Nissan

Green Purchasing Guidelines

May, 2019

Nissan Motor Co., Ltd.
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Nissan Green Purchasing Guideline
1. INTRODUCTION

A variety of environmental challenges—climate change, pollution and drain on resources—now affect our entire world. It has become crucial for all and every individual in the world as well as business entities, governments, non-governmental and non-profit organizations to proactively think and act in order to address these challenges.

Nissan Motor Co. Ltd. (Nissan) has promoted environmental impact reduction through actions such as quality control and substance management in cooperation with our entire supply chain of automobile component parts and materials, by sharing the value of Nissan’s procurement policy and environmental philosophy. Nissan conduct survey of suppliers’ action related to climate change and water and ensures proper management of substances by suppliers for parts and materials through their compliance with “Nissan Green Purchasing Guidelines”, as well as with “Alliance Nissan Product Quality Procedure” (ANPQP) and Nissan Engineering Standard “Restricted Use of Substances” of Nissan Engineering Standard. These guidelines and standards are based on “The Renault-Nissan Purchasing Way”, “Renault-Nissan Supplier CSR Guidelines” and “Nissan Green Program”.

“Nissan Green Purchasing Guidelines” was revised in 2018 by adding content of Nissan Green Program 2022 (NGP2022). Key issues under NGP2022 are climate change, resource dependency, air quality, and water scarcity. Business foundation is strengthen to promote these actions. Based on the policy, Nissan will build better communication with our supply partners and further accomplished our tasks.

In each countries of the world, legislations on environment-impacting substances are being developed in accordance with Strategic Approach to International Chemicals Management (SAICM). It is absolutely necessary for Nissan to expand its environmental activities to a global scale.

The requirements described in this Guideline are key factors when Nissan establishes a sustainable mobility and sustainable corporate management. It is prerequisite that we positively reinforce substance management as well as developing new technology to lower the vehicle’s environmental impact, which cannot be accomplished without the cooperation of every single supplier around the world who provides parts and material to Nissan.

Together with partners, Nissan will continue to conduct due diligence aiming at reducing environmental impact of our products, while developing products and offering service that will give full satisfaction to our customers. Nissan is confident that such effort will build and enhance a win-win relationship between Nissan and our partners, which also will contribute towards enhancement of competitive edge in the global market.

This guideline applies to all the automobile materials, parts, products and packaging that are to be delivered to Nissan and use for automobile, corporate activities such as manufacturing process, and suppliers’ environmental action.
Nissan Partners are encouraged to visit the Official Global Website of Nissan for the latest edition of the Nissan Green Purchasing Guideline as needed. Nissan appreciates all suppliers’ understanding as well as their cooperation in promoting Nissan’s environmental efforts through this guideline.

Nissan Motor Co., Ltd.
Purchasing Administration Department
Environmental Strategy Group, Sustainability Development Department
2. REVISED POINTS OF NISSAN GREEN PURCHASING GUIDELINE in FY18 and FY19

To realize the promise of its environmental philosophy “a Symbiosis of People, Vehicles and Nature,” Nissan has promoted a series of midterm environmental action plans under the name “Nissan Green Program (NGP)” since 2002.

In setting action plans and objectives for the 4th generation NGP2022, Nissan considered medium- to long-term environmental forecasts and engaged in dialogue with external experts, investors, organizations and alliance partners, alongside internal analysis of potential opportunities and risks, to identify four key environmental issues for both the company and its stakeholders: Climate Change, Material Resource Dependency, Air Quality and Water Scarcity.

To help find solutions to these issues and create new value, Nissan will take steps starting from products and corporate activities and throughout the entire supply chain, including suppliers.

Nissan Green Purchase Guideline was revised in FY18 to enhance suppliers’ understanding of Nissan’s environmental activities under NGP2022.

This FY19 amendment newly sets out a mandatory self-diagnostic assessment requirement for suppliers on their management system for environment impacting substances in order to further improve their compliance with current tightened and geographically extended laws and regulations.

Below table shows revised/added actions which is requested to suppliers under NGP2022 by each key issues in FY18 and FY19
<table>
<thead>
<tr>
<th>NGP2022 Key issues</th>
<th>Request to suppliers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Climate change</td>
<td><strong>CO₂ emissions reduction throughout the value chain</strong></td>
</tr>
</tbody>
</table>
| Resource dependency | **Proactive efforts in individual recycling activities and the use of recycled materials**  
  > preferential use of recycled material and provision of recycling information  
  > promotion of development and utilization of new recycled materials  
  > suggestions for improvement of Nissan Green Parts and/or remanufactured parts for after services. |
| Air quality       | **Development on VOC, Odor reduction and compliance with standard** |
| Water scarcity    | **Water reduction throughout the value chain** |
| Business foundation Reporting | **Enhance management of environment-impacting substances**  
  > Management of Environment-Impacting Substances ~Compliance with Regulations and Nissan Engineering Standards~  
  > Substances management under regulations  
  > Conduct chemical analysis of material which have risk of containing ELV regulated substances  
  > Submission of life cycle assessment data  
  > Reporting on the use of environment-impacting substances and substances of very high concern (SVHC)  
  > Implementation of supplier self-diagnostic assessment  
  > Respond to survey related to climate change and water |

Underline is revised/ updated part
3. PURCHASING WAY AND ENVIRONMENTAL POLICY

3.1 Renault-Nissan Purchasing Way, its Philosophy and Guideline

In the year 2006, Renault and Nissan purchasing departments jointly developed “The Renault-Nissan Purchasing Way”, in which our procurement policies and philosophies were compiled, to be shared worldwide with our supply chains. In 2010, “The Renault-Nissan Corporate Social Responsibility (CSR) Guidelines” were crafted in order for all our suppliers to enhance their management systems by reviewing their own businesses from the standpoint of CSR. The CSR Guidelines consist of five key areas, including the area of “Environment” which sets out six environmental policies as shown below.

