Recycle 100

9th International Secondary Lead & Battery Recycling Conference

GLOBAL LEAD MARKET FACTS, FIGURES & FUNDAMENTALS

JOAO JORGE

Director of Market research and Statistics
International Lead and Zinc Study Group (ILZSG)

1-2 September 2025 Kota Kinabalu, Malaysia

PRESENTATION OUTLINE

- ILZSG Overview
- Stocks, Prices & Demand for Lead Metal
- Mine Supply
- Metal Supply
- Conclusions

ILZSG OVERVIEW

Intergovernmental organization set up within the UN system

Established by UN in 1959 in New York

- Moved to London in 1977
- From start of 2006 ILZSG, ICSG & INSG co-located in Lisbon, Portugal
- Membership open to any country involved in lead and/or zinc production, usage, or trade
- 26 members (>85% of global lead/zinc industry)





Community







UNITED NATIONS

Morocco

Namibia

Norway

Peru

Poland

Portugal

Russian Fed

ILZSG - WORK OF THE GROUP

Promote Market Transparency

Closely monitor production, consumption, prices, stocks, trade flows and market balances

- Monthly Bulletin
- Monthly Data Spreadsheet
- Online Statistical Database
- Reports and Directories
- Twice-yearly Market Forecasts
 - Detailed supply and demand short term forecasts published in April and October
 - Information provided mainly by industry representatives in member countries in response to a global survey
 - Bottom-up forecast starting with country-level estimates that are added together to generate a global forecast
 - Consensus unbiased view providing unique insight into the plans of miners and smelters
 - Results widely covered in global metals press
 - Accuracy carefully monitored and reported on

In-depth Research into Issues of Interest/Concern to Members (Environmental legislation, economic developments, etc)

ILZSG - FACILITATE GOV/INDUSTRY COOPERATION

Study Group six monthly meetings bring together government and industry representatives in Lisbon

- Meetings usually held in April and October
- Up to 150 participants attend in October
- Industry or government delegates from non-members can request participation as observers
- Unique forum where mining ministries can meet their global counterparts and the international metals industry



PRESENTATION OUTLINE

ILZSG Overview

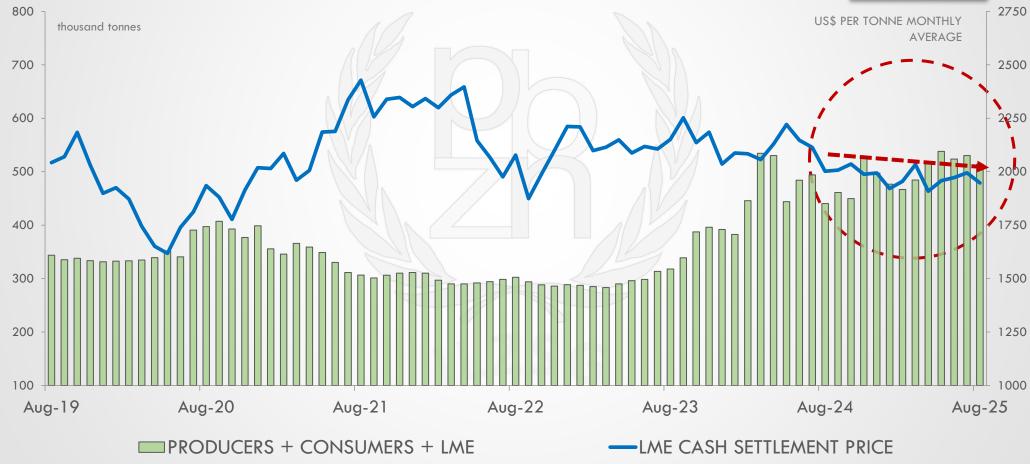
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LME LEAD STOCKS AND PRICES

