



# INVESTOR PRESENTATION



## OUR INVESTMENT STORY

Well positioned to achieve twin goals of being **Top 25 in the PSE** and a **Leading ESG investment** by 2025:

- **Sustainable mining volumes** with 425M WMT of resources as of end 2021.
- **Diversification to clean energy** with target capacity of 1GW reinforced by a pipeline of solar, geothermal, and energy storage systems.
- **Growth strategy** in mining, clean energy, and other industries to achieve double-digit income growth targets with PHP17 billion in attributable cash as of March 31, 2022 available for M&A.
- **Favorable markets** due to the EV industry's accelerating demand for Ni and the Philippine energy sector's shift to renewable and clean sources.
- **ESG is in our DNA** and embedded in our corporate culture since our founding 50 years ago.

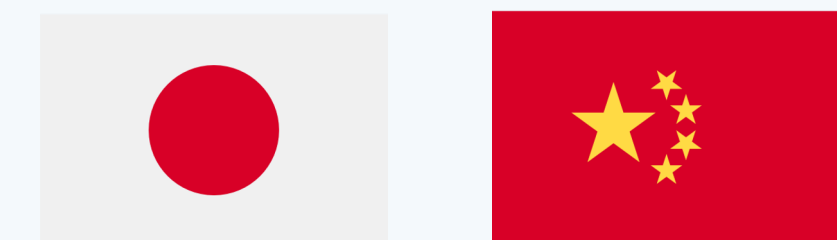




# AT A GLANCE

Largest nickel mining company in the Philippines and one of the largest suppliers of lateritic nickel ore globally – with a major push into the renewable energy sector through 87%-owned Emerging Power, Inc.

		<i>Through EPI Stake</i>	
<b>5</b>	Operating mines, with resources of 425M WMT and reserves of 271M WMT as of 2021	<b>200 MW</b>	Solar service contracts under JSI with DOE, 100MW operational as of June 2022
<b>3</b>	Exploratory mines, with resources of 123M WMT and substantial upside from further exploration	<b>1 GW</b>	Pipeline of solar, geothermal, and energy storage systems
<b>10%</b>	INTEREST IN Coral Bay (CBNC) & Taganito HPAL (THPAL) plants	<b>60%</b>	INTEREST IN Joint venture with Shell, with up to 3GW target



Strategic partnerships with key Japanese and Chinese industry players.



Twin goals are borne out of the **OneNAC Vision**, approved by the Board on November 21, 2021:

"We strive to contribute to **sustainable national development** by adopting our **ESG Roadmap** in order to achieve the highest standards in the **responsible utilization** of our country's natural resources."

Additional Note: Coral Bay ownership will increase from 10% to 15.625% by end of 2022 as NAC will acquire the stake in exchange for c.US\$26m



# NICKEL MINING

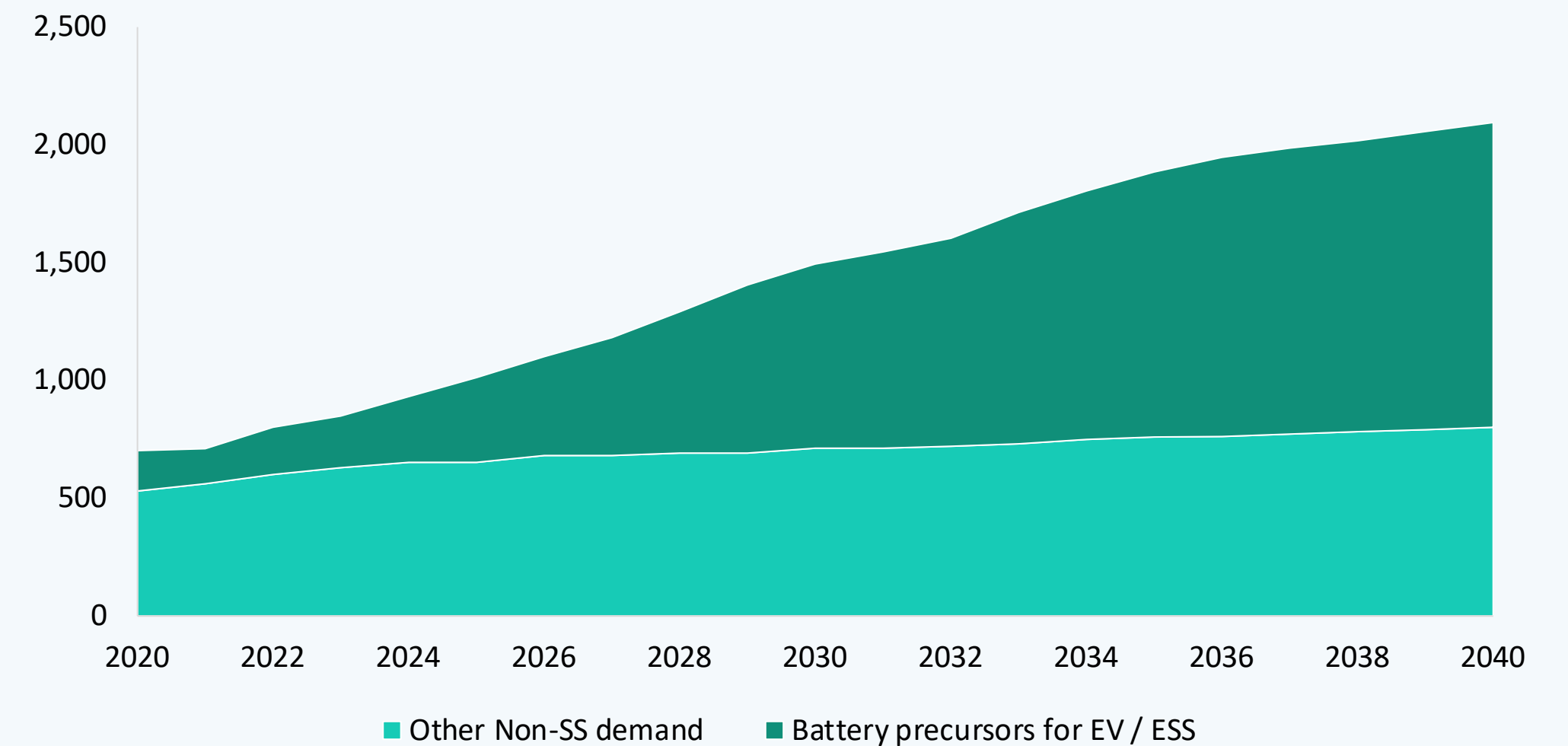


# HEADING TOWARDS A NICKEL DEFICIT

- Ni demand for stainless steel expected to grow 5.7% per year from 2020 to 2025. On the other hand, Green Ni demand (including EV Ni demand) forecasted to grow by ~30% per year in the same time period.
- Green Ni demand forecasted to grow by ~10% from 2025-2030. Based on estimated production capabilities, massive deficits are projected from 2026/27 onwards.
- To fill the supply gap, new nickel supply from as-yet unspecified sources will be needed from 2026/27.

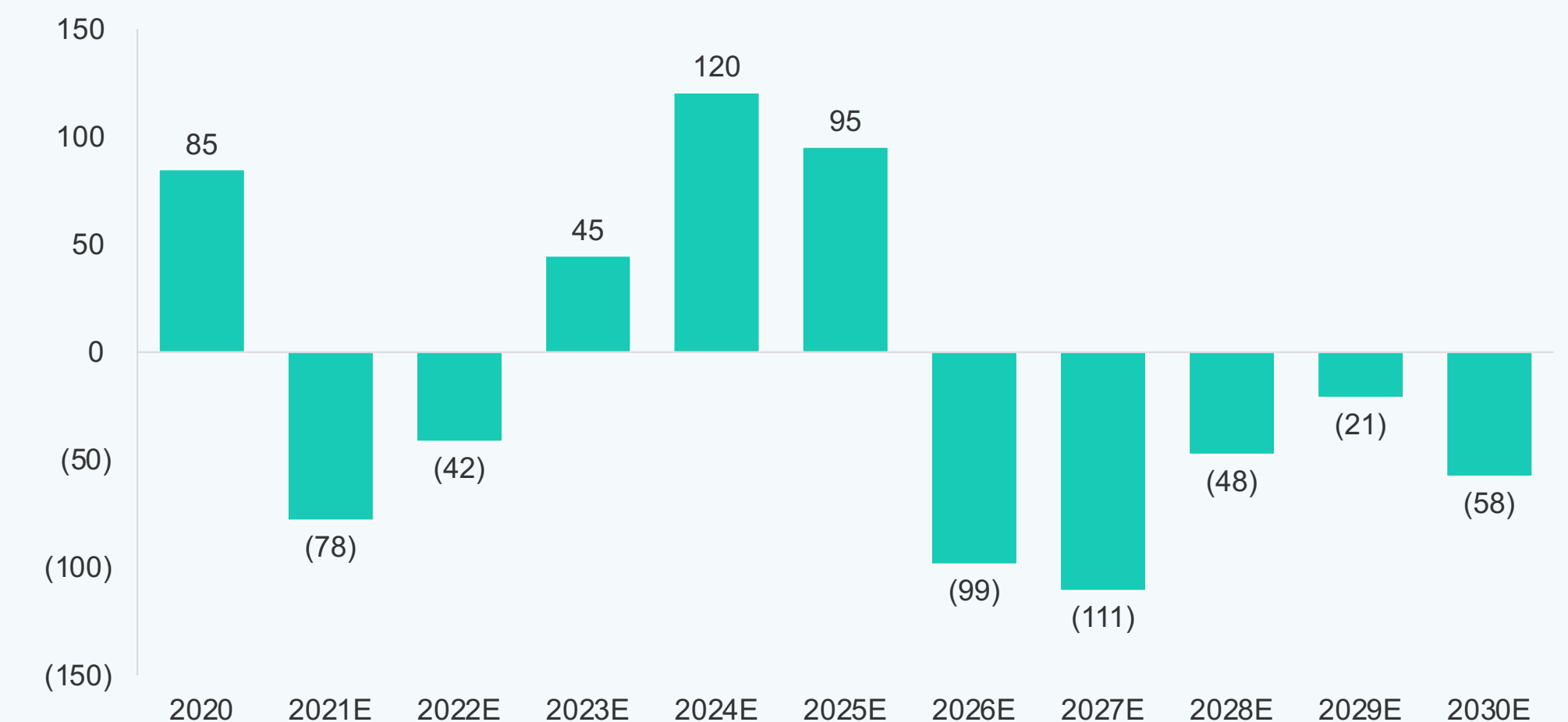
Source: Woodmac as of Mar 2022.

Nickel Demand for Non-Stainless Applications (kt)



Source: Woodmac

Global Nickel Balance (kt)



Source: Woodmac



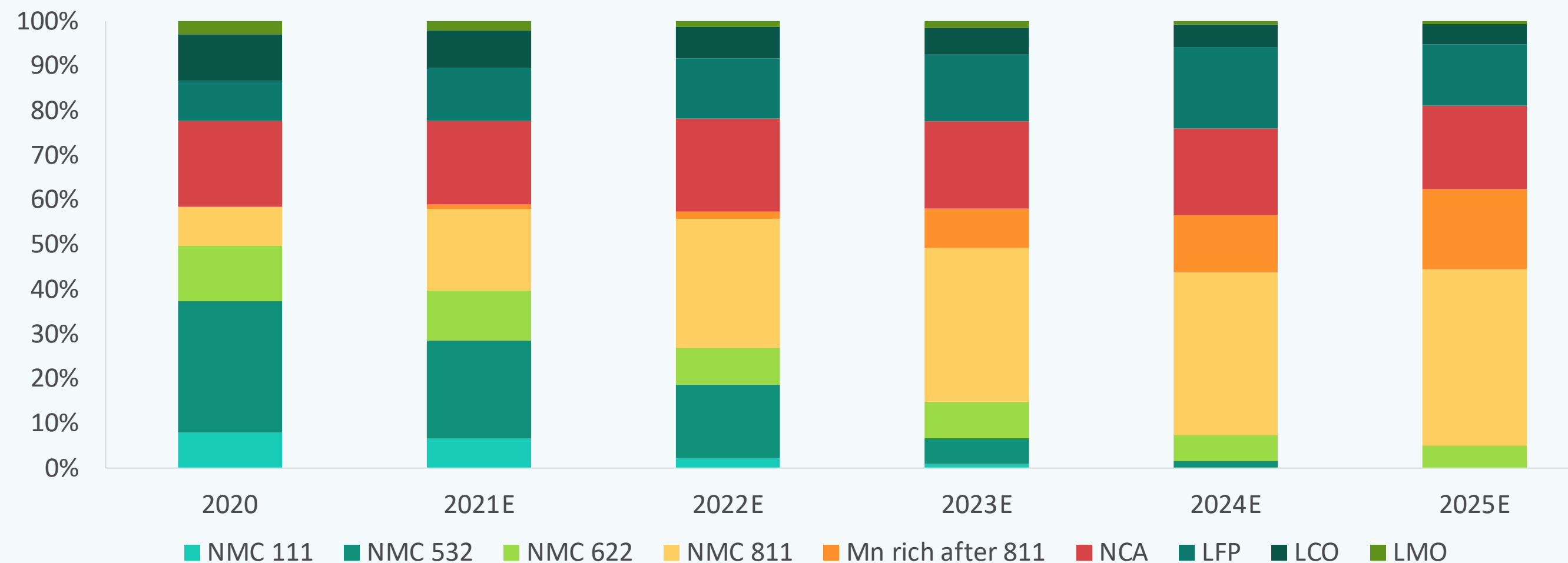


# NICKEL USE IN EVs

- NCA and NMC preferred due to smaller size, longer distance, and safety.
- Trend is to achieve longer distances by increasing cell pack capacity, which requires more Ni.
- Demand for Ni in EVs may be inelastic due to the minimal effect of Ni price vs. EV price:
  - At US\$25,000/t Ni, cost of Ni in NMC955 battery (high range) is US\$1,650. Increase of US\$5,000/t Ni results in cost increase of US\$330.

## Cathode Mix in EV Batteries

Preference for NCA and NMC811 batteries which have higher nickel intensities



Source: Select broker reports as of Jul 2021.

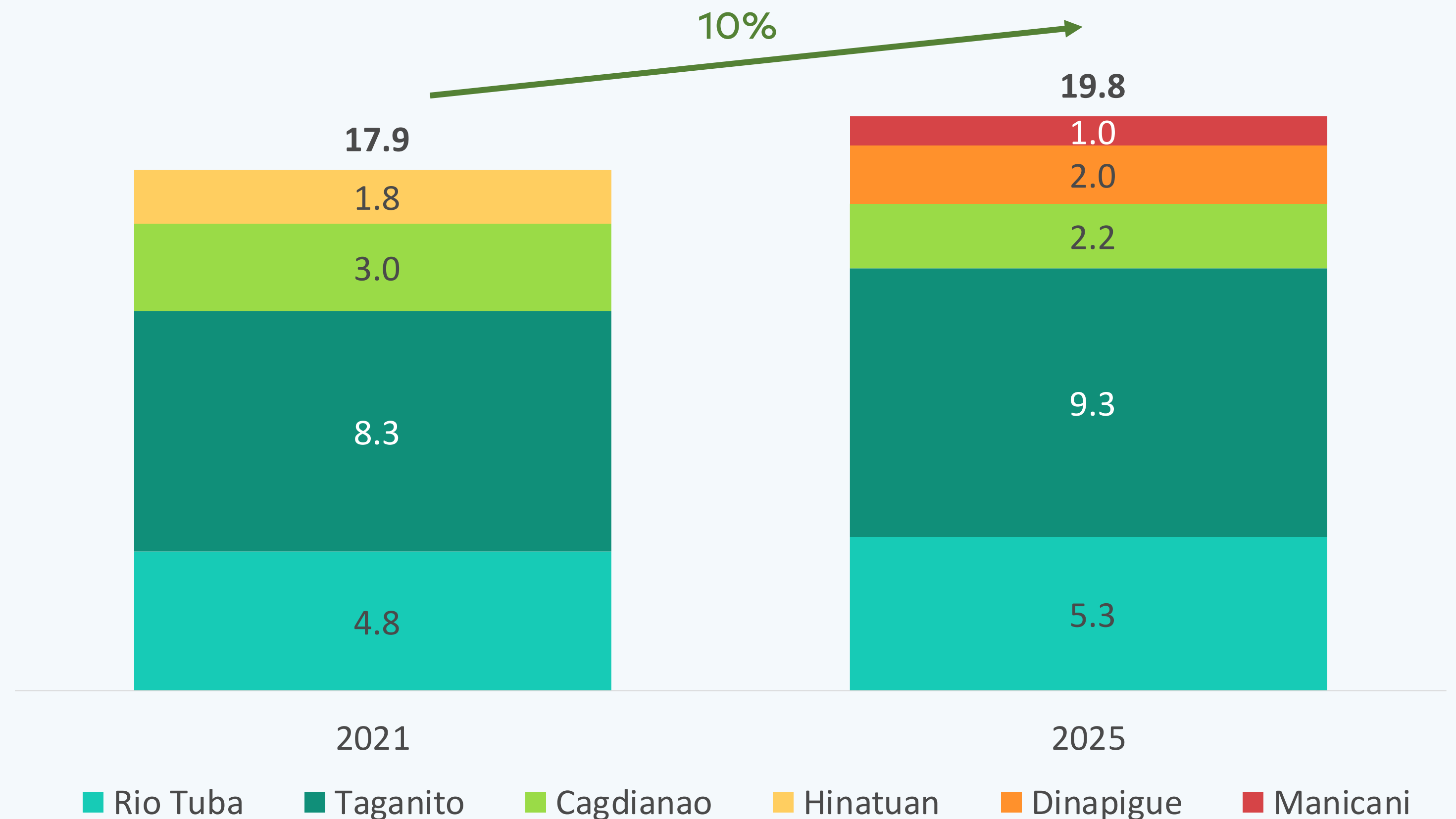


# ACHIEVING STABLE LONG-TERM NICKEL ORE OUTPUT

- Future cash dividends supported by stable nickel ore business:

  - Dinapigue - 750K WMT from 2022
  - Bulanjao - 1M WMT from 2023
  - Manicani - 1M WMT from 2024
- Remaining mine lives of existing operations from end-2025: RTN 13 years, TMC 7 years, CMC 3 years, DMC 23 years.
- Substantial exploration program yet to be done in Bulanjao (17% of MPSA drilled) and Manicani (38% of MPSA drilled).