<table>
<thead>
<tr>
<th>Key Areas of Renault-Nissan CSR Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Safety and Quality</td>
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<tr>
<td>2. Human Rights and Labor</td>
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<tr>
<td>3. Environment</td>
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<tr>
<td>- Implement environmental management</td>
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<tr>
<td>- Reducing greenhouse gas emissions</td>
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<tr>
<td>- Preventing air, water and soil pollution</td>
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<tr>
<td>- Saving resources and reducing waste</td>
</tr>
<tr>
<td>- Managing chemical substances</td>
</tr>
<tr>
<td>- Conservation of Eco system</td>
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<tr>
<td>4. Compliance</td>
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<tr>
<td>5. Information disclosure</td>
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</tbody>
</table>

Please refer to “The Renault-Nissan Purchasing Way” and “Renault-Nissan CSR Guidelines for Suppliers” for details.
3.2 Nissan’s Philosophy and Policy on Environment

The “Corporate Environmental Principle” has been established to enable us to realize Corporate Vision “Enriching People’s life.”

Corporate Environmental Principle

- **Corporate Vision**: Enriching People’s lives
- **Environmental Philosophy**: Symbiosis of People, Vehicle and Nature
  - Manage the environmental dependence and impact of our operations and products to a level that can be absorbed by the nature, and pass on rich natural capital to future generations
- **Ultimate Goal**: Sincere Eco-Innovator
  - **Sincere**: To address proactively the environmental challenges and reduce the impact on the environment
  - **Eco-Innovator**: To develop a sustainable mobility society, we will provide customers with innovative technology in our products

**Key Issues and Challenges**

- **Climate Change** | **Carbon Neutral**
  - Promote society’s de-carbonization through expansion of electrification, vehicle intelligence, and innovative future Monozukuri
- **Resource Dependency** | **No new material resource use**
  - Create a system that uses resources efficiently and sustainably, and promote services to use vehicles more effectively (Circular Economy)
- **Air Quality** | **Zero impact**
  - Cleaner exhaust emission and create a comfortable in-cabin environment to protect human health and to reduce the impact on the ecosystem
- **Water Scarcity** | **Zero stress**
  - Reduce water consumption and manage water quality with Monozukuri that can maintain ecosystem services

NISSAN MOTOR CORPORATION
Nissan Green Program is a mid-term environmental action plan, developed based on a Nissan’s environmental philosophy and policy, and our fourth-generation program is called “Nissan Green Program 2022”, which is a six-year action plan continues through fiscal 2022. Nissan Green Program 2022 aims to achieve the following main targets by fiscal 2022. Under NGP2022, Nissan will accelerate efforts toward 2022 to address four key issues and strength business foundation.

### Nissan Green Program 2022 Key Actions

<table>
<thead>
<tr>
<th>Climate change</th>
<th>Promote society's de-carbonization through expansion of electrification, vehicle intelligence, and innovative future Monozukuri</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>■ -40% of CO2 reduction from new cars (vs. FY00; JPN, US, EUR, PRC)</td>
</tr>
<tr>
<td></td>
<td>■ -30% reduction of CO2 per global sales from corporate activities (vs FY05)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Resource dependency</th>
<th>Create a system that uses resources efficiently and sustainably, and promote services to use vehicles more effectively</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>■ Reduction of new natural resource usage for vehicle manufacturing</td>
</tr>
<tr>
<td></td>
<td>■ Waste reduction at manufacturing sites</td>
</tr>
<tr>
<td></td>
<td>■ Reduction of landfill ratio at manufacturing sites</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Air quality</th>
<th>Cleaner exhaust emission and create a comfortable in-cabin environment to protect human health and to reduce the impact on the ecosystem</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>■ Research technical solutions for cabin air quality improvement</td>
</tr>
<tr>
<td></td>
<td>■ Reduction of VOC from manufacturing sites</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Water Scarcity</th>
<th>Reduce water consumption and manage water quality with Monozukuri that cares ecosystem services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>■ -21% reduction of water per global production at manufacturing sites (vs FY10)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Enhancement of business foundation</th>
<th>Enhance environmental management</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>■ Ensure management of the environmental compliance policy</td>
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<tr>
<td></td>
<td>■ Measure life cycle environmental impact of vehicle and new technology</td>
</tr>
<tr>
<td></td>
<td>■ Reduce environmental impact through engagement with stakeholders including suppliers, next generation customers and NGO.</td>
</tr>
</tbody>
</table>