AUG 2019 - AUG 2025



Source: ILZSG / LME



SHFE LEAD STOCKS AND PRICES

AUG 2019 - AUG 2025

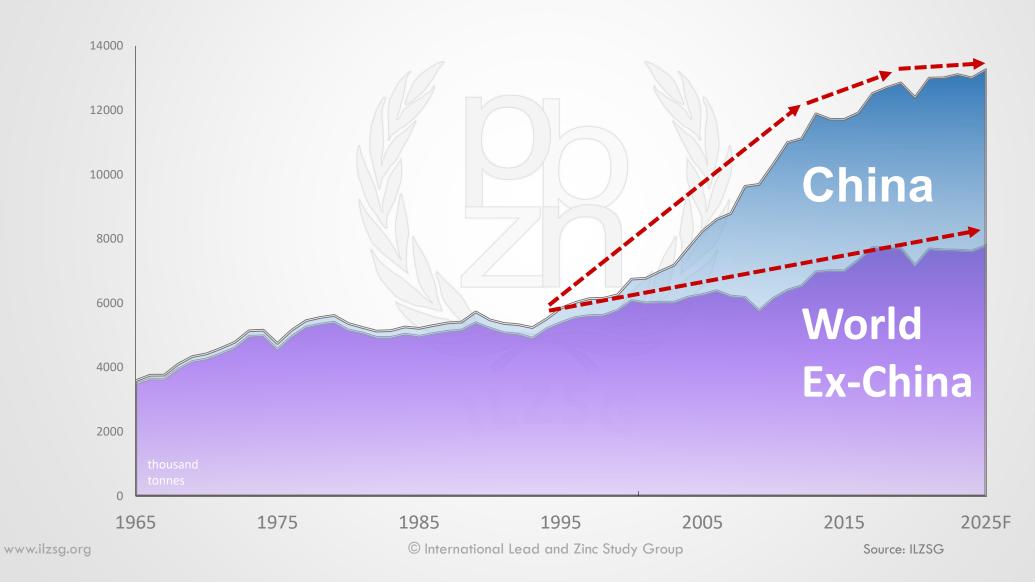


Source: ILZSG / SHFE



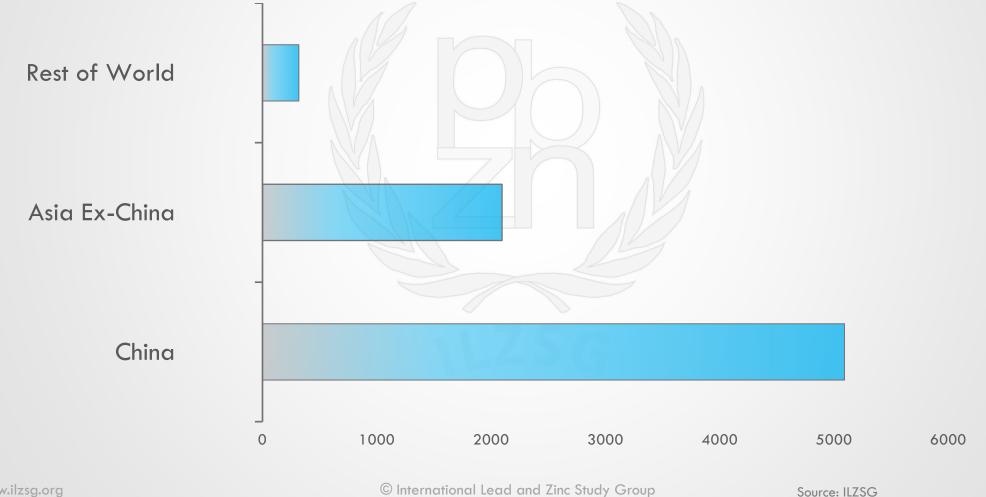
LONG TERM DEMAND FOR REFINED OF LEAD

1965 - 2025F

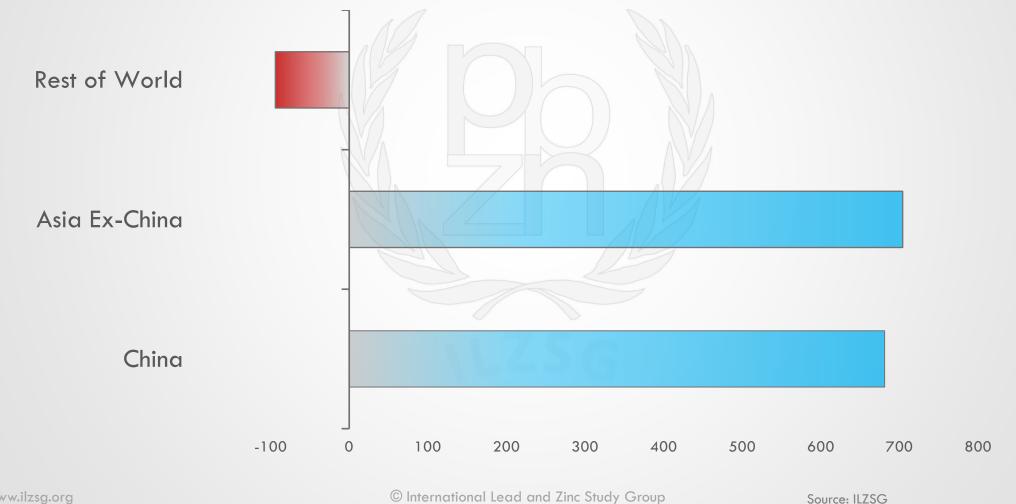


9

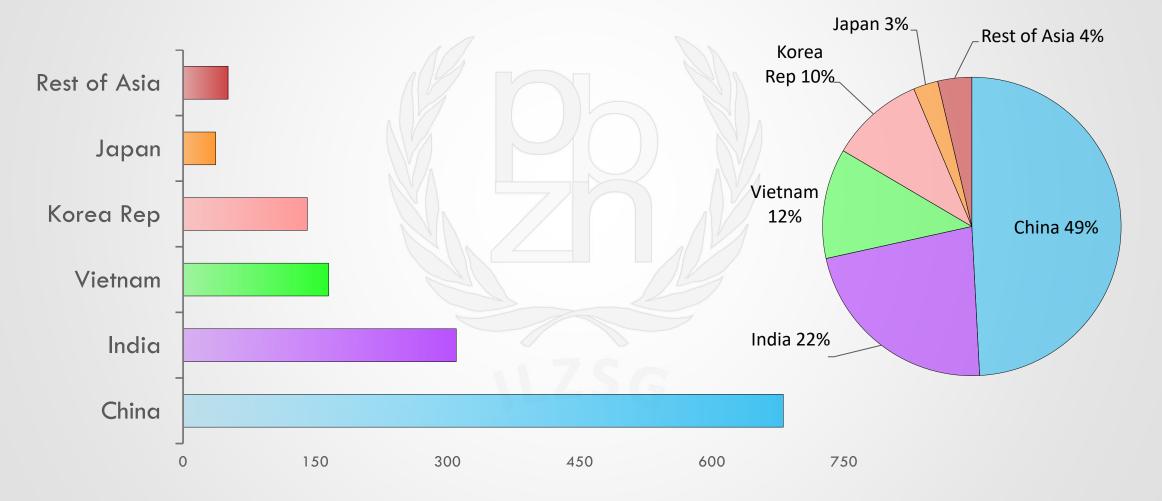
WORLD REFINED LEAD USAGE GROWTH COMPOSITION 2024 vs 1994



WORLD REFINED LEAD USAGE GROWTH COMPOSITION 2024 vs 2014



REFINED LEAD USAGE GROWTH COMPOSITION IN ASIA 2024 vs 2014



Source: ILZSG

LEAD DEMAND IN CHINA



Lead Battery Net Exports

• 2024: **4.8**% **1**

• 2025 Jan-Jun: **-6.5**%

Passenger Car Production (ICE)

• 2023: **-0.7**%

2024: **-10.6**% \

• 2025 Jan-May: ≈ **-10%**

9.5% (ICE+NEV)

3.7% (ICE+NEV)

16.1% (ICE+NEV)

ICE: Internal Combustion Engine

NEV: New Energy Vehicle (electric + plugin hybrid)



