

DENSO

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DENSO GROUP

Green Procurement Guideline



January 2024
DENSO CORPORATION

Table of Contents

Introduction

DENSO ECO VISION 2025

Positioning of the guideline

Request items to suppliers

1. Establishment of environmental management system

1-1. Establishment of environmental management system

1-2. Promotion of environmental management throughout the lifecycle

2. Controlling and reducing substances of environmental concern

2-1. Products, parts, materials, and sub-materials delivered to DENSO (those which finally construct products)

(a) Compliance with design standards for environmentally hazardous substances

(b) Providing information on materials and substances of environmental concern

(c) Report on the initial product inspection regarding the substance of concern

(d) Establishing the control system for preventing inclusion of substances of environmental concern

2-2. Materials and sub-materials * used within DENSO

(a) Prohibition of containing the prohibited substances

(b) Providing of information on materials and substances of environmental concern

2-3. Packaging materials to be delivered to DENSO

3. Reduction of CO₂ emissions and packaging materials for logistics

3-1. Reducing CO₂ emissions from logistics consigned by DENSO

3-2. Reducing CO₂ emissions and packaging materials from transportation into DENSO

4. Environmental efforts at suppliers

4-1. Legal compliance

4-2. Providing support for DENSO product development (Energy-saving products, products related to the green environmental business)

4-3. Improvement of environmental performance improvement (CO₂ emissions from production, total waste/cost waste, water usage volume, chemical substances, biodiversity, greening)

4-4. Environmental awareness campaign for associates (Eco-drive, environmental awareness)

Glossary

Contact

Revision history

Introduction

We appreciate very much your usual support and cooperation in our production and procurement activities. We DENSO Group have established the present business basis based on the strong partnership with our suppliers.

Both automobiles and transport-oriented societies have advanced dramatically, and today, automobile ownership has surpassed 1.1 billion vehicles. Along with the development of emerging countries, the world's population is expected to increase to 8 billion in 2025 and the number of automobiles is forecast to reach 1.5 billion vehicles. This means even more people will enjoy the convenience and freedom of mobility offered by automobiles. Nonetheless, this increase in vehicles will also inevitably be accompanied by a rise in greenhouse gas emissions, and it is anticipated that substances of environmental concern affect human health and natural environment. To ensure that people maintain their affection for automobiles for years to come, the DENSO Group will make ongoing efforts to be corporate group that tackles these issues directly and provides solutions to minimize adverse impacts while maximizing the value of automobiles.

As our guidelines in undertaking these efforts, we announced the "DENSO Group Long-term Policy 2030" and declares to strive to be a company that continuously generates value to enrich mobility that achieves sustainability, happiness and peace of mind for everyone. Additionally, the collective desire of all DENSO Group employees to be a company that continually gives consideration to people and society is encapsulated in our slogan "Bringing hope for the future for our planet, society and all people."

In accordance with the guidelines, DENSO has announced the "DENSO ECO VISION 2025" as the new long-term environmental policy to respond to the expansion of fields and roles to be sought as a corporation, enhance the life cycle point of view, and promote business aiming at creating environmental values as the entire value chain.

Our products, including parts, materials, equipment, facilities, secondary materials and office supplies delivered by the suppliers, are all created from the products and services directly or indirectly procured by the suppliers. To put the "DENSO ECO VISION 2025" into practice, we consider that it is important to concentrate the wisdom and effort of the every person from both of the DENSO Group and the suppliers. We would like to continue to make every effort to promote our business activities placing emphasis on mutual reliance and mutual development with the suppliers.

We have revised "DENSO Group Green Procurement Guideline" in response to the issue of DENSO ECO VISION 2025. We will appreciate our suppliers' understanding of the purpose and contents of this guideline and cooperation with us based on the new guideline.

Hideshi Takemura, Senior Director,
Head of Safety, Quality & Environment Center

Jiro Ebihara, Senior Executive Officer,
Head of Purchasing Group

DENSO ECO VISION 2025

The collective desire of all DENSO Group employees to be a company that continually gives consideration to people and society is encapsulated in our slogan “Protecting lives, Preserving the planet and Preparing a bright future for generations to come.”

In accordance with the guidelines, DENSO has announced the “DENSO ECO VISION 2025” as the new long-term environmental policy to respond to the expansion of fields and roles to be sought as a corporation, enhance the life cycle point of view, and promote business aiming at creating environmental values as the entire value chain.

