

05

Responsible Procurement

A Promoter of Shared Value

Suppliers are NTC's most important partners. We aim to enhance cooperation to create greater value and share the value and benefits of cooperation towards the sustainable corporation.

100%

100% of key suppliers completed self-assessment questionnaire

8 outstanding suppliers

NTC evaluated suppliers of raw materials components and equipments, and hold annual supplier award ceremony.

100%

3TG minerals suppliers in the supply chain meet the requirements for conflict-free minerals.



61 Supplier Sustainability Management

68 Conflict Minerals Management

Strategy and Achievement

○ Unachieved ✓ Achieved ★ Surpassed

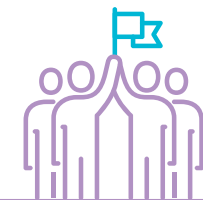
Material issues	Strategies	2019 Goals	2018 Targets	2018 Achievements	Target achievement status
Supplier Sustainability Management	<ul style="list-style-type: none"> • Conflict Minerals Management: No conflict minerals have been used in any of NTC's products 	Use of conflict-free minerals for wafer product lines: 100%	100%	100%	✓
	<ul style="list-style-type: none"> • Supply chain risk management: Implement regular "quality, delivery, service, cost, technology, and sustainable management" evaluations for suppliers 	Key suppliers' completion rate of the self-assessment questionnaire: 100%	100%	100%	✓

Supplier Sustainability Management

NTC Industrial Chain

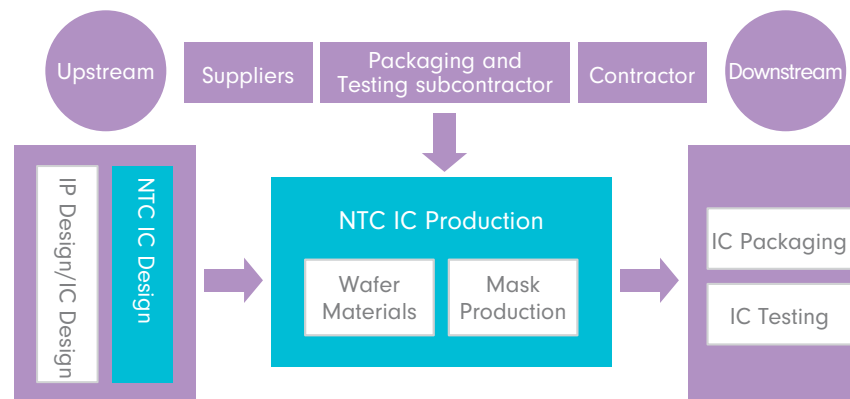
The IC industry (including DRAM) is categorized into upstream IC design, mask making/wafer materials, midstream IC production, and downstream IC packing and testing. NTC is committed to the research, development, design, production, and sales of IC products and we are primarily responsible for upstream IC design and midstream IC production in the industrial supply chain.

To reinforce the efficiency and frequency of customer service and to have a closer relationship with customers in the upstream product design and test verification stage, the head office, provides customers' technical solutions in various regions including Taiwan, mainland China, Southeast Asia, Europe, America, Japan and South Korea. We provide technical support and assist in solving the problems faced by the customer's engineering staff in design and testing.



The company continuously communicates with the customer in the midstream production and sales stage through weekly feedback of the customer's future demand forecast. The head office aggregates the needs of global business feedback and converts them into a production plan in the Company's production and sales system. It is continuously adjusted in accordance with weekly feedback from business staff to facilitate production and meet customer needs. We also integrate downstream suppliers in the industrial chain and form a comprehensive industrial value chain.

► Nanya Technology Corporation Industrial Chain



Supply Chain Overview

NTC's major suppliers can be categorized with "suppliers" and "Packaging and Testing subcontractors". Suppliers will be divided into two groups, providing production materials (direct/indirect/packaging materials) and non-production materials. Suppliers that provide production materials to the company are our major suppliers. There are 270 major suppliers in 2018 and 80 of them are key suppliers.

The procurement process is conducted through "open tenders" on the Formosa Technology E-Market Place which facilitate suppliers' online price inquiries, quotations, price negotiations, purchase orders, and delivery operations. NTC is committed to implementing sustainable business operations inside the company and working with suppliers outside the company to jointly construct a stable supply chain and achieve corporate sustainable development.