Source: CAAM / Antaike

13

LEAD DEMAND IN INDIA



Passenger Car Sales

2021: +20.9%

2022: +16.7%

2023:+16.2%

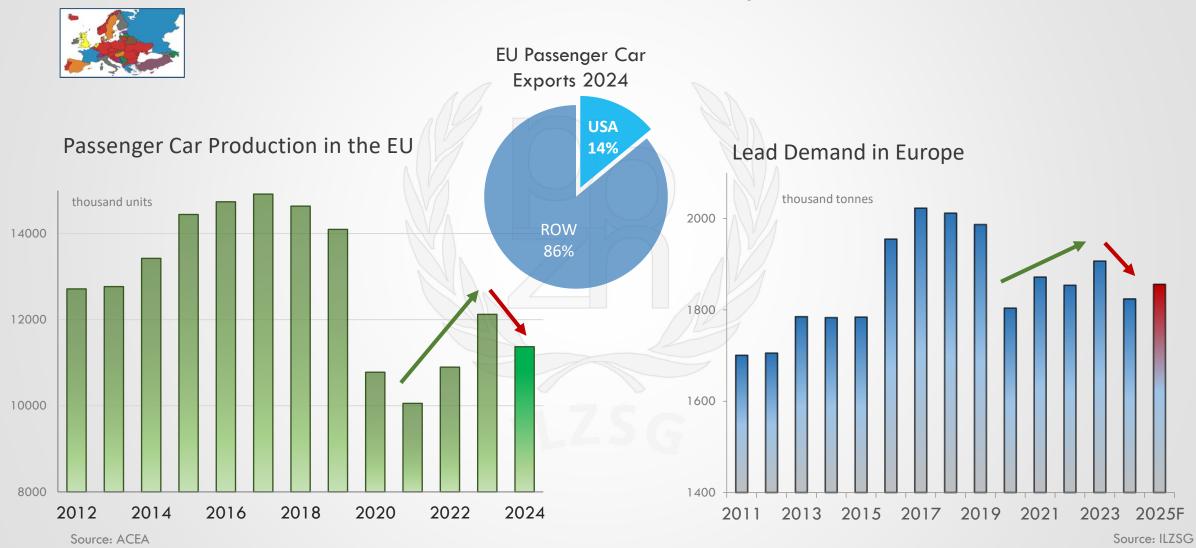
2024:+5.0%

2025 H1: +5.3%

Source: FADA



EUROPEAN VEHICLE PRODUCTION / LEAD DEMAND



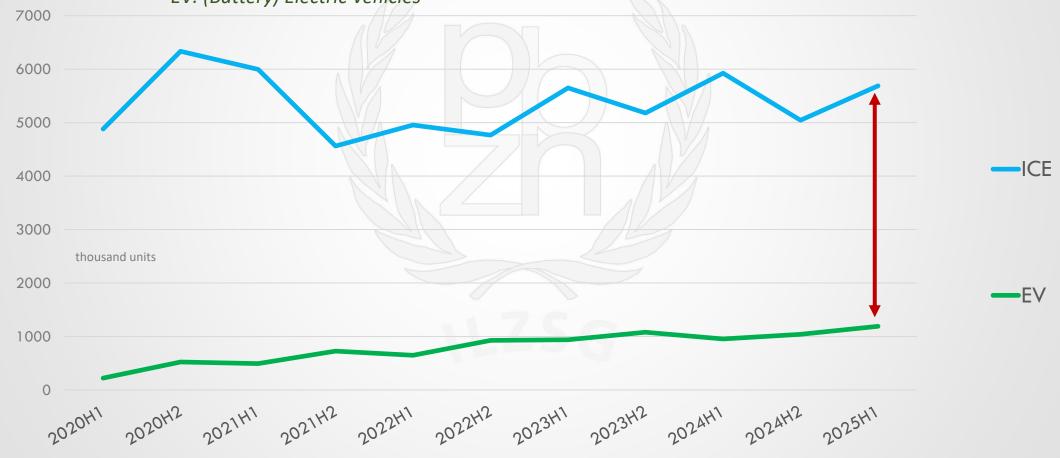
PASSENGER CAR SALES BY TYPE - EUROPE



2020H1 - 2025H1

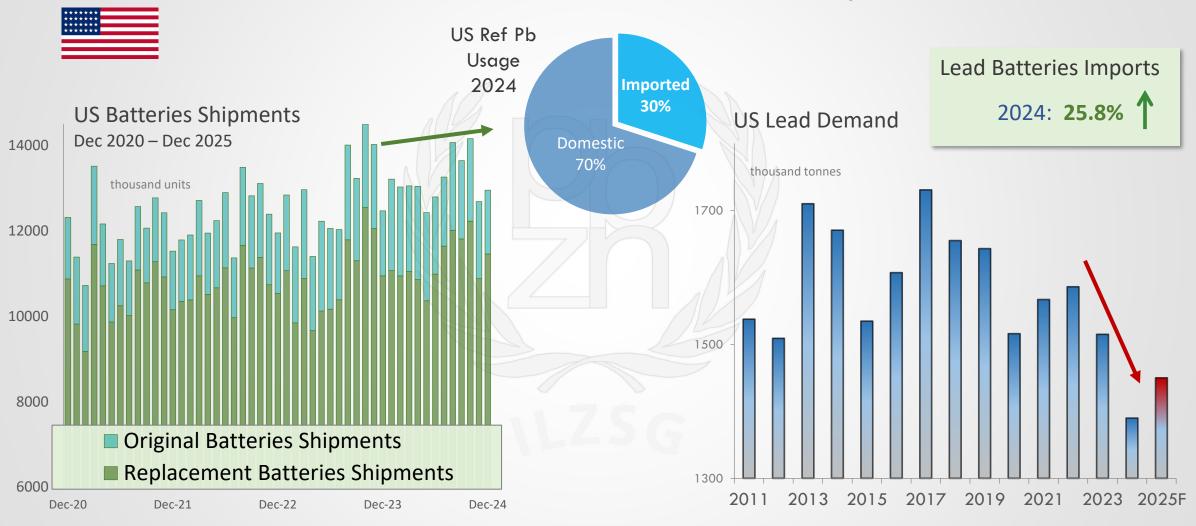