Sales Volume (In Million WMT)



Source: NAC

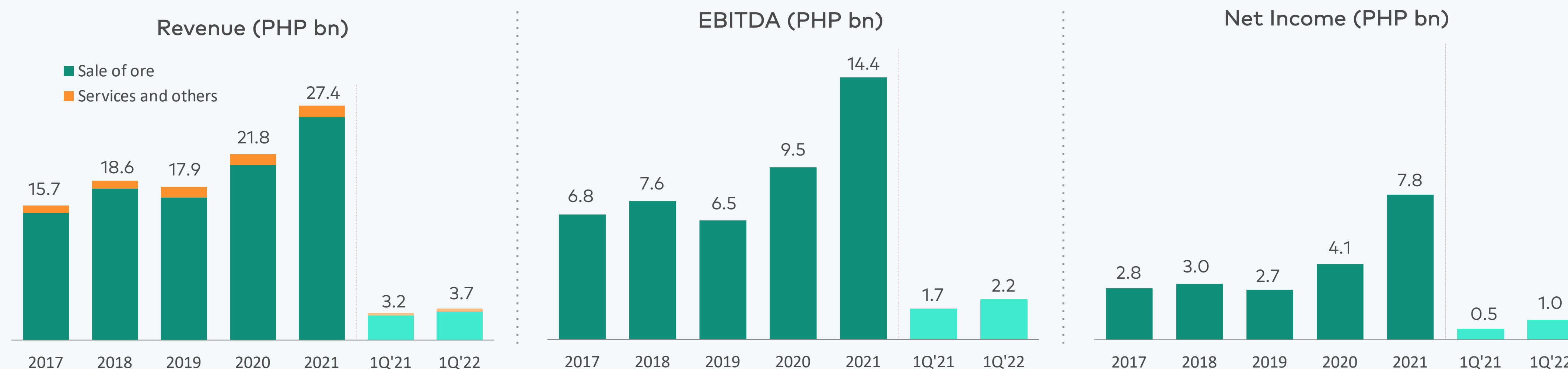


# DEVELOPMENT PIPELINE

	BULANJAO	MANICANI	KEPHA
Resources as of 12/31/2021	70M WMT @1.61% Ni	47M WMT @1.55% Ni	6M WMT @1.22% Ni
Percent of MPSA Area Drilled	22% of 3,553 hectares	38% of 1,165 hectares	2% of 6,981 hectares
Target Annual Production	4M+ WMT	2M+ WMT	2M+ WMT
Target Annual Product Mix	35% Saprolite 65% Limonite	50% Saprolite 50% Limonite	n/a
Pending Issues	Technical (Road Construction)	Regulatory (ECC Amendment)	Technical (Exploration)
Target Start Date	2023	2024	TBD



# FINANCIAL HIGHLIGHTS (FY 2017 to 1Q'2022)



	2017	2018	2019	2020	2021	1Q'21	1Q'22
EBITDA margin	44%	41%	36%	43%	53%	53%	60%
Net income margin <sup>2</sup>	18%	16%	15%	19%	29%	18%	29%
Ave. Ni LME price per pound (US\$)	4.72	5.95	6.32	6.25	8.39	7.97	11.97
Average price in US\$/WMT	Ore Exports	24.42	21.53	23.52	33.99	40.40	45.60
	HPAL Deliveries	6.31	9.97	8.19	8.33	12.11	11.29
Effective Ni Pay factor <sup>1</sup>	Ore Exports	24.67%	16.30%	16.94%	25.18%	24.11%	29.36%
	HPAL Deliveries	7.77%	8.10%	8.21%	8.33%	8.81%	8.68%
Cash dividend payout ratio of PY earnings <sup>2</sup>	31%	115%	32%	152%	151%	n.a.	n.a.

Source: Company Data

1. Ni Pay factor is the ratio of revenue to LME price for each unit of contained nickel sold.

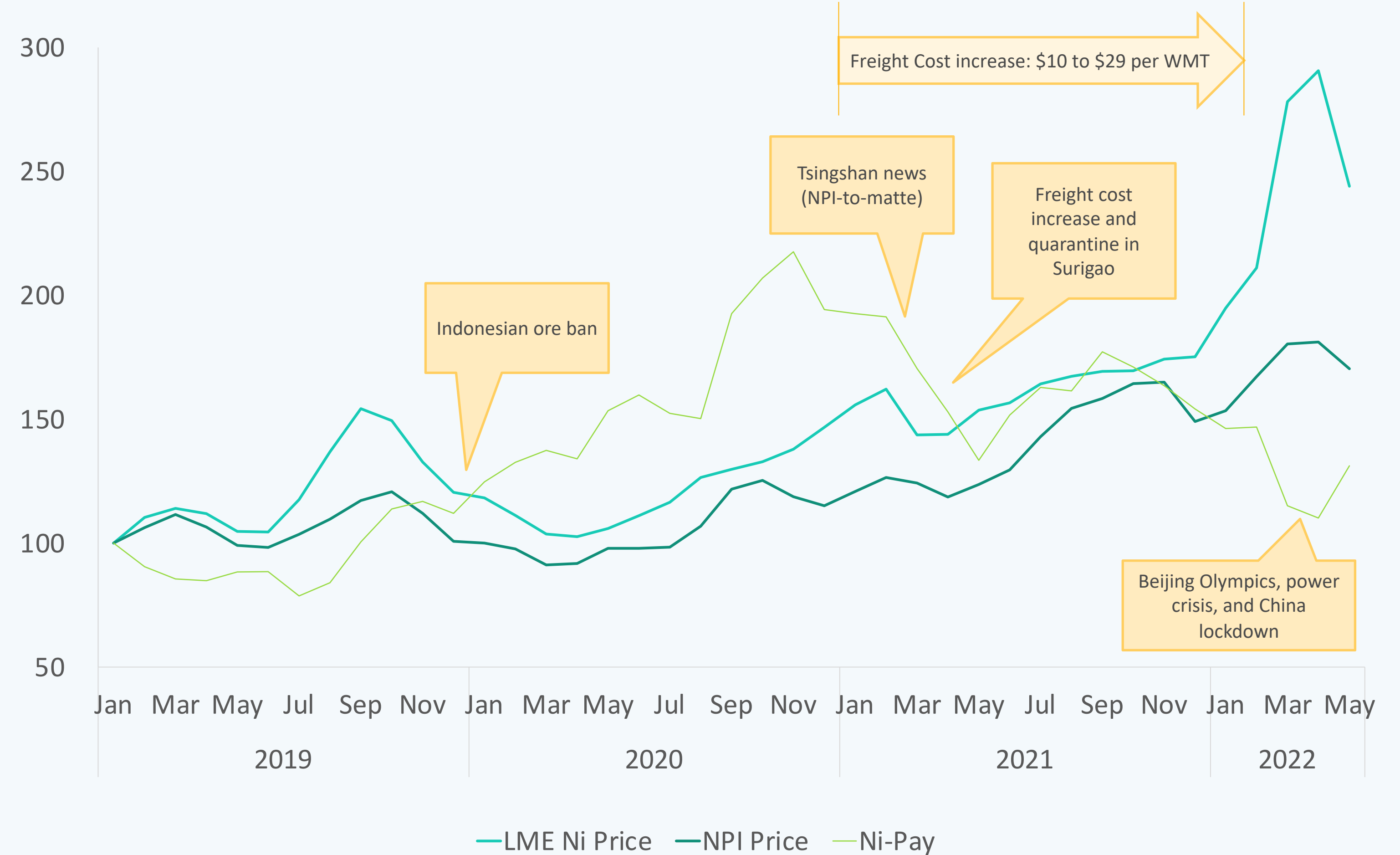
2. The cash dividend paid on April 7, 2022 represents 38% of PY earnings.



# LME AND ORE PRICE TRENDS

- LME Ni and Ni-Pay Factor (Ni-Pay) started rising from mid-2019 in anticipation of Indonesian Ni ore ban.
- The dip in LME Ni in Q1 2021 was due to news of Tsingshan's Ni-to-matte process. Otherwise, trend is upward.
- Sharp decline in Ni-Pay from early 2021 mainly due to rising freight costs.
- COVID restrictions in the Philippines eased in May 2021.
- LME Ni and Ni-Pay from Q4 2021 diverged, due to:
  - Class Divide (EVs = Class 1 Ni)
  - China supply chain disruptions
  - Fuel price

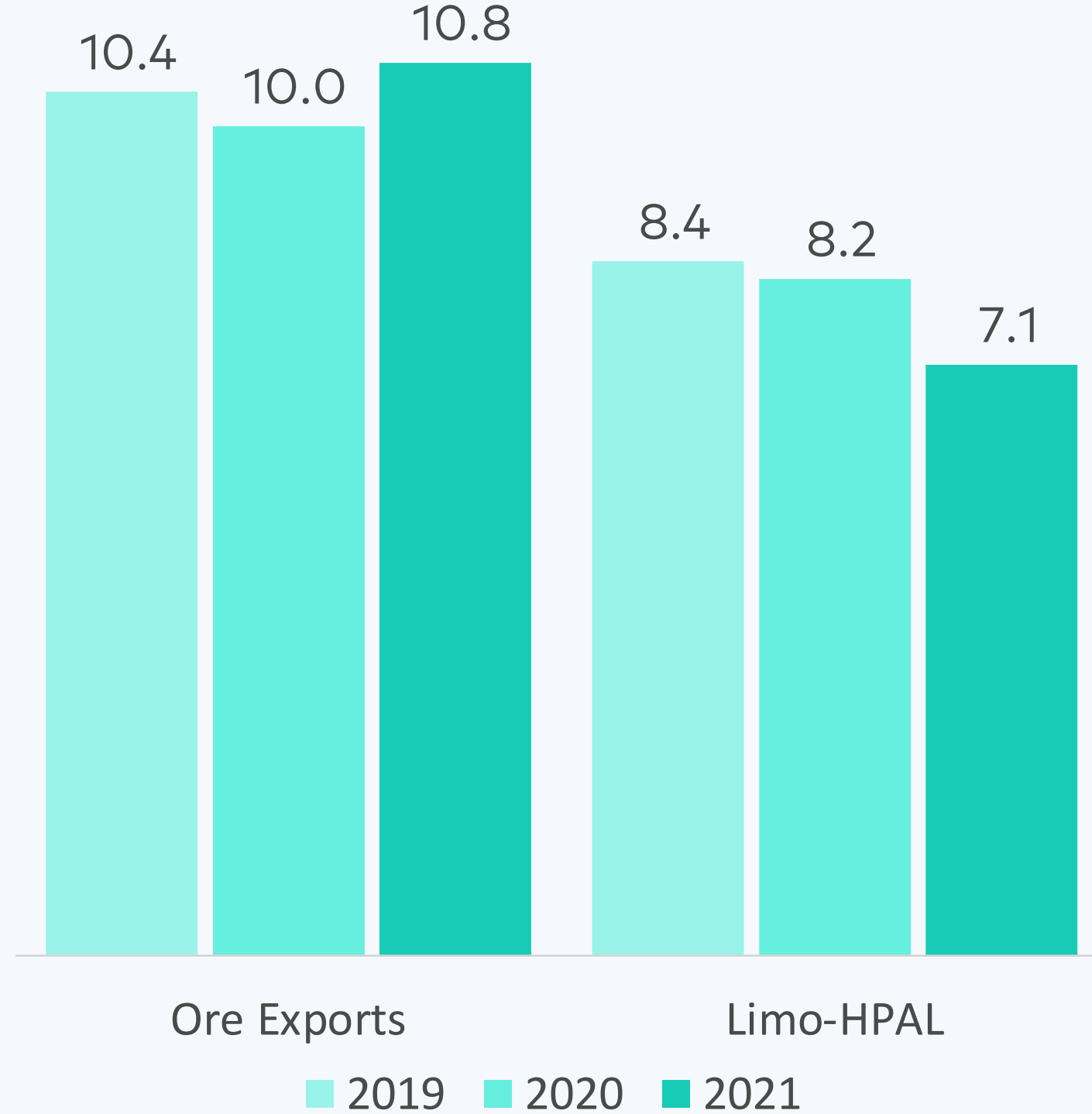
LME Ni Price, NPI Price and Ni-Pay Rebased to 100



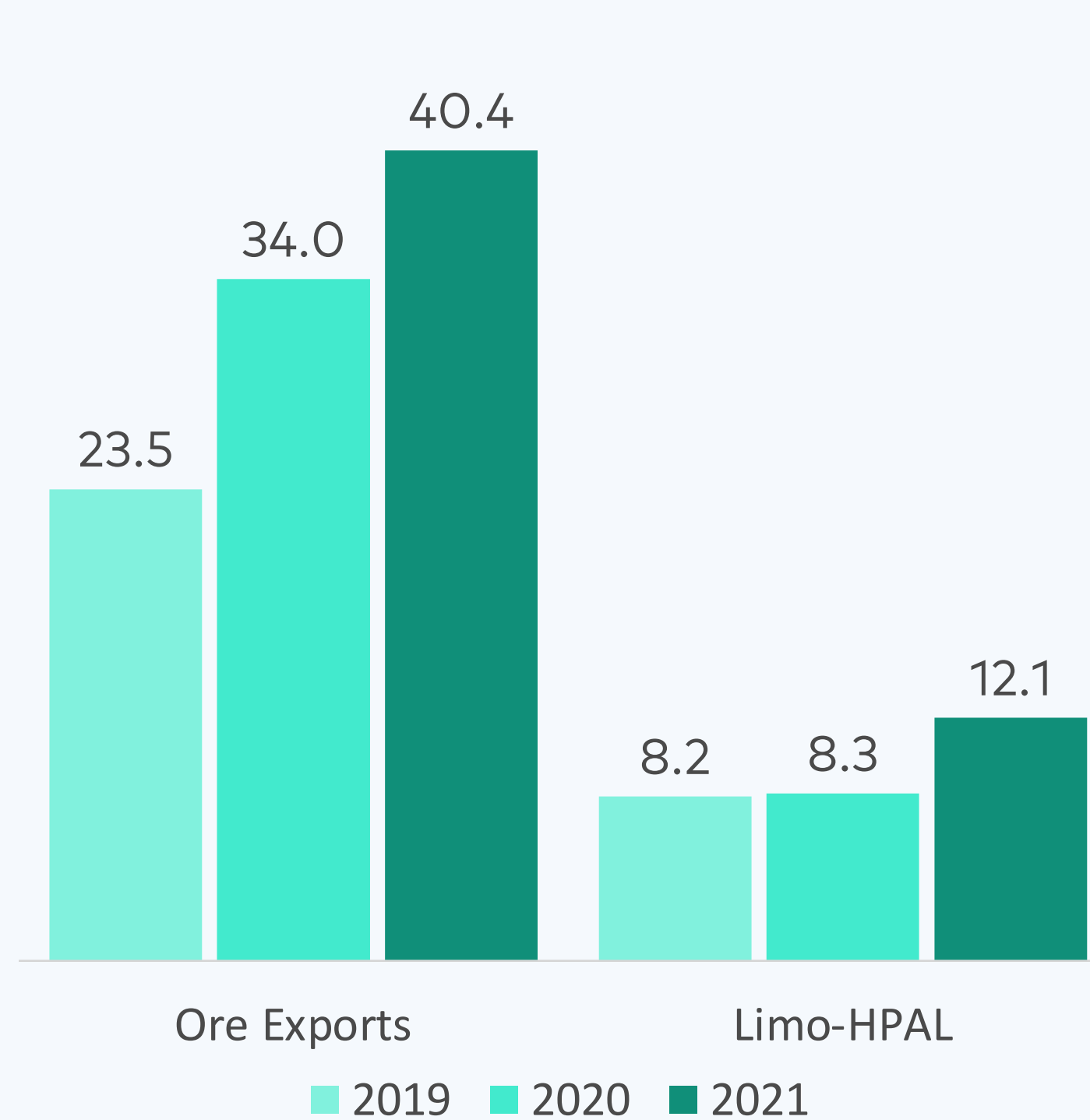


# SHIPMENTS AND REVENUES BY ORE TYPE (FY 2019 TO 2021)

Shipments by Ore Type  
(mWMT)



Prices by Ore Type  
(US\$/WMT)

