

# SUMIDA ESG Report 2024

# **Editorial Policy**

This '2024 SUMIDA CORPORATION ESG Report" serves as an introduction to SUMIDA CORPORATION including an overview of our CSR activities. Detailed CSR related information may be found on our website: www.sumida.com/csr/

"SUMIDA," as used in this report, refers to SUMIDA CORPORATION, its wholly owned subsidiaries, and all companies in which management rights are held.

This report covers the period from January 1, 2024, to December 31, 2024, and was published in April 2025. In conducting CSR-related activities, we reference the ISO 26000 guidelines to integrate social responsibility into our values and practices.

Forward-looking statements in this report reflect our current expectations and assumptions at the time of publication. These statements are subject to various risks and uncertainties that could cause actual results to differ materially from those projected.

The ESG data presented in this report may be subject to modifications due to changes in reporting standards, data collection methodologies, and other factors. As data quality improves over time, we will update our ESG data accordingly on our website. While we strive for accuracy and completeness, the data should be considered indicative rather than definitive.

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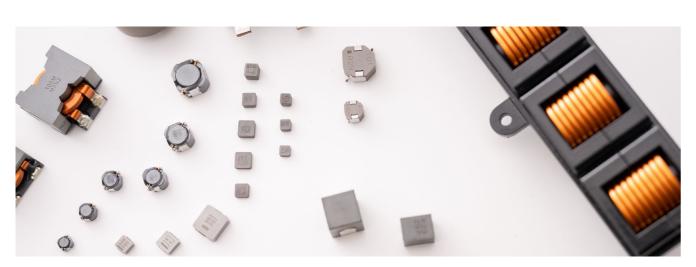
# "Connecting Technology to People"

Our vision is to lead in the industry as a timeless company and to provide solutions that help to power and inspire the world with innovations that fulfill the whims of our imagination.

energy solutions, devices and equipment.

SUMIDA is a global leader in the Our core product scope includes With over 60 years history in Asia design and manufacture of coil- components and modules and 90 years in Europe, our expertise related components and modules. such as power inductors & in coil-related manufacturing, as Specialising in custom design transformers, automotive keyless well as technical design, allows solutions, SUMIDA's products are antennas, mobile communications us to offer our customers both used in a wide range of applications equipment, radio frequency customised design solutions and from consumer electronic devices identification tags (RFID), power off-the-shelf products. In addition, through to home appliances, inverters for solar power generators our comprehensive manufacturing automotive electronics, green and components for industrial capabilities and footprint allow us industrial lighting solutions. In addition, we to flexibly adjust product volumes electronics and medical healthcare also provide the complementary and locations as required while manufacturing services (EMS).

products and services such as maintaining consistent high-quality magnetic materials, ceramics, standards. This is why we pride flexible connectors and electronic ourselves on our ability to cultivate long-term relationships with our customers built on trust.



# Core Strengths

# **Competitive Solution Provider**

With over 60 years of experience as a leader in key markets within the electronics industry we are a solution provider, capable of the design and manufacture of products ranging from basic coil components through to complex value added modules.

# **Leading Expert in Coil Technologies**

We are a technical specialist in the area of coil manufacturing technologies, which allows us to provide a full scope of professional coil-related design & production capabilities to our customers.

# Global Footprint - Global Reach, Local Support

Our Sales and R&D network allows us to be able to provide local advisory and technical support services to our customers no matter where they are, to manufacture products at locations which best suit customer needs and to flexibly adjust production resources as customer requirements change, all while maintaining the high quality standards and business integrity the industry has come to expect from a global leader in the market.

# **Key Technologies**

Material	Magnetic metal, capacitor ceramic, MnZn ferrite, NiZn ferrite, metal powder cores, soft magnetic composites, flexible metal
Design & Application	Product design, magnetic simulation, circuit simulation, stress simulation, circuit design, PCB layout
Machine & Process	Machine/ equipment development, laser sealing, laser blasting, laser peeling
Tooling	Tooling design, tooling processing, mold flow simulation
Winding	Alfa winding, edgewise winding, litz wire winding, orthocyclic winding, toroid winding, air coils
Precise Processing	Injection molding, insert molding, low-p overmolding, overmolding, pin draw molding, metal injection molding, vacuum potting, plasma treatment, ferrite injection molding, coating, stamping, electro-plating
Connection	Soldering, arc welding, laser welding, pulse heat welding, resistance welding, ultra sonic welding, pressfit pin (pin to PCB), crimping, pinning, board to board connection
Evaluation & Testing	Reliability test, transmission x-ray & CT scan, SEM/EDX, ion chromatography, thermal analysis, differential thermographic / DTA, full automatic scanning microscope, inductive coupled plasma, permeability measurement over temp, laser diffraction meter

# **Product Overview**



# **POWER & RF INDUCTORS**

Surface Mount, Through Hole, LPF Coils for Digital Amplifiers, Wire Wound Chip Inductors



# **SENSORS & ACTUATORS**

Rotor Position Sensors, ABS Coils, Solenoid Coils, Piezo Motors



**POWER TRANSFORMERS & REACTORS** 

SIGNAL MAGNETICS

Antennas, Others

RF/Communication, RFID,

Surface Mount, Through Hole, PoE Transformers, Strobe Flash Transformers, Switching Mode Power Supplies, Reactors, Wireless Power Transfer Coils



# **AUTOMOTIVE MODULES**

Choke Modules for Inverters, Module Components, Component Carriers, Power Conversion, Components & Modules



# MAGNETIC MATERIALS, CERAMICS, EMS & FLEXIBLE CONNECTIONS

Ceramic based Passive Components, **Electronic Manufacturing Services** (EMS), Flexible Flat Cables