ICE: Internal Combustion Engine (conventional ICE + micro & mild hybrids + plugin hybrids)

EV: (Battery) Electric Vehicles



Source: ACEA

US AUTOMOTIVE BATTERIES SHIPMENTS / LEAD DEMAND



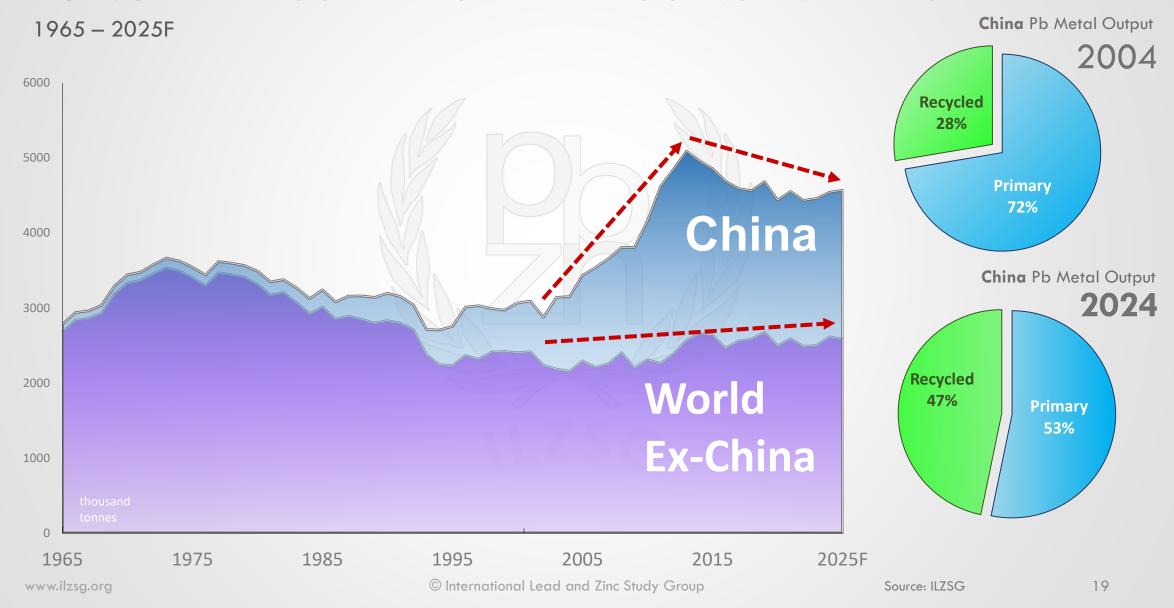
Source: Battery Council International

Source: ILZSG

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LONG TERM SUPPLY OF LEAD CONCENTRATES