I Commitment (- 2050)

DENSO group preserves the earth and delivers the bright future to the next generations by solving problems of environment and energy through all the cooperate behaviors and natural symbiosis and creating a new environmental value for the sustainable region and society in 2050.

II Environmental policy (- 2025)

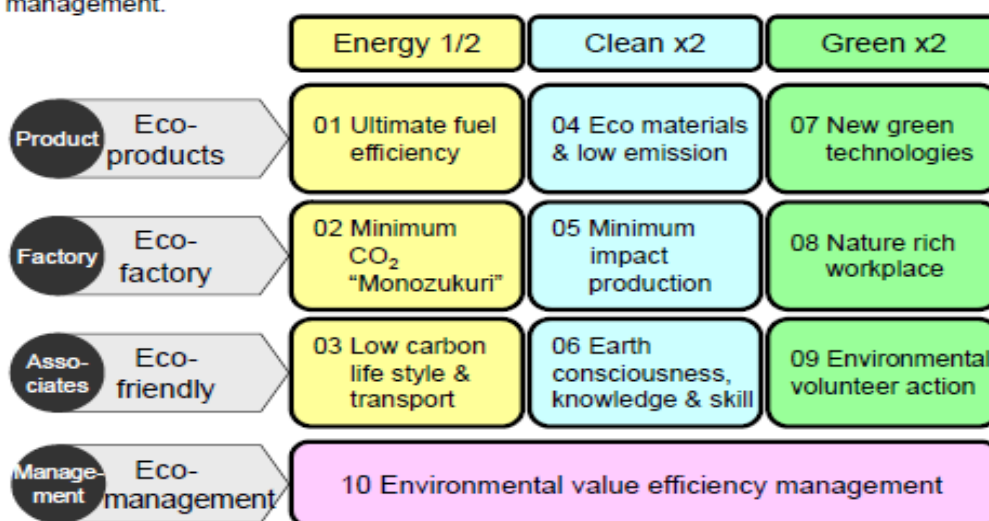
We define “Target 3” to be achieved in 2025 as a milestone of the commitment, and enhance “Action 10” as initiatives of ten concrete fields.

[Target 3]

Energy 1/2	Contribute to permanent maintenance of global environment by the technologies that can solve the problems of global warming, energy and resources.
Clean x2	Comply with law and promote continuous improvement in order to provide reassurance to all stakeholders and remain a cooperation that grows with the society.
Green x2	Realize a society with sharing nature's wisdom and benefit in order to take over rich natural environment to the next generation through cooperate activity aiming at symbiosis with nature.

[Action 10]

We define 10 action plans with three axes of “Energy”, “Clean” and “Green” and approach in all business scope from viewpoints of product, factory, associates and management.



Positioning of the guideline

■ What is green procurement?

The green procurement is the prioritized procurement of parts, materials, and services in consideration of reduction in environmental load and without using the prohibited substances we have specified, from suppliers who (1) comply with regulations and standards regarding the environmental laws, (2) strive to reduce environmental load*, and (3) have an established environmental management system.

*Reduction of environmental load is to reduce adverse impact on the global environment by decreasing GHG (greenhouse gas) emissions, reducing use of substance of concern, and other measures.

■ Positioning of the green procurement guideline

This green procurement guideline summarizes our requests to be shared among the global group companies as One DENSO, to the suppliers.

We will appreciate your understanding of this guideline and your cooperation in our green procurement activities.

Request items to suppliers

DENSO ECO VISION 2025 cannot be realized without DENSO suppliers' cooperation and understanding.

The figure below summarizes DENSO ECO VISION and the requests.

The table on the next page describes the detailed requests.

Appendix 3 is an enlarged list of the requests.

It is the expectation of DENSO that all DENSO suppliers comply with all the requests and expectations documented in this Green Procurement Guidelines.

All DENSO suppliers are also requested to comply with the relevant laws regulations and rules of each country and region.

