Environmental Management

Basic approach

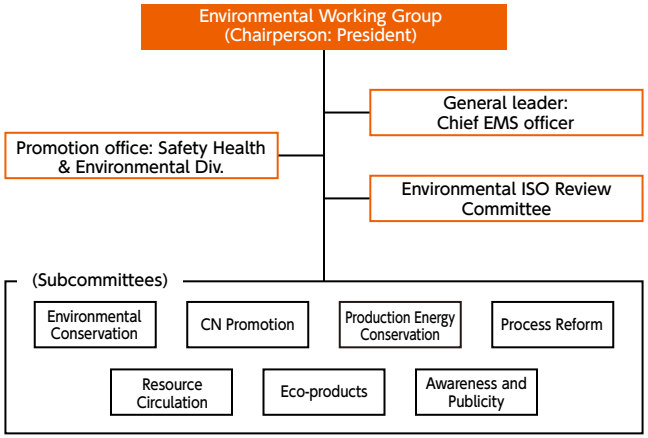
To achieve the Vision 2030 management mission of contributing to society as the "most environmentally friendly steelmaker," Aichi Steel formulated the Aichi 2025 Environmental Action Plan to chart a course of action through to 2025. It defines targets that should be accomplished by 2025, and we are currently working to achieve these targets, focusing on the three pillars: eco-energy, eco-production, and eco-management.

	Initiatives	Targets for 2025
Eco-energy	• Pursuing energy efficiency • Reforming manufacturing processes • Adopting clean energy	CO_2 emissions: **30**% reduction (compared to FY2013)
Eco-production	• Developing eco-friendly products and technologies • Contributing to next-generation infrastructure • Pursuing resource circulation	Amount of landfill waste: **2,400** t/year or less
Eco-management	• Ensuring environmental responsibility • Conserving nature and biodiversity • Disseminating and disclosing environmental information	Nakashinden environmental indicator species: **27** species attracted

Promotion structure

Aichi Steel is working to implement environmental management through effective employment of the PDCA cycle mainly through the Environmental Working Group, which operates under the supervision of its Board of Directors with the president as chairperson. The Environmental Working Group is in charge of executing strategy, establishing targets, and checking progress in accordance with company policies and the Aichi Environmental Action Plan. Seven subcommittees have been established under the Environmental Working Group with clear areas of responsibility to promote efficient and targeted activities based on specialized perspectives. In addition, the Aichi Steel Group Environmental Committee was established to share information and successful case studies to promote Groupwide activities.

● Organization chart



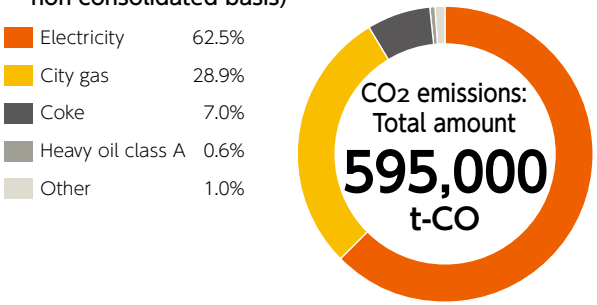
Subcommittees	Initiatives
Environmental Conservation	· Abnormality and complaint prevention, biodiversity and green space conservation activities
CN Promotion	· CO_2 related information gathering, strategic planning, etc.
Production Energy Conservation	· Improving energy conservation, production efficiency, etc.
Process Reform	· Developing innovative technologies in production processes, etc.
Resource Circulation	· Initiatives to reuse resources, reuse waste and raw materials, etc.
Eco-products	· Developing environmentally friendly products, etc.
Awareness and Publicity	· Messaging internally and externally to promote activities such as CN and SDGs

Eco-energy

Approximately 90% of our CO_2 emissions come from electricity and city gas used to melt steel scrap and heat steel materials. Based on the roadmap formulated toward achieving carbon neutrality by 2050, we are promoting the reduction of energy consumption through efforts to deepen the energy-saving technologies that we have cultivated, the elimination of waste in our daily operations, and drastic improvements in manufacturing processes. In FY2024, we conducted 129 energy-saving activities.

Regarding the introduction of non-fossil energy, we have already introduced solar power generation through on-site PPAs at Seki Plant and Gifu Plant. In FY2025, we will install a new solar power generation facility at the Higashiura Plant, and systematically expand the introduction of non-fossil energy by also utilizing biomass power generation through offsite PPAs.