# **EMC COILS & CHOKES**

AC Powerline, DC Powerline, Normal Mode Chokes, **Common Mode Chokes** 



# **EMI/EMC FILTER**

DC Line Filter Module, CMC Filter Choke, DM Filter Choke



# COMPONENTS FOR MEDICAL EQUIPMENT

# **Major Applications**

















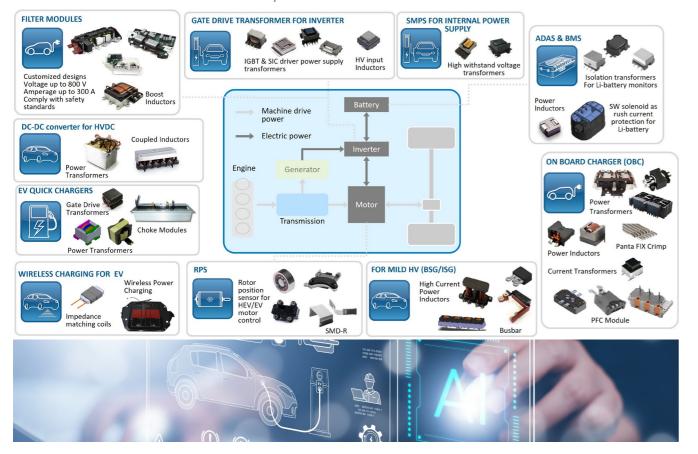




# **Automotive Electronics**



# Automotive Electronics - EV/xEV



# Consumer Electronics



# **Industrial Electronics**



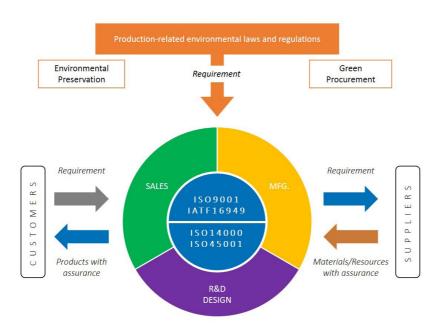
# **Company Profile**

Holding Company:	SUMIDA CORPORATION; Tokyo Stock Exchange, Prime Market (code: 6817)
Representative:	Kanji Hori (CEO)
Headquarters:	3-7-2 KDX Ginza East Building 7/F, Irifune, Chuo-ku, Tokyo, 104-0024, Japan Tel: +81-3-6758-2470 Fax: +81-3-6758-2472
Date of Incorporation:	January 16, 1956
Capital:	13,624 M JPY (as of December 31, 2024)
Consolidated Net Sales:	143,978 M JPY (for FY2024, ended December 31, 2024)
Employees:	14,662 (as of December 31, 2024)
R&D Centers:	Japan, China, USA, Germany
Worldwide Sales Offices:	Japan, China, Hong Kong, Singapore, Taiwan, Thailand, South Korea, USA, Germany, India
Manufacturing Sites:	Japan, China, Vietnam, Thailand, Mexico, Germany, Romania, Slovenia, USA
<b>Business Description:</b>	Research, design and manufacturing of electronic components and modules.

# **Environmental Policy**

SUMIDA has positively embraced environmental protection issues in order to fulfill its social responsibilities as global citizens.

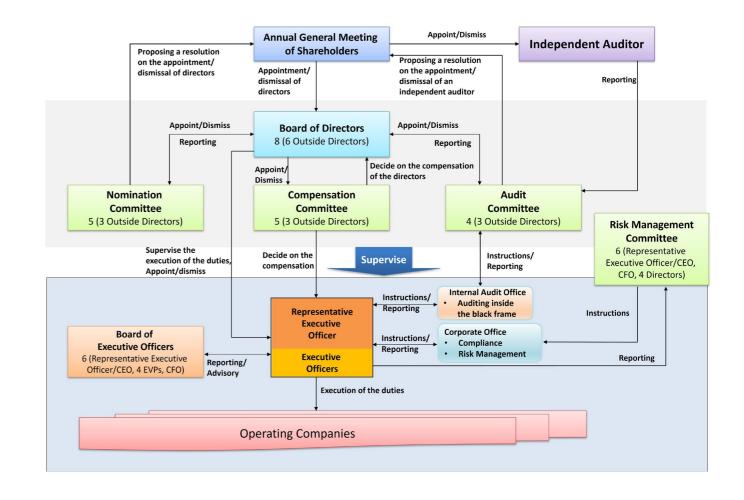
Our determination to protect the environment is specified in the "SUMIDA Environmental Philosophy". Additionally, each local region has established an "Environmental Policy" and promotes environmental protection activities according to the management system of ISO14001.



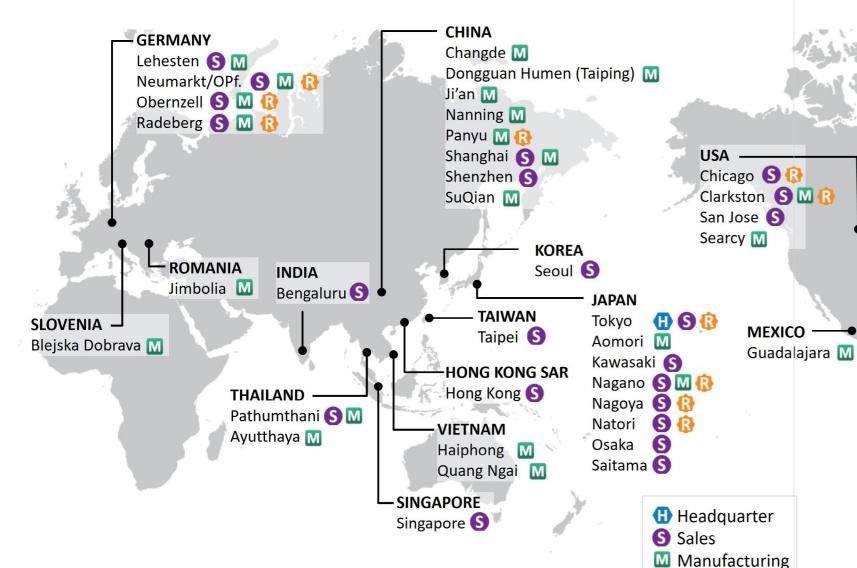


# Corporate Governance

SUMIDA recognises the importance of having a solid corporate governance policy in place in order to ensure the effectiveness of management to be able to respond to the expectations of our stakeholders, as well as to continuously enhance the corporate value of the company. Having adopted a "Company with Committees" system our board has a majority of outside directors, and the clear differentiation of responsibilities between "management" and "governance" helps us to ensure that we maintain a high level of integrity and transparency within our organisation.



