# Nippon Light Metal Group's Carbon Neutrality Strategy



November 14, 2023 Nippon Light Metal Holdings Co., Ltd.

### **Progress of Activities for Achieving Carbon Neutrality**

#### Nippon Light Metal Group's Carbon Neutrality Strategy

# By fiscal 2030, reduce emissions by 30% compared to fiscal 2013 (Scopes 1, 2, and 3)

- Risks and Opportunities Brought About by Decarbonization
  - → Increased expectations for aluminum in the transition to a decarbonized society
- II. Policy and Strategy
  - Current analysis: Understanding greenhouse gas emissions across the supply chain and identifying priority measures
  - → **Strategy formulation:** Setting reduction targets and concrete implementation measures for Scopes 1, 2, and 3 emissions
    - [Addenda] ① Collaboration within the Group for establishing a closed loop supply chain
      - ② Collaboration with customers for establishing a closed loop supply chain
- III. Carbon Neutrality (CN) Promotion Structure
  - Establishment of Green Growth Strategy Office (Command Center) and Metal Division (Execution Unit)
  - Future approach: Creation and publication of a roadmap / Establishment of subcommittees within the Green Growth Strategy Office



## 1. Risks and Opportunities Brought About by Decarbonization

The increasing expectations for aluminum in the transition to a decarbonized society Risks

Ö SCOPE

Movement towards carbon tax implementation CO<sub>2</sub> emissions = increased costs, **Opportunities** 

Taxation on energy costs according to CO<sub>2</sub> emissions

\* Based on precedents in Europe, there is a possibility of a 10,000 yen/t-CO<sub>2</sub> tax.

3 COPI

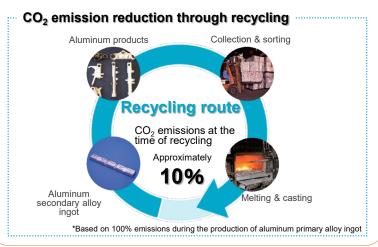
**Demands** Market

The progression of EVs in automobiles leads to increased vehicle weight due to batteries. Thus, lightening vehicles and parts through aluminum use.

Low-carbon demand for materials through recycling

**Demand for lighter** vehicles due to EV adoption

Aluminum is recycle-oriented material due to its low melting point. Aluminum can contribute to realizing a decarbonized society through the promotion pf recycling.



## 2. Policy and Strategy Current Analysis

**Analysis summary** 

Simple methods for grasping the overall sense of CO<sub>2</sub> emissions\*

Identifying priority measures for each Scope

\*The target of CO2 emission calculations is the domestic operations of the NLM Group.

Fiscal 2013 CO<sub>2</sub> emissions

Scope 1 & 2 680,000 t-CO<sub>2</sub>

Scope 1 & 2 CO2 emissions

Scope 1 300,000t

Scope 2 380,000t

Scope 3 emissions

> 2.04 million t-CO<sub>2</sub>

Scope 3 CO<sub>2</sub> emissions

81% of emissions originate from aluminum primary alloy ingot Aluminum primary alloy ingots are almost exclusively used for extrusion and rolling processing

Other (alumina hydrate, etc.) 380,000 t-CO<sub>2</sub>

> Primary alloy ingot .66 million t-CO<sub>2</sub>



**Appropriate** emission monitoring

Energy saving + renewable energy transition

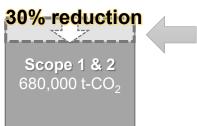
Low-carbonization of extruded and rolled materials

## 2. Policy and Strategy

# Nippon Light Metal Group's Approach to Decarbonization Strategy Formulation

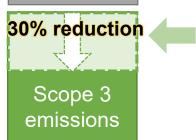
Building a closed loop supply chain is important to our decarbonization strategy as well

Fiscal 2013 CO<sub>2</sub> emissions



(1) Reduction of greenhouse gas emissions in own production process (Scope 1 & 2)