► Number of suppliers and proportion of procurement expenditures

	2017	2018
Number of major suppliers	350	270
Number of key suppliers	89	80
Proportion of key suppliers (%)	25.4%	29.6%
Proportion of procurement from key suppliers (%)	79%	77%

Sustainable Supply Chain Management

NTC believes that the sustainable management of supply chain requires complete and comprehensive mechanisms. We therefore established a supply chain management framework to use sustainability regulations, risk assessment, onsite audits/improvement measures and build supplier capabilities to promote sustainability of suppliers, improve the resilience of the supply chain, and manage supply chain risks. We seek to work with suppliers and become optimal partners for creating a sustainable future.



Signature of the "Letter of Compliance With Corporate Social Responsibility"

To demonstrate the importance of sustainable operations to suppliers/contractors, the company enacted the "Formosa Plastics Group Supplier/Contractor Corporate Social Responsibilities Letter of Compliance" (hereinafter referred to as the Letter of Compliance) and listed related sustainability regulations to ensure workplace safety of the supply chain, respect and dignity of workers, and accountability to the environment in business operations. The Letter of Compliance includes the Supplier/Contractor Code of Conduct established by Formosa Plastics Group, the RBA Code of Conduct, and related regulations and requirements for conflict-free minerals. Suppliers and contractors are required to acknowledge, understand, and abide by the corporate social responsibility regulations in the Letter of Compliance. We issued the Letter of Compliance to 270 (100%) major suppliers (including key suppliers) in 2018 and received back from 219 suppliers. The percentage of supplier signatures is 81.11%. Our target is 100% of the new suppliers and 80% of the existing suppliers in 2019.

	2017	2018	2019 goals
Major suppliers	Number of major suppliers	350	270
	Number of supplier signatures (cumulative)	211	219
	Percentage of supplier signatures (%) (2018 goal)	60.29%	81.11% (65%)
New suppliers	Number of new suppliers	76	18
	Number of supplier signatures	18	18
	Percentage of supplier signatures (%) (2018 goal)	23.68%	100% (100%)
Key suppliers	Number of key suppliers	89	80
	Number of supplier signatures	72	63
	Percentage of supplier signatures (%)	80.89%	78.75%

Note: Major suppliers includes new and key suppliers

Supplier sustainability assessment

In terms of supplier selection, when suppliers that directly produce materials are introduced into NTC's supply chain, we implement rigorous evaluations and reviews in addition to related third-party certification for ISO 9001 and ISO 14001. We use digital supplier assessment and management system to conduct reviews on six major indicators including "quality, timely delivery, services, costs, technology, and sustainability management". The score for sustainability management indicators accounts for 10%. We seek to ensure compliance with the company's supply chain requirements, uphold sustainable development ideals, and jointly construct a sustainable supply chain with upstream and downstream suppliers by ensuring that suppliers meet all of the company's requirements for quality and sustainable development.

► Supplier sustainability assessment indicators



* : Sustainability contents

- Green environment evaluation items include the ISO 14001 certification, energy and resource conservation, greenhouse gas emissions reduction, and waste recycling ratio
- Corporate social responsibility evaluation items include compliance with local labor laws and regulations

Sustainability Risk Surveys and Assessment

NTC evaluates suppliers regularly each year for "quality, timely delivery, services, costs, technology, and sustainability management". We seek to discover potential discrepancies on the supplier's end and implement immediately improvements. The assessment results are provided to the applicant department for the procurement as reference for future procurement projects. We use quarterly reports and various ad hoc meetings to review annual assessment scores with suppliers and share various information to construct good and smooth communication channels. The Company also establishes online support and management systems as a platform for exchanging information with suppliers to ensure that suppliers completely adhere to the Company's requirements and standards. They include distribution of materials procurement and inspection regulations and designated personnel to respond to and process opinions reported by suppliers. We execute various continuous improvement projects for quality and develop qualified long-term suppliers. To prevent materials shortage and quality risks, NTC actively develops competitors for various materials. We also classify the impact of specific incidents such as earthquakes, fire, water/power shortage, materials/labor shortage, and quality issues on direct materials used for production (critical materials) into acceptable and unacceptable risks. We then use risk classifications to establish related recommendations for preventive and improvement measures to facilitate crisis response and take on the responsibilities for corporate sustainability.

