



Developing an Advanced Metals Recycling Business



Forging a future in which batteries and metals gain a new lease of life



NIHON KAGAKU SANGYO CO.,LTD.

Mid-to-Long Term Roadmap

2030

Our Vision

Paving the path to the future by exploring the potential of metals

By honing our unique technologies and creating new value, we will—in partnership with various stakeholders—tackle the challenges in the path to sustainable society.

Mid-Term Management Plan

Tackling Social issues

Expanding our growth areas

Strengthening our business foundation

2024

Recycling vision

Forging a future in which batteries and metals gain a new lease of life

We seek to contribute to the attainment of a circular economy through our unique technology

2023

Start of Mid-Term Management Plan

Nippon Kagaku Sangyo: Recycling Vision

Forging a future in which batteries and metals gain a new lease of life

We seek to contribute to the attainment of a circular economy through our unique technology

To recover used metal to be used as the next resource, and to restore raw materials to be continuously reused.

Building a society in which the value of metal is continuously recycled.

Through recycling metal, we will improve the global environment.

This is our purpose and promise to society.



Role and Policy of our Recycling Businesses



Role

- Recycling business that are indispensable towards realizing our vision of a sustainable world
- Recycling business that aim to achieve our long-term sales and profit growth

Policy

Tackling social issues

- Minimize waste and effective use of resources
- Building a decarbonized society

Strengthening our business foundation

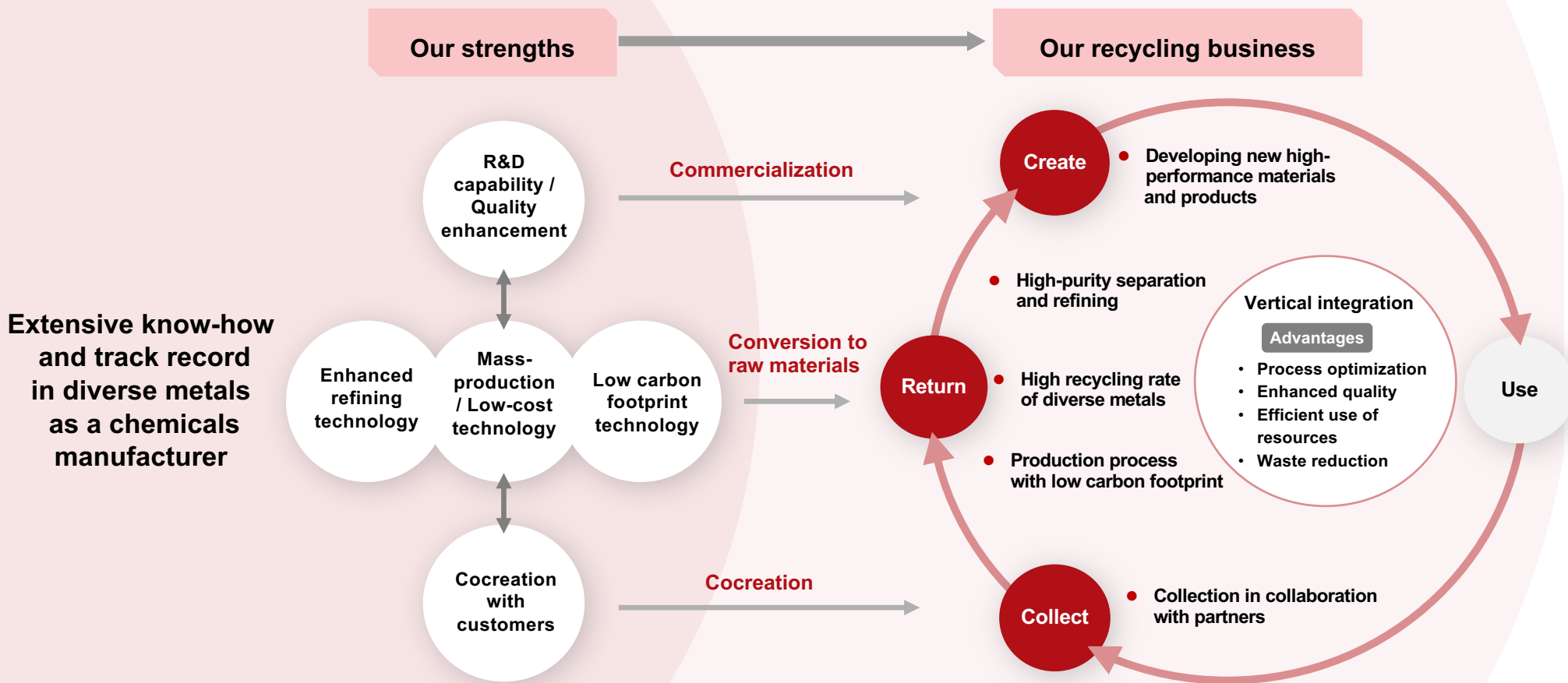
- Strengthening the vertical integration model
- Establishing new supply chains
- Expanding collaborative business partners

Expanding our growth areas

- Expanding our business domain to battery recycling
- Enhancing new high-performance materials and products derived from recycled raw materials