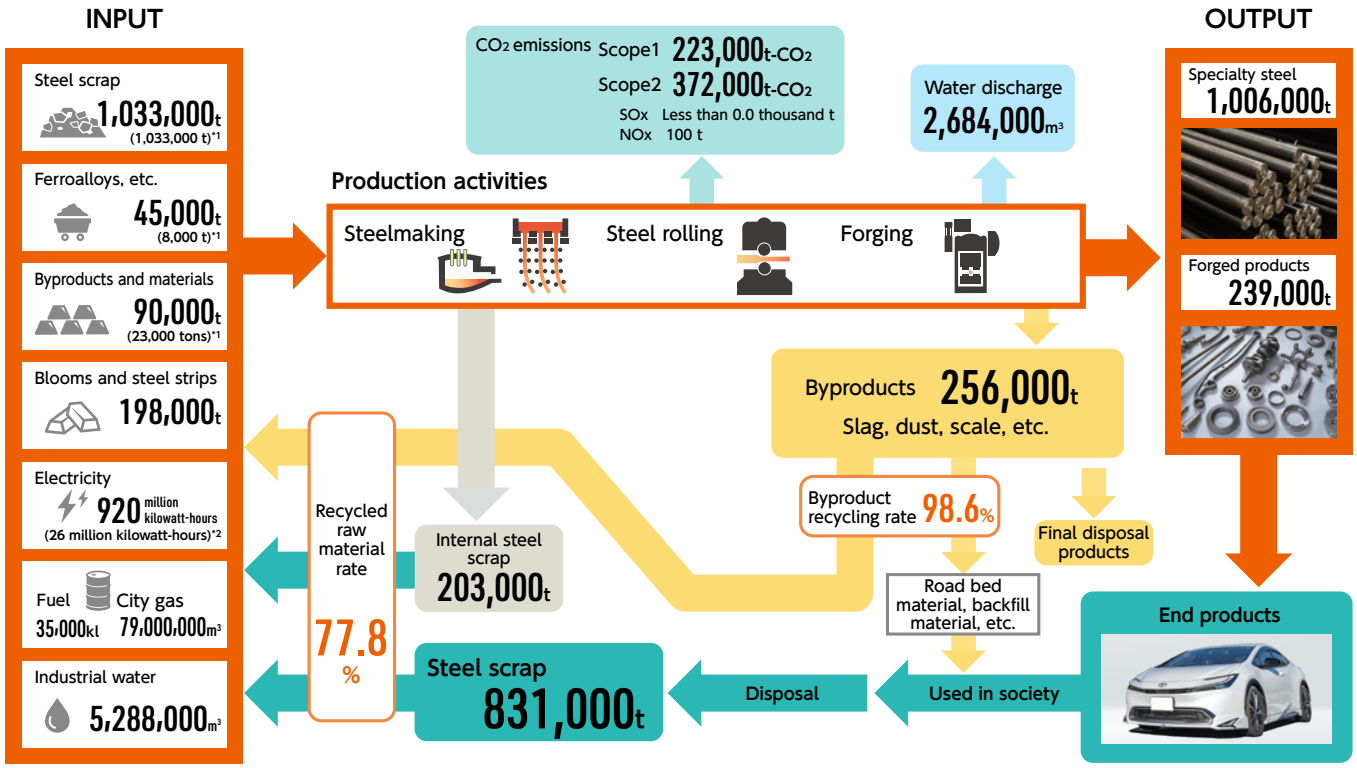
● Breakdown of CO_2 emissions in FY2024 (Scope 1 + Scope 2 emissions from Aichi Steel on non-consolidated basis)



Resource Circulation

Eco-production

Aichi Steel is a resource circulation-based company that both recirculates steel resources and achieves economic value, by recycling steel scrap generated from the dismantling of automobiles and infrastructure into high-quality specialty steel products, automotive components, and other products. We aim to transition to a circular economy by further accelerating our efforts to reuse products and parts and recycle waste and raw materials while reducing resource input and consumption through the efficient use of resources and energy.