Global Footprint Global Reach, Local Support



# **SALES**

22 offices in 10 countries 15 Asia 4 Europe 3 North America

# **MANUFACTURING**

23 factories in 14 countries 14 Asia 6 Europe 3 North America

# R&D

R&D

10 centres in 4 countries
5 Asia
3 Europe
2 North America

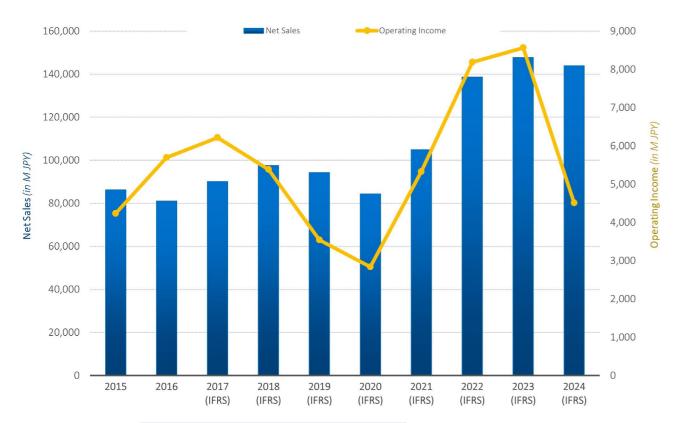
# **Production Site Data and CSR-related Certifications**

**	F 11	ouuctic	JII SILE L	Jata all	u CSIN-	Cia	icu	CCI	CIII	cati	Ulis
(Includes quality, environm Please click here to view all			Production Area (m²)	No. of Employees	Output/mth (m pcs)#	ISO 9001:2015	ISO 14001:2015	ISO 14064-1:2006	ISO 45001	ISO 50001:2011	IATF 16949
Panyu (SHK)	China	1984	12,000	982	7.49	0	0	0	0	-	0
Dongguan Humen	China	1991	11,230	1,582	11.26	0	0	-	0	-	0
Nanning (SNM)	China	2008	5,175	759	18.80	0	0	-	0	-	0
Changde (SCD)	China	2010	9,241	919	13.40	0	0	-	0	-	0
Ji'an (SJA)	China	2010	21,242	1,836	12.66	0	Ο	-	Ο	-	Ο
Panyu (SGZ)	China	2011	32,000	2,534	28.84	0	0	-	0	-	0
Shanghai	China	1997	2,940	144	3.10	0	0	-	-	-	0
SuQian	China	2013	5,066	319	4.60	0	-	-	-	-	-
Aomori	Japan	1987	1,300	77	0.02	0	0	-	-	-	-
Nagano	Japan	1970	900	73	0.09	0	-	-	-	-	-
Hai Phong	Vietnam	2010	1,800	307	3.31	0	0	-	0	0	-
Quang Ngai	Vietnam	2015	13,440	900	6.47	0	0	-	0	_	0
Pathumthani	Thailand	1989	8,900	397	7.10	0	0	-	0	-	0
Ayutthaya#	Thailand	2024	1,710	35	0.12	-	-	-	-	-	-
Obernzell	Germany	1942	10,977	449	10.00	0	0	-	-	0	0
Neumarkt	Germany	1922	3,011	46	6.80	0	0	-	-	0	0
Lehesten	Germany	1965	2,468	166	0.90	0	0	-	-	0	0
Radeberg	Germany	1993	5,700	266	7.70	0	0	-	-	0	0
Blejska Dobrava	Slovenia	1997	3,756	304	3.30	0	0	-	-	0	0
Jimbolia	Romania	1998	12,100	617	7.50	0	0	-	-	0	0
Guadalajara	Mexico	1997	8,024	479	4.30	0	0	-	-	-	0
Clarkston, Michigan	USA	1954	5,481	201	1.10	-	0	-	-	-	0
Searcy, Arkansas	USA	1997	2,787	81	0.26	-	0	-	-	-	0

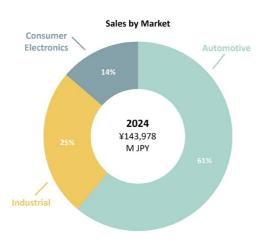
Note: \* Data as of Dec '24, # Max. mthly output in '24

<sup>\*</sup> Additional certifications: FDA (US Food and Drug Administration), ISO 13485 (Quality Management Systems for Medical Devices)

# Financial Performance Information

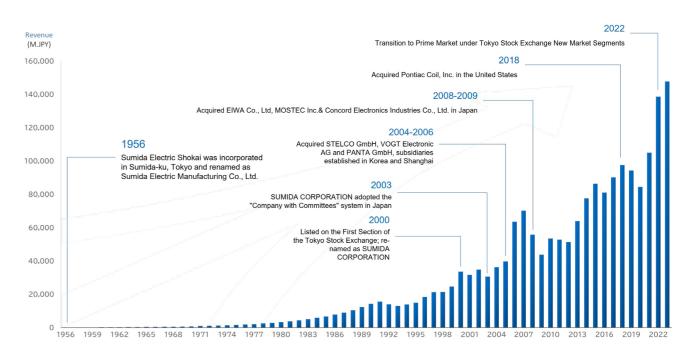


(in M JPY)	2020	2021	2022	2023	2024
Net Sales	84,417	104,920	138,600	147,672	143,978
Operating Profit	2,838	5,326	8,189	8,564	4,513
<b>Operating Margin</b>	3.4%	5.1%	5.9%	5.8%	3.1%
Profit attributable to owners of parent, or net profits for the year attributable to owners of parent	828	2,629	5,099	5,064	590
Basic earnings per share	31	97	188	167	18
Total Assets	98,063	117,725	134,846	142,786	147,766
Net Assets (or total equity)	34,557	40,101	48,877	57,312	60,915
Net assets per share, or equity attributable to owners of parent per share	1,213.75	1,409.82	1,722.08	1,687.39	1,774.64



