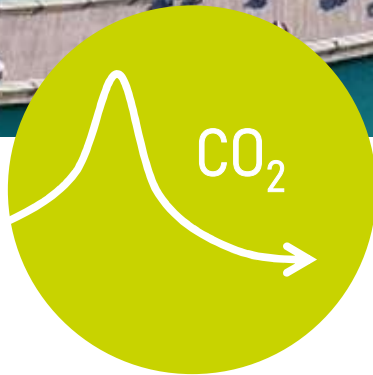


DEVELOPMENT OF ALUMINUM RECYCLING IN CHINA

RAFAEL SUCHAN
CEO, SCHOLZ RECYCLING & CHIHO ENVIRONMENTAL GROUP



CHINA'S STRATEGIES & POLICIES FOR A CIRCULAR ECONOMY TO ENABLE CARBON NEUTRALITY



“30/60” STRATEGY

CARBON PEAK BY 2030
CARBON NEUTRALITY BY 2060



14th FIVE-YEAR-PLAN

FOR A CIRCULAR ECONOMY
(2021-2025)

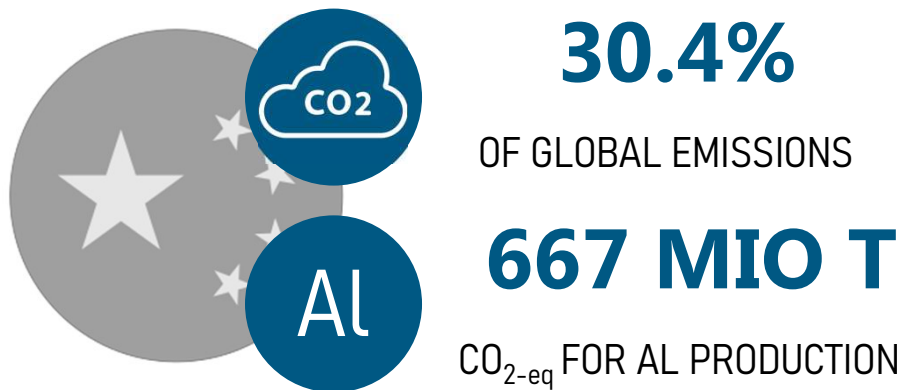


DUAL CIRCULATION

CHINA'S CO₂ EMISSIONS

APPROX 10 BILLION TONS - ALMOST ONE-THIRD
OF GLOBAL CO₂ EMISSIONS

CHINA IS THE WORLD'S
LARGEST CO₂ EMITTER



RECYCLING IS PIVOTAL

TO REDUCE CARBON EMISSIONS SINCE PRIMARY ALUMINUM PRODUCTION ACCOUNTS FOR 6-7% OF CO2 EMISSIONS IN CHINA

CHINA IS THE WORLD'S LARGEST CO2 EMITTER



30.4%
OF GLOBAL EMISSIONS

667 MIO T
CO_{2-eq} FOR AL PRODUCTION

1 TON RECYCLED ALUMINUM IN CHINA SAVES

COMPARED TO 1 TON ALUMINUM FROM BAUXITE IN THE LIFE-CYCLE

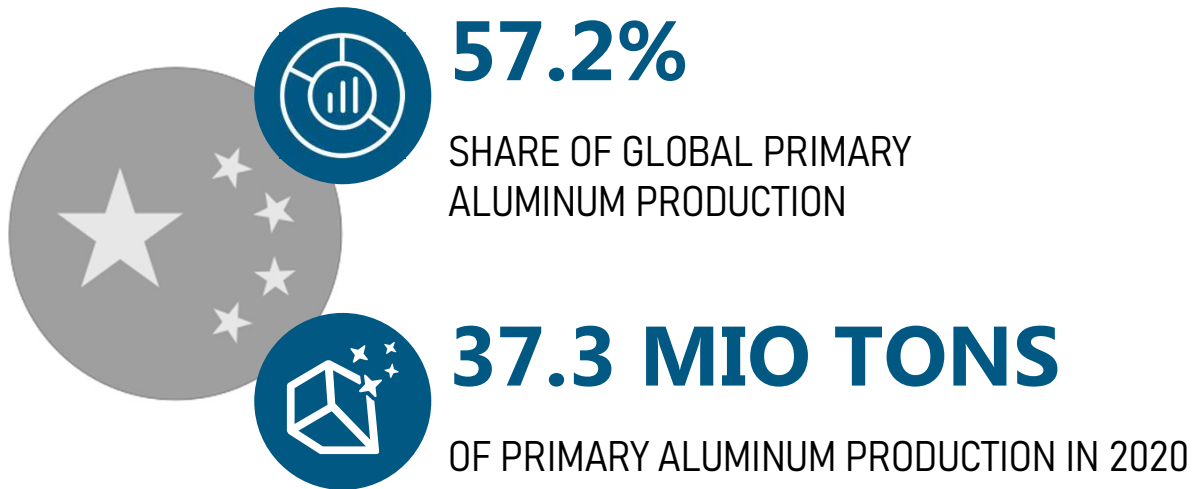


- 94%
ENERGY CONSUMPTION

- 95%
CO2 EMISSIONS

SIGNIFICANT GROWTH POTENTIAL

FOR RECYCLED ALUMINUM



Al scrap use in production China:
11% Post-Consumer | 13% Pre-Consumer

vs. 60% in N. AMERICA & EUROPE
vs. 100% in JAPAN

RECYCLED
SECONDARY
ALUMINUM
USAGE IN
CHINA

+50%
by 2025

+100%
by 2030

- INCREASE IN RECYCLED ALUMINUM NECESSARY TO MEET DEMAND GROWTH IN CHINA
- PRIMARY ALUMINUM PRODUCTION CAPACITY REDLINE AT 45 MILLION TONS (2019: 43.2 MILLION TONS CAPACITY)