Nissan Green Program URL
https://www.nissan-global.com/EN/ENVIRONMENT/GREENPROGRAM/FRAMEWORK/
3.3 Position of Nissan Green Purchasing Guideline

The Nissan Green Purchasing Guideline has embodied the notions described in the environment area from the Renault-Nissan Supplier CSR Guidelines. Development of the Nissan Green Purchasing Guideline is one of Nissan’s efforts towards accomplishment of mid-term environmental action plan known as Nissan Green Program.
4. REQUIREMENTS FOR KEY ISSUES OF NGP2022

All Nissan suppliers are required to work on following environmental activities based on “Supplier CSR Guidelines” and “Nissan Green Program”.
Nissan Partners are encouraged to visit the Official Global Website of Nissan for the latest edition of the Nissan Green Purchasing Guideline as needed.
Contact information for inquiry regarding each of the above items is available on p.26 “Contact Details by Subject Category”.

4.1 Request related to climate change

NGP2022 key action for climate change
Promote society’s de-carbonization through expansion of electrification, vehicle intelligence, and innovative future Monozukuri

- -40 % of CO2 reduction from new cars (vs.FY00; JPN, US, EUR, PRC)
- -30% reduction of CO2 per global sales from corporate activities (vs FY05)

4.1.1 CO2 emissions reduction throughout the value chain
To realize carbon neutrality, Nissan Green Program 2022 (NGP2022) will seek to reduce CO2 emissions from our products, services and corporate activities.
Please contribute to Nissan’s CO2 emission reduction activities by providing light weighted parts, technologies to improve vehicle’s fuel efficiency, and electricity with high renewable energy ratio etc.
Nissan will, in cooperation with our entire suppliers, promote efforts to reduce CO2 emission throughout our value chain. Please refer to 4.5.3 Environment impact reduction with supplier for details.

4.2 Request related to resource dependency

NGP2022 key action for resource dependency
Create a system that uses resources efficiently and sustainably, and promote services to use vehicles more effectively

- Reduction of new natural resource usage for vehicle manufacturing
- Waste reduction at manufacturing sites
- Reduction of landfill ratio at manufacturing sites

4.2.1 Proactive efforts by suppliers in individual recycling activities and the use of recycled materials
Nissan promotes “Closed loop recycling” in which scrap generated from Nissan production activities or recycled materials from end of life vehicles are reused in in-house production of vehicle components. Furthermore, NGP2022 emphasizes supplier’s individual recycling activities and the use of recycled materials, which aims to reduce dependency on natural resources and minimize negative environmental effects from mining and drilling. All Nissan
suppliers are encouraged to make continuous efforts in;

- preferential use of recycled material in every kinds of raw materials including standard reference materials;
- promotion of development and adaption of new recycled materials; and
- suggestion for improvement of Nissan Green Parts and/or remanufactured parts for after services.

4.3 Request related to air quality

NGP2022 key action for air quality
Cleaner exhaust emission and create a comfortable in-cabin environment to protect human health and to reduce the impact on the ecosystem
- Research technical solutions for cabin air quality improvement
- Reduction of VOC from manufacturing sites

4.3.1 Development on VOC, Odor reduction and compliance with standard
To improve comfortability of car cabin air quality, suppliers all are requested to comply with standard and direction for reduction of the substance to have an influence on human health promoting development for volatile substance reduction from products. Renault and Nissan globally have applied common targets on VOC (Volatile Organic Compounds & Carbonyl Compounds) and odor to reduce material emissions inside car cabin. Those targets can be achieved by implementing specific requirements for individual parts and materials.
18 groups of parts and related materials inside vehicle cabin for VOC and all parts inside vehicle cabin and such as glues, paint, etc. materials that could impact to car cabin air for odor are the scope.

4.4 Request related to water scarcity

NGP2022 key action for water scarcity
Reduce water consumption and manage water quality with Monozukuri that cares ecosystem services
- -21% reduction of water per global production at manufacturing sites (vs FY10)

4.4.1 Water reduction throughout the value chain
To realize zero stress, Nissan Green Program 2022 (NGP2022) will seek to reduce water intake.
Please contribute to Nissan’s action to reduce water intake by providing equipment for waste water recycle etc.
Nissan will, in cooperation with our entire suppliers, promote efforts to reduce water usage throughout our value chain. Please refer to 4.5.3 Environment impact reduction with supplier
NGP2022 key action for enhancement of business foundation

Enhance environmental management

- Ensure management of the environmental compliance policy
- Measure life cycle env. impact of vehicle and new technology
- Reduce environmental impact through engagement with stakeholders including suppliers, next generation customers and NGO

4.5 Request related to enhancement of business foundation

4.5.1 Enhancement of Environmental Impacting Substance Control for Environmental Compliance

4.5.1.1 Establishment and Use of an Environmental Management System

All business partners of Nissan are requested to promote the establishment and use of an Environmental management system of their own.

1) Compliance with Regulations and Nissan Environmental Basic Policies

Nissan suppliers are required to comply with all applicable laws and regulations related to their business activities as well as requirements set out in Renault Nissan Engineering Standard (chemical substance management standard: RENS-B00027), IMDS data entry standard: RENS-B00043 (NES M0302), material identification mark standard: RNESA-00001 (NES D0031) and other related publications for products to be supplied to Nissan.