Securities Identification Code:		6817		
Stock Exchange Listing:		Tokyo Stock Exchange, Prime Market		
End of Fiscal Year		December 31st		
Annual General Shareholders' Meeting		March		
Record Date:		December 31st		
Trading Unit:		100 Shares		
End-of-term Registration	Interim:	June 30th		
Deadline for Dividend Payment	Year-end:	December 31st		

# **Historical Overview**





# Numerical Targets for the Mid-term Business Plan 2024-2026\*

# **Targets**

Sales Operating Profit EPS

190.0 B JPY 13.5 B JPY 272 JPY/Share

gets by Market		FY2023 (Actual)	FY2026 (Target)	2023-2026 CAGR (%)	Details
	Automotive	86.8	114.3	9.6%	Significant growth regardless of power source, including EV, hybrid, FCV, etc.
onsumer ectronics	Industrial	40.1	54.3	10.6%	Growth in green energy, FA robots, medical equipment, and space related businesses.
utomotive	Consumer Electronics	20.7	21.4	1.1%	Aggressively acquire business on the back of AI penetration, aiming to improve profitability while maintaining current scale.
FY2023 Actual FY2026 Target	TOTAL	147.6	190.0	8.8%	

<sup>\*</sup>Data taken from Mid-term Business Plan published on February 8th, 2024

# Message from the CEO

In 2024, the global market for inductive components experienced slow growth due to sluggish economies, inventory adjustments, inflation and high interest rates in various regions. Overall, the automotive, industrial and consumer markets were weak. Despite the decarbonization mega-trend being evident in the expansion of the green energy market, the market also suffered as weaker economies saw reduced consumer spending and reduced government subsidies. In the electric vehicle (EV) market, adoption rates varied widely across regions. While countries like China and several European nations saw growth, other regions experienced slower uptake due to economic, infrastructural, and policy-related barriers. Changes in government policies and regulations also created uncertainty for manufacturers and consumers, with shifts in subsidies and incentives affecting market dynamics and consumer confidence.

(in M JPY)	2023 Actual	2024 Actual	YoY
Sales	147,672	143,978	-2.5%
Operating Profit	8,564	4,513	-47.3%

While the first half of the year began stable, the second half saw a slowdown in the Chinese economy due to ongoing stagnation in the real estate market and low domestic demand. In the United States, high interest rates and inflation dampened consumer spending. Meanwhile, in Europe, fluctuations in energy prices and geopolitical turmoil significantly affected the automotive industry.

# **Financial Performance**

Sales for the fiscal year 2024 amounted to 143.97 billion JPY, a decrease of 2.5% year on year. Despite significant efforts to reduce fixed costs, rationalization expenses due to reduction of our workforce at our European locations brought operating profit down to 4.51 billion JPY, half of the amount achieved in FY2023. Additionally, due to challenges such as the termination of government subsidies in Germany and headwinds in the xEV market, our full-year forecast was revised downward. Nevertheless, we are steadily progressing with measures to strengthen profitability to ensure sustainable growth. We remain confident in our strategic initiatives and are committed to driving innovation and efficiency, positioning ourselves for a strong recovery and long-term success.

# **Outlook for FY2025**

Looking ahead to FY2025, we anticipate ongoing uncertainty in Europe, where the recovery of the automotive and industrial markets will be gradual. Additionally, complications such as tariff wars, geopolitical tensions, and the state of the Chinese economy will also be contributing factors. In this challenging environment, we are taking the opportunity to make significant structural reforms, including workforce reductions at our European operations. Concerning sales, our green energy-related business continues to expand, and our focus is on securing high-quality projects.

Sales by Market:	(in B JPY)	2024 Actual	YoY
Automotive		87.8	+1.2%
Industrial		36.3	-9.5%
Consumer Electron	nics	19.7	-4.4%

Sales by Region:	(in B JPY)	2024 Actual	YoY
Asia - Greater China		36.7	+5.9%
Asia - Others		22.6	-10.1%
North America		26.6	+8.2%
Europe		57.9	-8.2%

# **Climate and Sustainability Challenges**

Climate change remained a significant concern, with 2024 witnessing an increase in extreme weather events such as wildfires, floods, and heatwaves, underscoring the urgent need for climate action. However, there was a notable backlash against ESG (Environmental, Social, and Governance) initiatives, particularly in the US and Europe. Contributing factors included political and economic pushback, regulatory changes increasing operating costs for businesses, and the

(in M JPY)	2024 Actual	2025 Forecast	Change YoY
Automotive	87,893	91,000	+3.5%
Industrial	36,314	33,800	-6.9%
Consumer Electronics	19,770	19,200	-2.9%
Total	143,978	144,000	+0.0%

The market environment remains challenging, and we expect sales to remain flat compared to the previous fiscal year. The Automotive market will offset the decline in the Industrial and Consumer Electronics markets.

pressure on corporations to balance responsibilities. Climate reports indicated that the world is falling short of meeting the goals of the Paris Climate Agreement, highlighting the gap between ambitious targets and current realities. These dynamics reflect the complex and often conflicting nature of sustainability and climate action.

# Commitment to Sustainability

The urgent need for global action to reduce carbon emissions is undeniable and we remain steadfast with our efforts to reduce our (scope 1 & 2) greenhouse gas emissions 42% by 2030 based on 2022 levels. Additionally, we see a healthy pipeline of opportunities in decarbonization-related sectors, which we aim to capture. With focus on our target growth markets for energy-efficient power electronics, we are also driving product design-related initiatives to reduce scope 3 greenhouse gas emissions in cooperation with our customers and suppliers.

We are committed to the global movement for climate action, through careful prioritisation of initiatives, identification of business growth potential, and building sustainable practices throughout our operations. We take a measured approach to achieving our long-term sustainability goals.