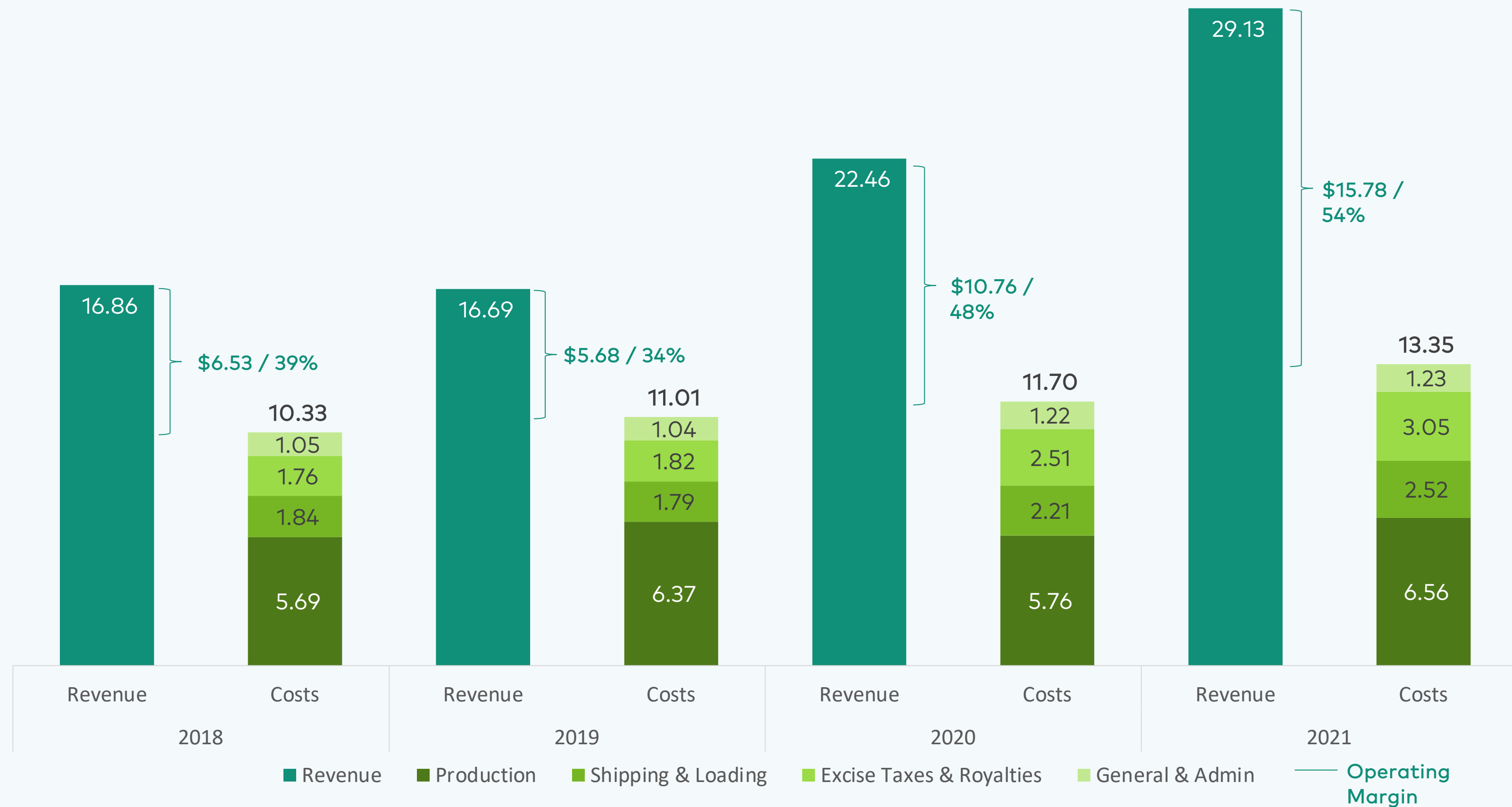


Revenue by Ore Type  
(PHPbn)





# REVENUE VS. CASH COSTS BREAKDOWN (IN US\$/WMT)



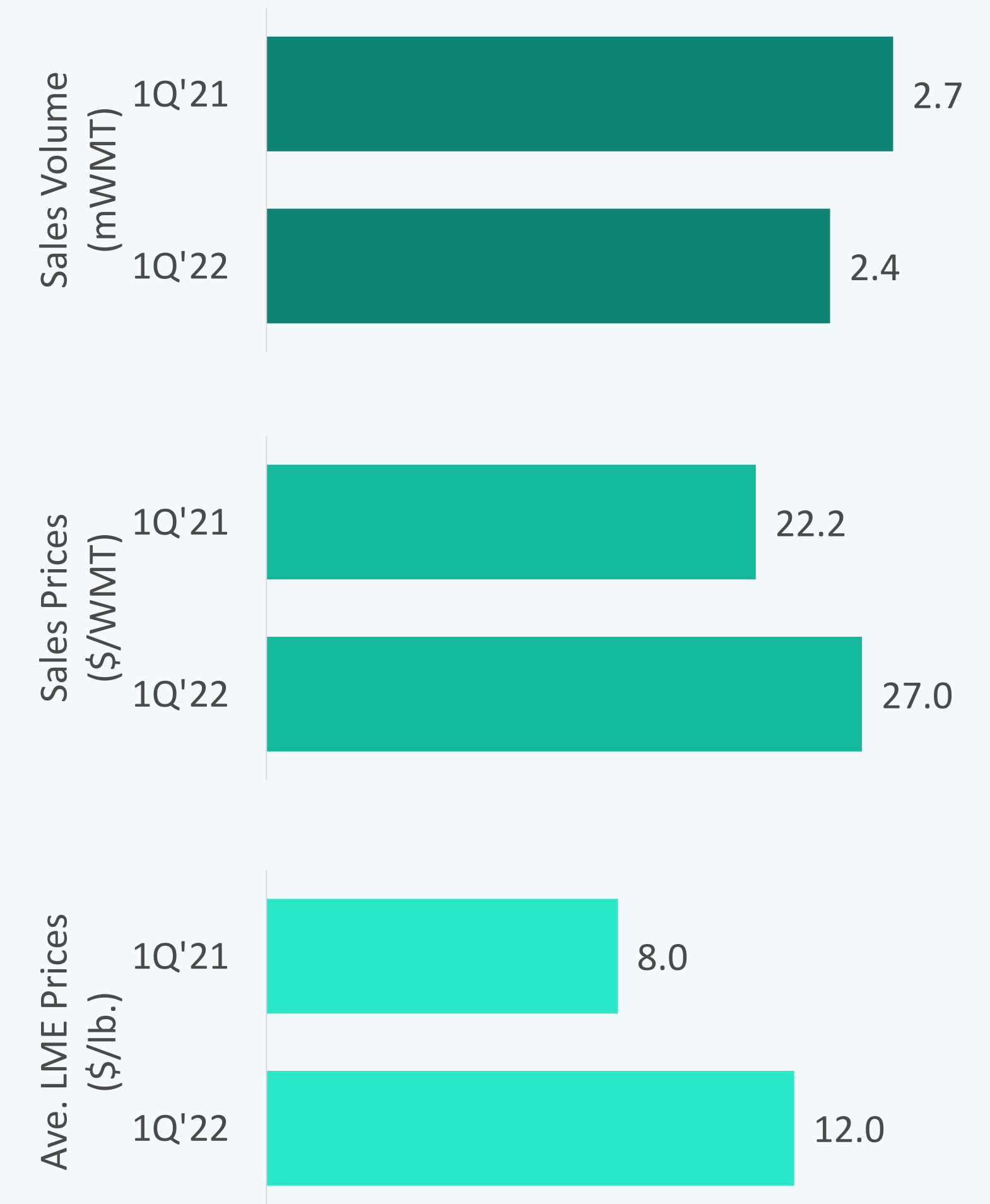
## Cash Costs per WMT 2021 vs. 2020:

- ▲ \$0.54 increase in Excise Taxes and Royalties as a result of higher ore prices
- ▲ \$0.25 from increase in fuel price
- ▲ \$0.21 from higher contactors' fees due to longer hauling distance
- ▲ \$0.28 from higher personnel costs due to employee regularizations, salary increases, and employee financial assistance after Typhoon Odette



# FINANCIAL HIGHLIGHTS (1Q'21 vs 1Q'22)

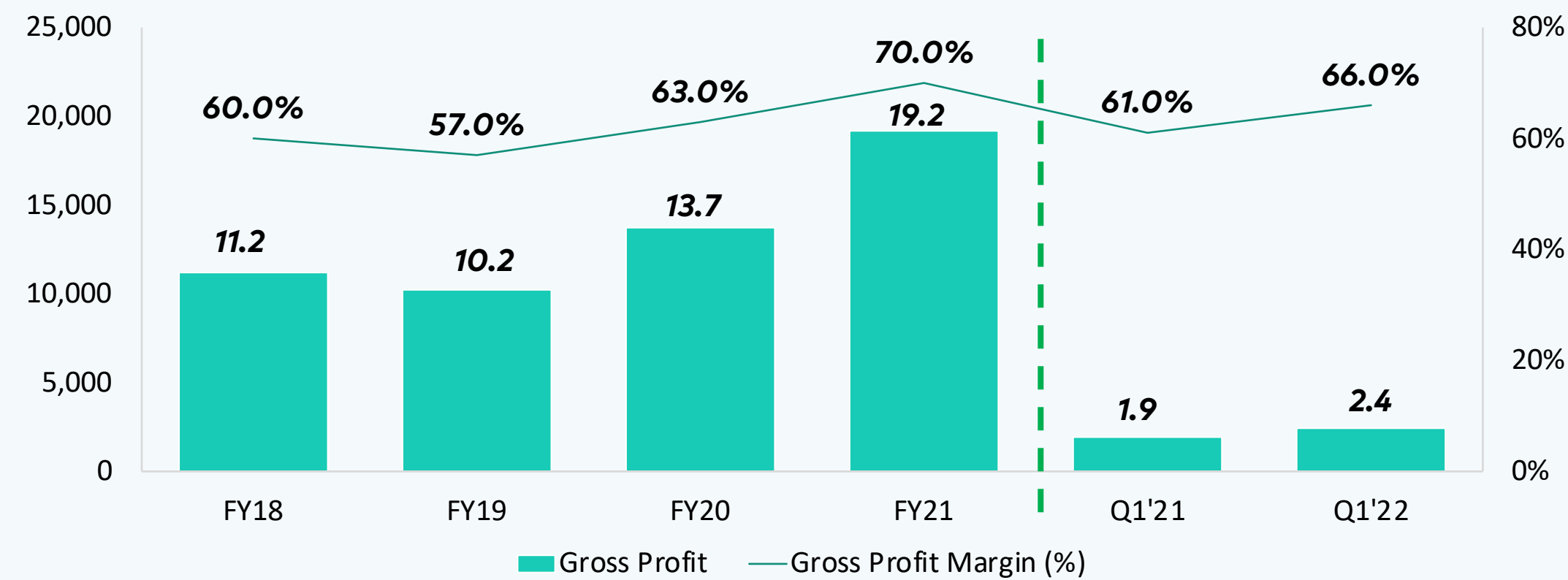
In PHPm	1Q'2021	1Q'2022	% Diff
Revenue	3,168	3,693	17%
Cost and Expenses	(1,850)	(1,897)	3%
EBITDA	1,689	2,203	30%
Finance Loss – Net	6	(41)	-683%
Equity Income	115	305	165%
Other Income (Charges)	11	26	136%
Prov. For Income Tax	(480)	(499)	4%
Net Income	969	1,587	64%
Attributable Net Income	584	1,054	80%



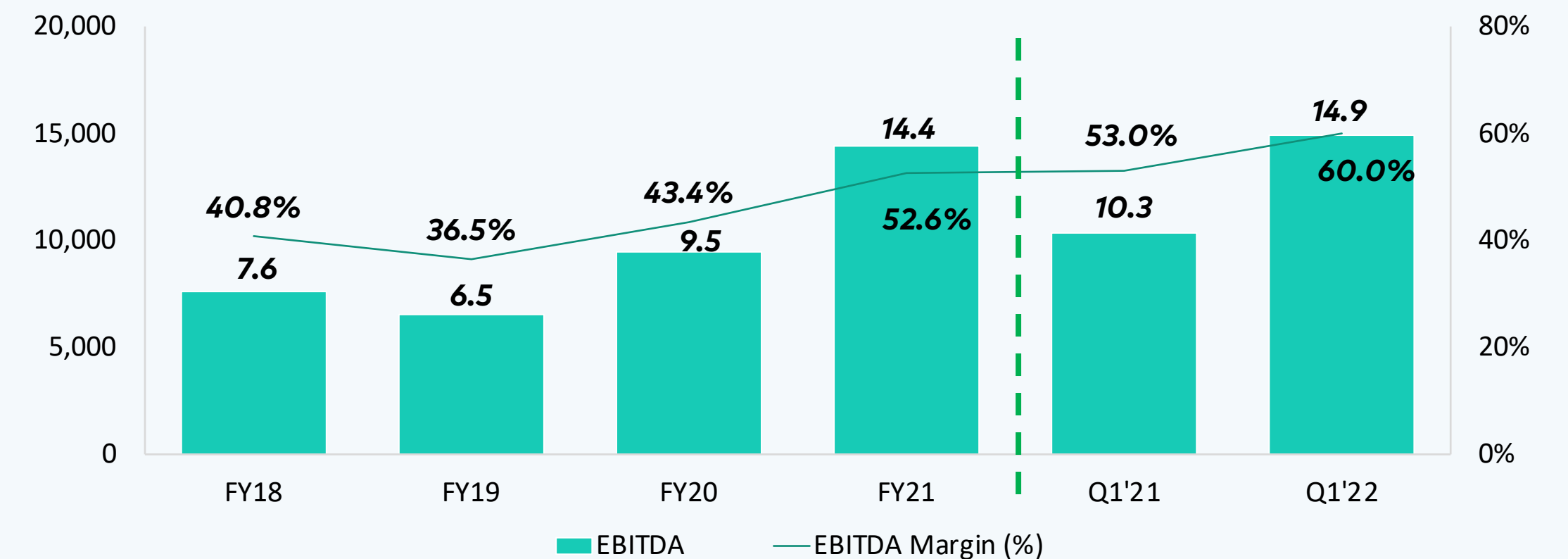


# NAC'S STRONG FINANCIAL PERFORMANCE

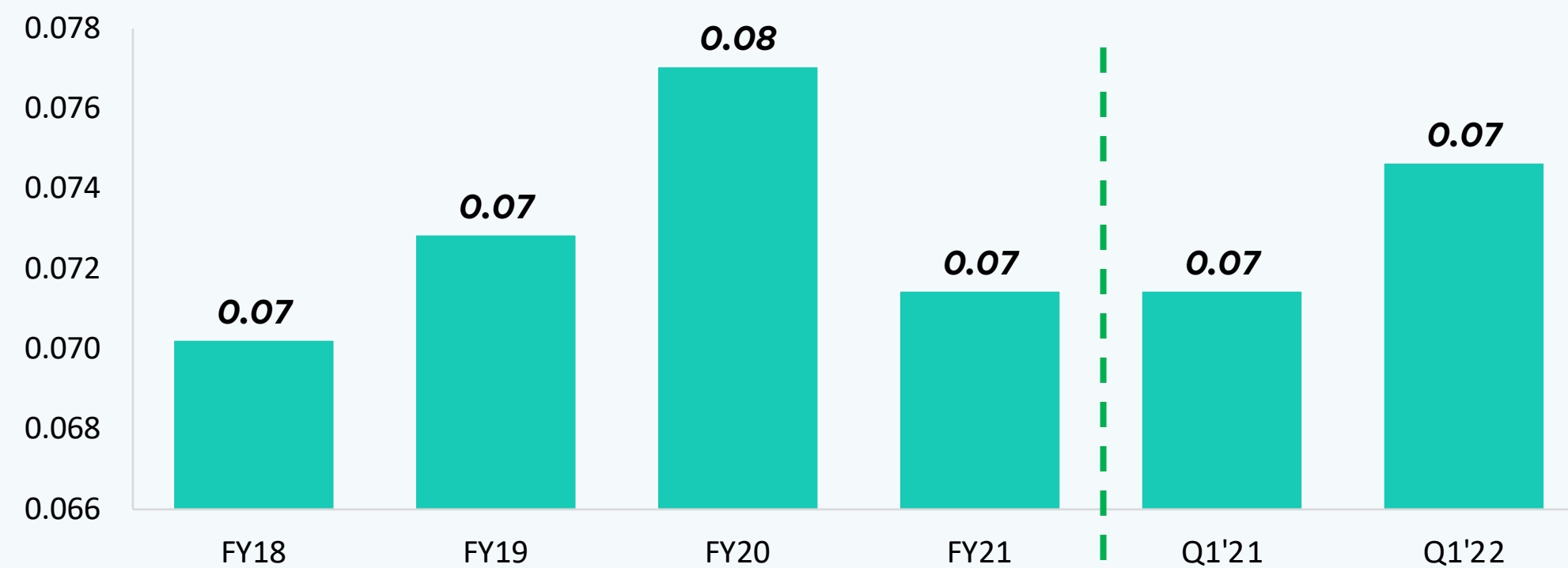
Gross Profit (PHP bn) & Gross Profit Margin (%)



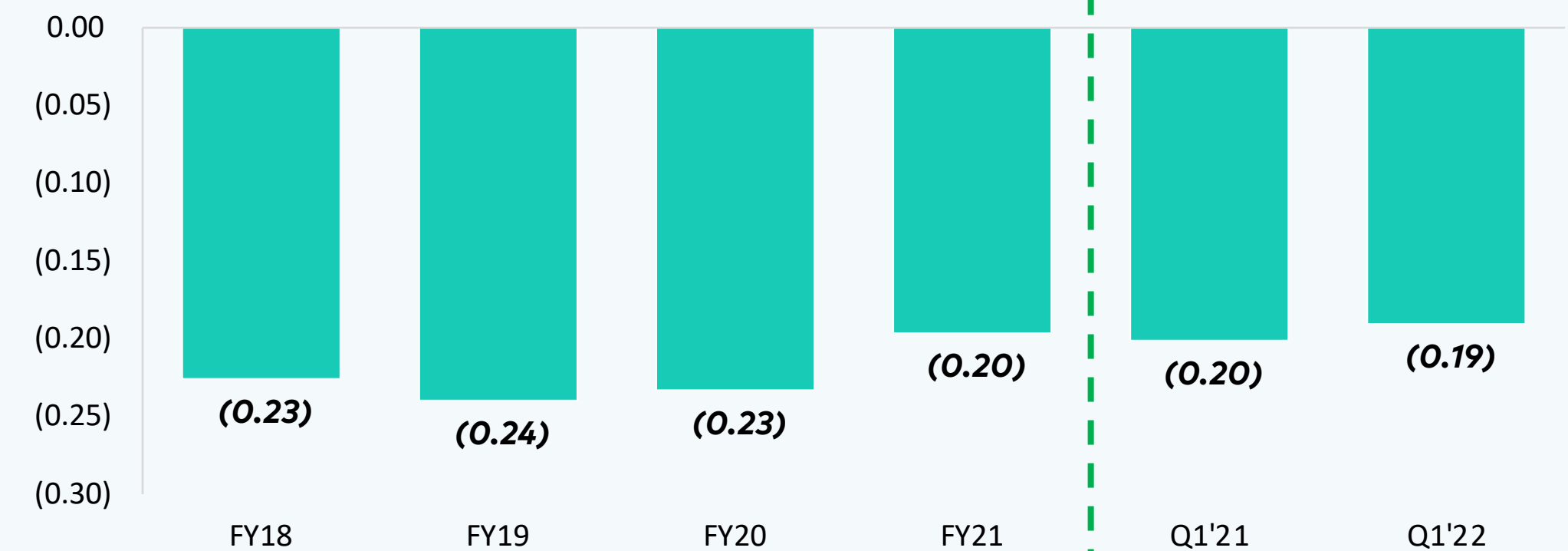
EBITDA<sup>3</sup> (PHP bn) & EBITDA Margin (%)



Total Debt<sup>1</sup> / Total Assets (x)



Net Debt<sup>2</sup> / Total Equity (x)



Source: Company Annual and Quarterly Reports.

