

4 December 2023

ASX Limited  
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(21 pages by email)

## NICKEL INDUSTRIES PRESENTS AT COP28 SUMMIT AND COMMITS TO NET ZERO EMISSIONS BY 2050

Nickel Industries Limited (**Nickel Industries** or **the Company**) is pleased to advise that its Sustainability Manager, Muchtazar, presented the attached presentation to the 2023 United Nations Climate Change Conference (**COP28**) in the United Arab Emirates (UAE) on Saturday 2 December 2023.

The Company was one of only two companies with Indonesian mining operations invited to present at the conference reflecting the growing recognition it is receiving for taking a leadership role in advancing the sustainability of Indonesia's nickel industry.

At the conference the Company also announced its future emission targets, committing to a 50% reduction in carbon intensity by 2035 and net zero emissions by 2050.



*Nickel Industries' Sustainability Manager, Muchtazar presenting at the COP28 Summit in UAE*

Commenting on the Company's participation at the COP28 conference, Nickel Industries' Managing Director Justin Werner said:

*"We are proudly taking a leadership role in advancing the sustainability of Indonesia's nickel industry and are delighted to have had the opportunity to showcase to the conference's global audience some of the current and future initiatives we will be implementing that will see us continue to reduce our carbon footprint and support the sustainability of the environments and communities in which we operate."*

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### **Overview of Nickel Industries:**

Nickel Industries Limited (**NIC**) is an ASX-listed company which owns a portfolio of mining and low-cost downstream nickel processing assets in Indonesia.

The Company has a long history in Indonesia, with controlling interests in the world-class Hengjaya Mine, as well as four rotary kiln electric furnace (**RKEF**) projects which produce nickel matte for the electric vehicle (**EV**) supply chain and nickel pig iron (**NPI**) for the stainless-steel industry.

Having established itself as a globally significant producer of NPI, the Company is now rapidly transitioning its production to focus on the EV battery supply chain – recently, the Company has converted some of its existing production from NPI to nickel matte, and also acquired a 10% interest in the Huayou Nickel Cobalt (**HNC**) HPAL project, adding mixed hydroxide precipitate (**MHP**) to its product portfolio.

Nickel Industries is now embarking on its next transformative step, announcing a positive final investment decision to invest in Excelsior Nickel Cobalt (**ENC**), a next-generation HPAL project capable of producing MHP, nickel sulphate and nickel cathode. ENC will produce approximately 72,000 tonnes of nickel metal per annum, diversifying the Company's production and reducing the Company's carbon emissions profile – reflecting the strong commitment to sustainable operations.

To learn more, please visit: [www.nickelindustries.com/](http://www.nickelindustries.com/)



# **NICKEL**

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## **INDUSTRIES**

**UNFCCC United Nations Climate Change Conference**

**COP 28**

*Dubai - December 2023*

**Proudly taking a leadership role in advancing the sustainability of Indonesia's nickel industry**



### Muchtazar

#### *Sustainability Manager*

- 7+ years experience, including as Environment and Sustainability Manager at Unilever Indonesia and various roles at Indika Energy and PT Semen Jawa
- Recipient of the Sustainable Development Goal Pioneer award from the United Nations in 2019
- Representative of Indonesia at multiple international forums, including the UN Global Compact Leaders Week

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## Who are we?

- Nickel Industries Limited (**NIC**) is a leading nickel processing business, currently producing some of the lowest capital intensive and most profitable nickel units in the global market in partnership with Tsingshan, the world's largest stainless-steel producer.
- Since its Initial Public Offering, NIC has established itself as a globally significant nickel pig iron (**NPI**) producer and has recently diversified into the '**Class 1**'<sup>(1)</sup> nickel electric vehicle (**EV**) battery supply chain by converting some of its current production into nickel matte and also acquiring an interest in the operating Huayue Nickel Cobalt high pressure acid leach (**HPAL**) project (**HNC**).
- NIC has also recently announced a positive final investment decision for the Excelsior Nickel Cobalt HPAL project (**ENC**) to grow and further diversify its production into the EV battery supply chain.

(1) Class 1 nickel defined as containing 99.8% nickel or above (high-purity) in pure nickel metal form suitable for battery production.