Kanji Hori CEO SUMIDA CORPORATION

Green Energy related Revenue (in B JPY)	2023 Actual	2024 Actual	YoY
xEV - Automotive	20.0	20.3	+1.3%
xEV - Industrial (Quick charger for xEV, etc.)	8.0	10.1	+25.8%
Others (Solar energy storage, charging stations, etc.)	8.6	8.4	-2.1%
Green Energy-related Sales	36.7	38.9	+5.9%
Green Energy-related Sales Ratio	24.9%	27.1%	+2.1pt

See notes 1 and 2 below for details of our market segmentation

# Note

- 1. Automotive: All automotive-related applications including xEV such as comfort, safety and braking-related applications Industrial: Medical, factory automation, green energy, telecommunication infrastructure-related applications Consumer Electronics: Home and personal electronics, white goods-related applications
- 2. xEV segment is split between automotive and industrial, where xEV-Automotive covers vehicle specific applications and xEV-Industrial covers charging infrastructure applications

  Green energy-related market: Includes not only xEV-Automotive and xEV-Industrial applications, but also includes green energy power generation equipment and energy storage solutions.

# 2024 - 2026 Mid-term CSR Goals

# " SOLUTIONS TO SUPPORT SOCIETY IN REDUCING CARBON EMISSIONS"

Sustainability has always been deeply rooted in SUMIDA's company culture as one of our 6 core values. As a manufacturing company in power-related electronics, environmental responsibility is an important aspect of our philosophy. Striving to find the right balance between nurturing our business growth objectives whilst reducing our impact on our environment is a fundamental principle in our decision-making process for our 2024-2026 Mid-term Business Plan.

# Our Approach



Target specific markets with innovative products and solutions that help in reducing carbon emissions



Operational, energy and waste efficiency – optimizing efficiency, utilizing green energy, smart grid solutions and recycled materials where possible



To be a socially responsible company and to work together with our stakeholders to support the 17 UN Sustainable **Development Goals** 

# Mid-term CSR Goals & Actions FY2024 - 2026 Plan

# ENVIRONMENTAL

# "Take Climate Action"

- Energy Efficiency
- Waste Reduction & Recycling
- Adoption of Sustainable Energy
- Sustainable Resource
- Use

Prevention of Pollution

# E1. Set goals and develop an action plan to reduce scope 1, 2 & 3 greenhouse gases emissions to support the paris climate agreement

Due to complexities of our position within the industry supply chain, take a practical & impactful twopronged planning approach for new mtbp:

1) Scope 1 & 2 (CCF)- aim to reduce scope 1 & scope 2 greenhouse gas emissions 42% by 2030, from a base year of 2022

- PV installation planning & implementation
- Develop action plans for other emissions reduction measures by location 2) PCF & Scope 3
- Conduct scope 3 stocktake and analysis
- Design 4 Sustainability workshops initiative
- Initial trial pilot projects for PCF calculations

# E2. Improve the transparency of annual environment-related CSR disclosures for SUMIDA CORPORATION

Continue to participate in CDP – disclosing relevant environmental data through the global platform

# E3. Engage supply chain for GHG reporting and emission reduction

[Ongoing] Raise awareness and encourage suppliers to consider reducing their ghg emissions and reporting on their environmental activities through the CDP.

Improve emissions factor data for scope 3 "purchased goods & services" by collecting primary data from suppliers where available and incorporate ghg emissions accounting into IT systems where possible.













Aim to reduce our scope 1 and scope 2 greenhouse gas emissions 42% by FY2030 from a base year FY2022.

Target to capture demand for power supply infrastructure driven by the worldwide growth of energy infrastructure

- 1. High-efficiency Power Grid / Smart Grid-related
- 2. Greenenegy-relatedmarkets(xEV,quickchargers,energy storage, etc.)
- 3. Next growth areas (medical care, defense, space development, AI technology related ares, data centres, wind power, special purpose vehicles, etc.)
- 4. Drivethedevelopmentofkeytechnologiesthroughopen innovation and other collaborative approaches.

# GOVERNANCE

# "Operate with a high standard of integrity & build operational resilience"

- Compliance & Risk Management
- Product Quality & Security
- IT Security
- Transparency
- CSR Training & Promotion

# G1. Strengthen SUMIDA's global compliance system

Timely or regular reporting of compliance issues from the SUMIDA Group companies in the world. Regular and continuous inhouse compliance training and review of the Global Compliance Guidelines.

# G2. Increase SUMIDA's corporate value and achieve sustainable growth through further improving the transparency of SUMIDA's management

Continue to evaluate the effectiveness of the Board of Directors by utilizing outside experts.

Provide information to BOD members in a more timely and appropriate manner to enable further active discussions at board meetings.

Timely disclosure of relevant and clearly presented information to help stakeholders understand company disclosures.









# **SOCIAL**

# "Be a respected member of society"

- Labour & Human Rights
- Develop New Technologies & Solutions for a sustainable future
- Talent Recruitment, Development & Retention
- Responsible Supply Chain
- Social Contribution

# S1. Maintain high standards of occupational health and safety

[ongoing] Minimise workplace accidents.

[ongoing] Maintain high standards of employment practices.

S2. Prioritise the development of products/technologies targeted at 'socially responsible' applications

Focus and concentrate resources on future growth markets such as green energy-related markets

# S3. Maintain and improve our talent pool diversity

Female Managers: ≥20%, Non-Japanese Managers: 50%, Managerial positions occupied by mid-career employees: ≥ 80%, Board & committee composition

# S4. Work together with our suppliers and logistics partners to ensure responsible business practices throughout our supply chain

[Ongoing] Improve awareness and signed collection ratio of our Supplier Social Responsibility Commitment Letter and conflict minerals information.

[Ongoing] Improve awareness and the number of targeted suppliers with contracts that include clauses on environmental, labour and human rights requirements.

# S5. Community Engagement / Social Contribution

[Ongoing] Actively engage with local communities on projects such as community development, environmental conservation, and philanthropy & disaster relief.