Notes:

(1) Total Debt includes short term debt, long term debt, fixed payment obligations such as lease liabilities and pension payments.

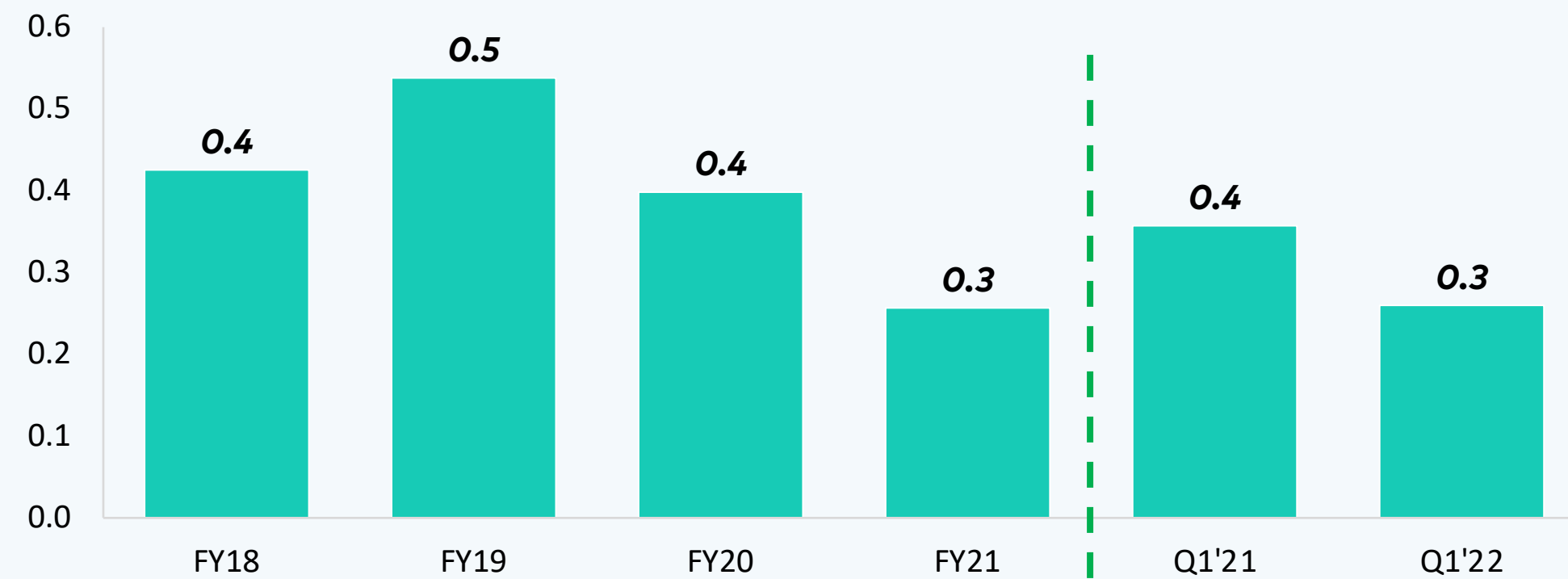
(2) Net Debt is calculated by subtracting cash and cash equivalents from Total Debt;

(3) EBITDA used is calculated on the sum of the last four quarters

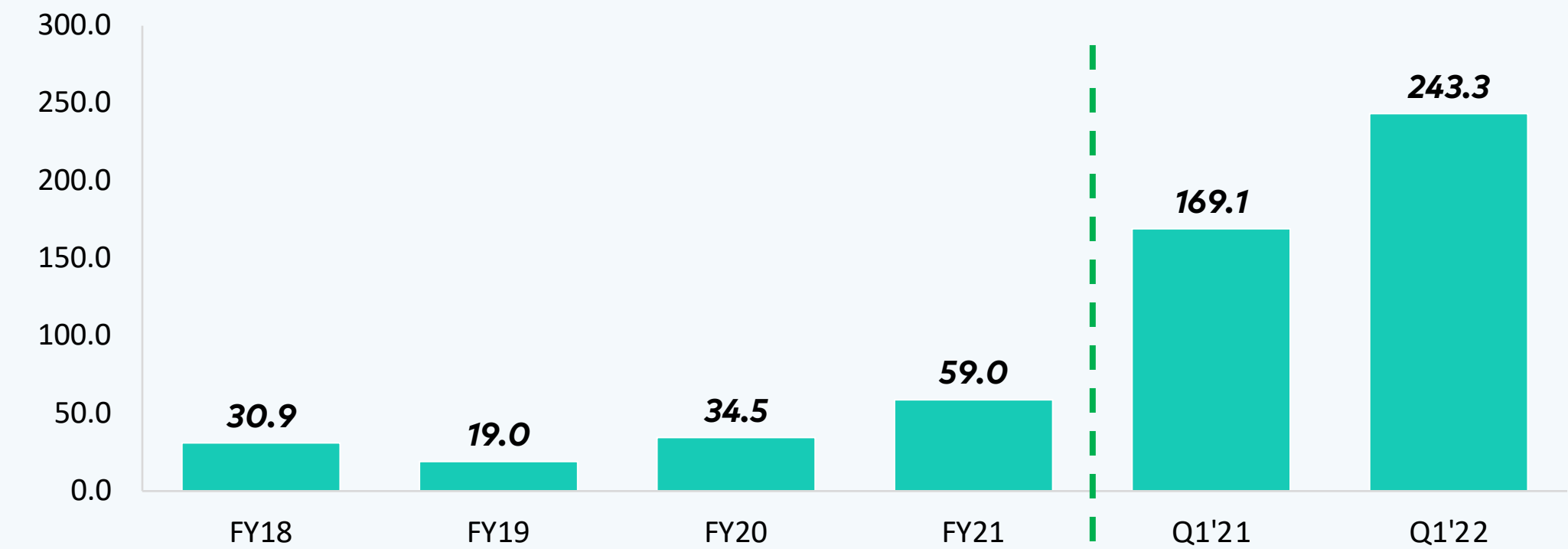


# NAC'S PRUDENT CAPITAL STRUCTURE

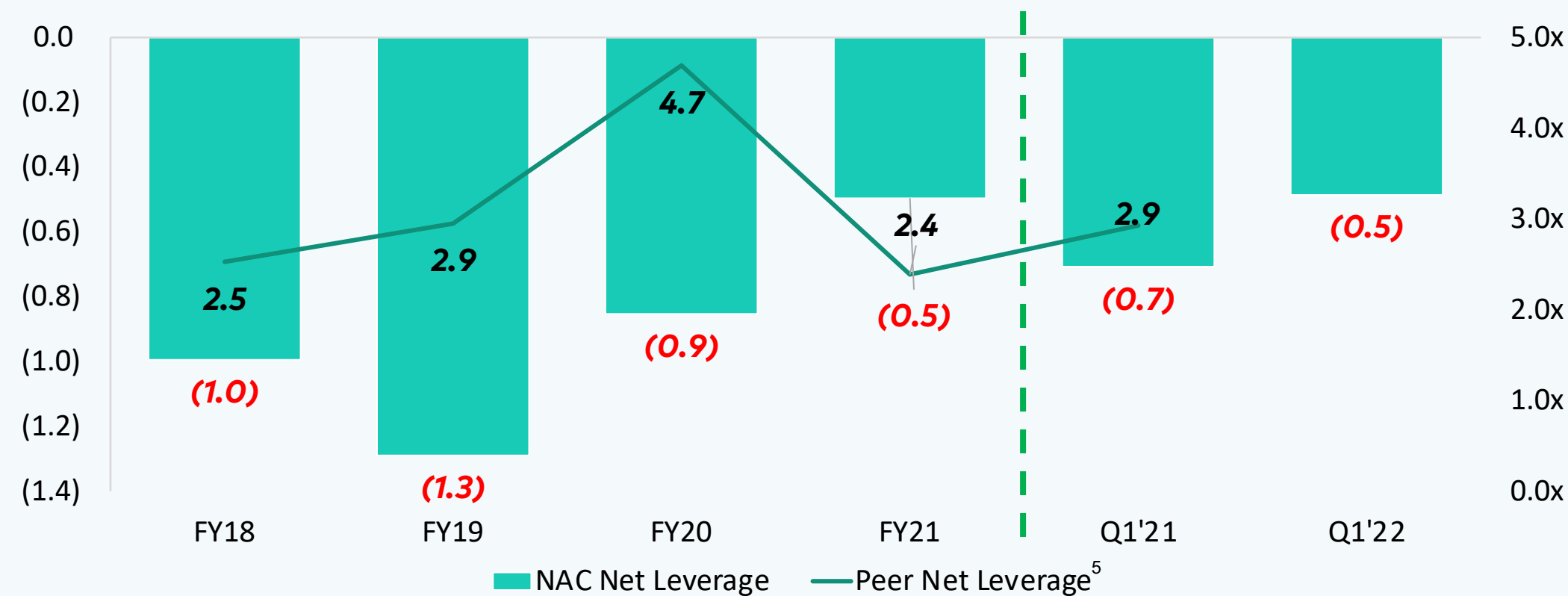
Total Debt<sup>1</sup> / EBITDA (x)



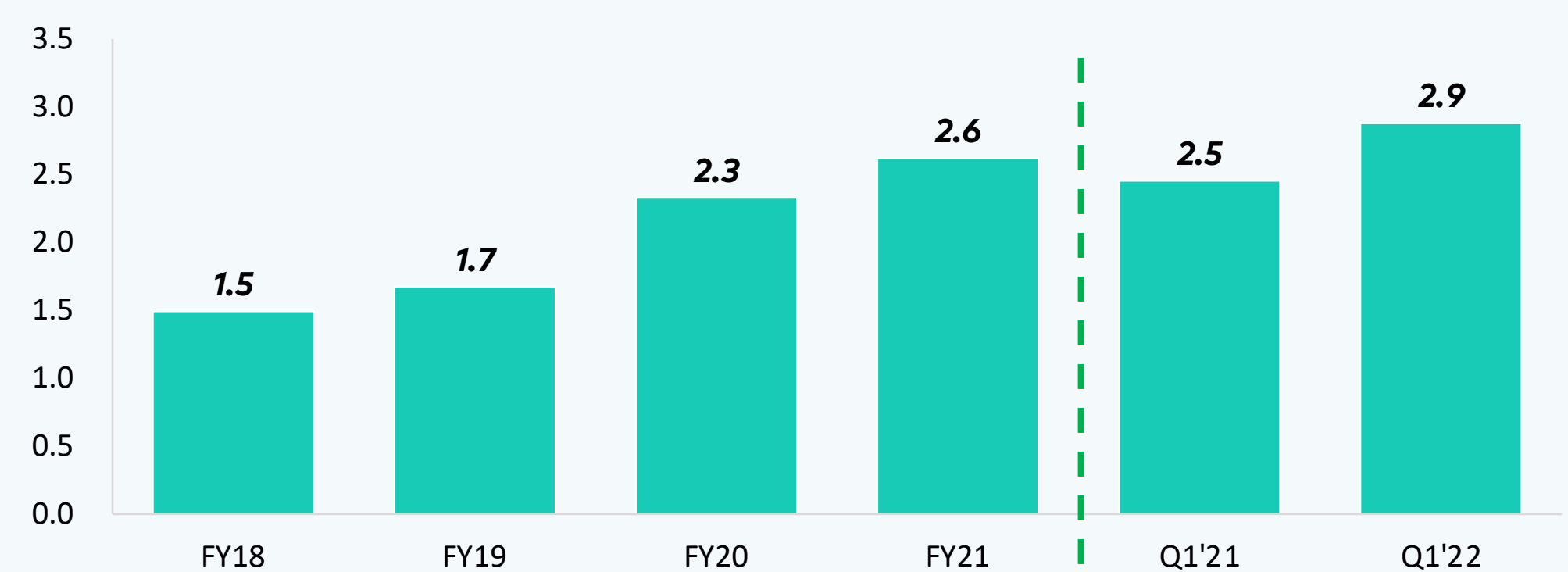
EBITDA Interest Coverage (x)<sup>3,4</sup>



Net Debt<sup>2</sup> / EBITDA<sup>3</sup> (x)



Cash Flow from Operating Activities / Total Debt (x)<sup>1</sup>



Source: Company Annual and Quarterly Reports.

Notes:

(1) Total Debt includes short term debt, long term debt, fixed payment obligations such as lease liabilities and pension payments.

(2) Net Debt is calculated by subtracting cash and cash equivalents from Total Debt;

(3) EBITDA used is calculated on the sum of the last 4 quarters

(4) Interest used is calculated on a last twelve months basis;

(5) Peers include ICTSI, Jollibee, Aboitiz Equity Ventures, Vista Land & Lifescapes, Nickel Mines Ltd, Fortescue Metals Group, JSW Steel and China Hongqiao

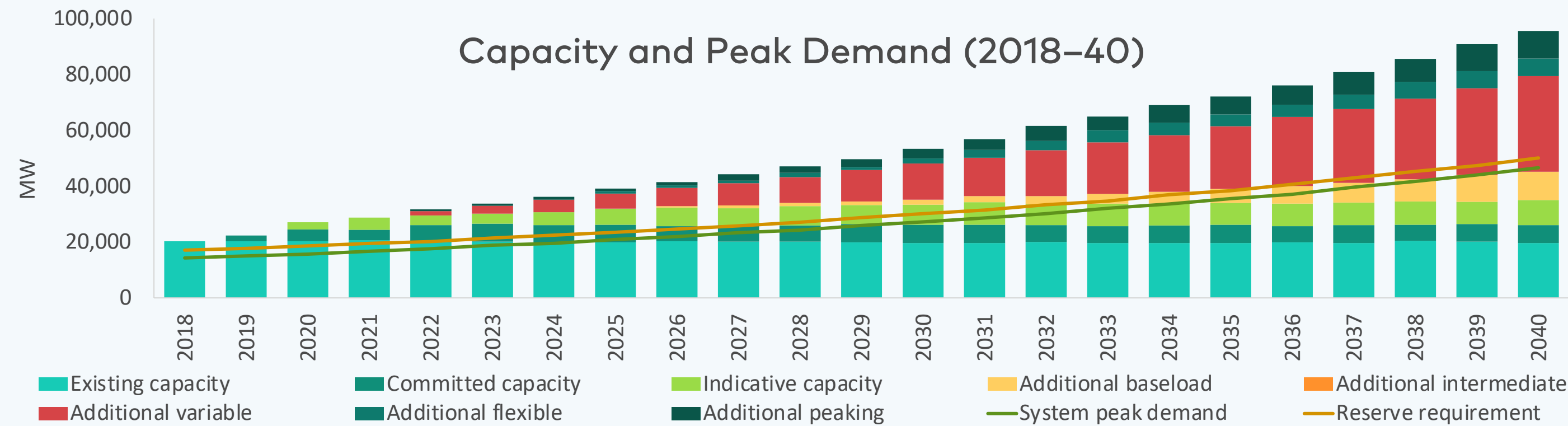


# RENEWABLE ENERGY



# PHILIPPINE SHIFT TO RENEWABLE ENERGY

- Demand growth of 6%+ p.a. until 2040, exceeding dependable capacity by 2024:



