	1	2	3	4	5	6	
About the report	Introduction	Performing Sustainable Management	Stakeholders Communication	Corporate Governance	Environmental Protection and Energy Conservation	Employee Relations and Social Relations	Appendix

56

GUC 2022
Global Unichip Corporation
GLOBAL UNICHIP CORP.
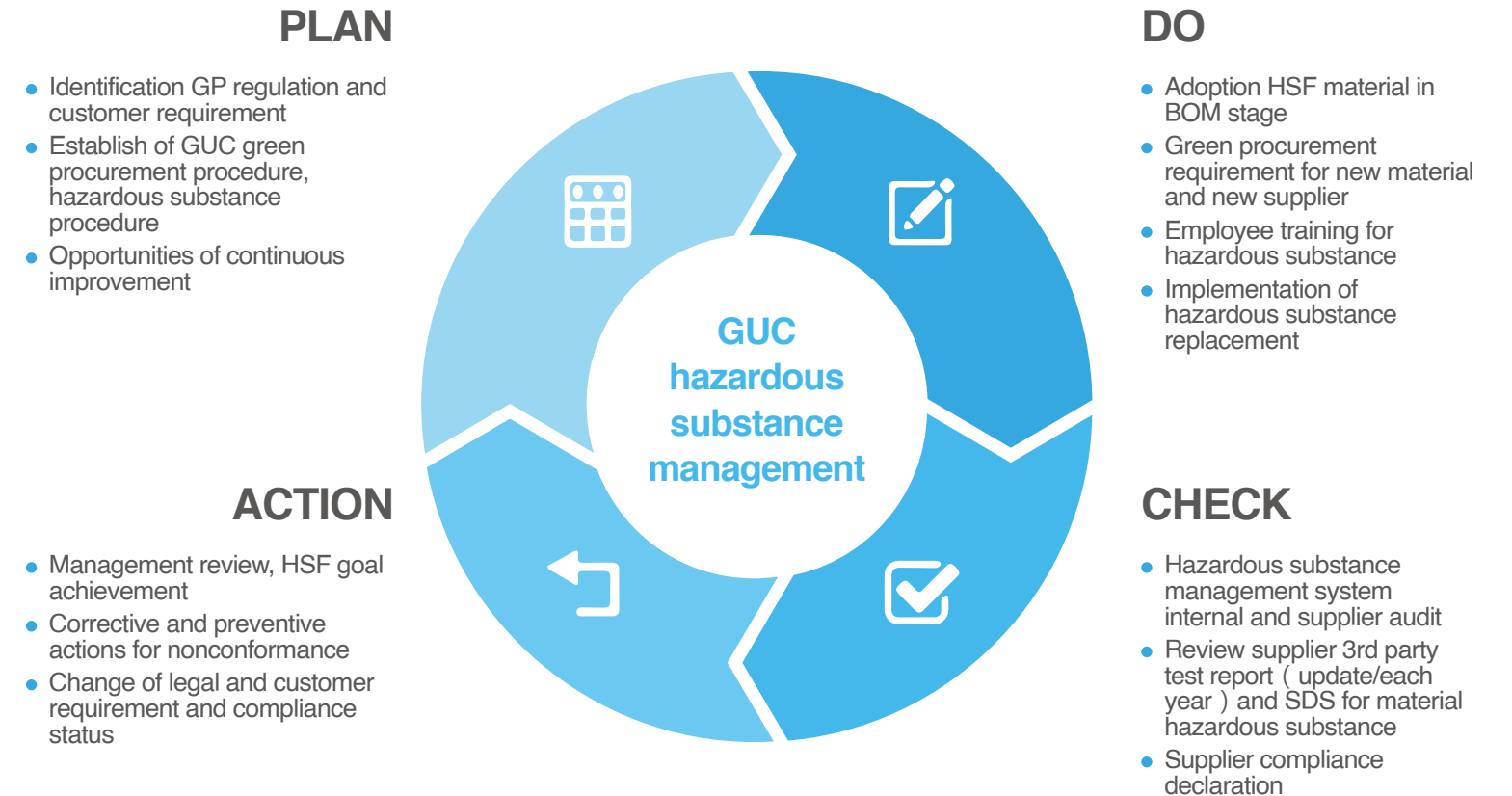ESG Report