LEAD MINE OUTPUT

Selected World Ex-China producers

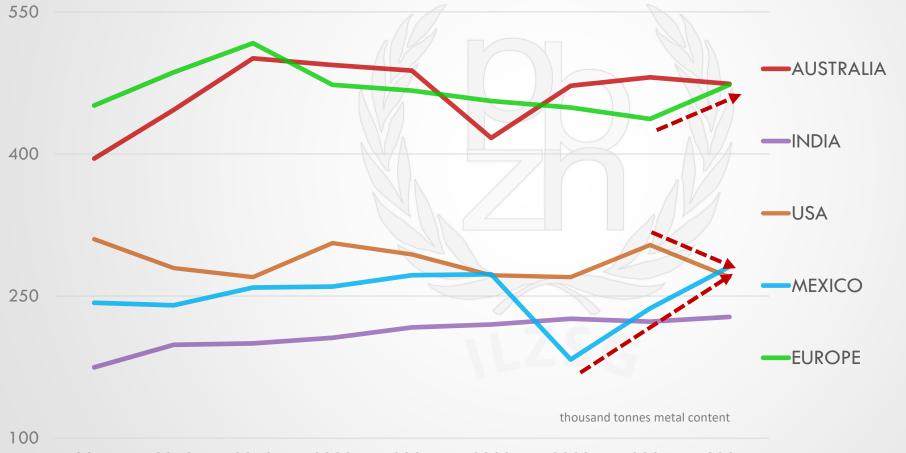
MEXICO 2024 29.5%

EUROPE 2024 -2.7%

USA 2024 12.6%



24Kt/y capacity





Opened Sep 2024

40Kt/y capacity



20Kt /y capacity

2022 2017 2018 2019 2020 2021 2023 2024 2025F

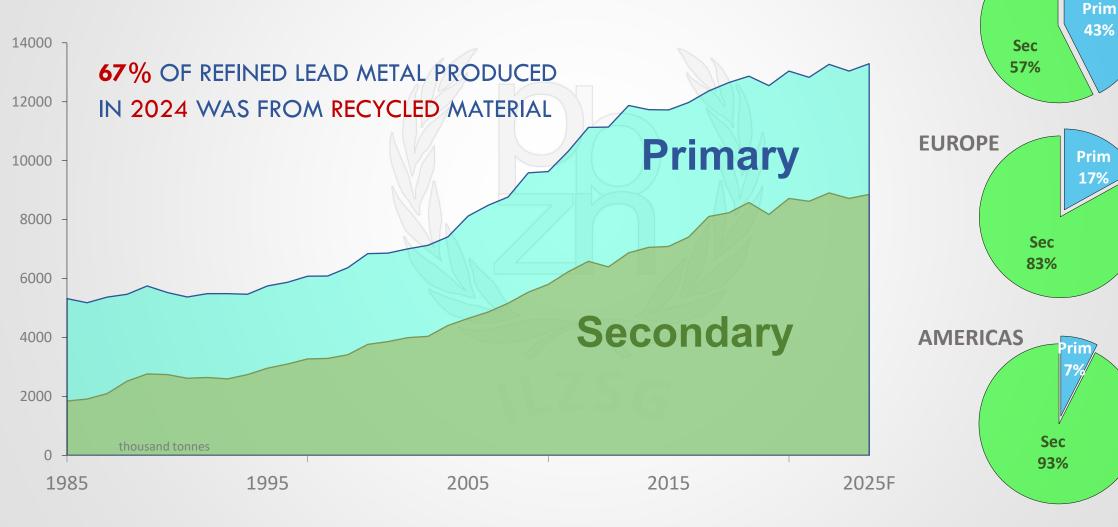


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LONG TERM SUPPLY OF LEAD METAL