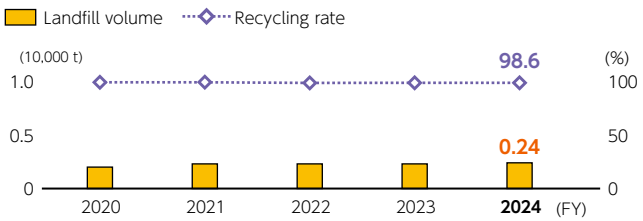


*1 Figure in parentheses represents recycled raw materials
*2 Figure in parentheses represents electricity derived from renewable energy sources

Efforts to increase by-product recycling rates

We have strengthened our recycling of by-products that were previously sent to landfills, maintaining a recycling rate in the upper 90% range. Slag generated in electric furnaces is primarily used as roadbed material for roads, while electric furnace dust is sent to recycling companies for processing to recover valuable metals. Additionally, waste brick used in steelmaking and refining is sorted and crushed, then reused as slag-forming material in electric furnaces. At present, we are focusing on developing technology to recycle slag-based by-products, which are difficult to process, as slag-forming material, with the aim of reducing the amount of landfill to 2,000 tons by 2030 and zero by 2050.

● Trends in byproducts sent to landfill and byproduct recycling rate



Initiatives for a circular economy

We are a member of Circular Core, an association for promoting the sound development of a circular economy, creating new value, and advancing sustainable manufacturing that is environmentally friendly, through collaboration across automotive materials, components, and the entire supply chain. The association actively conducts market research on the circular economy covering automotive materials, components, and the entire supply chain, researches, develops hypothesis and validates the latest technological trends and business practices, and engages in exchanges and cooperation with relevant domestic and international organizations.

Biodiversity

Eco-management

As a resource circulation-based company, we carry out manufacturing that achieves both the circulation of iron resources and economic value. In our business activities, we constantly benefit from the gifts of biodiversity, including natural resources and water. On the other hand, our CO_2 emissions and wastewater from melting scrap and heating steel materials impact biodiversity.

We are deeply aware of the importance of biodiversity, which is being continuously lost. Based on the following policies, we contribute to a sustainable society by conserving biodiversity and developing businesses that protect and utilize nature.

Aichi Steel Group's Biodiversity Policy

1. Protection and restoration of ecosystem
- We assess the impact of our business activities on nature and take appropriate protective measures.
- We explore environmental conservation measures that take advantage of nature's gifts in order to minimize our impact.
- We contribute to the restoration of nature by leveraging our proprietary technologies derived from our special steel manufacturing expertise.

2. Sustainable use
- We promote sustainable methods and use in the areas of "climate change, water, and resources," which impact nature.

3. Collaboration with local communities
- We work together with local communities to conserve and restore biodiversity and guide nature toward regeneration.

Through these efforts, we are contributing to achieving a "world in harmony with nature (nature positive)" by 2050.

Biodiversity conservation initiatives

We endorse the Biodiversity Declaration and Action Guidelines of the Japan Business Federation (Keidanren) and are engaged in conservation activities. We also contribute to the revitalization of nature as a participant in the 30 by 30 Alliance, established by government agencies, companies, and NPOs.

Since FY2012, we have been promoting the Forest Habitat Creation for Beetles project in the Nakashinden Greenbelt adjacent to Chita Plant, maintaining an environment that attracts 50 indicator species. The site, which forms part of Chita Peninsular Greenbelt, a collaboration among 11 organizations including Aichi Steel and other companies, government agencies, students, experts, and NPOs, was certified in FY2023 by the Ministry of the Environment as a Nature Symbiosis Site.

In 2024, we planted 6,000 trees while zoning*, and hosted a tree-planting ceremony attended by the Mayor of Tokai. In November, we were recognized as an Aichi Biodiversity Excellence Certified Company. Furthermore, we have been conducting forest cultivation activities in Nagano Prefecture since 2006, and in 2019, we signed a Forest Adoption Agreement with Otaki Village, the water source for our business operations. Employees and their families regularly engage in conservation activities, working together with the local community to nurture a richer forest.

*The process of determining optimal plant placement

Volunteers cultivating the water source forest in Otaki Village

Nakashinden Greenbelt Tree-Planting Ceremony

Disclosures based on TNFD (Taskforce on Nature-related Financial Disclosures)

The impact of resources such as biodiversity and water varies by region, and so we feel we need to adopt a region-specific perspective. We will proceed with information disclosure based on the recommendations of the TNFD. We have begun assessing the impact of our business activities on nature through a process in line with the LEAP approach advocated by the TNFD. The aim is to publish this by the end of FY2025.

– LEAP/TNFD explanation

The LEAP Approach
- Developed by TNFD as an integrated approach for assessing nature-related issues, including points of contact with nature, dependencies on nature, and impacts, risks, and opportunities related to nature.
- In the LEAP approach, following scoping, an organization progresses through the steps of Locate, Evaluate, Assess, and Prepare to build readiness for TNFD disclosures.

● LEAP approach diagram