2) Establishment of Environmental Management System (EMS)

Nissan suppliers are required to acquire an external certificate of environmental management system (EMS) such as ISO14001 or any system equivalent to ISO14001, as well as to establish their own EMS.

* Suppliers who have an EMS are requested to continue to develop and update the system.

* Suppliers who have no such system are required to establish one immediately.

3) Designation of an Environmental Responsible Person

Nissan requires that each of its suppliers designates persons who are to be in charge of environmental issues (substances, materials, recycling, Life cycle assessment, environmental labelling,...) and environmental impacts (CO2, energy, water, waste,...) of manufacturing process of Nissan products, and submit his or her name and contact information through an E-file in response to an RFQ. (see 5.5.1 for E-file details)

4) Tier-2, -3 and Farther Upstream Suppliers Management

Nissan expects the Tier-1 suppliers to assure that they work in cooperation with their Tier-2 suppliers and that this cooperation will expand farther upstream to reduce the
environmental impacts over the product life cycle and guarantee the compliance of the supplied parts with all the requirements of these guidelines.

5) Supplier Audits for implementation of Environment management system
Nissan may verify the environmental commitments (management system, waste, …) either through audits or brand specific actions.

4.5.1.2 Management of Environment-Impacting Substances
~Compliance with Regulations and Nissan Engineering Standards~
Nissan requires its suppliers to comply with its substances standard and policy that aims at replacing potentially harmful substances to human health and/or the environment.

1) Substances management under regulations
Nissan promotes the management of environment-impacting substances and recycling, in consideration of all the regulations around the world. Suppliers must be committed to comply with applicable laws and regulations in each country or region of production, importation or product sale for the following substances issues,
• control the substances used in parts and vehicles and prevent the use of prohibited substances
Current trend of chemical substance regulation focuses on risk assessment and management as well as restriction and reduction considering hazardous properties. Among those regulations specific attention must be paid to enlarged frames like EU REACH Regulation (entered into force in 2007 in Europe (EC No 1907/2006)) or REACH like approaches. Nissan expects its suppliers to ensure compliance with requirements for substances of concern in those various requirements under the REACH regulation: Registration, Evaluation, Authorisation and Restriction.
Specific regulations such as Europe's Biocidal Products Regulation (EC No 528/2012), which do not restrict the use of substances but identify the authorized chemicals for biocidal use, also need to be taken into account. Nissan requests its suppliers to handle this topic with the appropriate judgment in order to avoid the use of un-authorized chemicals whenever biocidal properties are needed.
Current effective regulations are also subject to regular review. Lead exemptions under EU ELV Directive are currently under the review for potential removal. EU RRR Directive stipulates a requirement of compliance with this ELV Directive in the framework of a preliminary assessment of vehicle manufacturers. The Directive specifies a list of component parts deemed to be non-reusable* such as airbags, etc., and Nissan prohibits the reuse of any of those listed items under the Directive. Furthermore, such Directives are being extended to Korea, China, etc. to the outside the EU, which requires careful attention for globally used common parts to ensure compliance with specific requirements in each region.
Each chemical substance subject to eventual prohibition or restriction has intrinsic properties that are classified as carcinogenicity, germ cell mutagenicity, persistent, bioaccumulation, endocrine disrupting and/or respiratory sensitization, etc. Specifically Prohibition and/or restriction on flame retardants, plasticizers and water repellents with one or more of such hazard classes are either already in force or discussed to be decided. Non-use of these substances must therefore be ensured.

Regulations associated with safety verifications on delivery and transportation are also included in the scope. Those regulations set out documentation requirements to take into account. SDS (Safety Data Sheet) is a form for the safety verification of substances contained in raw materials, parts and products, and it is necessary to attach it to the product at the time of delivery.

*Component parts deemed to be non-reusable:
All airbags; automatic or non-automatic seat belt assemblies; seats (only in cases where safety belt anchorages and/or airbags are incorporated in the seat); steering lock assemblies acting on the steering column; immobilisers; emission after-treatment systems (e.g. catalytic converters, particulate filters); and exhaust silencers.

2) Renault Nissan Engineering Standard
Renault and Nissan are working on establishment of commonized standards, “Renault Nissan Engineering Standard (RNES)” and “Renault Nissan Design Standard (RNDS)”. RNES_B-00027\(^1\) globally bans the use of substances likely to be subject to eventual restriction in parts, accessories and materials in addition to the substances currently listed in GADSL\(^2\) or other relevant laws and regulations. Renault-Nissan suppliers are required to deliver products and materials compliant to regulations of each country and the RNES_B-00027.

Please be aware that the RNES_B-00027 will be reviewed and updated at least once a year in order to reflect the latest environmental regulations, requirements and policy changes. All of our suppliers are encouraged to consult the latest edition of the RNES_B-00027.