## What is our vision?

- Our vision is to become the world's **pre-eminent global nickel company** with an **unrivalled platform of diversified, low-cost, sustainably produced nickel products**, underpinned by **global best practice mining standards**.

## How can we achieve this?

- By advancing the sustainability of Indonesia's nickel industry by playing a leadership role in **promoting and implementing industry best practices** across our mining and downstream processing operations with the support of the local communities in which we operate.

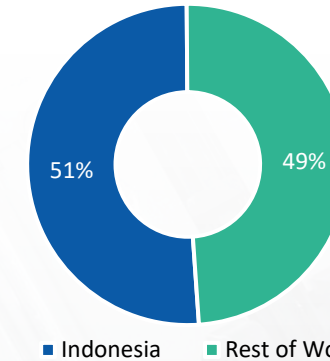
# Why Invest in Indonesian Nickel?

## Indonesia is now the global epicentre of nickel supply for the EV revolution

### The EV Supply Revolution in Indonesia is now well Underway

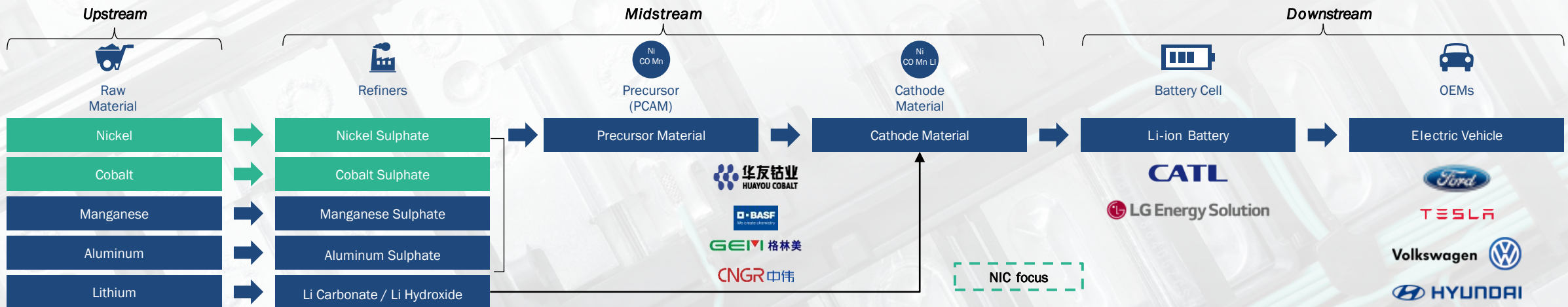
- Previously, nickel sulphate for today's dominant nickel manganese cobalt ("NMC") battery chemistries could only be made from sulphate ores. Shortages of sulfide ores historically proved a bottleneck for precursor producers to secure raw material supply for Class 1 nickel production
- In 2021, Tsingshan announced it had successfully used laterite ore to produce nickel matte, opening up an important source for battery grade nickel
- EV materials players (particularly Chinese precursor makers and global OEMs makers) are now active investors in Indonesia, developing supply chains around valuable laterite ore resources
- Vertical integration of supply underpins expectations that nickel matte and mixed hydroxide precipitate ("MHP") will become dominant processing avenues for nickel sulphate for EV battery demand

### Global Nickel Mine Production 2021<sup>(1)</sup>



Ore comes predominantly from Indonesia, who mines 51% of the world's production from its rich laterite reserves<sup>(1)</sup>

### Global EV Producers Becoming active in Indonesia to Establish Integrated Supply Chains<sup>(2)</sup>



(1) AME Nickel Market Report 2023

(2) Source: USGS.



# Significant Foreign Investment in Indonesian Nickel industry

Indonesian nickel industry is attracting investment from global EV supply chain participants, focused on securing long term supply Indonesian government initiatives... ..have facilitated and encouraged significant influx of foreign investment and expertise into the onshore nickel supply chain



**Jan-20:** Renewed ban on exports of unprocessed nickel ore to support local downstream processing



**Mar-21:** Establishes Indonesia Battery Corporation (IBC) to cooperate with foreign investors in developing an EV battery supply chain



**Jan-22:** Investment Ministry signs an MoU with Foxconn, Gogoro Inc, IBC and Indika Energy for investment in EV battery development