Eco vision and requests to suppliers

[Color] Red: Action and report to DENSO Blue: Request

	Energy 1/2	Clean x2	Green x2
Eco-products	(1) Ultimate fuel efficiency Support DENSO's R&D of products for reducing energy consumption and CO ₂ emissions	(4) Eco materials and low emission - Compliance with design standards(ex.DDS2004) - Provide information on materials and substances of environmental concern -Report on the initial product inspection regarding the substance of concern -Establish non-inclusion control system for substances of environmental concern	(7) New green technologies Support R&D of products related to green environmental business
Eco-factory	(2) Minimum CO ₂ "MONOZUKURI" - Reduce CO ₂ emissions from supplier's production processes - Reduce CO ₂ emissions from supplier's logistics -Report fuel consumption from consigned logistics	(5) Minimum impact production - Reduce total waste at suppliers - Reduce cost waste - Reduce water usage at suppliers - Reduce harmfulness of substances of environmental concern at suppliers - Prohibit specific materials contained in materials and sub-materials -Report substances contained in the materials and sub-materials and submit SDS -Report substances contained in the packaging materials upon request from DENSO	(8) Nature rich workplace Promote greening of factory and workplace at suppliers
Eco-friendly	(3) Low carbon lifestyle & transportation Encourage supplier's employees to carry out eco driving	(6) Earth consciousness, knowledge & skill Ensure that each employee of suppliers is environmentally aware.	(9) Environmental volunteer action Promote biodiversity conservation activity at suppliers
Eco-management	(10) Environmental value efficiency management -Establish the environmental management system at suppliers [notification and education to the supplier's Tier1 and Tier 2 companies] and report the establishment progress upon request from DENSO. - Promote the environmental management taking the whole life cycle of products delivered to DENSO into account and provide the environmental data of supply chains on the delivered products (upon request from DENSO) -Legal compliance		

[Appended Table3] List of request to suppliers

DENSIO Eco Vision and request to suppliers		Corresponding chapter	Type of supplier's business									
			Raw material	Product/ Part	Sub-material	Supplier, etc.	Packaging material	Equipment / Machine	Facility/ Construction work	Logistics	Other (restaurant/ catering, etc.)	
Management	Establish the environmental management system as suppliers' identification and education to the supplier's Tier 1 and Tier 2 companies and report the establishment progress upon request from DENSO.	Chapter 1	○	○	○	○	○	○	○	○	○	○
	Promote the environmental management taking the whole life cycle of products delivered to DENSO into account and provide the environmental data of supply chains on the delivered products upon request from DENSO.	Chapter 1	○	○	○	○	○	○	○	○	○	○
	Legal compliance	Chapter 4	○	○	○	○	○	○	○	○	○	○
	Support DENSO's RMD of products for reducing energy consumption and CO ₂ emissions	Chapter 4	○	○	○	○	○	○	○	○	○	○
Energy *1/2	Reduce CO ₂ emissions from supplier's production processes	Chapter 4	○	○	○	○	○	○	○	○	○	○
	Reduce CO ₂ emissions from supplier's logistics to DENSO and packaging materials	Chapter 3	○	○	○	○	○	○	○	○	○	○
Friendly (Employees)	Reduce CO ₂ emissions from logistics consigned by DENSO and report fuel consumption	Chapter 3	○	○	○	○	○	○	○	○	○	○
	Encourage supplier's employees to carry out eco driving	Chapter 4	○	○	○	○	○	○	○	○	○	○
	Compliance with design standards for environmentally hazardous substances(ex:DDO 82004)	Chapter 2	○	○	○	○	○	○	○	○	○	○
	Provide information on materials and substances of environmental concern in products delivered to DENSO	Chapter 2	○	○	○	○	○	○	○	○	○	○
Product	Report on the initial product inspection regarding the substance of concern	Chapter 2	○	○	○	○	○	○	○	○	○	○
	Establish non-incident control system for substances of environmental concern	Chapter 2	○	○	○	○	○	○	○	○	○	○
	Reduce total waste at suppliers	Chapter 4	○	○	○	○	○	○	○	○	○	○
	Reduce cost waste at suppliers	Chapter 4	○	○	○	○	○	○	○	○	○	○
Factory	Reduce water usage at suppliers	Chapter 4	○	○	○	○	○	○	○	○	○	○
	Reduce harmfulness of substances of environmental concern at suppliers	Chapter 4	○	○	○	○	○	○	○	○	○	○
	Prohibition of containing the prohibited substances	Chapter 2	○	○	○	○	○	○	○	○	○	○
	Report substances contained in the materials and sub-materials and submit SDS	Chapter 2	○	○	○	○	○	○	○	○	○	○
Friendly (Employees)	Report chemical substances contained in the packaging materials	Chapter 2	○	○	○	○	○	○	○	○	○	○
	Ensure that each employee of suppliers is environmentally aware.	Chapter 4	○	○	○	○	○	○	○	○	○	○
	Support RMD of products related to green environmental business	Chapter 4	○	○	○	○	○	○	○	○	○	○
	Promote greening of factory and workplace at suppliers	Chapter 4	○	○	○	○	○	○	○	○	○	○
Green *2	Promote biodiversity conservation activity at suppliers	Chapter 4	○	○	○	○	○	○	○	○	○	○

1. Establishment of environmental management system

1-1. Establishment of Environmental management system creation

Reduction of environmental load involves all corporate activities. We would like all our suppliers to establish the "environmental management system" based on ISO14001 or other third-party certification equivalent thereto.