With respect to the substances subject to elimination or reduction, Nissan may require its supplier to report analysis result of material composition of products in accordance with NES M0303 “Measurement Method of Environmental Impact Substances”

\(^1\) Current edition of RNES_B-00027 V2.0 as of August 2018 may be accessed as NES M0301-2018N on Nissan supplier portal for convenience of the portal system

\(^2\) GADSL (Global Automotive Declarable Substance List) URL: [http://www.gadsl.org/](http://www.gadsl.org/)

4.5.2 Management of environmental impacts through vehicle life cycle and proactively propose environmentally efficient solutions
Nissan carries out quantitative assessment on environmental impact in all stages of the vehicle lifecycle from resource extraction, manufacturing, transportation and to vehicle disposal, instead of merely from operational emission. Nissan will continue to work on lowering the vehicle’s environmental impact by developing new technology and improving efficiency in manufacturing process. As a method of assessing the environmental impact, Nissan uses the Life Cycle Assessment (LCA: a method of measuring the environmental performance of products from cradle to grave). Please provide designated environmental data on production process of parts or materials base on request from Nissan.

4.5.3 Environment impact reduction with supplier
Nissan conducts survey to enhance engagement with suppliers and reduce environmental footprint under NGP2022. Globally selected Tier-1 suppliers are asked to respond to a survey related to climate change and water for the purpose to ascertain their present situations of environmental management and environmental efforts, as well as to promote their environmental activities. Nissan will, in cooperation with our entire suppliers, further utilize the collected environmental data and promote efforts to reduce CO2 emission and water usage throughout our value chain. In addition, Nissan would like to request suppliers to promote CO2 emission and water reduction throughout supplier’s value chain.
5. REPORTING

5.1 Reporting on climate change

5.1.1 Information related to CO2 emission
Nissan will take actions to reduce CO2 emission from our products, services and corporate activities. Please provide information related to CO2 emission, such as weight of parts, energy usage of equipment, and emission factor of electricity, if requested in supplier selection process, etc.

5.2 Reporting requirement with respect to resource dependency

5.2.1 Reporting on the Use of Recycling Materials
In order to proceed with a reduction of natural resource dependency as a key task of NGP2022, Nissan has been actively facilitating expanded use of recycled materials. Nissan suppliers are required to submit information about their use of recycled materials.

What to report
Kind and weight of post-/pre-consumer materials and their ratio to the weight of virgin materials if they are used in resin materials for products supplied to Nissan. The definition of post-/pre-consumer materials is defined in ISO14021 as follows:
Post-consumer material: Material generated by households or by commercial, industrial and institutional facilities in their role as end-users of the product which can no longer be used for its intended purpose. This includes returns of material from the distribution chain.
Pre-consumer material: Material derived from waste stream during a manufacturing process, excluding materials generated from rework, regrind or scrap and reclaimable into the same manufacturing process.

How to report
The supplier shall include ratio of recycled resin in IMDS data submission. The suppliers shall refer to RNES_B-00043 (NES M0302) for IMDS reporting instruction.
*IMDS (International Material Data System) is an internet based material data system for the automobile industry. IMDS may be substituted.

5.2.2 Reporting on Materials Used and Weight
To comply with recycling legislations of different countries, Nissan is working on grasping the full extent of recyclability of each model. Nissan works out recycling/recovery rates of new vehicles and generates base data for the calculation of recycling fees. To accomplish these, Nissan suppliers are required to provide Nissan with their material composition data (e.g. precise data for materials and weight.)

What to report
Information of all materials used and weight of the parts to be delivered to Nissan.
How to report
The supplier shall submit IMDS data. The suppliers shall refer to RNES_B-00043 (NES M0302) for IMDS reporting instruction.

5. 2. 3 Reporting on Marking of Products and Parts
Nissan has been implementing material marking with the parts containing plastics and elastomers for promoting material recycling. Polymer components and materials having a weight more than 100 grams and elastomer components and materials having a weight more than 200 grams must be marked in accordance with the recycling legislations in EU.

What to report
The marking requirements are set out in Renault Nissan Engineering Standard, RNES_B-00043 (NES M0302). Nissan suppliers are required to report about the identification and marking status of their plastic and elastomer parts that are designated by Nissan.

How to report
The supplier shall input and submit through International Material Data System (IMDS) for all the parts and materials independently of the vehicle shipment destination. The suppliers shall refer to the following Renault-Nissan requirement when inputting IMDS data.

Table of regulatory requirements and targets over recycling

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Target parts / materials</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Parts</td>
</tr>
<tr>
<td>Recycle</td>
<td></td>
</tr>
<tr>
<td>Improve Recyclability</td>
<td>Target</td>
</tr>
<tr>
<td>Timing</td>
<td>When delivering trial/mass production parts</td>
</tr>
<tr>
<td>Form Tool</td>
<td>IMDS</td>
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<tr>
<td>Target</td>
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<td>Form Tool</td>
<td>IMDS</td>
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### Reporting on marking of products and parts

<table>
<thead>
<tr>
<th>Target</th>
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<tbody>
<tr>
<td>When delivering trial/mass production parts</td>
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<td>Upon individual request</td>
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<td>IMDS</td>
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<td>-</td>
<td>IMDS</td>
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</tbody>
</table>

*1: Items used at production plants such as steel sheets, steel products, paints, adhesives, oils and coolants and those (have the potential to) remain in or on vehicles.

*2: Materials that do not make up actual products. It means same as indirect materials.

*3: Dealer optional parts such as accessories and others.