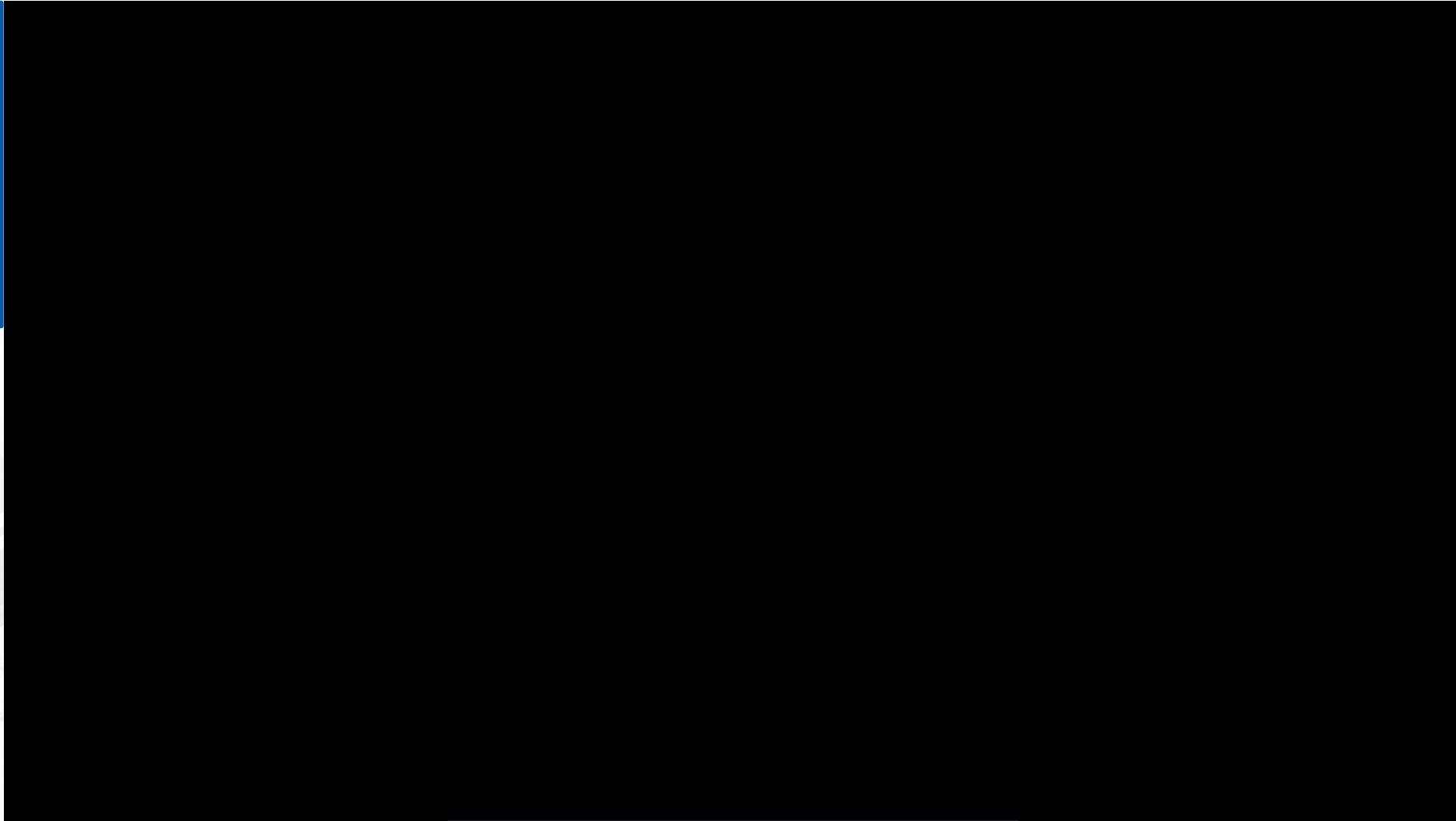


**Mar-23:** Announces subsidy for electric cars, scooters and buses to boost EV adoption and help secure investment from global EV makers