If you have already established the environmental management system, we hope you will maintain, enhance and renew the system.

For the suppliers who have not yet acquired a third-party certification, we hope you will first establish a system that satisfies the items in Note below, and acquire one.

- Note -

Fill out the mandatory items in the "DENSO Global Environmental Management Requests (Appendix 1)". For those who select B, C, or D in I. Certification acquisition, establish a system in which all questions would be answered with "yes" in II. Self-diagnosis about the environmental management system.

When answering the questions in II. Self-diagnosis about the environmental management system, refer to Appendix 2, Guidelines for Self-diagnosis regarding Environmental Management System.

DENSO Tier-1 suppliers are also expected to verify environmental management system at your Tire-1 suppliers, give them advices and instructions as well as expand it to the upstream suppliers, as needed, aiming at the realization of management of the entire supply chain. We will separately check the status of the environmental management system establishment for each supplier.

1-2. Promotion of environmental management throughout the lifecycle

DENSO has made every effort to reduce the product influence upon the environment in the entire corporate activities, while evaluating the environmental performances of products from the total viewpoint. In these activities, we need to understand the environmental influence in the supply chain, as well as the environmental influence exerted by us. Then, we occasionally request environmental data submission from the suppliers that deliver the applicable parts and raw materials to DENSO.

In this case, the supplier should investigate the environment in accordance with the "Investigation Guideline of Supply Chain Environmental Data", which would be sent from us, and submit the data shown in the following table.

Regarding newly-adopted or engineering-changed materials/parts in particular, suppliers may be requested to report the difference in environmental impact from the conventional materials/parts.

Item to be investigated	Major investigation detail Investigation detail
Materials/parts selected by DENSO (Selection will be made as requested, in consideration of the degree of the estimated influence upon the environment.)	Data of materials/parts manufacturing environment - Energy consumption amount - Amount of emissions ofCO ₂ , NO _x , and other substances into the air - Amount of waste - Amount of water consumption

<Documents to be submitted to DENSO and submission time>

Document to be submitted	Submission time
Supply chain environmental survey	When a new products is developed, when an engineering change is made, as needed (Request will be made about two months before the submission deadline.)

2. Controlling and reducing substances of environmental concern

2-1. Products, parts, materials, and sub-materials delivered to DENSO (those which finally construct products)

Recently, European countries and other nations have increasingly established laws and regulations regarding use of substances of environmental concern, and the influence of those laws and regulations become larger and larger. Regarding automobiles in particular, a law was issued in Europe concerning the substances of environmental concern in time of disuse of a car. To observe these laws, stricter guarantee is requested for us against no-inclusion of substances of environmental concern. With such a trend, various measures have been taken at DENSO to prohibit and reduce use of substances of environmental concern.

DENSO suppliers are requested to comply with the following requests concerning substances of environmental concern contained in their products, parts, materials and sub-materials (hereinafter referred to as "products") that are delivered to DENSO:

(a) Compliance with design standards* for environmentally hazardous substances

We requested that each of the suppliers deliver products, etc. in accordance with design standards.

"Declarable substances" specified in design standards includes some substances that are currently examined or to be regulated. We may practically request alternative technology research & development and reduction activities from the suppliers. In this case, we will inform you of the details and request for your cooperation.

* In the case of DENSO, it is the DDS 2004 "Restrictions on the use of substances of environmental concern as materials or product components"

(b) Providing information on materials and substances of environmental concern

We request that the suppliers provide us information regarding materials and substance of concern based on our requests such as the procedure of the "Suppliers quality assurance manual."

(c) Report on the initial product inspection regarding the substance of concern

We request that the suppliers will report an initial product inspection result follow the instructions from our responsible division.

(d) Establishing the control system for preventing inclusion of substances of environmental concern

We request that the suppliers establish a control system to prohibit substances of environmental concern from being contained in their products, etc.

Furthermore, we inspect the suppliers to check the actual situation of the “control system for preventing inclusion of substances of environmental concern” as requested.