- Key drivers of electricity consumption:

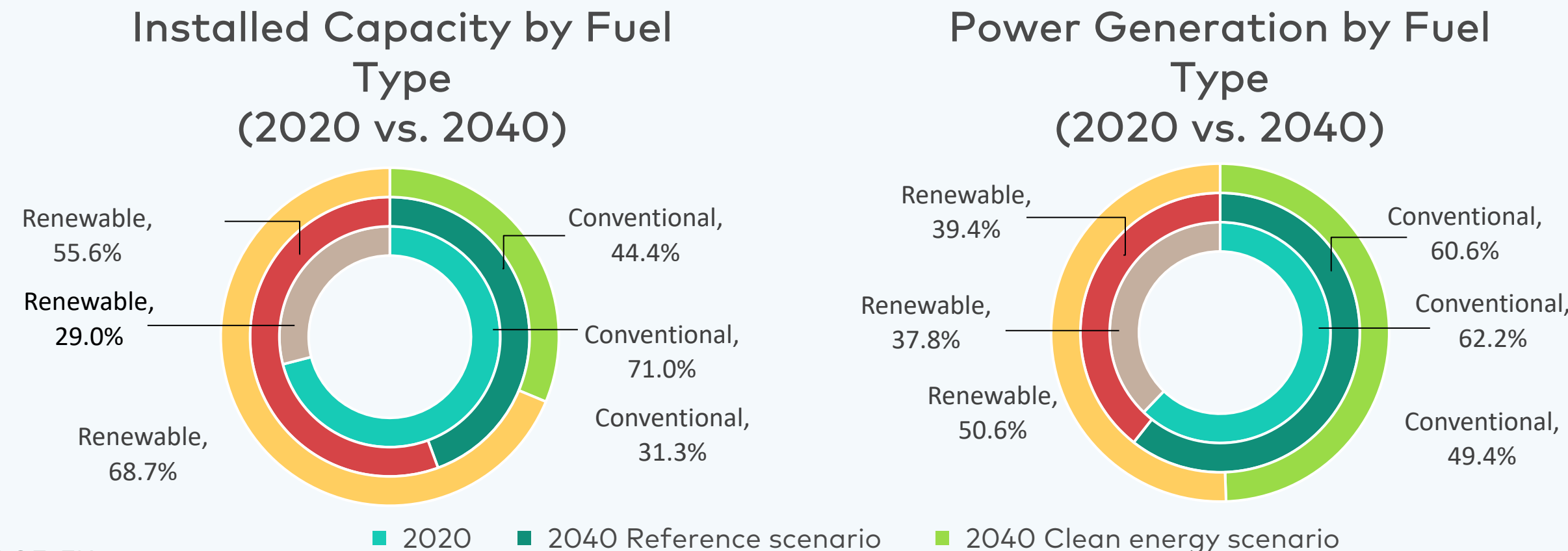


Strong macroeconomic and demographic growth



Government goal to achieve 100% electrification rate by 2022

- Over 50% of electricity demand to be supplied by RE by 2040, half from solar:



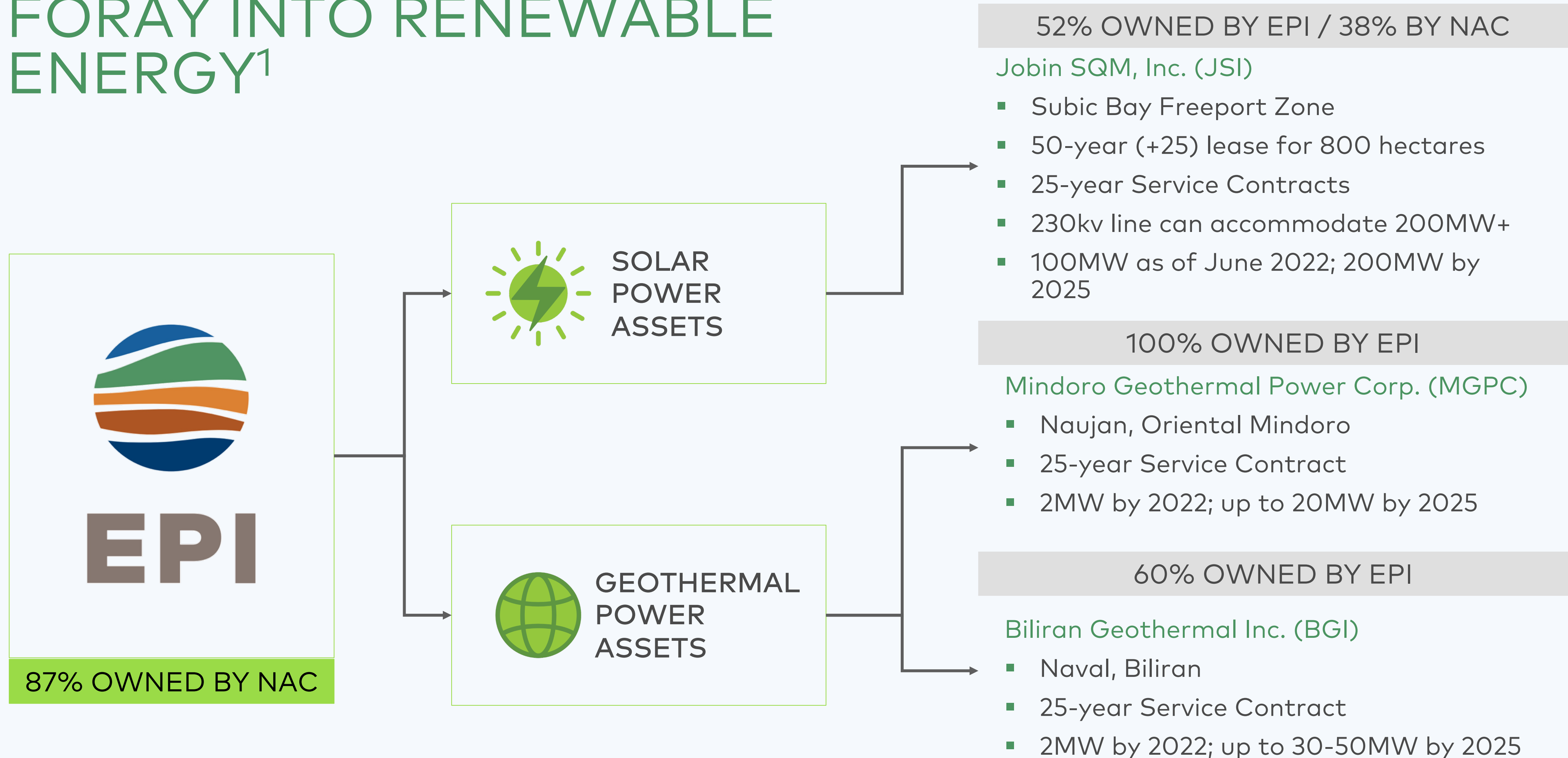
- RE development facilitated by favorable government policies:

- ✓ Feed-in Tariff
- ✓ Renewable Portfolio Standards (RPS)
- ✓ Green Energy Auction
- ✓ Green Energy Options

Source: DOE, EIA



# FORAY INTO RENEWABLE ENERGY<sup>1</sup>



Notes: (1) NAC standalone renewable plans prior to EPI and Shell Joint Venture partnership for development of renewable energy.

# EPI ALREADY EXECUTING ON ITS RENEWABLE STRATEGY

	Solar (JSI)	Geothermal (MGPC)	Geothermal (BGI)
Target Capacity by 2025, MWs	200 (100 existing)	2 – 20	2 – 50
Expected Energy Generation, MWh Per Year	309,000	16,000 – 161,000	16,000 – 403,000
Target Offtake Arrangements and WESM Exposure	70% Contracted 30% WESM Must-Dispatch	100% Contracted	70% Contracted 30% WESM Priority Dispatch
Expected Gross Revenue Per Year Average market prices expected to be at PHP4.5/KWh for solar and PhP5.5/KWh for geothermal	PhP1.4 billion	PhP89 – 886 million	PhP89 – 2,216 million
Expected EBITDA Margin	82%	40% – 85%	55% – 80%
Expected Emission Reduction, t-CO <sub>2</sub> /MWh Based on DOE's Grid Emission Factor	211,268	9,600 – 96,370	9,600 – 240,930



# PARTNERSHIP WITH SHELL A SIGNIFICANT MILESTONE IN ACHIEVING ITS STATED STRATEGY

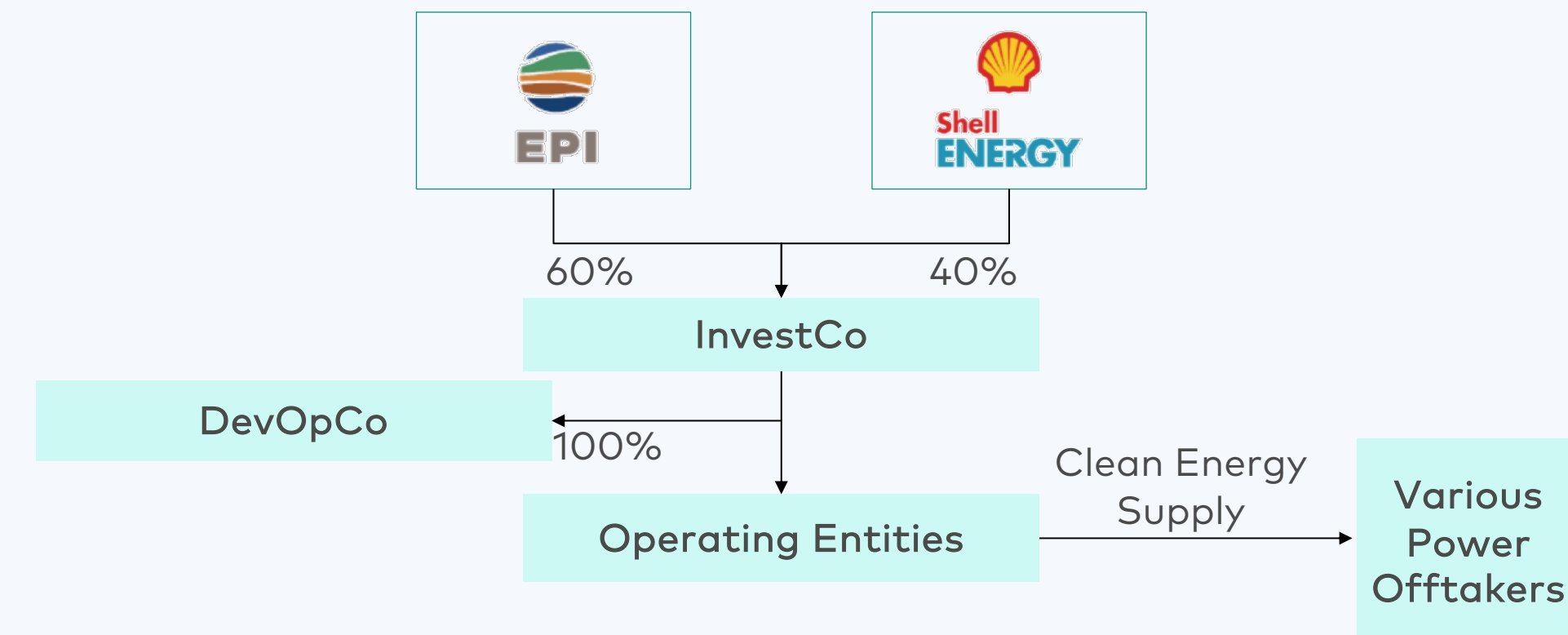
## Overview of Joint Venture

- On July 1, 2022, EPI and Shell signed a Joint Venture ("JV") partnership to jointly develop, own, operate, and maintain onshore renewables projects in the Philippines
- Initial focus on utility scale grid-connected solar PV in Luzon and Visayas while evaluating opportunities in onshore wind and energy storage systems
- Capacity target of 1GW by 2028 with ambitions of up to 3GW

## Key areas of strategic partnership and collaboration

- 1 Establishing a strategic partnership with well-established, global players like Shell further propels EPI's expansion into renewable energy
- 2 The partnership leverages on Shell's technical expertise and integrated solutions as a global energy company
- 3 Opportunity to provide integrated value to customers through exploring synergies with retail electricity supplier Shell Energy Philippines
- 4 Tap into additional areas of synergies and operational collaboration between Shell and EPI

## Illustrative Corporate Structure



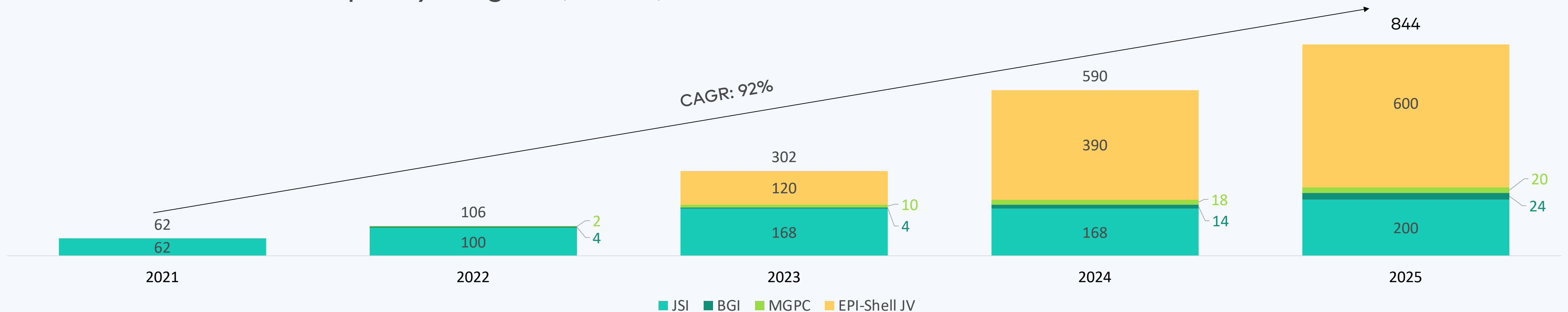
## Overview of Shell

- Global reach with 100+ years of global energy market experience and deeply embedded capabilities
- Well positioned to offer integrated decarbonisation solutions for its customers in progressing through the energy transition
- The partnership reinforces Shell's view of the Philippines as an important market

# KEY MILESTONES FOR EPI-SHELL JV



EPI Renewable Power Capacity Targets (in MW)





# OPTIMIZE FINANCING STRATEGY AT NAC AND EPI TO FUND GROWTH



NAC invests shareholder funding into EPI, sourced from NAC's diversified funding channels, ranging from its cash and potentially supported by tapping into the capital markets

EPI raises further funding via prudent levels of limited recourse debt, as well as potential investments from any partners

As EPI scales up, the business may explore unsecured funding from the debt capital markets

An IPO at the right time is an option for future financing needs of EPI





# INVESTMENT PARAMETERS

In selecting sites, we follow these criteria:

- Irradiance or wind resources assessment are better than average
- Possessory rights are clear and robust
- Viable and cost-effective connection solution to the grid
- ESG best practices can be implemented

In developing solar farms, depending on the site, we are targeting:

10-15%

Project IRR

12-20%

Equity IRR

75-85%

EBITDA Margin

25-35%

Net Income Margin

60-75%

Non-Recourse Debt

An assumed tariff of PHP

4.5/kWh



Net income of PHP

150-250 mm

Per 100 MW of solar capacity



# ESG



# ESG IN OUR DNA



CARBON  
NEGATIVE  
OPERATIONS

## BY THE NUMBERS

6M

Number of trees planted from 2017-2021

900

Hectares rehabilitated from 2017-2021

\$26M

Spent for mandated and voluntary CSR from 2017-2021, which have elevated the living standards in our mining communities

\$46M

Expenditures for Environmental Protection (EPEP) from 2017-2021

\$422M

Taxes and royalties paid from 2017-2021



PHILIPPINE RED CROSS MTL LABORATORY, SURIGAO CITY



# ESG IS KEY TO OUR LONG-TERM GROWTH STRATEGY

In November 2021, the Board has approved a new vision to (1) achieve the highest standards in the responsible utilization of Philippines's natural resources; (2) become leading ESG investments in Philippines

## 3 Pillars of NAC's ESG Roadmap

### Environment

- Net Zero Carbon
- Net Positive biodiversity
- Net Positive Water Impact
- Waste Management
- Energy Efficiency
- Climate Resilience
- Mine Sites Conversion