To ensure the supply chain's implementation of internal management for sustainability, NTC distributes the "Nanya Technology Corporation Supply Chain Code of Conduct Questionnaire" to major suppliers in the fourth quarter of each year and requires all major suppliers to complete the questionnaire. Suppliers are required to report the implementation status of various sustainability issues and provide certification documents issued by related management systems. The results of the suppliers' self-assessment questionnaire shall be adopted as the basis of sustainability risk management and as reference for NTC's assistance to achieve supply chain sustainability. After the results of the questionnaires are analyzed, we screen 5% of high-risk suppliers for onsite audits. We request suppliers to explain the results of self-assessments and provide assistance for improvements.

We issued the self-assessment questionnaires to 270 major suppliers (including key suppliers) in 2018 and the completion rate is 100%. Based on our analysis, we identified 14 high-risk suppliers in 2018 and we have completed document review and onsite audits.

► Supplier sustainability risk assessment

		2017	2018	2019 goals
Major suppliers	Number of suppliers surveyed	350	270	
	Completion rate	63%	100%	100%
	Number of high-risk suppliers	5	14	
	Percentage of high-risk suppliers (%)	1%	5%	
Critical suppliers	Number of suppliers surveyed	89	80	
	Completion rate	64%	100%	100%
	Number of high-risk suppliers	4	1	
	Percentage of high-risk suppliers (%)	4.5%	1.25%	
Tier 2 key suppliers	Number of suppliers surveyed	43	32	40
	Completion rate	100%	100%	100%
	Number of high-risk suppliers	1	3	
	Percentage of high-risk suppliers (%)	2.3%	9.4%	

Note: Major suppliers includes critical suppliers

Supplier On-Site Audit

NTC has included RBA into the scope of the supply chain audit since 2015. We use self-assessment questionnaires and onsite visits to incorporate suppliers into the labor ethics system. We list suppliers that fail to reach qualification standards as high-risk suppliers based on the scores in their self-assessment questionnaires and we assign personnel to conduct onsite audits, provide assistance, and require improvements within a specified time. The annual RBA audits are conducted by audit teams that consist of human resources and EHS departments. They perform onsite compliance audits and document reviews.

In 2018 we conducted 25 suppliers' onsite audits. (14 suppliers from self-assessment questionnaire results, 12 suppliers from quality evaluation results, and one of them belongs to both.) We discovered 39 non-compliant items and issued Corrective Action Requests (CARs) for follow-up. In addition to suppliers, NTC also included packaging and testing subcontractors into the scope of the RBA audit. We completed the audit for all (4) packaging and testing subcontractors. The improvements are expected to be completed in 2019.

► Sustainability audit table

		2016	2017	2018	2019 goals
Numbers of audited suppliers		12	8	25	15
Average audit score		-	89.37	90.4	
Non-compliant audit item		3	20	39	
Category and number of violations	Labor ethics	-	<ul style="list-style-type: none"> 1 instance of forced labor 4 penalty records 4 items involving work hours and wages 3 items involving training and education 1 item involving personal information protection 2 items involving discrimination 1 item involving the management system 	<ul style="list-style-type: none"> 1 instance of forced labor 2 penalty records 7 items involving work hours and wages 1 item involving training and education 3 items involving discrimination 3 items involving child labor/youth labor 2 items involving information security 1 item involving female night shift 1 violation of labor regulations 	
	EHS	3 violations of environmental regulations	<ul style="list-style-type: none"> 2 violations of EHS regulations 2 instances of operation management irregularities 	<ul style="list-style-type: none"> 4 items involving fire safety 8 items involving labor safety operation management 6 items involving public website environmental information updates 	
Improvement rate		100%	100%	100% (Note 1)	100%

Note 1: 100% improvement plans proposed; 89% plans completed

Supplier Quality Evaluation and Audits

Supplier Quality Evaluation

We evaluated the performance of suppliers in 2018 and 78 suppliers took part in the evaluation. The results were as follows: 52 suppliers were ranked as Class A suppliers (higher than 90 points); 23 suppliers were ranked as Class B suppliers ($80 \leq$ - <90 points); and 3 suppliers were ranked as Class C suppliers ($70 \leq$ - <80 points). To ensure the outstanding performance of NTC's raw materials suppliers in terms of quality, services, and process capabilities, the Company determines the list of suppliers for onsite audits based on the importance of materials, stability of quality, and results of annual evaluations.