4.6.3 Quality Management

Quality and Competitiveness

Global Unichip Corporation encourages all employees to provide customers with high quality design services, silicon intellectual property, and competitive products in the spirit of innovation and continuous improvement, and is committed to listening to our customers and building a trustworthy and mutually beneficial partnership with them. Through the spirit of PDCA quality management, we ensure the effective execution of our quality management system, continuously improve our corporate performance, and strive to become the world's leading IP and ASIC supplier.

GUC
Global Unichip Corporation

Advanced Technology

High Quality

Sincere Service

Global Unichip Corporation has implemented a PDCA management process for green substance management to address regulatory risks. By surveying suppliers, we propose improvements and work with members of our supply chain to reduce the use of hazardous substances. These efforts are aimed at improving the competitiveness of Global Unichip Corporation's products in advance of international regulatory trends.

▼ **GUC material hazardous substance management**

PLAN
- Identification GP regulation and customer requirement
- Establish of GUC green procurement procedure, hazardous substance procedure
- Opportunities of continuous improvement

DO
- Adoption HSF material in BOM stage
- Green procurement requirement for new material and new supplier
- Employee training for hazardous substance
- Implementation of hazardous substance replacement

GUC hazardous substance management

ACTION
- Management review, HSF goal achievement
- Corrective and preventive actions for nonconformance
- Change of legal and customer requirement and compliance status

CHECK
- Hazardous substance management system internal and supplier audit
- Review supplier 3rd party test report (update/each year) and SDS for material hazardous substance
- Supplier compliance declaration

Product Design and Life Cycle Control

Green IC Design

We select materials that comply with international regulations and meet our customers' requirements for green materials. The new or revised standards in 2022 include the U.S. TSCA Persistent, Bioaccumulative and Toxic (PBT) substances, and France Decree 2020-105, which regulates the use of mineral oil, etc. We are actively seeking alternative materials and do not use prohibited hazardous substances in our products.

| 1 | 2 | 3 | 4 | 5 | 6 |
| About the report | Introduction | Performing Sustainable Management | Stakeholders Communication | Corporate Governance | Environmental Protection and Energy Conservation | Employee Relations and Social Relations | Appendix |

57

GUC
Global Unichip Corporation

2022
GLOBAL UNICHIP CORP.
ESG Report

We also include HSF reduction in our supplier audits and evaluate the results of the implementation to create green products in parallel with our supplier partners to ensure the safety and health of our employees and to avoid polluting the environment.

1. Global Unichip Corporation has introduced green design from the product lifecycle design and development stage as a specific action: Bisphenol A (BPA) is harmful to human health and causes environmental pollution. Although there are no restrictions on the shipment of products containing BPA in the European Union, Global Unichip Corporation is ahead of its peers in the strictest control to protect the health of customers and consumers and is more spontaneous than the EU regulations. Since 2018, all new products to be introduced contain 100% BPA-free substrates and key components to achieve sustainable management.

2. To reduce environmental pollution and energy consumption, Global Unichip Corporation is also concerned about the health of our supply chain partners: The pad printing ink thinner used for printing on the production line originally contained formaldehyde, and to reduce the environmental hazards and health risks, the company has gradually switched from pad printing to laser stamping since 2020. The proportion of shipments made by laser stamping has increased from 87% in 2021 to 95% in 2022. The environmental impact of material use is reduced, and the benefits include the amount of ink saved and the energy saved by the equipment. This translates into an annual greenhouse gas reduction of 13,145 kg in CO_2e and 9 kg of volatile organic compounds (VOCs). We will continue to increase the percentage of laser stamping of our products to protect the safety of the industrial supply chain and the health of our supply chain partners.