	Company	Description
Dec-20		BASF and Eramet sign a joint agreement to assess the development of a <b>nickel and cobalt hydrometallurgical refining complex</b>
Dec-20		Investment Ministry signs an MoU with LG Energy Solution on <b>integrated EV battery investment</b>
Sep-21		LG Energy and Hyundai Motor Group start construction of a US\$1.1bn <b>battery cell plant</b> , the first stage of an US\$9.8bn deal to develop <b>integrated EV battery facilities</b>
Feb-22		A joint venture between Zhejiang Huayou Cobalt, Tsingshan Holding Group and China Molybdenum Co makes the first shipment of <b>nickel mixed hydroxide precipitate</b> to China from Morowali
Mar-22		Hyundai launches a plant in Indonesia to produce <b>battery-powered EVs</b>
Apr-22		IBC and state mining company Aneka Tambang sign a framework agreement with <b>CATL Group</b> , through its subsidiary Ningbo CBL for partnership including <b>nickel mining and EV battery manufacturing</b>
Jun-22		LG Energy breaks ground on a US\$3.5Bn <b>nickel sulphate smelter</b> in Batang, Central Java. It will also build a US\$2.4bn factory in the Batang park to produce <b>precursor and cathode components</b>
Aug-22		Production of the <b>Wuling Air EV</b> is launched in Indonesia. It is being built by SGMW Motor Indonesia, part of a joint venture of SAIC Motor Corp Ltd, General Motors Co and Wuling Motors
Sep-22		Vale Indonesia signs an agreement with Zhejiang Huayou to build a second <b>nickel MHP plant</b>
Nov-22		SK On has signed a MOU with EcoPro, a Korean secondary battery material company, and GEM, a Chinese precursor producer, to <b>build a MHP plant in IMIP, Indonesia</b>
Jan-23		Aneka Tambang and Hong Kong CBL Limited, a subsidiary of CBL, sign a conditional share purchase agreement for partial ownership on <b>Antam's nickel mine</b> in East Halmahera, North Maluku
Mar-23		Ford joins Vale Indonesia and Zhejiang Huayou Cobalt as the new partner in a US\$4.5bn <b>nickel MHP plant</b> with commercial operation expected to begin in 2026

*"Ford can help ensure that the nickel that we use in electric vehicle batteries is mined, produced within the same ESG standards as part of our business around the world... this framework gives Ford direct control to source the nickel we need – in one of the industry's lowest-cost ways – and allows us to ensure the nickel is mined in line with our company's sustainability targets, setting the right ESG standards as we scale" – Lisa Drake, vice president for Ford Model e EV industrialization (Mar-23)*

# Introduction to Hengjaya Mine – our Foundation Asset





Nickel Industries has implemented several Environment, Social and Governance initiatives

Our sustainability strategy is focused on 3 core pillars ...

...and committed to further reducing our carbon footprint



### Environmental Stewardship

Committed to **reducing carbon footprint** and developing products essential for the **global energy transition** and the stability of our operating environment



NIC's HPAL projects adopt the most advanced 'third-generation' HPAL process with **energy consumption and carbon emissions only ~25% and ~20% of similar pyrometallurgical products**, respectively



### Social Responsibility

Dedicated towards **stimulating local socioeconomic development** and sustainably contributing to the **wellbeing of local communities** and the surrounding environment



NIC's HPAL projects will operate at less than 10 CO<sub>2</sub> tonnes / tonne nickel production and **future carbon reduction plan which aims to see the project become carbon-neutral by 2030**



### Economic Development

**Long term vision** to grow the business in a way that **optimally benefits local communities**



Investigation and adoption of **renewable power sources** for NIC's operations to further de-carbonise

A 50% reduction in carbon intensity by 2035  
and net zero emissions by 2050



## Key environmental pillars to become a leading sustainable producer of battery grade Class 1 nickel globally



### 1 Commitment to Energy & Carbon Footprint Reduction

- ✓ Launched **'Future Energy' collaboration framework** in 2021 in partnership with Shanghai Decent
  - Transitioning current energy sources across NIC's operations to **renewable energy**
- ✓ 'Future Energy' projects under discussion:
  - collaboration with PT Sumber Energi Surya Nusantara ('SESNA') on installing 200MWp **solar capacity** for NIC's RKEF lines
  - development of **LNG-to-power solution** for Indonesia Morowali Industrial Park ('IMIP')