# S6. Open Innovation R&D Projects

[Ongoing] Capture collaborative research projects with technical universities and partners with a focus on long-term product development prospects







NOTE: CCF - Corporate Carbon Footprint, PCF - Product Carbon Footprint

# way2zero Update

In April 2024, a global action planning exercise was initiated with the clear target to reduce scope 1 and scope 2 emissions 42% by 2030, using a base year of 2022. Taking into to account the energy supply infrastructure of the countries within which we operate, location-based action plans were formulated identifying emissions reduction opportunities and targeted strategies to achieve our goal.

Environmental Data	2020	2021	2022	2023	2024
Energy Consumption (MWh)	125,617	142,584	131,449	125,428	113,993
Renewable Energy Consumption (MWh)	5	5	7,839	23,090	20,473
Renewable Energy Generated (MWh)	83	313	551	1,879	1,916
Scope 1 & 2 GHG Emissions (t-CO2e)	84,155	69,868	69,067	64,486	48,211
Water Consumption (M litres)	674	713	898	990	823
Hazardous Waste (tons)	515	594	534	553	677
Non-hazardous Waste (tons)	2,587	2,981	2,943	3,278	2,927
% Operational Sites with ISO 14001	90%	90%	90%	90%	87%
% Operational Sites with ISO 14064-1	23%	23%	23%	27%	30%
% Operational Sites with ISO 50001	5%	5%	5%	5%	4%

The data contained in this table may be subject to adjustments

The Scope 1 & 2 emissions related to the production processes are periodically recorded in our CCF (Corporate Carbon Footprint) calculations. Specific targets and actions for all locations of SUMIDA are defined and continuously monitored in the way2zero workstream in order to reach the defined consolidated Scope 1 & 2 reduction target.

For SUMIDA as a supplier of components and modules cradle-to-gate product carbon footprints (PCFs), reflecting all the emissions created from raw material extraction through production up to our outgoing factory gate are becoming an increasingly important factor to our customers in the R&D stage and development cycle of their product influencing priorities and rules of our design processes.

Due to the fact that these cradle-to-gate PCFs are usually dominated by Scope 3 emissions from purchased materials on our BOM (bill of material) that are difficult to be reduced in the short term, we have initiated a separate workstream for these Scope 3 emissions to address emissions analysis, target setting and action planning involving customers and suppliers.

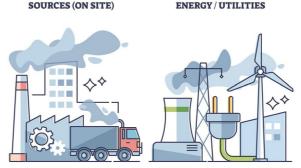
# Note: CCF & PCF

The GHG Protocol Corporate Standard defines the Corporate Carbon Footprint (CCF) as the total greenhouse gas emissions from all activities across a company's value chain, including direct emissions from owned or controlled sources, indirect emissions from the generation of purchased electricity, and all other indirect emissions that occur in a company's value chain

The GHG Protocol Product Standard defines the Product Carbon Footprint (PCF) as the total greenhouse gas emissions associated with a product throughout its life cycle, from raw material extraction through production, use, and disposal

Source: GHG Protocol

# SCOPE 1 SCOPE 2 DIRECT INDIRECT EMISSIONS FROM EMISSIONS FROM SOURCES (ON SITE) ENERGY/UTILITIES



Location specific plans & targets to reduce scope 1 & 2 emissions

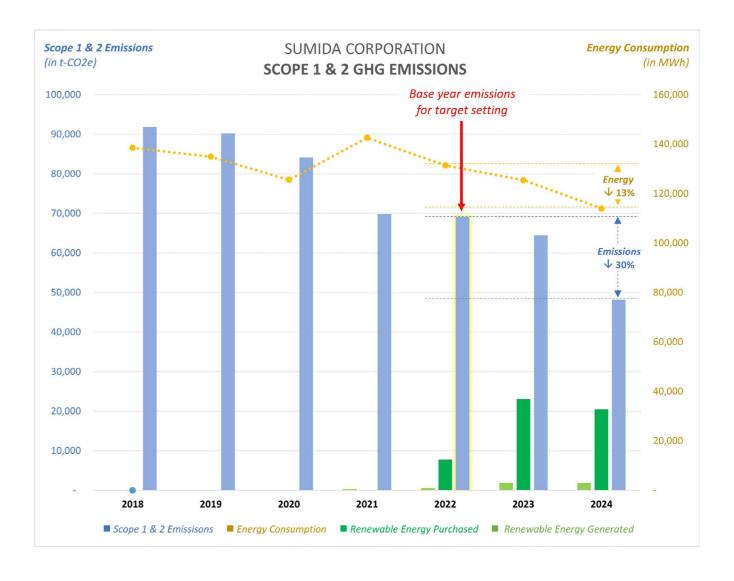
A. Location-based Action Plan

# SCOPE 3 INDIRECT EMISSIONS OF THE CHAIN SUPPLY OR SERVICE

# **B. Function-based Action Plan**

# design4sustainability

Long-term action plans targeting circular economy Cooperation with key stakeholders to reduce GHG emissions



# TCFD Disclosure

# Governance

At least once a year, the CEO reports the results of the CSR Committee and other activities to the Board of Directors regarding progress, plans, and risks related to the environment, including climate change, and the Board of Directors discusses the results based on the report.

# **Risk Management**

We have the Rules for Compliance and Risk Management which purpose is to ensure that the entire SUMIDA group companies comply with all applicable laws and regulations, corporate ethics, and the company internal rules in Japan and abroad in the execution of its management and business operation, and to ensure efficient and effective management through sound risk-taking, including verification of the appropriateness of risk-taking and minimization of risk.

Our Risk Management Committee (RMC) is headed by Chief Risk Management Officer, which CEO is in charge of. The objectives of RMC are to identify risks for SUMIDA group effectively and efficiently and to prevent or avoid those risks as much as possible (definition of risk means an uncertainty that might cause unexpected damages to the corporation).

To make the RMC's discussions more effective, a risk survey is conducted every three years, and based on the results, a risk map is prepared based on the scale of damage and frequency of occurrence, which is used to promote business and inform management decision-making. We will conduct a risk survey and revise the risk map in 2025.