*4: Stocks, service parts and oil chemical products and others.

### 5.3 Reporting on air quality

#### 5.3.1 Reporting on development on VOC, Odor reduction and compliance with standards

Report on VOC and odor: To reduce car cabin odor and volatile substance to have an influence on human health, suppliers shall report evaluation result and test data on car cabin parts and materials in accordance with Renault/Nissan common standards shown as following.

**What to report**

Suppliers shall investigate all parts and material as paste and liquid of materials in car cabin and trunk following to the below standards.

- VOC, Odor test method and target in accordance with Renault/Nissan Design Standard (RNDS)/Nissan Design Standard (NDS)
- VOC & Carbonyl compounds emissions from parts:
  - Parts VOC test method; Renault/Nissan Technical Standard RNES B-00114 (Nissan Technical Standard NES M0402), Parts VOC target; Renault/Nissan Technical Standard RNES B-00115 (Nissan Technical Standard NES M0403)
- Odor from parts and materials:

**How to report**

- In the development phase, suppliers shall submit test results (measurement result) and data of parts VPC and Odor test as suppliers test report (STR) in accordance with Renault/Nissan Design Standard (RNDS)/Nissan Design Standard (NDS). Report format should be followed to Renault/Nissan Technical Standard (RNES) or Nissan Technical Standard (NES). Additionally suppliers shall submit the usage amount and types of paints and adhesive material.
• In the mass production, suppliers shall submit VOC and Odor data of mass production parts for COP (Conformity of Production) management.

5.4 Reporting on water
5.4.1 Information related to water usage
Nissan will take actions to reduce water intake. Please provide information related to water, such as equipment’s water usage, if requested in supplier selection process, etc.

5.5 Reporting with respect to business foundation strengthening
5.5.1 E-file
E-File (Environmental File), included in RFQ (Request for Quotation) for supplier selection process, is used to evaluate candidate supplier’s compliance with Nissan’s requirements related to environmental impacting substances control for target parts. The E-file requirement applies to all regions globally.

Evaluation criteria
• Supplier agreement of compliance with laws and regulations in different countries and RNESB-00027
• Supplier agreement of compliance with Nissan’s requirements related to the environmental impacting substances management
• Submission of contact information of managers and/or staffs in charge of environmental impacting substances management for Nissan products
  ➢ Responsible person who manages environment-impacting substances and/or a person who handles actual duties on behalf of the responsible person such as a sales person, an IMDS* engineer or a REACH regulation responder
  ➢ An IMDS reporter and a sub-IMDS reporter who complete material data inputs to the IMDS by specified date in response to a request from Nissan.
  ➢ A REACH Regulation responder who handles matters related to REACH requirement

Inadequate response to the E-file
Disagreement with requirements in regulatory compliance or other inadequate responses to the E-file may result in a rejection. A supplier with rejected E-file will be subject to an improvement measure in terms of environmental management. Nissan R&D and Purchasing Department will review the supplier’s E-file and ask for a resubmission of the file upon implementation of the improvement measure. The supplier is required to demonstrate the implementation of improved management and/or procedure in order to become a qualified candidate in supplier selection.
In case an improvement was not found in the reevaluation of the supplier, the result will affect supplier selection.
All Nissan supplier are encouraged to maintain close communication with responsible
designers and buyers of Nissan to ensure compliance with all the requirements specified in the E-file.

*IMDS (International Material Data System):
An internet based material data collection system the IMDS (International Material Data System) is the automobile industry's material data system.
Nissan-authorized web-based systems equivalent to IMDS are accepted. (e.g. CAMDS)

5.5.2 Reporting on the Use of Environment-impacting Substances and Substances of Very High Concern (SVHC)
Nissan suppliers are required to report their use of the environment-impacting substances in Nissan parts and raw materials in accordance with relevant regulations and Renault-Nissan Engineering Standards.
In order to ensure full regulatory compliance, material data submission is a mandatory requirement which applies to all Nissan parts and components regardless of a target market. If a supplier of Nissan parts, raw materials, preparation (mixtures), subsidiary materials or packaging materials identifies a presence of SVHCs, listed on ECHA website, in concentration greater than thresholds specified in RNESB-00027, the supplier must report to Nissan a CAS number and concentration rate of each SVHC by using IMDS or other designated methods.
Also the supplier must communicate any changes in the use of SVHCs resulting from component or raw material substitution to Nissan purchasing department, and at the same time the changes must be reported by using IMDS or other designated methods.

1) Parts and raw materials
How to report
Each design note for Nissan parts indicates a requirement of IMDS data submission for the part and raw materials. Suppliers must input substance data to the IMDS in accordance with RNESB-00043 and submit to Nissan. An engineering liaison form may also be used to require additional IMDS data submissions in some cases.

Submission of an inspection report, upon delivery of a prototype part from each prototype lot, a first product after SOP or a first product after a part change, must include approved IMDS ID number in accordance with ANPQP unless otherwise directed by an engineering liaison form.

In order to ensure Conformity of Production (CoP) regarding the use of heavy metals (lead, cadmium, hexavalent chromium, mercury, etc.) restricted under motor vehicle recycling laws in different countries, Nissan requires its suppliers of a material data analysis in accordance with NES M0303 “Measurement Methods of Environmental Impact Substances” if the
suppliers use any raw materials (e.g., solders) that are likely to contain the heavy metals.