### Social

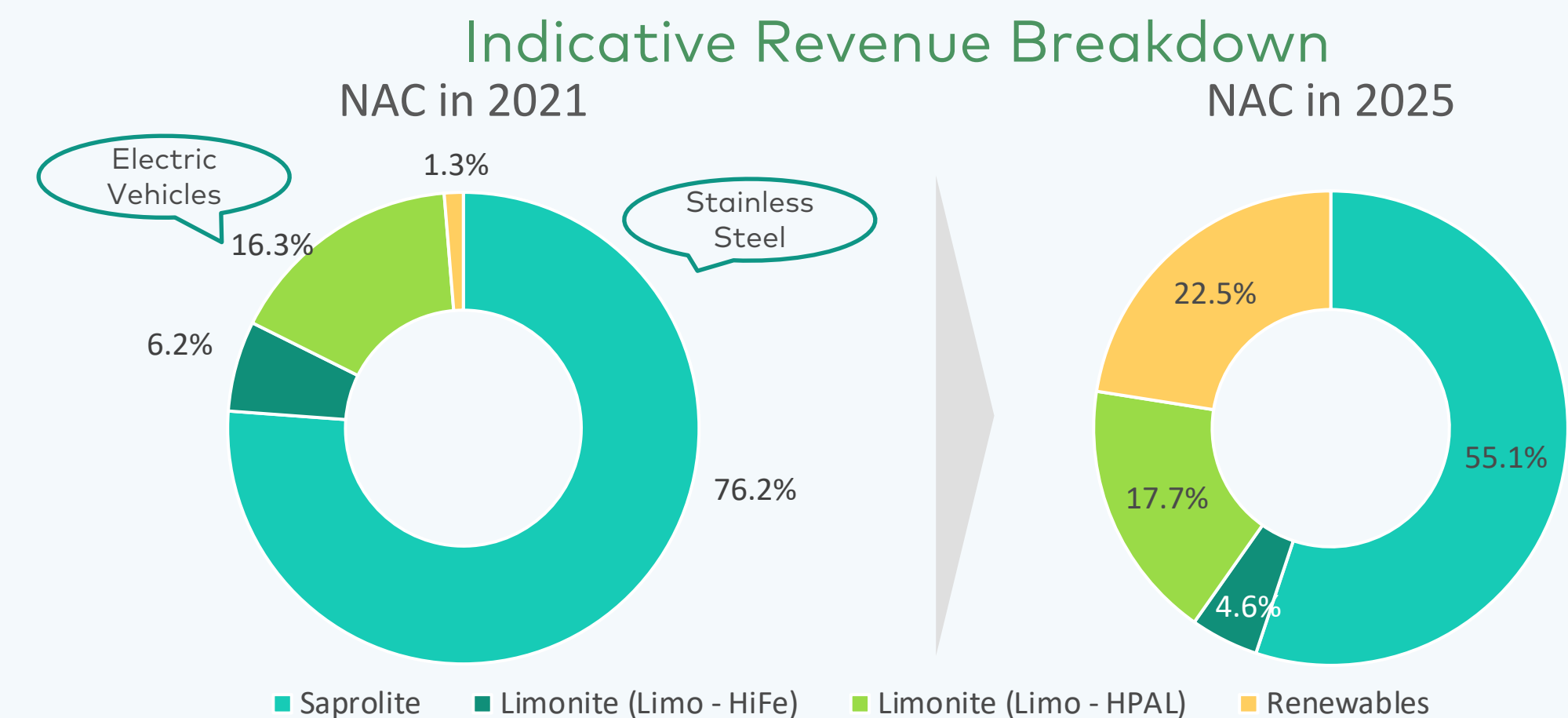
- Health, Safety & Well-being of Employees
- Equal opportunities & Decent Work
- Sustainable Communities after Conversation
- Community Contributions
- Indigenous Peoples Partnership

### Governance

- Inclusive Leadership & Management
- Strong Organizational Structure
- Robust & Comprehensive Risk Management System

## Portfolio positioned for sustainable future with substantial expansion plan in renewables

- 1 Nickel demand for EVs: robust growth forecasted with NAC's end products in EV batteries given its most successful implementation of HPAL technology
- 2 Nickel demand for stainless steel: steady growth driven by many sectors representing integral part of modern life
- 3 NAC intends to substantially grow its renewables portfolio with its goal of reaching 1GW capacity by 2028





# BRINGING ESG TO LIFE: MINE CONVERSION OPTIONS

EPI SOLAR FARM,  
SUBIC, ZAMBALES



SOLAR FARM CONVERSION OPTION: convert mined-out areas into solar farms like this facility in Subic, Zambales, owned and operated by NAC subsidiary, Emerging Power, Inc.

GAMAWA,  
SURIGAO DEL NORTE



AQUAFARM CONVERSION OPTION: create aquafarms in partnership with national government agencies and Peoples' Organizations on the ground like this fishing cooperative named GAMAWA, in Surigao del Norte, sponsored by Taganito Mining Corporation.

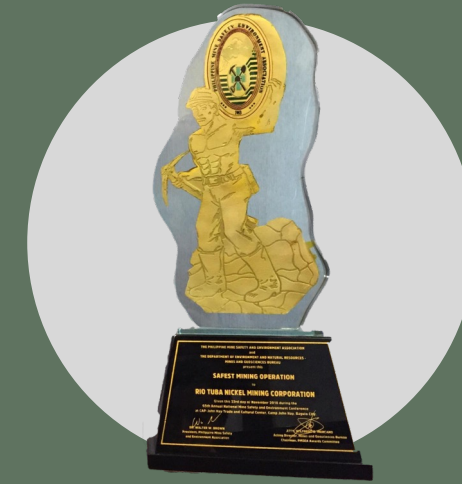


# A PROVEN TRACK RECORD OF EXCELLENCE



## RTN

- First ASEAN Mineral Awards (2017)
- Presidential Mineral Industry Environment Award (2002, 2003, 2015, 2018, 2020)
- Platinum Achievement Award (1999, 2000, 2001, 2010, 2016)
- Titanium Achievement Award (1998, 2009)



## CMC

- Presidential Mineral Industry Environment Award (2019, 2020)
- Platinum Achievement Award (2016, 2018)
- Titanium Achievement Award (2005, 2006, 2007, 2015, 2017)



## TMC

- Presidential Mineral Industry Environmental Award (2003, 2004, 2008, 2021)
- Platinum Achievement Award (1999, 2006, 2009, 2017)
- Titanium Achievement Award (2007, 2016)



## HMC

- Presidential Mineral Industry Environment Award (2021)
- Platinum Achievement Award (2018, 2017, 2019, 2020)
- Titanium Achievement Award (2000, 2016)



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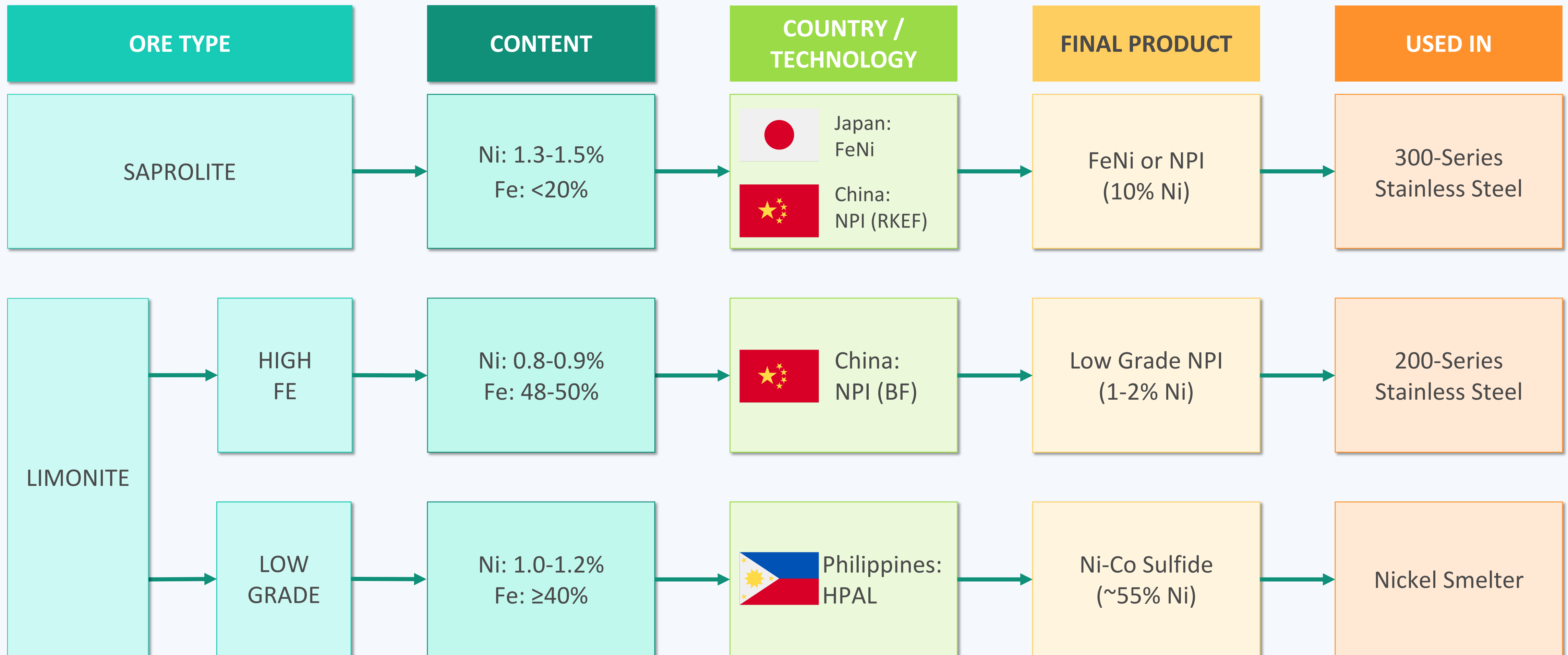
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# APPENDICES