In addition, the CSR Committee identifies environmental risks and opportunities, including climate change, and discusses the progress of these efforts on an ongoing basis at least once a year.

# Strategy

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We are working on disclosures in line with the TCFD recommendations. The risks and opportunities related to climate change which the CSR Committee have identified are as follows.

Climate-related Risks	Outline of Risks	Time Span
Acute physical: Flood (coastal, fluvial, pluvial, groundwater)	Damage of company infrastructure, company locations are subject to disrupted operation due to the consequences of more frequent extreme weather events.	Long Term (4-10 years)
Market: Changing customer behavior	Customers and their supply chain may be more frequently affected by extreme weather conditions. As a consequence demand for the products of company may be postponed or significantly reduced for considerable time.	Mid Term (1-3 years)
Emerging regulation: Carbon pricing mechanisms	Cost of energy and certain pre-material may be increasing due to carbon pricing regulations in certain markets.	Mid Term (1-3 years)

Climate-related Opportunities	Outline of Opportunities	Time Span
Products and services	We are designing and manufacturing products for energy efficient applications (power supplies, energy efficient lighting, electric drives, renewable energy applications).	Mid Term (1-3 years)
Markets	Increasing business by winning new customers and/or new projects with existing customers by providing innovative solutions for low carbon emission applications and good collaboration in the supply chain supporting various GHG emissions reduction initiatives.	Mid Term (1-3 years)
Circular Economy	Innovative product design in cooperation with suppliers and customers to increase the use of recycled materials in our products and improve recyclability in the end product of our customers.	Mid Term (1-3 years)

# Other News

# Start of Operations at New Plant in Thailand

On 30th October 2024, SUMIDA announced that Sumida Electric (Thailand) Co., Ltd., has started operations at its new Wang Noi Plant. This Plant was developed and brought online due to an increase in order volume for medical device-related products and in preparation for the introduction of new medical device-related products from FY2025 onwards. SUMIDA projects that demand will increase roughly threefold from current levels by FY2028.





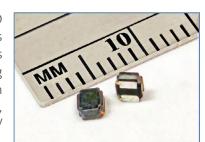
# Product of the Year Award (Passives category)- Electronic Products Magazine (US)

SUMIDA is proud to announce that the new CDxxxxMB/DS SMD RESIN-SHIELDED INDUCTORS have been selected as the Product of the Year winner for the Passives category. According to Electronic Products, "The annual awards, now in its 47th year, recognizes outstanding products that represent any of the following qualities: a significant advancement in a technology or its application, an exceptionally innovative design, a substantial achievement in price/performance, improvements in design performance, and a potential for new product designs/opportunities."

The products are a family of Resin-Shielded Surface-Mount Power Inductors. In this new design, both the magnetic shielding effect and the mechanical impact strength of the components were enhanced.

Ferrite or Metal Composite Resin-Shielded inductors are produced similarly to traditional drum and ring core shielded inductors but with an important difference. Instead of using an external ring core for shielding, a coating of magnetic powder-impregnated resin encases the insulated copper winding and functions as the magnetic shield. This technology has the performance benefits of an open magnetic inductor (high-temperature rise current and wide inductance range) with reduced flux leakage due to the impregnated resin shielding.

Compared to legacy ferrite ring construction, resin-shielded power inductors have improved EMI protection, plus size reductions. The over-molding enhances protection from moisture, dust, and mechanical stress, contributing to improved durability and reliability. The resin can also aid in heat dissipation, ensuring stable operation under varying temperature conditions.





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The product size range is wide including sizes from 3.2 x 3.2 x 1.2mm to 8.3 x 8.3 x 4.2mm.

# SUMIDA'S PRODUCTS FOR A SUSTAINABLE FUTURE



SUMIDA offers high quality magnetics solutions for medical technologies such as implantable stimulator devices, medical diagnostic equipment, external defibrillators.

New technologies are under development with technical universities for future growth markets in medical and other applications related to decarbonisation.











Isolation & Network Isolation Transformers



Transformers, Chokes

**Insulation Transformers** (THT and SMD)



**RFID Transponders** 



Power Inductors



RF Ceramic Coils

Telemetry Coils for **Body Implants** 









# Battery Storage

This new growth in scale is leading to significant struggles with how best to store and recover the megawatts of energy generated during peak opportunity times. This call for storage capability has been answered by key players in the energy storage market via expandable battery systems. Sumida with our decades long experience continues to support both large- and small-scale battery storage projects with our customerfocused custom inductive components for inverters (Resonant Transformers, Boost Inductors, BMS Transformers, CMC, and Filters, etc.) enabling our partners to meet their ever-changing design and power level requirements.



Reactor for DC lines

and AC lines



DMC Filter Choke

Module



Common Mode

Chokes





In the consumer and industrial market, we provide magnetics solutions for AI / data center





AC Chokes

PV Inverter Modules Panta FIX Jumpers











Roaowski-Coils

power management applications.



Current Sensor Modules









**HPC Transformer Modules** 



SUMIDA continues to be a market leader in magnetic components for safety critical Automotive applications. Our high reliability inductors, filters, transformers, and solenoids are utilized throughout the vehicle in these key applications (ABS, Airbag, Collision Avoidance, Backup Warning, Stability Control, Lane Departure, etc.). In each vehicle these different designs work in concert not only to protect the end user from harm but also to help to make world around them a safer place.







Along with these newer technologies, SUMIDA continues our corporate wide support for the development boom of all types of Electric Vehicles (xEV) and their exponentially growing demand for charging infrastructure with our proprietary magnetics designs. These applications will significantly contribute to the global drive for electrification and help to reduce future dependence on fossil fuels and their associated CO2 emissions.













- CFFH158



High Withstand Voltage Transformers

**Power Transformers** 

Current Transformers

SMD Transformer

Gate Drive Transformers









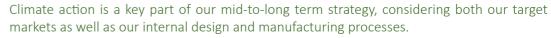




DC Wallbox 22kW

FMI Filters





We are using our cutting-edge magnetics (Inductors, Transformers, Common Mode Chokes & Modules) to support the latest Bi-Directional Vehicle-to-Grid (V2G) and Vehicle-to-Home (V2H) charging technologies which will transform the way both power providers and consumers manage energy and costs in the future.