Energy saving: facility improvements leading to improved fuel intensity Renewable energy: transition from fossil fuels to renewable energy



2.04

million

t-CO<sub>2</sub>

(2) Reduction of greenhouse gases in the supply chain (Scope 3)

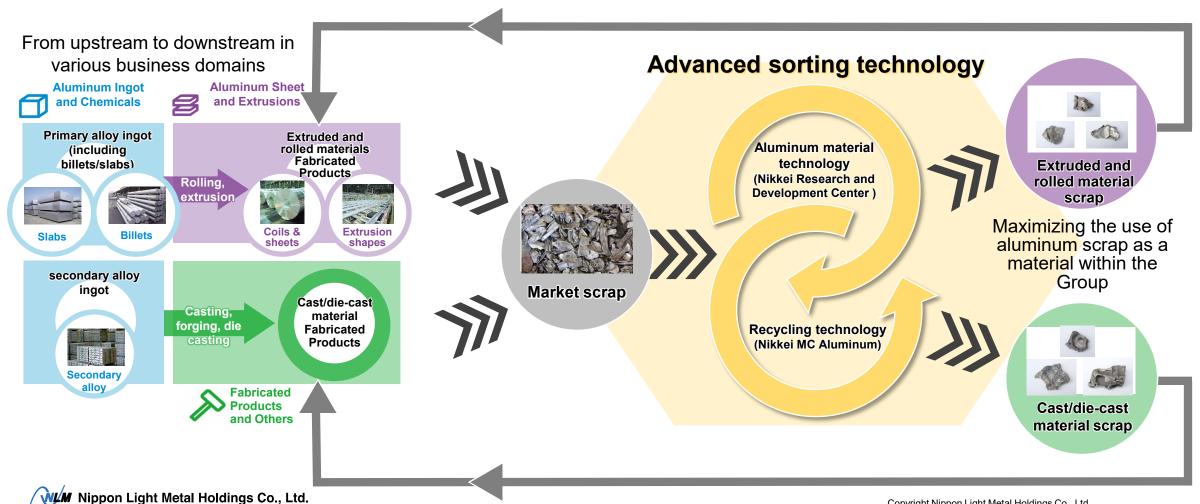
Low-carbon import materials (including green aluminum)
Increased use of scrap (mainly in the extruded and rolled material field)

- ⇒ Construction of a closed loop supply chain
  - ✓ Collaboration within the Group
  - ✓ Collaboration with customers

# 2. Policy and Strategy

# Collaboration Within the Group for Establishing a closed loop supply chain

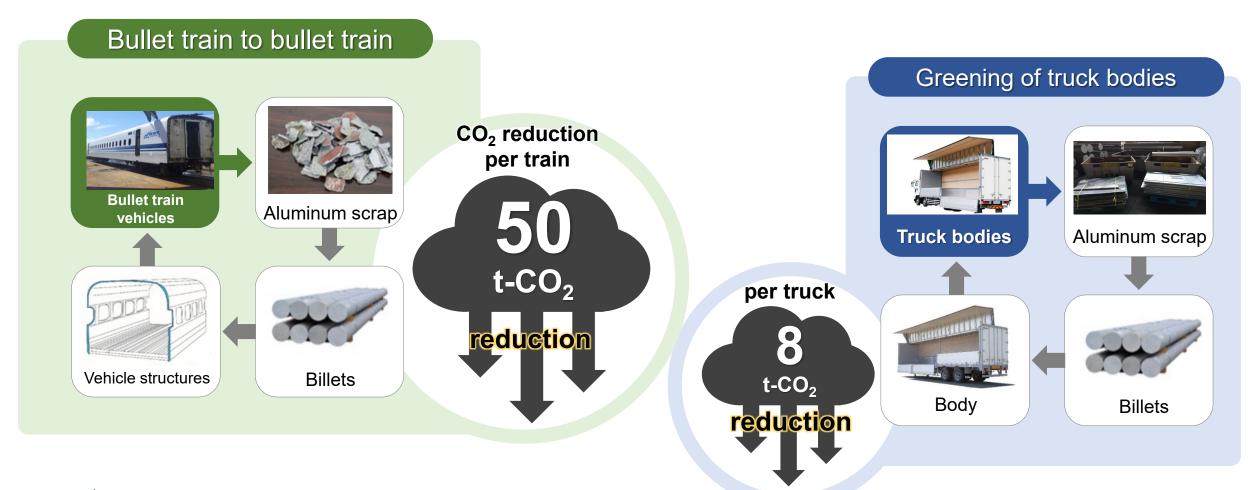
Business operation in diverse field would be a strength to build to a closed loop supply chain