Note:

1.Explanation for supplier performance evaluation ratings

Class A suppliers: Class A suppliers are listed as excellent suppliers as procurement references/ suppliers classified as Class A for three consecutive years may be excluded from the audit plans in the following year

Class B suppliers: NA

Class C suppliers: Request improvements (meeting, written, or audit)

Class D suppliers: Discuss whether to remove their qualifications as qualified suppliers in the MRB

2.Results of supplier performance evaluations in the most recent three years:

- We evaluated the performance of suppliers in 2018 and 78 suppliers took part in the evaluation. The results were as follows: 52 suppliers were ranked as Class A suppliers (higher than 90 points); 23 suppliers were ranked as Class B suppliers ($80 \leq$ - <90 points); and 3 suppliers were ranked as Class C suppliers ($70 \leq$ - <80 points).
- We evaluated the performance of suppliers in 2017 and 76 suppliers took part in the evaluation. The results were as follows: 35 suppliers were ranked as Class A suppliers (higher than 90 points); 35 suppliers were ranked as Class B suppliers ($80 \leq$ - <90 points); and 6 suppliers were ranked as Class C suppliers ($70 \leq$ - <80 points).
- We evaluated the performance of suppliers in 2016 and 74 suppliers took part in the evaluation. The results were as follows: 69 suppliers were ranked as Class A suppliers (higher than 90 points); 5 suppliers were ranked as Class B suppliers ($80 \leq$ - <90 points)

Supplier Quality Audit

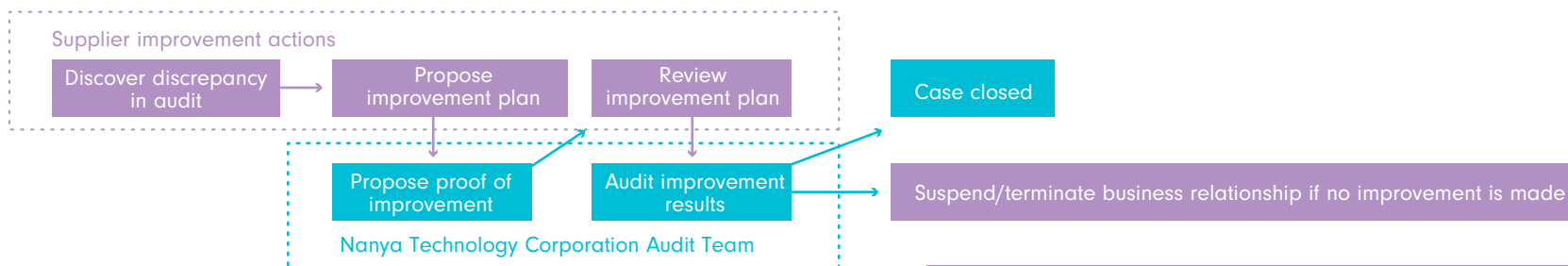
NTC will arrange annual quality audits in order to improve suppliers' quality and sustainability capabilities. We will also provide them with assistance and recommendations to enhance growth in the entire supply chain.

We completed onsite audits for 12 suppliers in 2018 focusing on 15 quality system-related aspects. We formed an audit team that consisted of the Company's employees (including personnel for quality management, materials, environmental safety, and engineering) and conducted onsite audits. We discovered 40 items that required improvements and all suppliers have completed the improvements.

► Quality audit statistics table

	Results of audits in the past three years			
	2016	2017	2018	2019 goals
Number of audits	22	16	12	17
Average audit score	79.8	80.8	86.0	-
Number of defects discovered	101	61	40	-
Improvement rate	100%	85.2%	100%	100%
Common discrepancies	Poor instrument calibration traceability, failure to complete manufacturing process in accordance with standard procedures, and product appearances that did not match labels.			

► Supplier discrepancy improvement and management procedures (eCAR follow-up management system)



Building Supplier Capabilities

In order to implement sustainability requirements in daily management of the supply chain, we establish the Material Review Board(MRB), make evaluations, conduct audits, and hold annual award ceremony.The evaluation items include supply chain performance, quality system, customer satisfaction, delivery time, and environmental safety.

NTC will hold CIP Review Meeting with suppliers based on the evaluation results each year. In the meeting we will ask the suppliers to meet our requirements and advocate the related issues on sustainability. Moreover, we will hold Annual Supplier Award Ceremony to deliver our goals and requirements on quality, technology, delivery time, services, and costs. In 2018 we made supplier assessment for suppliers of raw materials, components, and equipment and presented awards to 8 outstanding suppliers.