### 2 Water Conservation & Saving

- ✓ Continuous **effluent monitoring system** at the Hengjaya Mine to safeguard the area's water resources
  - Hengjaya Mine received **Green PROPER** from the Indonesian Government in 2022
- ✓ Work with certified laboratories to assess **water quality** at the RKEF operations to ensure the effluent's quality meets requisite standards in Indonesia

### 3 Biodiversity Protection

- ✓ Biodiversity program supports **mangrove and watershed rehabilitation**
  - Total area of 1,905 Ha
- ✓ **Planted more than two million trees** since 2019
  - Tree saps will stimulate the community's economy with a projected income of US\$535 per hectare
- ✓ Rehabilitated the post-mining site at Hengjaya Mine in 2022
  - Converted 20.15 hectares into a reclamation zone

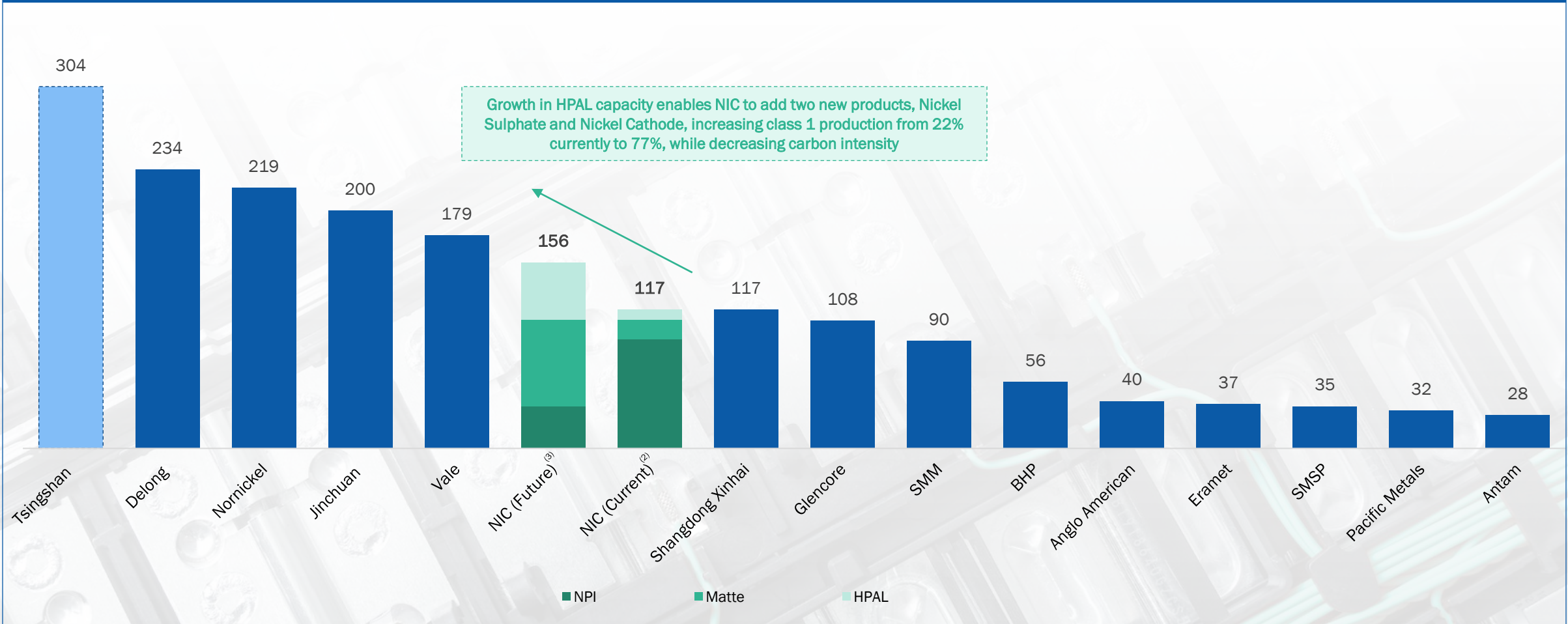
Building the foundation for a **sustainable, environment friendly, battery metals powerhouse**



# NIC is a Large, Established Top 10 Global Nickel Producer

Ramp up of existing assets, coupled with recently announced ENC HPAL project FID, positions NIC with the flexibility to grow its capacity across Class 1 and Class 2 nickel

2022 Finished nickel production (kt, attributable) <sup>(1)</sup>



Source: AME Nickel Market Report 2023.