3. Lead (Pb), a harmful substance commonly found in electronic products, is toxic to reproduction and is also a carcinogen, which is harmful to human health. In 2018, the company began introducing Pb-free bumps, and in 2022, in advance of the international regulatory trend, we have achieved completely Pd-free bumps throughout our product line.

4. Green IC production requirements for product restrictions on hazardous substances: The U.S. Environmental Protection Agency Toxic Substances Control Act (TSCA) is a new international regulation affecting five PBT substances (decabromodiphenyl ether DecaBDE, decabromodiphenyl ether DecaBDE, pentachlorobutadiene [hexachlorobutadiene], hexachlorobutadiene, 2,4,6-tris[tert-butyl] phenol) that have specific persistent, bioaccumulative, and toxic attributes. In order to reduce their environmental hazards and health risks, we control them in advance to comply with international regulatory trends and customers' requirements for restricted substances in products .

5. Green IC production requirements for hazardous substances in packaging materials: The new France Decree 2020-105 regulates mineral oil substances, Mineral Oil Aromatic Hydrocarbons (MOAH), and Mineral Oil Satruated Hydrocarbons (MOSH), which are carcinogenic and bioaccumulative in ink packaging materials. We are currently guiding eight suppliers to actively implement improvement plans to comply with international regulatory trends and to protect customer health.

6. Introduction of recyclable lead boxes: Taking into consideration the environmental impact of the disposal of packaging materials, recyclable lead boxes are to be used in place of single-use cartons to reduce waste. Lead boxes are returned to the factory to be reused and recycled, minimizing the environmental impact. Additionally, the packaging process from the packaging plant to the testing plant has been simplified to improve the efficiency of the packaging and unpacking process, including economizing the packing process for large boxes to reduce wasted operating time.

Introduction of recyclable power conductor box

25,669
fewer cores and cartons compared to the previous year (2022)

Improvement in sealing plant packaging process efficiency
76%
12.25 -> 2.9 min

Improvement in test plant unpacking process efficiency
78%
10.5 -> 2.3 min

| About the report | 1 Introduction | 2 Performing Sustainable Management | 3 Stakeholders Communication | 4 Corporate Governance | 5 Environmental Protection and Energy Conservation | 6 Employee Relations and Social Relations | Appendix |

58

2022
GLOBAL UNICHIP CORP.
ESG Report

Raw Materials Management – No Conflict Minerals

In line with the global trend of human rights protection, customers insist on not using minerals from areas commonly considered to be "conflict mines" or those known to produce "conflict minerals" to produce their products. GUC currently has 243 Responsible Minerals Initiative smelters that use 100% Responsible Minerals to source raw materials such as gold, tungsten, tin, tantalum, and cobalt. We will continue to actively manage supplier conflict mineral due diligence as the CMRT (Conflict Minerals Reporting Template) and CRT (Cobalt Reporting Template) survey versions are updated.

243 RMI-Accredited Smelters

- Tungsten 36
- Cobalt 27
- Gold 98
- Tantalum 33
- Tin 49

100%

	2021	2022
	237	243

Number of Qualified Smelters
Percentage of Qualified Smelters

100%

	2021	2022
Cobalt	8	27
Gold	105	98
Tantalum	36	33
Tin	51	49
Tungsten	37	36

▼ **Conflict Minerals (CMRT) and Expanded Minerals (EMRT) Management Process**

Reliability and Quality do not Shrink during the Pandemic

During the pandemic period, we planned in advance the time of each reliability test, and held technical discussions with the customer to adjust or change the time of the test, and delivered the products to be tested directly to the supplier's factory via a special truck. The supplier then conducted the test and uploaded the test results to meet the established product test plan while avoiding the risk of personnel contact.