CHIHO & SCHOLZ IN CHINA

JOINT VENTURE WITH CHINA HONGQIAO GROUP

SCOPE

- BUILT AROUND THE "3+N" MODEL:
 - (1) RECYCLING OF ALUMINUM
 - (2) RECYCLING OF MIXED METALS & END-OF-LIFE VEHICLES
 - (3) ELECTRIC VEHICLE BATTERY RECYCLING AND
 - (N) SUPPORTING INDUSTRIAL CHAINS
- INVESTMENT OF 1.5 BILLION CNY

CHIHO & SCHOLZ IN CHINA

JOINT VENTURE WITH CHINA HONGQIAO GROUP

PHASE 1

200,000 TONS
OF RECYCLED ALUMINUM PER YEAR

40,000 TONS
OF END-OF-LIFE VEHICLES WILL BE
RECYCLED

PHASE 2

+300,000 TONS
OF RECYCLED ALUMINUM PER YEAR

+60,000 TONS
OF END-OF-LIFE VEHICLES AND OTHER
MIXED METALS WILL BE RECYCLED

50,000 UNITS
OF EV BATTERIES WILL BE PROCESSED

PARTNERING

AND THE BENEFITS



China Hongqiao Group Limited
中國宏橋集團有限公司

- GLOBAL LEADER IN PRIMARY ALUMINUM PRODUCTION
 - PRESSURE TO REDUCE CARBON FOOTPRINT
- PRIMARY ALUMINUM PRODUCTION RE-LOCATION TO YUNNAN
 - RELIABLE AND STRONG DOWNSTREAM DEMAND
- NEW SCRAP FROM ITS OWN AND SUBSIDIARY PLANTS
 - STRONG HISTORY IN MELTING TECHNOLOGY



- GLOBAL LEADER IN MIXED METAL SHREDDING AND SORTING TECHNOLOGY
- STRONG KNOW-HOW IN ALUMINUM RECYCLING AND REMELTING BUSINESS
- GLOBAL NETWORK AND 150 YEARS OF HISTORY IN SCRAP METAL TRADE
- STRONG SYNERGY WITH END-OF-LIFE VEHICLE AND MIXED METALS RECYCLING BUSINESS



150 YEARS RECYCLING FOR CLOSED LOOPS.



**RECYCLING.
RESOURCES.
RESPONSIBILITY.**