(1) Comparable production data reflects 2022 figures unless stated otherwise. NIC pro forma figures are not indicative of future nickel production levels that may be achieved and are not financial guidance or forecasts

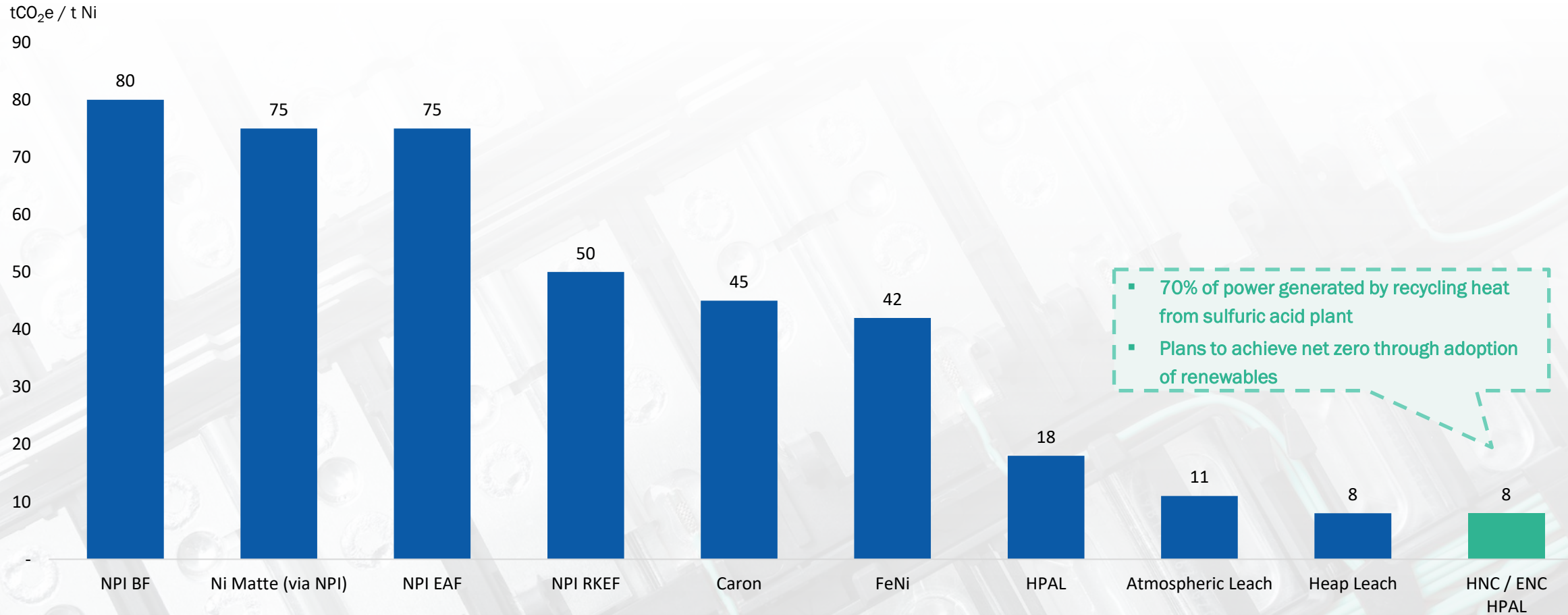
(2) NIC current production: 3Q'2023 production of 35,262 tonnes (33,852 RKEF + 1,410 HPAL), calendarised (note, HPAL production of 1,410 is only 2 months, post HNC acquisition). NIC's corresponding attributable production = ~117,000 tonnes

(3) NIC future production = current production in (2) above, plus expected 72,000 tonnes from ENC. NIC's corresponding attributable production = ~156,000 tonnes

# HPAL Significantly Reduces our Carbon Intensity

Each incremental unit of HPAL nickel production decreases NIC's carbon intensity. NIC has industry best practice tailings storage via dry-stack tailings at its HPAL operations