Nissan conducts random inspections on the Nissan parts and raw materials to validate the concentration of environment-impacting substances. Depending on the inspection results and/or status of their existing/submitted IMDS data, Nissan suppliers may individually be required to submit additional substance data as well as to be audited of their substance management procedure in a production process.

2) Raw materials and subsidiary materials for factories
Scope
All chemical substances that are to be used:
- as raw materials (e.g. article and plastic materials, metal materials, paints, adhesive materials, toner, ink and fillers) and parts (e.g. batteries) for new designs, as well as existing products and those under development.
- as indirect materials (e.g. ink for paint marker pens used at factories)
- at factories and/or other business facilities

What to report
SDS (Safety Data Sheet) for substances contained in the specified raw materials and parts.

How to report
Every time a new contract is planned and an individual request is made, target suppliers are required to register the SDS and the material composition of the raw materials and parts to be delivered to Nissan, via the designated servers such as MSDS server (see accompanying sheets for details).

3) Equipment and service parts
Scope
- Newly designed or existing accessories (including AVCN)
- service parts for old model vehicles out-of warranty
- some exclusive service parts without distinction as to existing or old model vehicles as well as within or out-of warranty.
  * “Existing vehicles” and “parts for old model vehicles within warranty” follow the same rules as mass production parts.

What to report
Nissan suppliers are required to enter and submit the material information of designated parts via IMDS
Nissan suppliers may be required to submit additional material information of their parts using an engineering liaison form, even if the parts are not bounding for countries subject to
the regulations.

How to report
Nissan suppliers are required to use IMDS for reporting. Please refer to RNES-B00043 (NES M0302) for details of how to submit the data and to which department the data be reported. For the parts reported via IMDS, the IMDS numbers must be accompanied with an inspection report on delivery. Both are required on delivery of the trial parts of every trial lot on delivery of the first parts from first time mass production line, and on delivery of design changed parts from first time mass production line after the change. Nissan suppliers are required to follow the specific directions in the engineering liaison form for the individual request made with the notification form.

4) Packaging materials for logistics
Scope
Packaging materials for newly designed parts.
Nissan suppliers may also be individually requested to submit substance data on the packaging materials after the mass production of those parts.

What to report
Nissan defined in Nissan Engineering Standard "Restricted Use of Substances" (RNES_B-00027) the environment-impacting substances that are prohibited or restricted to use for Nissan products. Nissan will designate the packaging materials that need to be investigated and reported by our suppliers.

How to report
Please report the investigation results to Nissan by submitting a designated form(s) such as Logistic File, packing notification form (in PDS), Individual File, Material Standard Chart (AS) and MSDS.

Table of requirements and targets over management of products and materials

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Parts, Raw Materials *1</th>
<th>Raw &amp; Indirect Materials *2</th>
<th>Accessories *3</th>
<th>Service parts *4</th>
<th>Logistics packaging materials</th>
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<tr>
<td>Compliance with regulations in each country and Nissan Standards</td>
<td>Target Standard RNESB-00027 RNESB-00043</td>
<td>RNESB-00027</td>
<td>RNESB-00027</td>
<td>RNESB-00027</td>
<td>RNESB-00027</td>
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<td>Requirements</td>
<td>All suppliers ☑</td>
<td>Applicable suppliers (To be advised by Nissan) ▲</td>
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<td>Assessment over Supplier management level</td>
<td>Timing</td>
<td>Form</td>
<td>Target</td>
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<td>Timing</td>
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<td>Submit parts for analysis and inspection</td>
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<td>Target</td>
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<td>Upon individual request</td>
<td>Timing</td>
<td>-</td>
<td>Upon individual request</td>
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</tbody>
</table>

*1: Items used at production plants such as steel sheets, steel products, paints, adhesives, oils and coolants and those (have the potential to) remain in or on vehicles.

*2: Materials that do not make up actual products. It means same as indirect materials.

*3: Dealer optional parts such as accessories and others.

*4: Stocks, service parts and oil chemical products and others.
5.5.3 Submission of Life Cycle Assessment Data for Product Evaluation
Nissan suppliers are required to report the environmental data for designated parts and materials using “The Environmental Data Survey Sheet of Materials and Parts”. Nissan suppliers are encouraged to refer to the "Environment Data Survey Method of Raw Materials and Parts" for instructions. Nissan suppliers may be contacted to ascertain details of the submitted data survey sheet (e.g. calculation methods).

Deliverables
The designated data on CO2 emitted during the production process of materials or parts

How to report
Environmental data survey sheet of materials and parts.

Table of requirements and targets over LCA
\[\checkmark\]: All suppliers ▲: Applicable suppliers (To be advised by Nissan)

<table>
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<tr>
<th>Requirements</th>
<th>Target parts / materials</th>
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<tr>
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<td>Submit the life cycle assessment data</td>
<td>Timing</td>
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<td>Specialized sheet</td>
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*1: Items used at production plants such as steel sheets, steel products, paints, adhesives, oils and coolants and those (have the potential to) remain in or on vehicles.
*2: Materials that do not make up actual products. It means same as indirect materials.
*3: Dealer optional parts such as accessories and others.
*4: Stocks, service parts and oil chemical products and others.