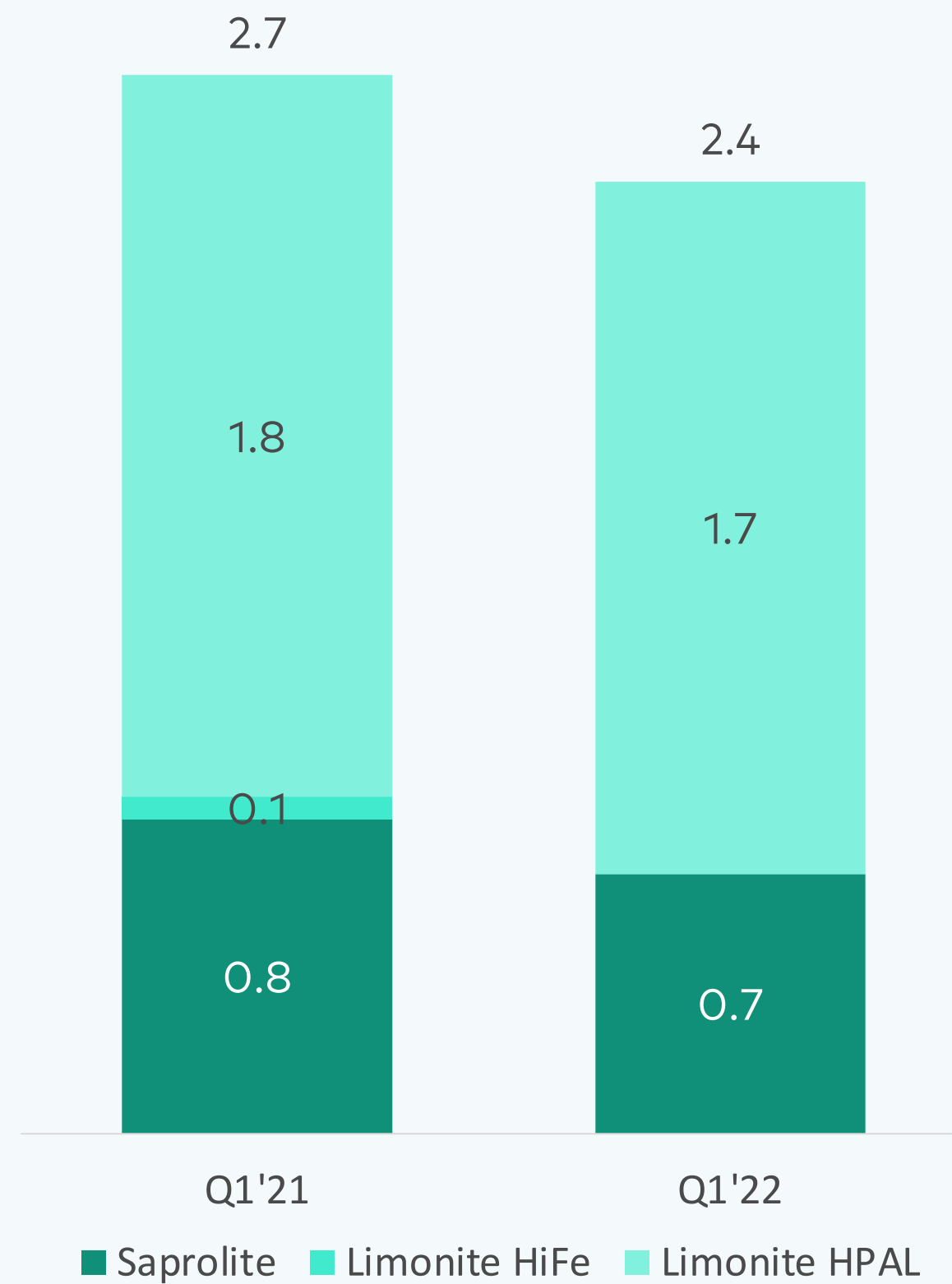
# NICKEL ORE PRODUCTS



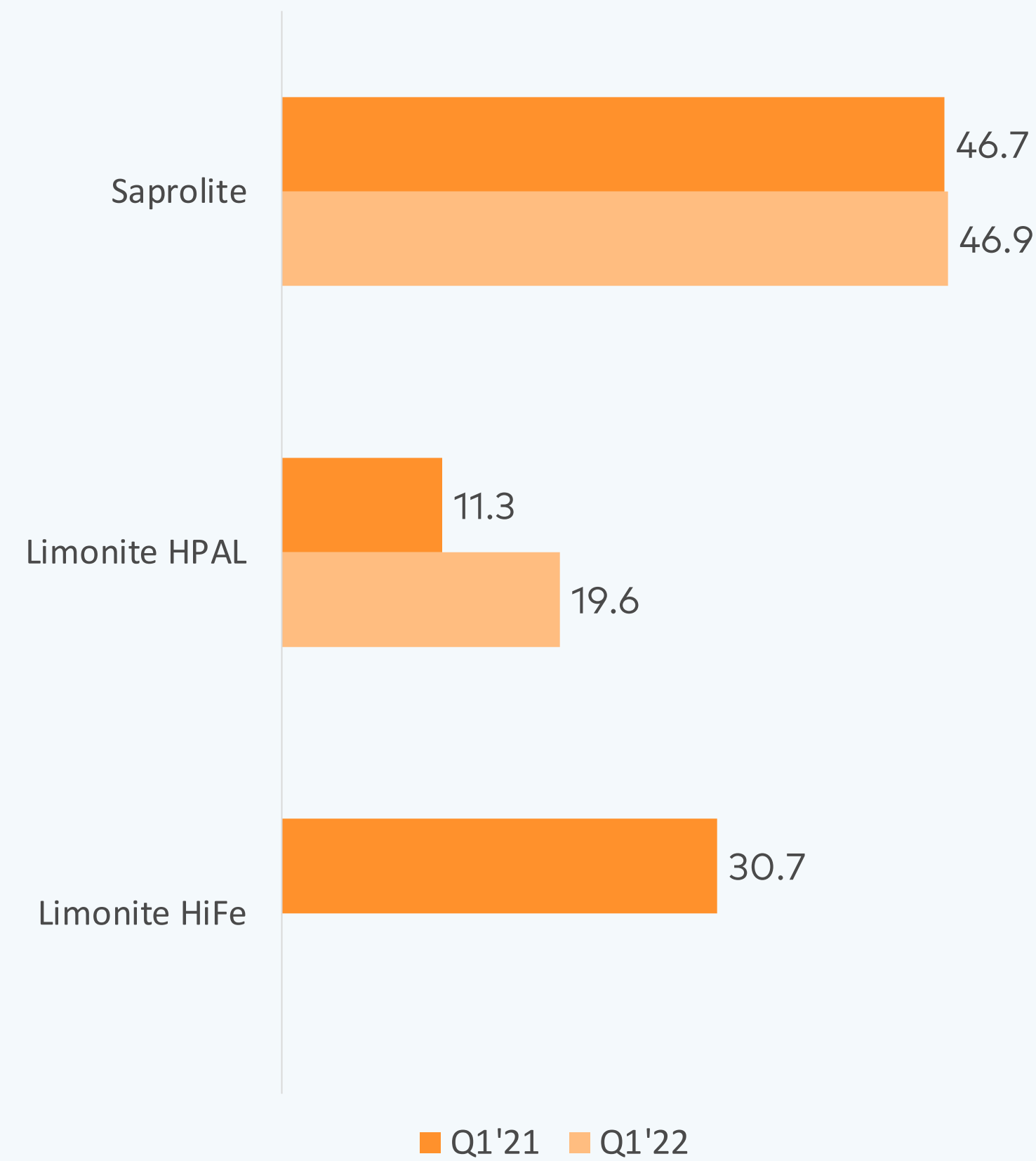


# SHIPMENTS AND REVENUES BY ORE TYPE (Q1)

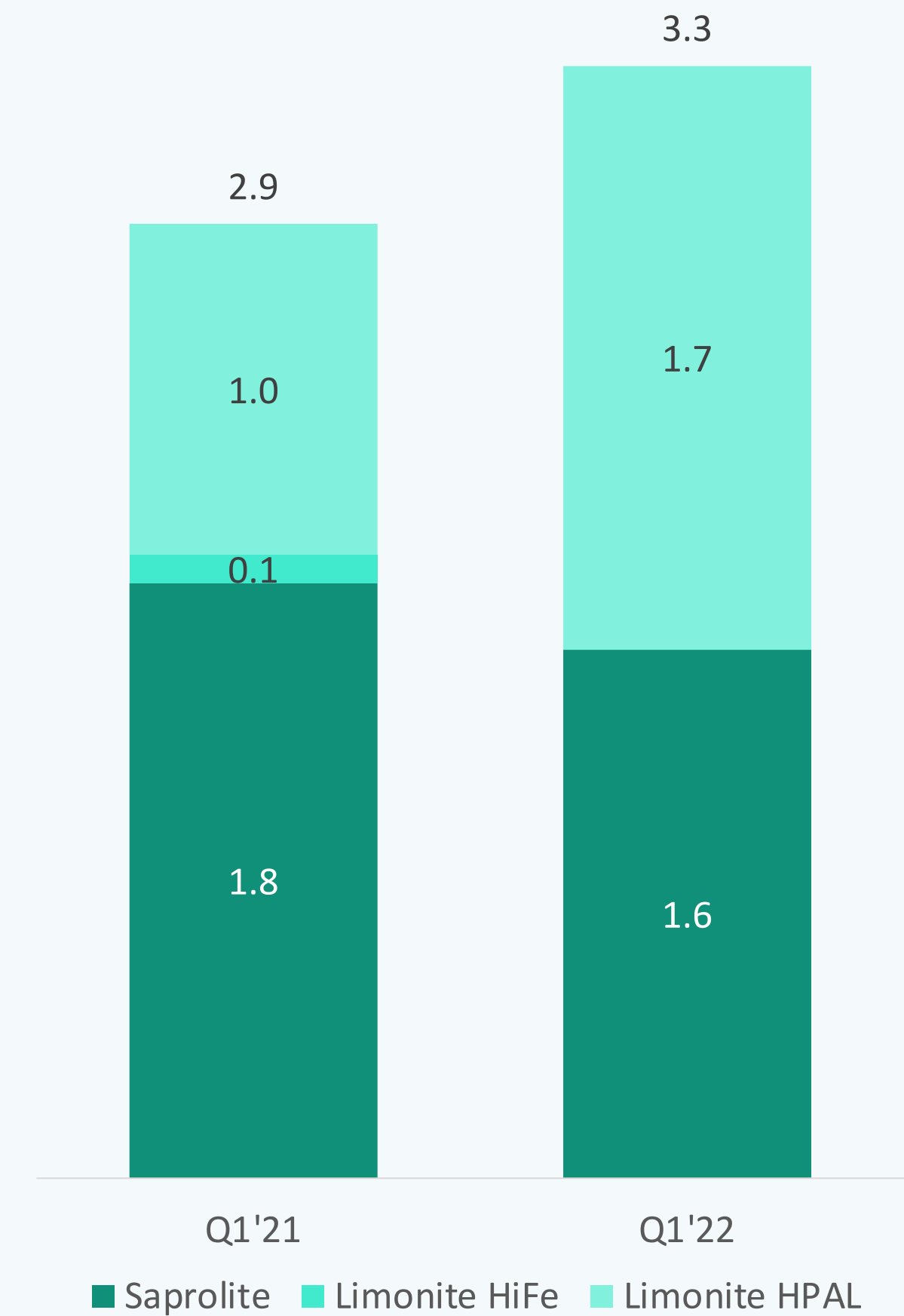
Sales Volume (In mWMT)



Average Ore Sales Prices (In US\$/WMT)

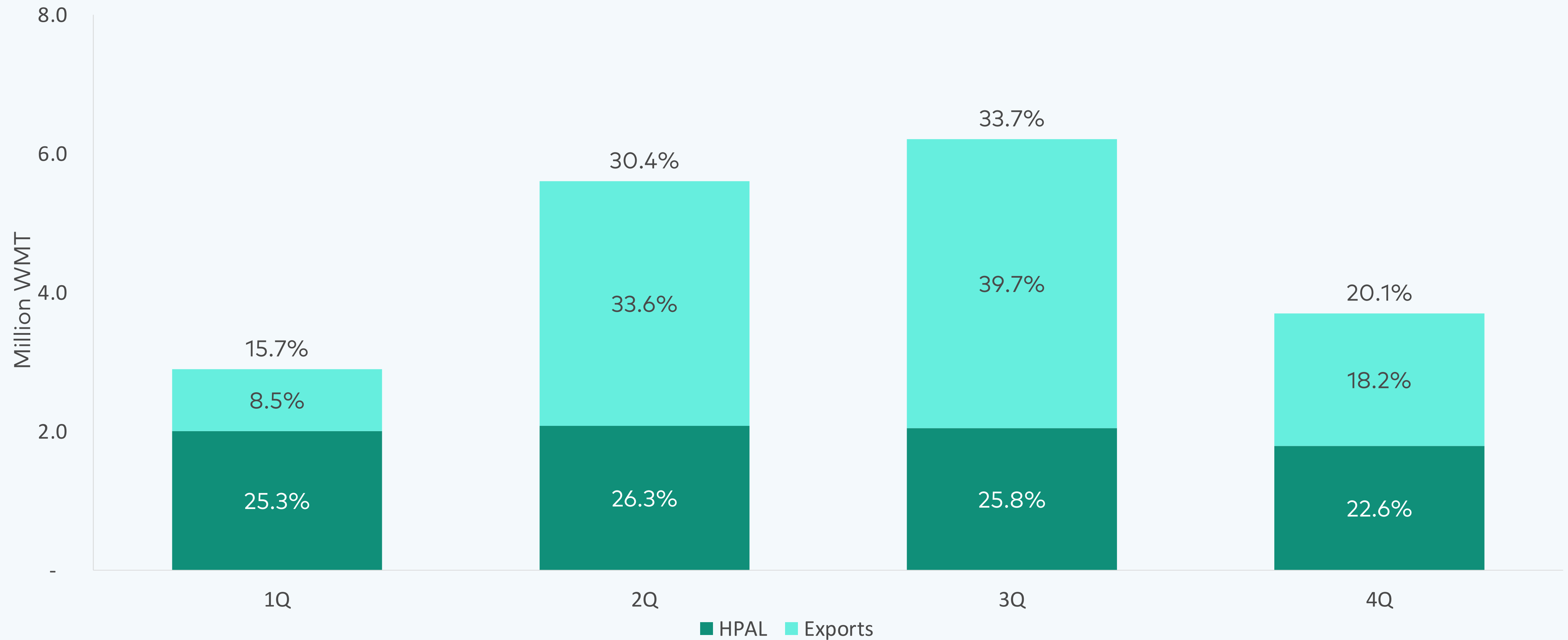


Revenue (In PHPbn)



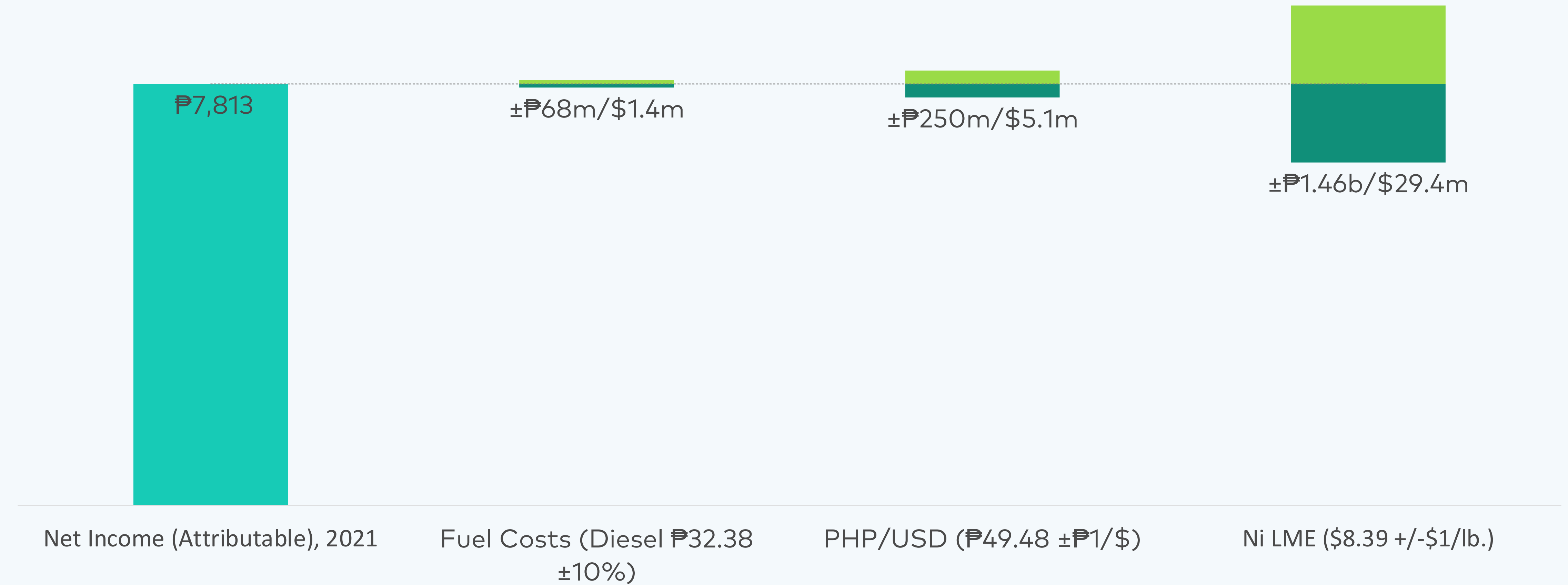


# ORE SALES VOLUME QUARTERLY DISTRIBUTION (AVE. LAST 5 YEARS)



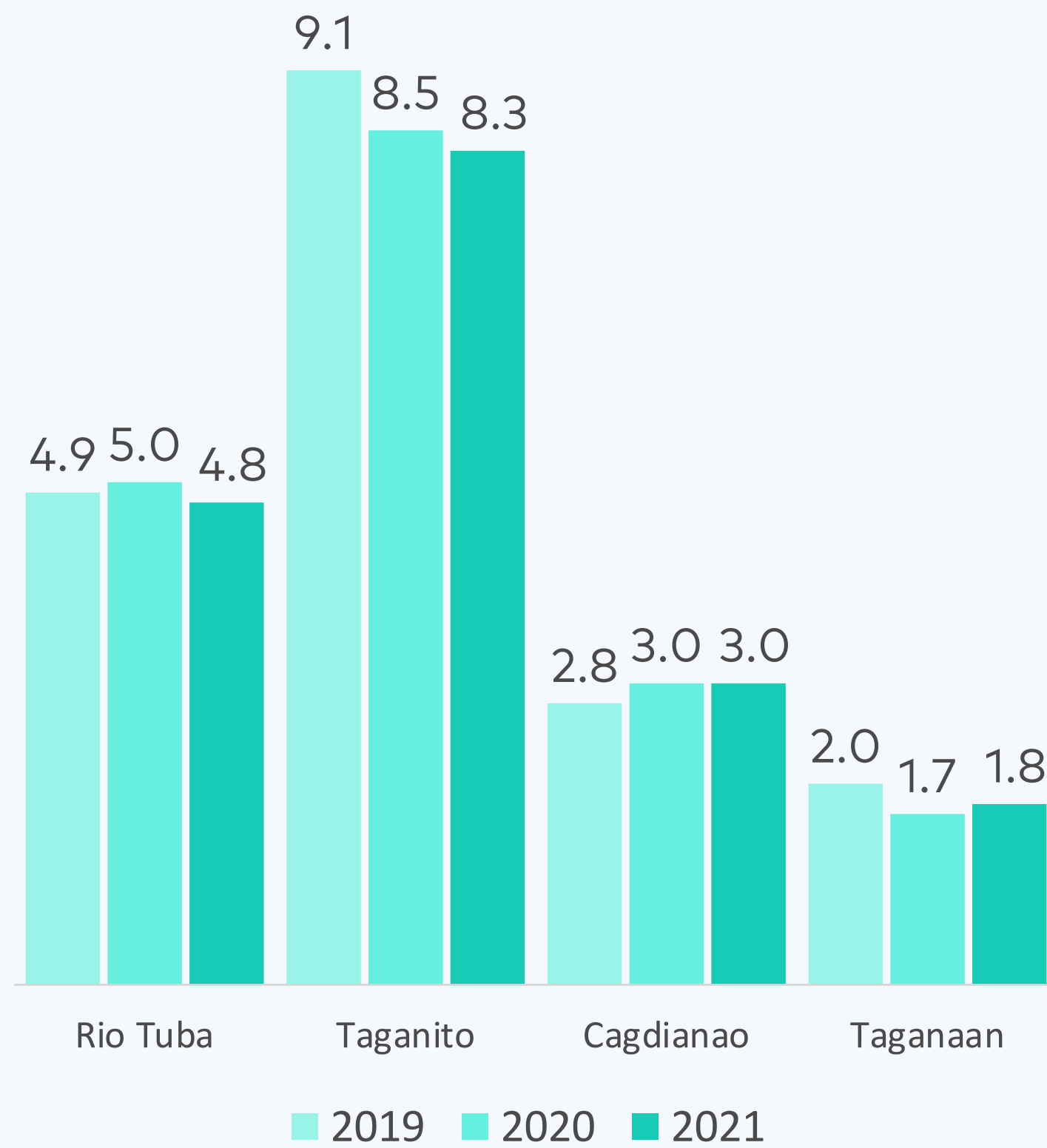


# SENSITIVITY ANALYSIS: 2021 NET INCOME



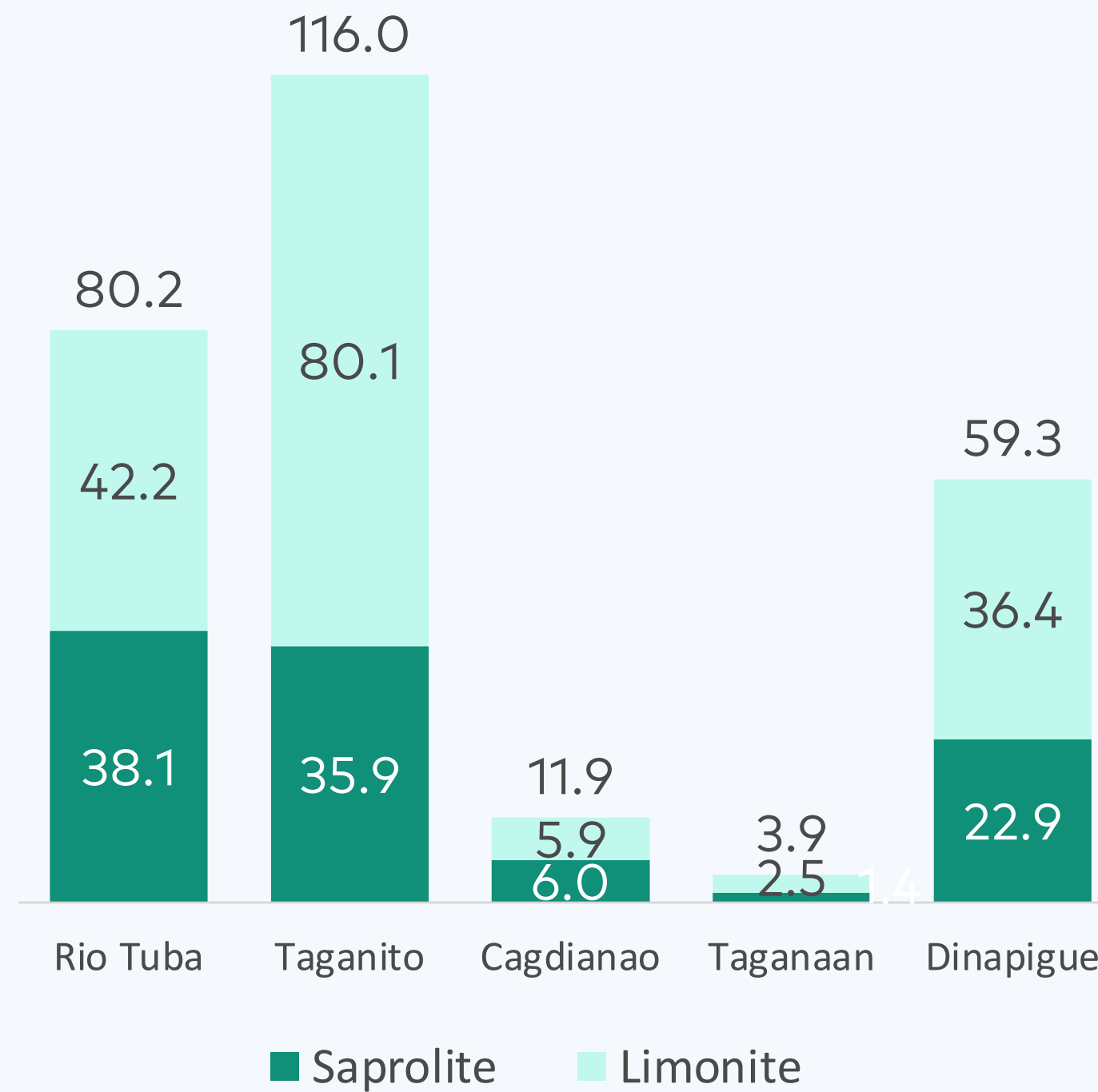
# RESERVES AND MINE LIFE

Shipments by Mine (mWMT)