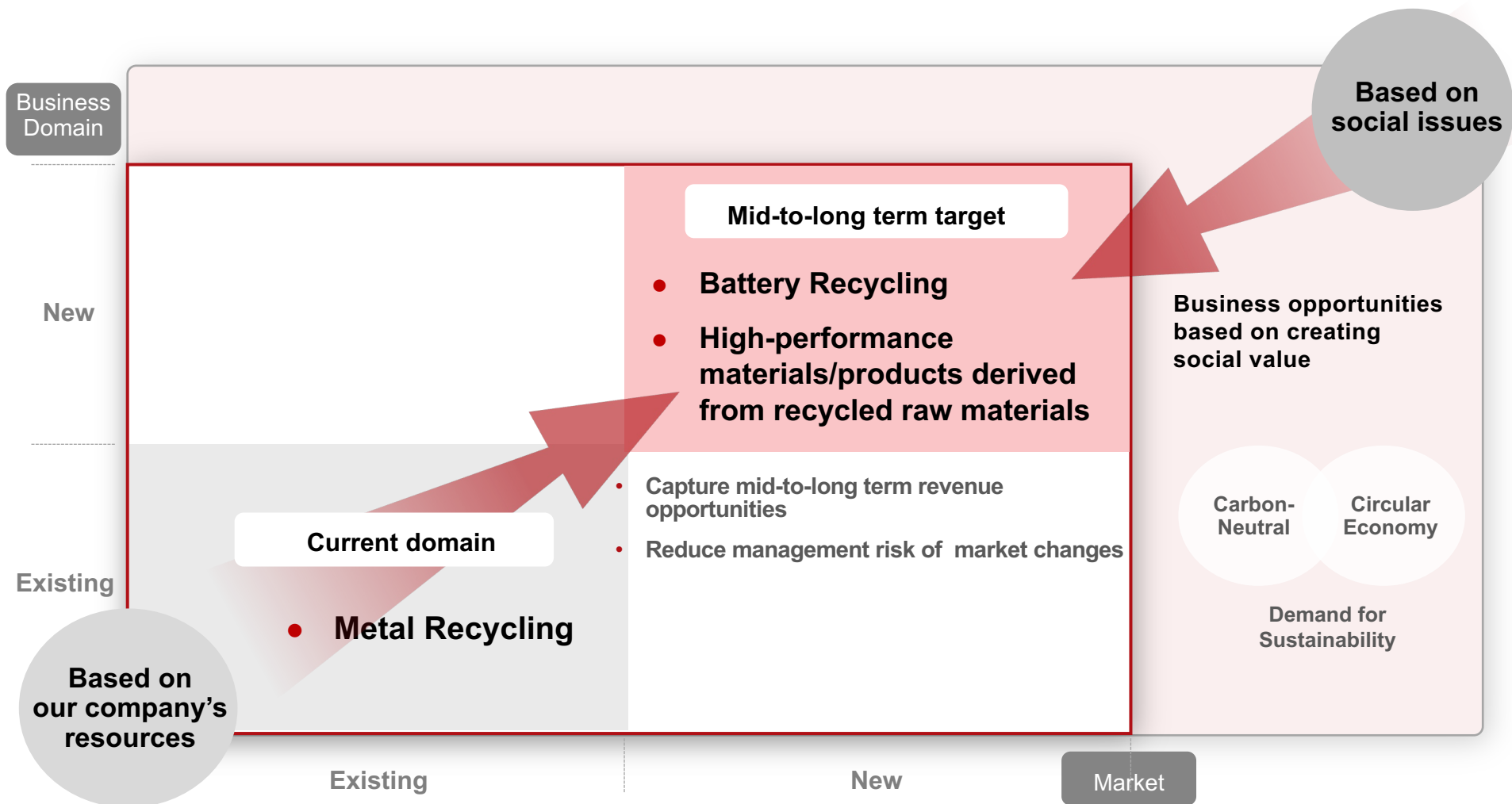
The source of the strengths of our recycling business

Expanding our recycling business by leveraging our cumulative strengths



Expanding Business Domain

Shifting our portfolio by viewing major market turning points as business opportunities



Battery Recycling Business

Enhancing our contribution to a circular economy and decarbonization

Use

Collect

Return

Create

Building a Recycling Society

Leading the way to a circular economy as a pioneer of recycling, by leveraging our decades of track record

Building a Decarbonized Society

By maximizing the use of our accumulated production technologies, we will reduce CO₂ emissions and supply products with a low carbon footprint

- Collaborating with our partners to procure Black Mass

- High-purity of separation and refining treatment
- High recycling rate of diverse raw materials

- Efficient use of resources
- Creating new highly functional materials and products

- Production process with low CO₂ emissions
- Less waste that realizes reduced CO₂ emissions

Battery Recycling Business Initiatives

Pursuing initiatives to realize our recycling vision

2024

2030

Research & development

- Creating technologies that realize long term sustainable growth
- Strategic investment of resources in mid-to-long term growth areas

Mass-production technology development

- Continue practical experiments of recycling technologies at pilot plants
- Continue reviewing processes to reduce CO₂ emissions

Commercialization

- Create measures to stabilize operations and improve productivity
- Strengthening development of high-performance materials and products

Proposal

Feedback

Collaboration with diverse partners involved in the resource recycling loop



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