2018 Supplier Award Ceremony

Sustainable Supply Chain Strategy & Project

Sustainable Supply Chain Strategy

We are responsible corporate citizens and act proactively to ensure that operation meets professional and ethical standards. We also believe that long-term operation and success depend on the sustainable development. Suppliers are our important partners and we will cooperate with all suppliers to establish a stable and sustainable supply chain.

NTC's commitments:

- Use conflict-free minerals and all procurements are in accordance with green product specifications.
- Comply with the principle of fair trade and comply with relevant laws and regulations to protect human rights, emphasize on the importance of physical and mental health and safety of workers, protect the environment and carry on the social responsibilities.
- Uphold the principle of integrity and promise to take corporate social responsibility in procurement activities and pursue sustainable development.

Sustainable Supply Chain Development Project

1.Sustainable supply chain - social aspect: Packaging and Testing subcontractors immigrant worker human rights risk assessment
4 subcontractors participated in the assessment and one of them is not qualified. The improvement plan is as followed.

Planned Schedule	Item
2019/1	Immigrant worker commission issue management
2019/2	Define and establish procedures for the ban on commission payments
2019/4	Reimburse all excess payments
2019/5	Complete RBA VAP

2.Sustainable supply chain - environmental aspect: Packaging and Testing subcontractors and supplier's product environmental footprint inventory

Packaging and Testing subcontractors are our most important partners. The company has advanced product environmental footprint inventory since 2018 and required 1 subcontractor and 1 supplier to complete the life cycle inventory of our memory products. In 2019 we will ask our key subcontractor to make the inventory constantly.

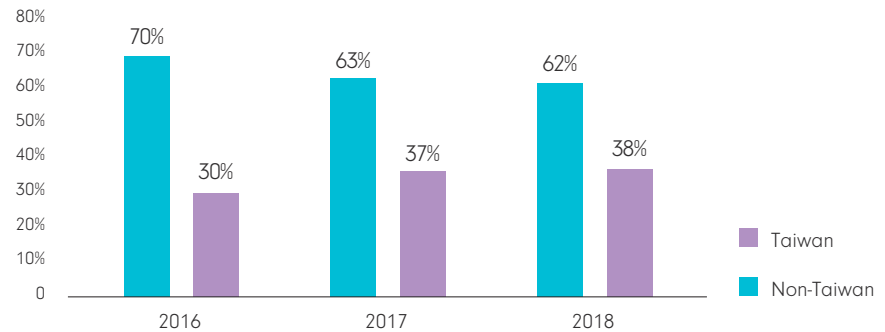
The results of the environmental footprint survey of subcontractors in 2018 show that most of the environmental impact is mainly from the use of power in the manufacturing, followed by the gold line in the raw material acquisition stage, solder ball, liquid nitrogen and tap water. It can be improved by the energy-saving mechanism. In 2019, we will require key subcontractors to conduct product environmental footprint inventory constantly.

The results of the company's 2017 product environmental footprint inventory indicated that the use of wafer is an important cause of environmental impact. For the company's key suppliers, we require them to cooperate in the product environmental footprint inventory in hopes of finding out the source of environmental impact in their plants and help reduce the impact on the environment.

Local Procurement

NTC prioritizes local procurement to facilitate stable development and cooperation with suppliers, provide faster service time, shorten delivery time, reduce unnecessary costs, and reduce the impact on the environment. However, as semiconductor equipment and technologies mostly involve foreign production or international collaboration, most of the materials used in the semiconductor industry are still produced in foreign countries. This has led to larger foreign procurement compared to domestic procurement. NTC shall continue to cooperate with local suppliers to expand procurement and employment opportunities in Taiwan and create greater value in partnerships with suppliers.

► Percentage of local materials procurement in 2016-2018



Conflict Minerals Management

NTC is committed to an accountable procurement management strategy for the ban on conflict minerals to satisfy current and future market, legal, and regulatory expectations. We aim to meet requirements for the ban on conflict minerals and bear responsibilities specified by the Responsible Business Alliance (RBA) and satisfy the Responsible Minerals Assurance Process (RMAP). NTC's four Subcontractors and six materials suppliers have completed investigations on conflict minerals in their supply chain and confirmed that 100% of the 43 minerals suppliers in the supply chain meet requirements for the ban on conflict minerals and made substantive contributions to the environment and the industrial supply chain.