CO<sub>2</sub> e Emissions by Process



Source: Wood Mackenzie





## Heat Recovery



- ✓ Utilizes waste heat from the kiln to reduce coal consumption in its RKEF process



## 'Future Energy' Projects



- ✓ Installed a 396kWp solar panel plus 250kWh battery storage at the Hengjaya Mine to reduce diesel consumption by approximately 31 Million litres over the 25-year projected project life
- ✓ In 2022, NIC signed an MoU with Quantum to develop solar projects with a capacity of 220MWp



## Bio-based liquid fuels



- ✓ Shift the consumption of diesel toward biofuel for some operations at the mining site



## Commitment to a more sustainable future for Indonesia’s nickel industry



- August 2022 - Binding agreement signed with SESNA to implement Indonesia’s largest solar power project within the IMIP (200MWp +20MWh BESS)
- October 2023 – Operation Lease and Service Agreement (“OLSA”) signed where NIC will become the sole off-take partner to the project

### SESNA – “Project Initiator”

- Sole responsibility for design, funding, construction, ownership and operation

### Nickel Industries

- No requirement for any capital investment
- Sole long term off-take partner (20+years)
- Electricity tariff (expressed as US cents per Kwh) is relatively stable over the life of the contract

### Benefits

- Material power contributions to NIC’s RKEF assets and ENC HPAL project
- Material reductions in annual CO<sub>2</sub> emissions

Nickel Industries believes it is essential to improve the **livelihoods** and **well-being** of communities around our projects in the most appropriate and meaningful ways. We seek to develop programs related to the communities' needs with the long-term **economic development vision**, and **avoid reactive social investments** to create **mutual value throughout and beyond the life of our operations**.

## Key Focus Areas

	Education		Health
	Real Income, Economic Independence		Infrastructure
	Social-Cultural		

## Nickel Industries Foundation

- Planning to establish the Nickel Industries Foundation that will enable us to deepen our ties with local communities
- We will aim to take a leadership role across a number of community-based initiatives, including but not limited to economic development, education, health protection, waste management, women empowerment and adoption of renewable energy

## University Scholarship Programmes

- Currently looking to enter a partnership with reputable universities in the local community to help provide financial support to indigenous students from the Central Sulawesi, North Maluku and West Papua Provinces
- Planning to provide full scholarship funding for students through their entire degree, with a focus on undergraduate students across the fields of metallurgical engineering, environmental engineering and mining engineering



## ANTI-CORRUPTION

- NIC has a written Code of Conduct, an Anti-Bribery and Corruption Policy, a Whistleblower Policy and a Securities Trading Policy that applies to all directors, employees, and related parties, and is committed to:
  - Not engage in corrupt business practices
  - Prevent bribery and corruption by all personnel
  - Comply with all applicable laws, regulations and standards, including Anti-Bribery and Corruption Laws
  - Ensure third parties are suitable for NIC to associate with
  - Refuse to take bribes or perform corrupt acts



## HUMAN RIGHTS AND ANTI-SLAVERY

- NIC's Human Rights Policy ensures the protection and respect of human rights at all levels by providing guidance to identify and mitigate risks across the business
- Commissioned JRP Associates, an independent law consultant, to conduct a human rights assessment of our Ranger Nickel and Hengjaya Mine operations in 2022
  - Determined NIC complied with mandatory requirements in accordance with the Australian Modern Slavery Act 2018
- NIC will continue to:
  - Maintain zero tolerance for slavery and human trafficking
  - Encourage “whistle-blowing” any concerns
  - Endorse training and regularly auditing and reviewing existing processes for gaps



## EQUAL OPPORTUNITY

- NIC's diversity and Inclusion policy is crafted and overseen by the Board of Directors, focussing on fostering an inclusive and diverse culture
- We believe diversity is paramount to hiring and retaining talent
- In 2022, the Company employed 4,411 people:
  - All employees are protected under Indonesia's Law No.13 of 2003 concerning Manpower and Law No.11 of 2020 on Job Creation
  - The Company does not have any part-time employees
  - There was no difference in the basic salary and remuneration earned by women and men (1:1 ratio)





- PROPER is an official environmental rating from the Indonesia Ministry of Environment and Forestry.
- Blue PROPER status achieved from KLHK in 2020 and 2021, representing full compliance with Indonesia's environmental regulations
- Green PROPER status achieved in 2022 representing standards beyond compliance with Indonesia's environmental regulations
  - HM the sole entity from Morowali and only mining company from Central Sulawesi to achieve this rank.
- In 2023, the HM has again been nominated for Green PROPER status (final results announced at the end of December 2023).