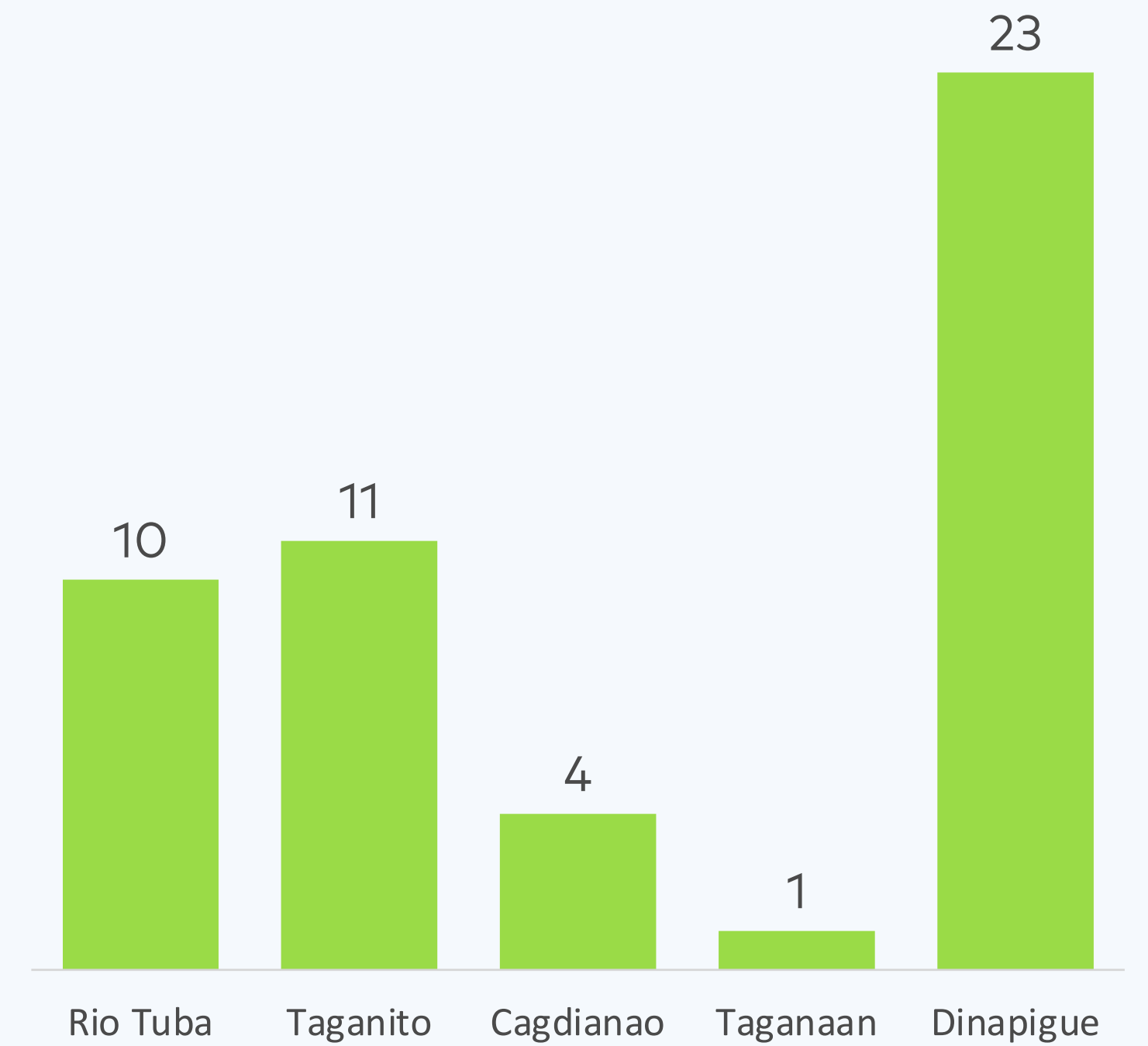


Ore Reserves by Mine (mWMT)

*Proved and Probable (as of Dec. 31, 2021)*



Mine Life  
*Years from December 31, 2021*





# INVESTMENT IN HPAL PROJECTS

- Most successful implementation of HPAL technology in the world.
- End products are refined in Japan by Sumitomo Metal Mining and ultimately utilized in the production of EV batteries.
- Provides captive market for our low-grade limonite ore, that would otherwise end up as waste materials, thereby enhancing the profitability of Rio Tuba and Taganito mines.
- NAC plans to exercise its option to increase its stake in CBNC to 15.625% in 2022.

	Coral Bay	Taganito HPAL
Location	Palawan, adjacent to Rio Tuba mine	Surigao Del Norte, adjacent to Taganito mine
Equity Ownership	10%	10%
Project Cost / Year	\$508 Million / 2005	\$1.59 Billion / 2013
Nameplate Capacity	20,000 Ni-Ton	30,000 Ni-Ton
Ore Supply (2021)	3.1 million WMT	4.0 million WMT
NAC's Equity Earnings (2021)	PHP145.4 million	PHP412.4 million
Technology	High Pressure Acid Leach (HPAL) process licensed from Sumitomo Metal Mining	
Product	Ni-Co sulfide sold exclusively to Sumitomo Metal Mining	

# GLOBAL NICKEL DEMAND (03/22)

(in kt)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Total primary nickel demand	2,457	2,787	3,014	3,279	3,506	3,690	3,908	4,005	4,035	4,105	4,273
Primary nickel in stainless	1,729	1,901	2,008	2,137	2,243	2,281	2,327	2,357	2,350	2,350	2,363
Primary nickel in non-stainless	728	886	1,006	1,143	1,264	1,410	1,580	1,648	1,685	1,756	1,910
Alloy Steel	71	82	89	92	93	94	95	96	97	98	99
Non-Ferrous Alloys	201	199	215	225	233	240	245	250	253	257	260
Plating	147	158	169	175	181	185	189	194	198	202	207
Battery precursors for EV/ESS	199	319	392	507	610	735	893	950	976	1,035	1,181
Foundry	53	58	64	64	66	67	67	68	69	70	71
Other	56	69	78	79	82	89	90	91	92	93	92



# GLOBAL NICKEL BALANCE (03/22)

Indonesia is one of the largest producers of refined nickel but majority of production is Class 2 nickel.

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Mine Production / Capability	2,610	2,908	3,312	3,585	3,763	3,859	3,857	3,823	3,827	3,799	3,758
Forecast Disruption Allowance			(55)	(72)	(75)	(77)	(77)	(76)	(77)	(76)	(75)
<b>Base Case Mine Output</b>	<b>2,610</b>	<b>2,908</b>	<b>3,257</b>	<b>3,513</b>	<b>3,688</b>	<b>3,782</b>	<b>3,779</b>	<b>3,747</b>	<b>3,751</b>	<b>3,723</b>	<b>3,683</b>
Probable Mine Projects			15	35	43	60	46	36	37	42	47
Additional Adjustment			15	88	219	378	523	667	790	885	1,025
Forecast Market Adjustment			30	123	262	438	569	703	827	926	1,072
<b>Actual / Forecast Mine Output</b>	<b>2,610</b>	<b>2,908</b>	<b>3,287</b>	<b>3,636</b>	<b>3,949</b>	<b>4,220</b>	<b>4,348</b>	<b>4,450</b>	<b>4,578</b>	<b>4,650</b>	<b>4,755</b>
Smelter Production Capability	2,530	2,649	3,003	3,220	3,422	3,506	3,497	3,507	3,518	3,512	3,483
Forecast Disruption Allowance			(50)	(64)	(68)	(70)	(70)	(70)	(70)	(70)	(70)
<b>Base Case Smelter Output</b>	<b>2,530</b>	<b>2,649</b>	<b>2,953</b>	<b>3,156</b>	<b>3,353</b>	<b>3,436</b>	<b>3,427</b>	<b>3,437</b>	<b>3,448</b>	<b>3,442</b>	<b>3,413</b>
Probable Smelter Projects			7	34	57	92	95	108	108	122	128
Additional Adjustment								53	137	221	347
Forecast Market Adjustment			7	34	57	92	95	161	245	343	476
<b>Actual / Forecast Smelter Output</b>	<b>2,530</b>	<b>2,649</b>	<b>2,960</b>	<b>3,190</b>	<b>3,410</b>	<b>3,528</b>	<b>3,521</b>	<b>3,598</b>	<b>3,693</b>	<b>3,785</b>	<b>3,889</b>
Refined Production Capability	2,542	2,709	3,016	3,311	3,596	3,705	3,718	3,730	3,742	3,736	3,707
Forecast Disruption Allowance			(50)	(66)	(72)	(74)	(74)	(75)	(75)	(75)	(74)
<b>Base Case Refined Output</b>	<b>2,542</b>	<b>2,709</b>	<b>2,965</b>	<b>3,245</b>	<b>3,524</b>	<b>3,631</b>	<b>3,643</b>	<b>3,656</b>	<b>3,667</b>	<b>3,662</b>	<b>3,633</b>
Probable Refinery Projects			7	32	54	88	90	103	103	116	122
Additional Adjustment								50	130	210	330
Forecast Market Adjustment			7	32	54	88	90	153	233	326	452
<b>Actual / Forecast Primary Refined Output</b>	<b>2,542</b>	<b>2,709</b>	<b>2,972</b>	<b>3,277</b>	<b>3,578</b>	<b>3,719</b>	<b>3,733</b>	<b>3,809</b>	<b>3,900</b>	<b>3,987</b>	<b>4,085</b>
Secondary Refined Output				47	49	67	76	85	88	97	131
<b>Actual / Forecast Total Refined Output</b>	<b>2,542</b>	<b>2,709</b>	<b>2,972</b>	<b>3,324</b>	<b>3,627</b>	<b>3,785</b>	<b>3,809</b>	<b>3,894</b>	<b>3,988</b>	<b>4,084</b>	<b>4,216</b>
China	783	746	665	759	875	920	920	920	920	920	920
Indonesia	638	906	1,177	1,343	1,456	1,508	1,511	1,513	1,518	1,518	1,518
Russia	155	121	133	135	140	141	141	142	142	142	142
Japan	150	147	153	155	165	171	171	171	171	171	171
Canada	118	107	113	121	120	122	122	122	123	122	122
<b>Class 1 Actual / Forecast Total Refined Output</b>	<b>1,043</b>	<b>1,032</b>	<b>1,171</b>	<b>1,319</b>	<b>1,482</b>	<b>1,551</b>	<b>1,562</b>	<b>1,574</b>	<b>1,586</b>	<b>1,580</b>	<b>1,581</b>
<b>Class 2 Actual / Forecast Total Refined Output</b>	<b>1,498</b>	<b>1,677</b>	<b>1,845</b>	<b>1,993</b>	<b>2,114</b>	<b>2,154</b>	<b>2,156</b>	<b>2,156</b>	<b>2,156</b>	<b>2,156</b>	<b>2,127</b>
Consumption	2,457	2,787	3,014	3,279	3,506	3,690	3,908	4,005	4,035	4,105	4,273
Balance	85	(78)	(42)	45	120	95	(99)	(111)	(48)	(21)	(58)
Estimated Stocks	1,349	1,271	1,229	1,274	1,394	1,490	1,391	1,280	1,233	1,212	1,154
- in Days of Consumption	201	166	149	142	145	147	130	117	112	108	99
<b>LME Price (US\$/lb)</b>											
Current \$/t	625	838	1,077	935	930	910	980	1,100	1,120	1,060	1,150
2022 \$	675	867	1,077	917	894	858	905	996	995	923	982
<b>LME Price (US\$/t)</b>											
Current	13,772	18,476	23,754	20,619	20,512	20,062	21,605	24,251	24,692	23,369	25,353

Source: Woodmac as of 18 Mar 2022.

# SHELL GROUP & SHELL ENERGY

## Shell Group

- Shell is *one of the largest energy companies globally*, which operates via 4 main businesses;
  - **Upstream:** Exploration, production, marketing and transportation of crude oil, natural gas and natural gas liquids
  - **Downstream:** Manages different chemicals and products activities as part of an integrated value chain that trades and refines crude oil and oil products
  - **Integrated Gas:** Manages liquefied natural gas ("LNG") activities and the production of gas-to-liquids ("GTL") fuels and other products (e.g., electricity and carbon-emission rights)
  - **Renewables and Energy Solutions ("RES"):** Focused on finding commercial ways to meet the evolving energy needs of customers, including hydrogen, power from renewable and low-carbon sources and decarbonization options

## Shell Energy

- Under the Shell Energy brand, the Group *provide innovative, reliable and cleaner energy solutions* through its extensive portfolio of gas, power and environmental products and energy efficiency solutions
- Its customers include energy producers, asset owners, traders, wholesalers, large industrial customers, as well as individual households. Shell Energy's key product & services includes;
  - **Energy Supply:** End-to-end power solutions, renewable power, natural gas
  - **Energy Solutions:** Energy efficiency & management, back-up generation, demand response, EV charging optimization, on-site renewable energy and asset management & operations
  - **Renewable Solutions:** Carbon credits including nature-based-solutions, renewable energy certificates and renewable natural gas
  - **Wholesale:** Tailored energy solutions to help clients meet their power requirements, manage risks and maximize value of their energy portfolio with physical and financial cross-commodity solutions. The company also provides industry leading market intelligence


"Shell is fully committed to the global sustainability efforts and has set goals in-line with the Paris Climate Agreement, as well as to become a net-zero emissions business"


  
**70+ countries**  
 83,000 employees (2020)






  
**70 million tonnes**  
 of liquified natural gas (LNG) sold globally in 2020

  
**30 million**  
 Shell provides products and solutions to approximately 30 million customers per day

  
**~255+ TWh**  
 global power sales to end customers in 2020

  
**5.6+ GW**  
 operating renewables capacity access globally

  
**60,000 EV Stations Today**  
 Shell Energy has 60,000 electric vehicle charging points in 14 countries

Partner	Description
 Breakthrough Energy	<ul style="list-style-type: none"> <li>■ First energy anchor partner in their Catalyst programme.</li> <li>■ Backed by Bill Gates and other leading organizations, focused on commercialization of green hydrogen, SAF, long-duration energy storage and direct air capture.</li> </ul>
	<ul style="list-style-type: none"> <li>■ Extended partnership to develop high performance E-transmission fluids and showcase Shell E-Mobility solutions in the all-electric Formula E racing.</li> </ul>
	<ul style="list-style-type: none"> <li>■ Signed a strategic cooperation agreement to improve the charging experience for electric vehicle customers around the world</li> </ul>
	<ul style="list-style-type: none"> <li>■ Signed a broad strategic collaboration agreement to accelerate the global energy transition by helping each other achieve their respective commitments for net-zero carbon emissions.</li> </ul>
	<ul style="list-style-type: none"> <li>■ Identify projects for the production, use and distribution of green hydrogen and decarbonize RWE gas and biomass-fired power plants in northwest Europe</li> </ul>



# OUR SUSTAINABILITY PERFORMANCE AND TARGETS

ESG at the forefront of our priority to address material risks with our medium-long term targets and fulfill the decarbonization goals of the Government

## Our Sustainability Performance and Targets

## Our Long-term targets

	SDGs	Metric	Achievements in 2021	2025 Targets
 <p><b>Environment</b></p>	   	<b>Renewable Energy Generation</b>	62MW Operational Capacity	650MW by 2025
		<b>GHG Emissions (Scope 1 &amp; 2)</b>	99,406 tCO2e Total Greenhouse Gas Emissions in Scopes 1 and 2	10% Reduction in Scopes 1 and 2 GHG Emissions
		<b>Carbon Sequestration</b>	155,211 tCO2 Sequestered from Reforestation including Mine Rehabilitation	208,090 tCO2 Sequestered from Reforestation including Mine Rehabilitation
		<b>Biodiversity Protection</b>	9,187 hectares of terrestrial habitats protected and restored	10,376 hectares of terrestrial habitats protected and restored
 <p><b>Social</b></p>	   	<b>Safe Workplace</b>	Zero (0) Lost Time Accidents	Zero (0) Lost Time Accidents
		<b>Health Care</b>	100% Employees Covered by Annual Physical Exam	100% Employees Covered by Annual Physical Exam
		<b>Mental Health</b>	All Subsidiary Companies with Access to Mental Health Care	All Subsidiary Companies with Access to Mental Health Care
		<b>Gender Equality</b>	27% Women in Supervisory and Managerial Positions	30% Women in Supervisory and Managerial Positions
		<b>Sustainable Communities</b>	22% of Total Households with Access to Level 3 Water System	57% of Total Households with Access to Level 3 Water System
 <p><b>Governance</b></p>	  	<b>Diversity and Inclusion</b>	24% Average Women Representation in Top Level Management Positions	30% Average Women Representation in Top Level Management Positions
		<b>Transparency</b>	\$87mn Taxes & Royalties Paid	\$101mn Taxes & Royalties Paid
		<b>Zero Bribery</b>	Zero (0) Bribery Incidents	Zero (0) Bribery Incidents
		<b>Governance Mechanism</b>	Dedicated Sustainability Committee reporting to Board of Directors	Incorporate ESG strategy with Risk Management Framework
		<b>Board Commitments</b>	Approved New Vision in November 2021	Evaluation and Updating of Roadmap based on Accomplishment and Assessment

- Increase Renewable energy capacity to >1GW
- 25% decrease in scopes 1 & 2 GHG emissions by 2030 vs 2021 baseline
- 0 waste to landfill by 2030
- 50% share of RE in energy mix by 2040
- Carbon Neutrality by 2050

Our efforts will help minimize material risks & achieve sustainable developments

- ✓ Secure resources with manageable regulatory risks
- ✓ Satisfy downstream customers
- ✓ Sustainable relationship with ecosystem/stakeholders
- ✓ Minimized risk for malpractice and catastrophe
- ✓ Path to carbon neutrality by 2050
- ✓ Optimized capital allocation with EV/RE exposures