2-2. Materials and Sub-materials* used within DENSO

Regarding the substances of environmental concern contained in materials, sub-materials, chemicals and others used in an office or plant of DENSO, the following items should be observed:

(a) Prohibition of containing the prohibited substances

Any supplier that delivers raw materials, subsidiary materials or equipment or undertakes construction, cleaning or landscape gardening work should allow no "prohibited substances" specified by DENSO to be contained in the materials delivered or carried into DENSO (including oil agents applied to equipment, agricultural chemicals and those used for other purposes).

1) Substances prohibited from production and use in each country and region

2) Substances prohibited by DENSO

We may specify a substance as a prohibited one. For further details about the "prohibited substances," access our website.

(b) Providing of information on materials and substances of environmental concern

Suppliers that deliver materials and sub-materials to be used within DENSO are requested to report the contents of the materials and sub-materials and submit their Safety Data Sheets.

2-3. Packaging materials to be delivered to DENSO

Suppliers that deliver packaging materials to DENSO are requested to investigate chemical substances contained in packaging materials and report the result upon request by DENSO.

3. Reduction of CO₂ emissions and packaging materials for logistics

DENSO promotes reduction of CO₂ emissions (energy consumption) from logistics and packaging materials.

Suppliers are expected to take actions for reducing environmental load in logistics.

3-1. Reducing CO₂ emissions from logistics consigned by DENSO

Suppliers that contract for logistics of products and parts are expected to understand the improvement efforts by DENSO and join the activities as the logistics partner.

We ask relevant supplier to provide information on CO₂ emissions based on our request as necessary.

3-2. Reducing CO₂ emissions and packaging materials from transportation into DENSO

Suppliers that deliver parts, raw materials, and sub-materials to DENSO are expected to make an effort to reduce CO₂ emissions during the delivery transportation to DENSO. Suppliers are also expected to reduce packaging materials.

<Documents to be submitted to DENSO and submission time>

No document is requested to be submitted to DENSO.

4. Environmental efforts at suppliers

4-1. Legal compliance

DENSO prioritized compliance with laws and regulations as the most important item in environmental activities.

We request you to comply with the environmental laws and regulations.

4-2. Support for DENSO product development

DENSO will offer products that contribute to reducing energy consumption and CO2 emissions to drive the reduced environmental impact from the motorized society. DENSO will also promote its green environment business. Through the development of green environmental products, DENSO will contribute to the sustainable and prosperous future and the global environment protection. Suppliers are expected to play an even more significant role in development activities of DENSO.

4-3. Environmental performance improvement

We request that the suppliers make every effort to improve the following environmental performances in their business activities.

- ◇Reducing CO2 emissions
- ◇Reducing total waste* and cost waste*
- ◇Reducing water usage volume
- ◇Reducing harmful effect of substances of environmental concern
 - Controlling/reducing prohibited substances contained in sub-materials used for production (substances prohibited by DENSO)
 - Reducing emissions of PRTR* substances
 - Reducing VOC* emissions
- ◇Greening promotion of factory/workplace
- ◇Promotion of biodiversity conservation activity

The company is committed to reducing its impact on biodiversity and its sustainable use by promoting business activities that take biodiversity into account.

4-4. Environmental awareness campaign for associates

DENSO tackles reducing the use of fossil fuel energy in everyday life and transportation to achieve low-carbon lifestyle and transportation.

Suppliers are expected to encourage their employees to carry out eco-driving.

DENSO believes that it is essential that each and every employee focuses on “global environment protection” and recognizes it as their own mission, and practices environmentally-friendly behaviors in each situation aiming at sustainable society.

Suppliers are requested to raise the environment consciousness of their employees.

Glossary

◆ **GHG**

Green House Gas

◆ **SDS**

Safety Data Sheet

◆ **Cost waste**

Waste that is discarded on a charged basis

Recycling of waste with paying money + landfill waste

◆ **Total waste**

Waste that is discarded by DENSO as disused articles

Recycling of waste with receiving money (valuable resource) + cost waste (Recycling of waste with paying money+ landfill waste)

◆ **PRTR (Pollutant Release and Transfer Register)**

This is a system for a corporation that manufactures, uses or releases the applicable chemical substances to understand, calculate and officially announce the emission volume and the volume transferred out of its offices and plants.

◆ **VOC**

Volatile Organic Compounds

◆ **Sub-materials**

Cleaning solvents, cutting fluids, or others that are not components of products but are used in the production process. In addition, the sub-materials in the production stage at the suppliers refer to those used for products to be delivered to DENSO.

Contact

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Revision history

version number	version number	Details
9th Revision.	Jan 1, 2024	•P2: Change of Purchasing Group head •P13: Enquiry department name changed.

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