In concert with these newer advanced infrastructure storage ideas, more and more forwardlooking regions are looking to utilize the enormous growth in electric vehicle (EV) as battery cells within these energy storage ecosystems. These V2G systems can use the electric vehicles sitting in garages across the region as storage cells via newer Bi-Directional Charging systems.

These new Bi-Directional systems allow for energy to flow back and forth from the vehicle to

the grid or home to both supplement their overall storage capability but also to supply energy back from the car demand during peak hours. SUMIDA's custom inductive components continue to support this global drive now and into the decades to come.









**Isolation Transformers** for Li-battery Monitors

Filter Choke Modules

Onboard Receiver Units

# CSR Activities Throughout the Year

Our CSR efforts encompass a broad range of activities from environmental protection-related initiatives as well as enhancing employee well-being and safety, cultivating community engagement, and showcasing technological advancements.

The following images are a glimpse into some our of CSR activities throughout the year.















Occupational health & safety training









Community service activities such as giving to children in need, disaster relief and blood bank donations









Educational tours & workshops for children of various ages









Employee well-being sports & team building social events

# Corporate Update

# **Efforts to Strengthen Governance**

The composition of our board of directors in 2024 is as follows:

1. Independent outside directors: 5/7 (71.4%)

2. Foreign directors: 2/7 (28.6%)

3. Female directors: 1/7 (14.3%)

In addition, the chair of each of Nomination, Audit, and Compensation Committees is an independent outside director. Since the company transitioned to a company with committees in 2003, the ratio of independent outside directors has been over 50%, and foreign directors have been appointed. Since 2019, female directors have been appointed, and we are working to strengthen gender diversity.

# Inhouse compliance training

In 2024, we conducted the inhouse compliance training on the Global Compliance Guideline at our group companies in each country. This year, we conducted training on a wider range of topics than in 2023. We will continue to conduct training like this in the future to further understand and implement the principles, values, and policies outlined in the Guideline.





**Board members (from left to right):** Mr. Ryo Hayakawa, Dr. Albert Kirchmann, Ms. Junko Dochi, Mr. Tatsuo Umemoto, Mr. Shigeyuki Yawata, Ms. Sawako Ueno, Mr. Yan Hok Philip Fan, Mr. Yoshiyuki Honda

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# **Evaluation of the Effectiveness of the Board of Directors**

The Company periodically analyzes and evaluates the effectiveness of the Board of Directors to verify whether corporate governance is functioning effectively and to take appropriate measures for the sustainable enhancement of corporate value. The Company conducted an evaluation of the Board of Directors' activities for the fiscal year 2024 in January 2025.

A questionnaire consisting of sixty-one questions in nine major categories was administered to seven directors for the Board of Directors, the Nominating Committee, Compensation Committee, Audit Committee and Risk Management Committee, and the results were reported to the Board of Directors.

# [Questionnaire items]

Composition and operation of the Board of Directors, discussion and oversight of strategy, discussion and oversight of risk, evaluation and compensation of management, dialogue with shareholders, effectiveness of the Nominating Committee, Compensation Committee, Audit Committee and Risk Management Committee.

# **Assessment Results**

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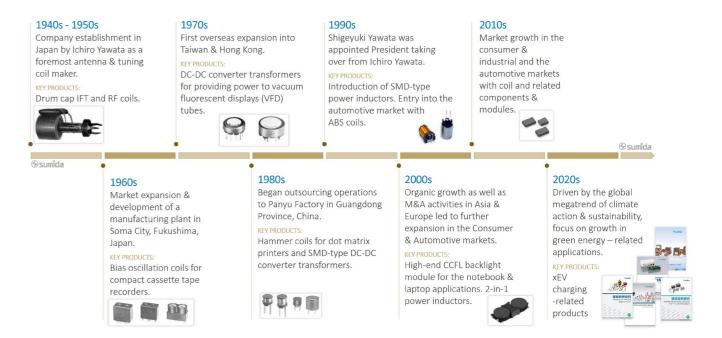
As a result of the questionnaire, a number of opinions were confirmed as appropriate or generally appropriate, and we judged that the effectiveness of the Board of Directors, etc. is ensured.

However, to further enhance effectiveness, we recognize the following issues to address:

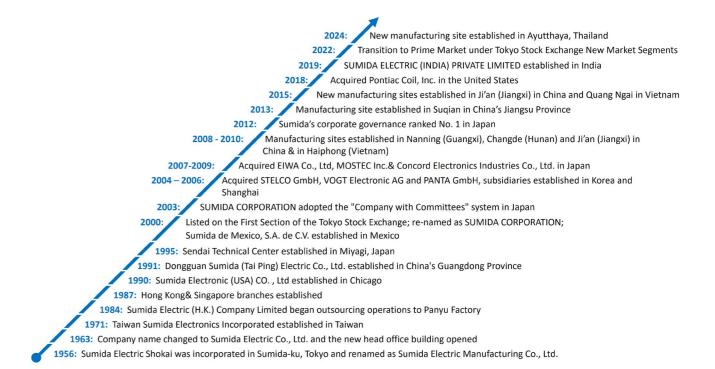
- 1. Engage in deeper discussions regarding the CEO succession plan, allowing sufficient time.
- 2. Consider diversifying performance evaluation criteria for executive incentive plans.
- 3. Deepen discussions on management resource allocation for sustainable growth.
- 4. Enhance discussions towards goals for increasing sustainable corporate value through DX promotion.
- 5. Aim for timely sharing of information on risks and potential risks to facilitate appropriate risk responses.
- 6. Strive to improve the transparency of the internal whistleblowing system within the company.
- 7. The executive side should expedite the distribution of materials and promptly provide additional materials upon request from directors.

Through the execution of these tasks, we will continue to work to improve the effectiveness of the Board of Directors and further strengthen corporate governance.

# **Product History**



# Company History



www.sumida.com