The only mining company from Central Sulawesi to be awarded Green PROPER rating in 2022

**Hengjaya Mine has now firmly established itself as a showpiece asset for the Indonesian Government and a first-class example of sustainable mining in Indonesia**

## Most Promising Transition Award 2023

- Winner of the promising transition award at the ESG World Summit 2023.
- Acknowledgement for the Company's leadership in transforming its business models to contribute towards sustainability and minimising the impact of its operations on the environment.



## TrenAsia ESG Award 2023

- Winner of the TrenAsia ESG Award 2023 for the nickel sector.
- The TrenAsia ESG Award 2023 jury consists of representatives of the Financial Services Authority (OJK), Indonesian Chamber of Commerce (KADIN), Investment Managers, ESG practitioners, Indonesian Entrepreneur Association, and the National Committee on Governance Policy.



## Other Awards and Accolades

- |           |   |  |
|-----------|---|--|
| S&P       | ➤ | Second-top quartile (69%) worldwide of ESG performers for the Metals & Mining Industry Group globally as rated by S&P Global, last year 59% percentile               |
| MSCI      | ➤ | <b>Highest MSCI ESG rating</b> given to Indonesian-based Metals and Mining companies   |
| ENSIA     | ➤ | <b>Three platinum, two gold, and two silver trophies</b> at the Environmental & Social Innovation Awards (ENSIA) 2023.   |
| ASRRAT    | ➤ | Finalist for the Asia Sustainability Report Award (ASRA) 2022 and the recipient of the Silver award at the Asia Sustainability Reporting Rating (ASRRAT) 2022 & 2023 |
| Nusantara | ➤ | Two gold awards at the Nusantara CSR Awards 2023 in Jakarta for its coral reef and partnership initiatives   |



# Significant Commitment to ESG supported by Industry Best Practice Reporting Standards

ESG reporting frameworks are aligned with international standards ...

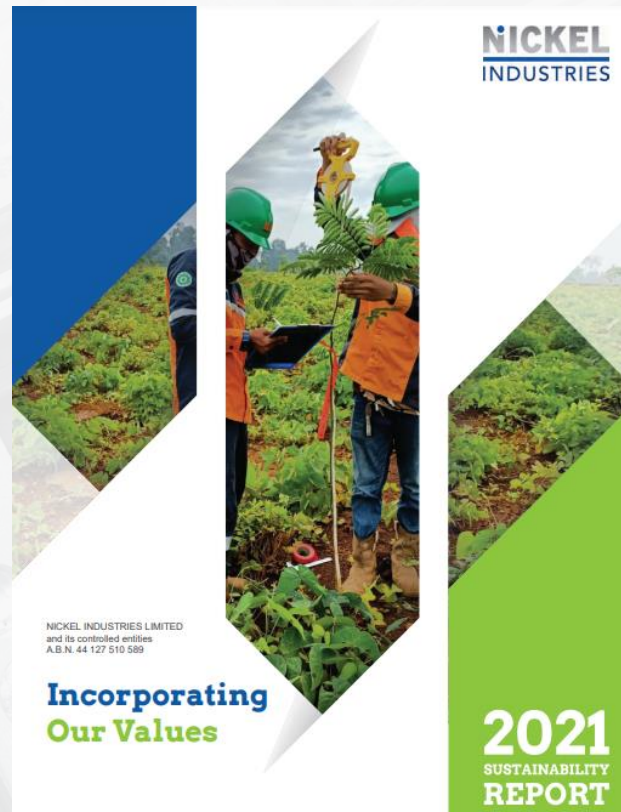
Our Sustainability reporting complies with the requirements of GRI standards: Core Options and refers to several international frameworks such as SASB, TCFD and, ACSI Guide



acsi



TCFD  
TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES



- GRI Standard 2020
- GRI Sector Supplement: Mining and Metals



**THANK YOU**