# 2. Policy and Strategy

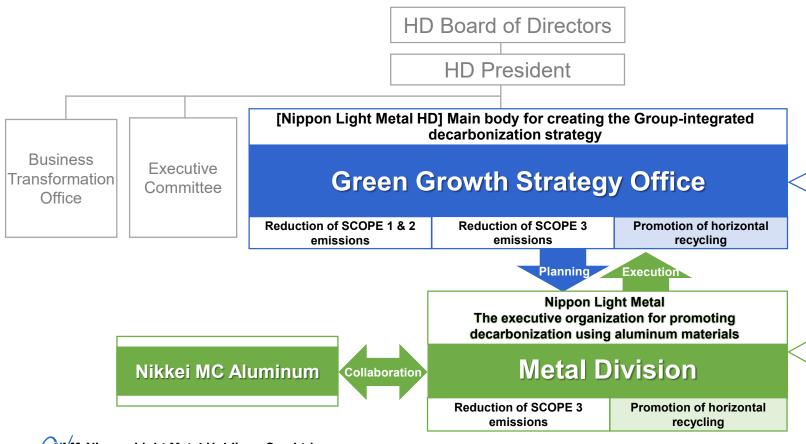
# Collaborating with Customers to Establish a closed loop supply chain

Building a collaborative closed loop supply chain creates value for customers



## 3. Establishing Structure to Promote Carbon Neutrality

- Establishment of Green Growth Strategy Office: creation of a Group-integrated decarbonization strategy
- Integration of Metal Division: reorganization of the Aluminum Material Department, key to decarbonization
- Establishing an integrated and agile decarbonization promotion structure



# Tormulation and promotion of decarbonization strategies

The **Green Growth Strategy Office** established as the main body for creating an integrated strategy within the HD organization, responding to a diverse array of business developments

# ② Executing promotion of the decarbonization strategy

To reduce scope 3 emissions from aluminum materials, procurement/manufacturing/sales of them should be managed as if one team. We integrated these function as **Metal Division**, which will be execution division for recycling and reducing Scope3 emissions.

# 3. Establishing Structure to Promote Carbon Neutrality

#### Where to Go from Here

**Appropriate** emission monitoring

system \*Utilizing DX

**Organizing** measures and establishing promotion organization

✓ Setting up subcommittees within the CN promotion office for each Groupwide strategy theme

✓ Announcement of decarbonization strategy and roadmap \*Planned for fiscal 2024

Creation of decarbonization strategy and roadmap

√ Track the progress of measures

Disclose progress in a timely manner

Steadily implementing decarbonization measures

**Current proposal for** organizing Preparing the environment for subcommittees carbon neutrality promotion Formulating strategies for carbon offsetting **Green Growth** Reduction of own emissions **Strategy Office** Scope 1 & 2 (energy conservation & reduction renewable energy) Formulation and promotion of comprehensive decarbonization strategies Scope 3 Low-carbon material emission procurement/management reduction Scope 3 Promotion of recycling of emission extruded and rolled materials reduction Scope 3 Responding to customer emission recycling requests reduction

✓ Establishment of data collection