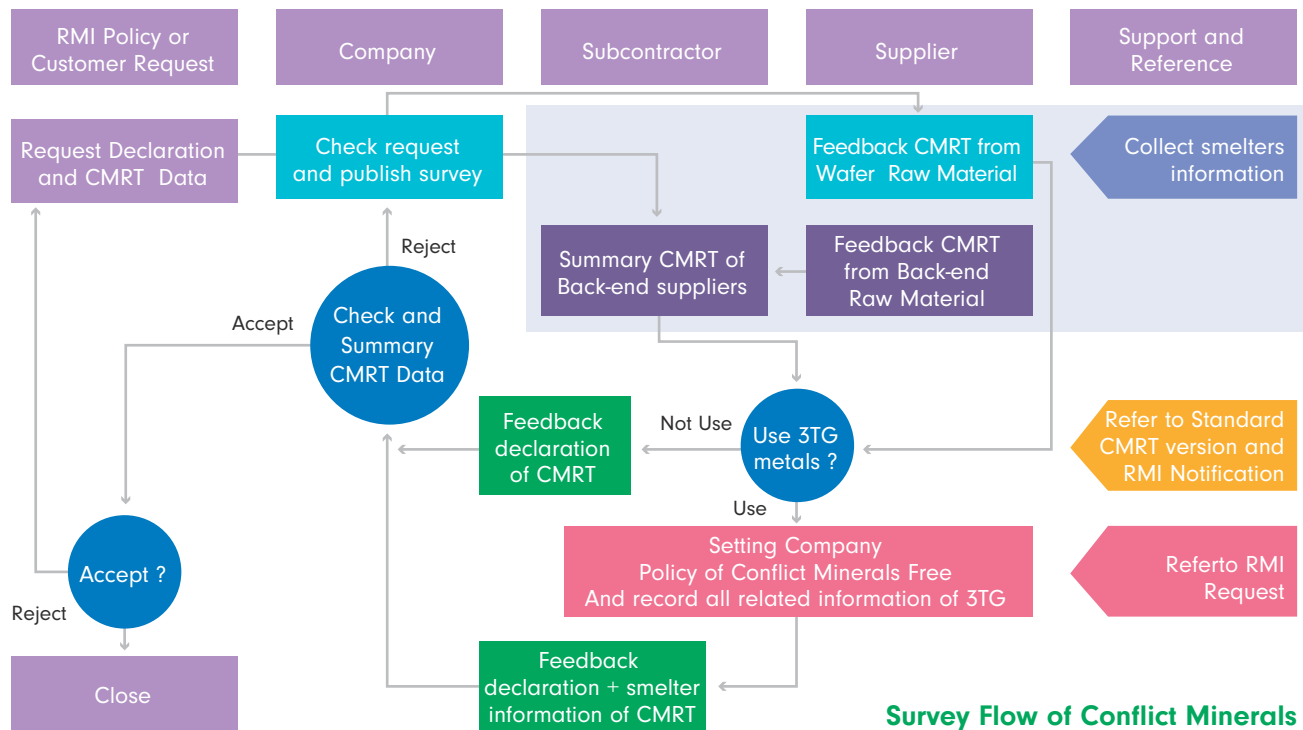
Suppliers that used raw materials containing 3TG shall comply with the Company's policies and use the Conflict Minerals Reporting Template (CMRT) as an investigation tool for 3TG investigation results to ensure that the supply chain does not participate in illegal financing of warlords or armed militants or violate basic human rights. Among the minerals used in our products, approximately 10% minerals sourced of the gold, tantalum, tin, and tungsten (referred to as 3TG) might come from the Democratic Republic of the Congo (DRC) or adjoining countries. They are also might source from recycled or scraps .

We do not directly purchase raw or unrefined 3TG minerals, nor do we purchase illegal minerals from the Democratic Republic of the Congo, neighboring countries or other conflict zones to ensure our supply chain does not directly or indirectly finance illegal organizations. All products of NTC have been confirmed, and the procurement process adheres to the principle of responsible mineral procurement, and no conflict minerals have been used.

