labour:

Indonesia has a pool of experienced workers in automotive and electronics manufacturing.

Experienced Workforce

Custom Production Cycles:

Manufacturers in Indonesia may be able to offer tailored production schedules to align with specific production and delivery needs.






Chapter 5

Market Entry Strategies

Market Entry Strategies

The following market entry strategies each have unique advantages and challenges, and the choice depends on factors including risk tolerance, available resources, and long-term business objectives.

	Option 1 Hire Sub-Contractors⁵²	Option 2 Partnership / Joint Venture⁵³	Option 3 Wholly Foreign-Owned Company⁵⁴
Description	Engaging Indonesian manufacturers to outsource specific manufacturing tasks.	Partnering with local entities that may already have established factories, equipment, and staff.	Establishing a new business entity in Indonesia.
Pros	<ol style="list-style-type: none"> 1. Cost-effective and flexible production 2. Avoiding the need for significant capital investment 3. Focus on core competencies 	<ol style="list-style-type: none"> 1. Access to established facilities and workforce 2. Shared costs and risks 3. Knowledge of local market dynamics 	<ol style="list-style-type: none"> 1. Full control over operations and decision-making 2. No need to share profits with local partners 3. Flexibility in business direction
Challenges	<ol style="list-style-type: none"> 1. Quality control and reliability of subcontractors 2. Ensuring intellectual property protection 3. Managing multiple supplier relationships 	<ol style="list-style-type: none"> 1. Finding a reliable and compatible local partner 2. Sharing control and decision-making 3. Potential cultural and communication differences 	<ol style="list-style-type: none"> 1. Extensive regulatory and legal requirements 2. Investment in infrastructure and workforce 3. Building brand presence from scratch
Indicative Ease of Entry	 Relatively easy	 Moderate	 Challenging

Market Entry Considerations



- Investing in relationships is critical to succeeding in Indonesia. The strength of business relationships can determine many aspects of commercial life, including gaining credit, procurement and contracting, and the speed of administrative procedures⁵⁵.
- In recent years, Indonesia has launched a system of designated Special Economic Zones (SEZ) which offer various administrative incentives such as easier licensing processes, tax concessions and advanced infrastructure to encourage the establishment of businesses and industries⁵⁶.

⁵² Commisceo Global, Why is Relationship Building so Important in Indonesian Business Culture? Available at: <https://www.commisceo-global.com/blog/why-is-relationship-building-so-important-in-indonesian-business-culture> (Accessed: 24 October 2023)

⁵³ *Idem*

⁵⁴ *Idem*

⁵⁵ *Idem*

⁵⁶ Medina, A.F. (2023), An Introduction to Special Economic Zones in Indonesia, ASEAN Briefing. Available at: <https://www.aseanbriefing.com/news/an-introduction-to-special-economic-zones-in-indonesia/> (Accessed: 30 September 2023)









Chapter 6

**Key Considerations for
Australian Businesses**

Key Considerations for Australian Businesses

While offshoring manufacturing represents good value for Australian business, consideration should be given to several factors which are outlined below in making a balanced assessment of where you will offshore production and what it means for your business.

Key consideration	What must be considered?	What can Australian businesses do to successfully manufacture in Indonesia?
 Regulatory Compliance	Adherence to Indonesian manufacturing regulations & Australian quality and safety standards is crucial.	Establish a dedicated compliance team, work closely with Indonesian authorities, and keep up-to-date with regulatory changes.
 Intellectual Property Protection	Ensure appropriate IP protection, and where appropriate trademarks and patents as they apply to your product or components.	Seek qualified legal advice on appropriate IP protection strategies (including the reach of this protection), including agreements governing the manufacturing relationship, logistics, patents, and clear terms with other partners in your value chain.
 Quality Assurance	Ensuring consistent quality control and compliance to international standards during manufacturing.	Establish robust quality control processes, conduct regular inspections, and invest in employee training for quality assurance.
 Logistics and Supply Chain	Managing logistics efficiently, including transportation, lead times, and customs procedures, can support a smooth manufacturing and delivery process.	Map your supply chain and know your partners and distributors, the source of all parts and undertake a high-level risk assessment and mitigation plan should there be disruption. Partner with experienced logistics providers and customs brokers as appropriate, and plan for contingencies.
 Worker Protections / Modern Slavery	Ensure compliance with labour laws and modern slavery regulations (e.g., Commonwealth Modern Slavery Act 2018) to protect worker rights ⁵⁶ adherence to OH&S and more.	Implement strong labour practices, conduct regular onsite audits, know the provenance of products in your supply chain, and select a local manufacturing partner that others will validate as prioritising fair treatment, safe working conditions, and employee well-being in compliance with local laws and regulation.
 Indonesian Local Content Regulations	Indonesia's national 'local content' regulations require that all vehicle types require 80 per cent or more local content throughout the manufacturing process by 2030 ⁵⁷ .	Collaborate with local suppliers, understand regulatory requirements, and leverage available incentives for local content sourcing.
 Language & Communication	Establishing clear communication channels with Indonesian partners to mitigate language barriers and to ensure clarity of requirements and expectations from design through to production.	Approximately 30 per cent of Indonesians speak English, however, there may be communication barriers (both linguistically and culturally) ⁵⁸ . Having support for communication is usual in most offshoring ventures outside of Australia – the right partner in Indonesia can support you on the ground.
 Switching Costs from other countries	Evaluate the effort and costs associated with switching manufacturers to Indonesia, considering payback periods and profitability. It can be done but assess if the timing and benefits are right for you.	Assess the financial implications, benefits, transition plan, and potential risks of relocating existing manufacturing operations to Indonesia.

⁵⁶ Legislation.gov.au

⁵⁷ Jakarta Globe – Regulation signed by current Indonesian President Joko Widodo

⁵⁸ Williams, E. (2022), Do People Speak English In Indonesia?, Higher Language. Available at: [https://higherlanguage.com/do-people-speak-english-in-indonesia/#:~:text=According%20to%20a%20survey%20by%20The%20British%20Council%2C,than%20in%20other%20countries%20like%20Thailand%20and%20Vietnam.%20\(Accessed:20September2023\)](https://higherlanguage.com/do-people-speak-english-in-indonesia/#:~:text=According%20to%20a%20survey%20by%20The%20British%20Council%2C,than%20in%20other%20countries%20like%20Thailand%20and%20Vietnam.%20(Accessed:20September2023))

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