1985 - 2025F



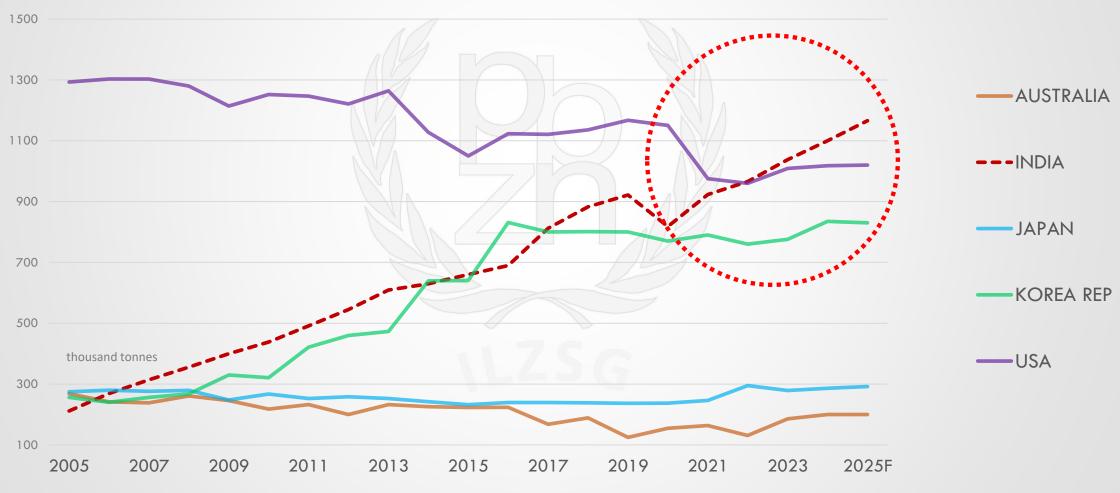
2024

ASIA

LEAD METAL SUPPLY Ex-CHINA



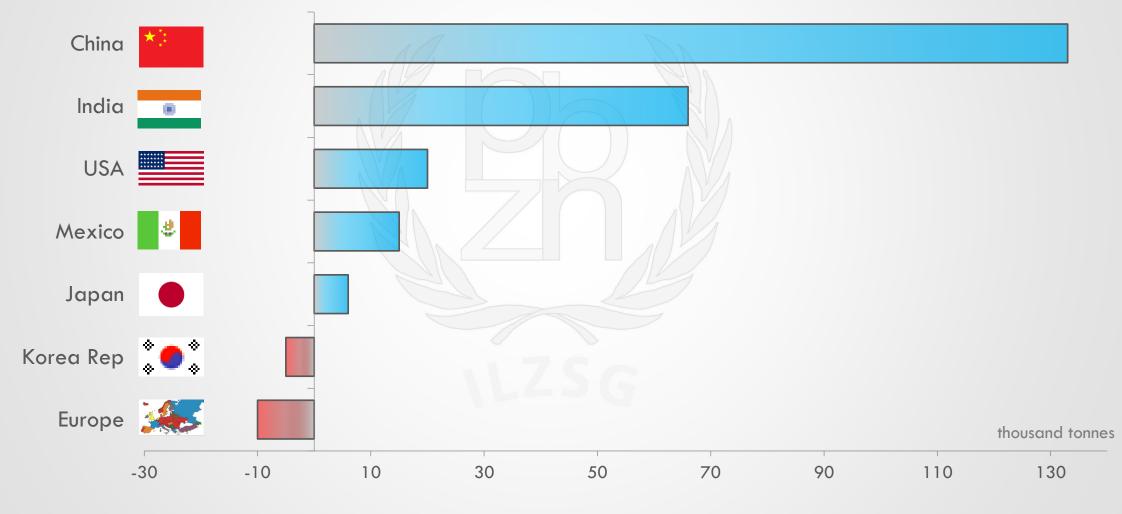
Remarkable growth in India over the past 2 decades



Source: ILZSG

WORLD LEAD METAL SUPPLY 2025F

CHANGE 2024-2025F - ILZSG APR 2025 FORECAST



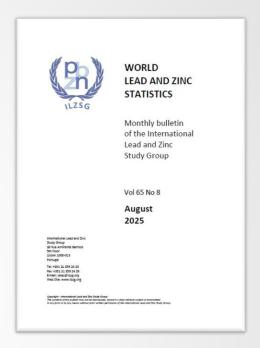
Source: ILZSG

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KEY TAKE AWAYS

- The Asian continent not just China has become absolutely central to global lead demand growth
- Demand Ex-Asia declined over past decade
- Tightness in concentrate market but new capacity has been commissioned
- Long-term upward trend in the share of recycled metal globally
- Asia also dominates global metal production growth
- India refined metal demand and supply rising



- Latest ILZSG Statistics Jan-Jun 2025
- Global surplus of 21kt market nearly balanced
- Inventories increased by 26kt
- Global lead mine supply rose by 0.9%
- Global lead metal output rose by 1.6%
- Refined lead metal usage grew by 2.3%

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