► The Company's current 3TG applications are as follows:

Metal name	Applicable product	Application category
Gold	IC	Gold bonding wire
Tantalum	wafer	Wafer manufacturing target
Tin	IC	Solder paste, solder ball, tin wire
Tungsten	wafer	Wafer manufacturing target

► Procedures for the Management of Conflict Minerals

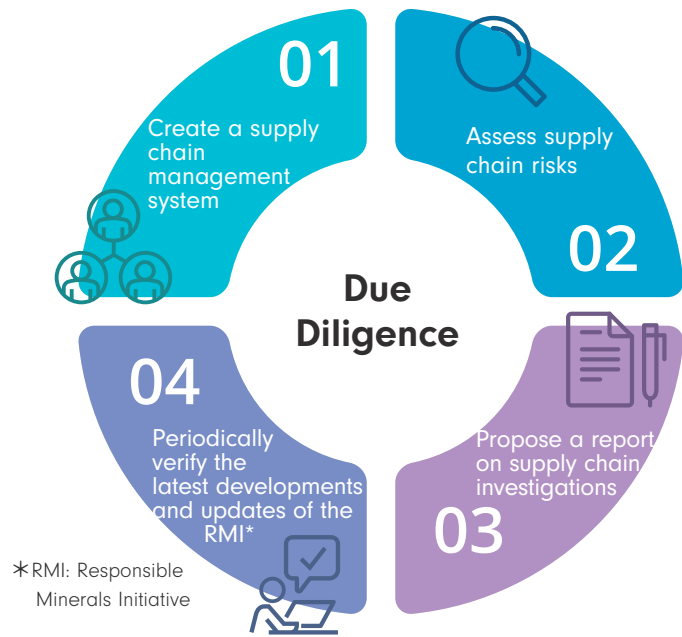


Responsible Procurement

Investigation Preparation

NTC's supply chain maintains multi-level supply chain relations with the raw ore . Before investigations, we shall inspect the supply chain materials and define the applicable classification of 3TG in the Company's products. We will screen out the suppliers that need to conduct conflict mineral investigations. use the standard survey tools defined by the Responsible Minerals Initiative (RMI) to obtain an up-to-date list through a series of surveys conducted by suppliers.

Due Diligence

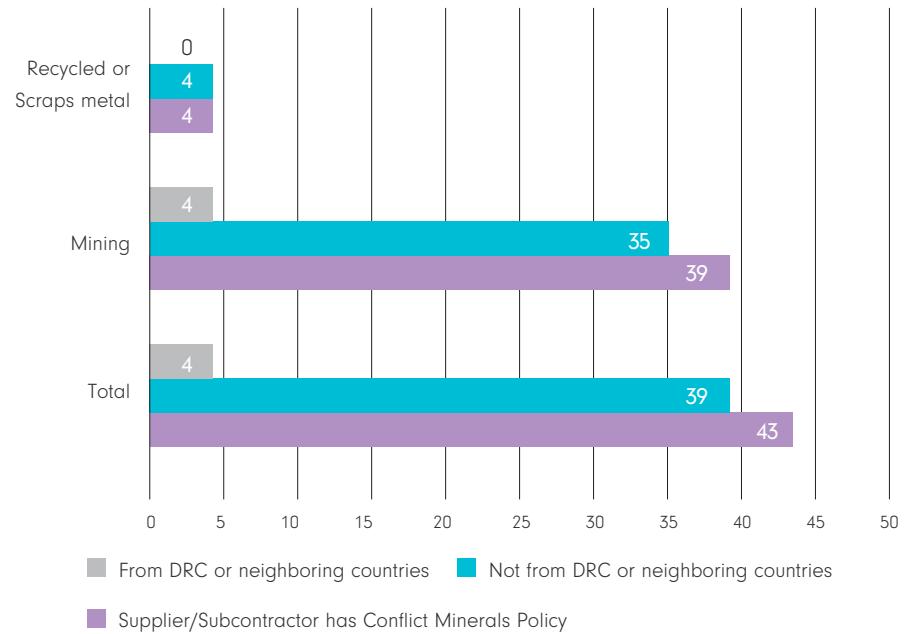


Corresponding Product Categories for 3TG Minerals and Investigation Data

NTC currently supplies Niche Type SDRAM product. According to due diligence investigations in the supply chain and comparison with the list of qualified smelters of the Responsible Minerals Initiative (RMI), and there are 43 suppliers of metal materials. (100%) Reply to the 3TG metal source.

And 43 smelter survey information was identified in the supply chain survey:

Source of 3TG minerals procurement



NTC will continue to follow up the Responsible Minerals Assurance Process (RMAP) policy to conduct due diligence and reduce supply chain risks.