5.5.4 Survey related to climate change and water
Nissan will conduct survey related to climate change and water to globally selected Tier-1 suppliers to enhance supplier engagement and environmental impact reduction. Nissan adopted the supply-chain program offered by CDP, an international environmental NPO that manages a global system for disclosing corporations’ environmental impact and strategies, in fiscal 2014 to request information related to climate change and water, and to conduct a comprehensive review. Please respond to survey related to climate change and water on request from CDP/ Nissan.
6. Laws, Regulations, etc. (non-exhaustive)

GADSL – Global Automotive Declarable Substance List  URL: https://www.gadsl.org/
UN GHS (ST/SG/AC.10/30) – “Globally Harmonized System of Classification and Labelling of Chemicals”

EU REACH Regulation - “Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)” (EC) No 1907/2006
EU CLP Regulation – “Regulation on classification, labeling and packaging of substances and mixtures” (EC) No 1272/2008
EU Packaging and Packaging Waste Directive (94/62/EC)
EU BPR – “Biocidal Products Regulation” (EU) 528/2012
EU RRR Directive – “Directive 2005/64/EC relating to the type-approval of motor vehicles with regard to their reusability, recyclability and recoverability”

US Significant New Use Rule (SNUR) (TSCA Section 5)

JP Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. (Act No. 117 of October 16, 1973)

Laws and regulations on mercury aligned with requirements with Minamata convention
JP Act on Preventing Environmental Pollution of Mercury (Act No. 42 of June 19, 2015);
CA Products Containing Mercury Regulations (SOR/2014-254);

KR Act on the Resource Circulation of Electrical and Electronic Equipment
CN Management Requirements for Vehicle Hazardous Substance and Recyclable Utilization Ratios (MIIT Notice No.38 (2015))
CN Requirements for prohibited substances in automobiles (GB/T 30512-2014)

Acts, etc. associated with safety verification on delivery and transportation
JP Industrial Safety and Health Act (Act No. 57 of June 8, 1972)
US Occupational Safety and Health Act of 1970 (29 U.S. Code Chapter 15 § 651)
Pollutant release and Transfer Register (PRTR)
### 7. Relevant Standards and Procedures

(Please go to the Nissan supplier portal website or ask a Nissan buyer for a copy.)

Renault Nissan Engineering Standard, RNES_B-00027 "Restricted Use of Substances" (NES M0301)
Renault Nissan Engineering Standard, RNESB-00043 "Substance data input standard by IMDS" (NES M0302)
Nissan Engineering Standard "Measurement Methods of Environmental Impact Substance" (NES M0303)
Renault Nissan Engineering Standard, RNESA-00001 "Identification and Marking of Polymeric Parts" (NES D0031)
Renault/Nissan Technical Standard “Vehicle Interior parts - Test method for the determination of the volatile organic compounds” (RNES B-00114)
Nissan Technical Standard “VOC test method of cabin parts” (NES M0402)
Renault/Nissan Technical Standard “Vehicle Interior parts – Target value of the volatile organic compounds” (NES B-00115)
Nissan Technical Standard “VOC of Cabin Parts” (NES M0403)
Renault/Nissan Technical Standard “Odor test method for materials and parts” (RNES B-00096)
Renault/Nissan Technical Standard “Odor specification for materials and parts” (RNES B-00161)
Nissan Technical Standard “Method of Testing the Smell of Interior Parts” (NES M0160)
Nissan Technical Standard “Odor substance usage restrictions” (NES M0297)
Alliance Nissan Product Quality Procedure (ANPQP)

### 8. HISTORY

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<th>Edition</th>
<th>Contents</th>
</tr>
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<tbody>
<tr>
<td>2010.07.29</td>
<td>[1]</td>
<td>Document edited according to the revised EU regulations for environment-impacting substances (EU REACH regulation, MSDS report requests)</td>
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<td></td>
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<td>Document edited according to the publication of the Renault-Nissan CSR Guidelines for Suppliers.</td>
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<td>2012.11.30</td>
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<td>Document edited according to expansion of requirement to suppliers</td>
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<td>2015.10.31</td>
<td>[4]</td>
<td>Reframed to be aligned with the Renault Green Purchasing Guideline</td>
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<td>2019.05.23</td>
<td>[7]</td>
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## Contact details by subject category

<table>
<thead>
<tr>
<th>Subject</th>
<th>Department</th>
<th>Manager</th>
<th>Contact person</th>
<th>e-mail</th>
<th>Phone number</th>
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<tbody>
<tr>
<td>Green Purchasing Guideline in general, regulation matters</td>
<td>Regulation and Homologation Department</td>
<td>Masahiko Iwasaki</td>
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<tr>
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<td>Naoki Hatano</td>
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<td>+81(0)46-270-1643</td>
</tr>
<tr>
<td>Apply G2B implementation</td>
<td>Global Help Desk (Nissan Global Customer Service Center)</td>
<td></td>
<td></td>
<td></td>
<td>+81(0)3-5326-5623</td>
</tr>
<tr>
<td>Random check on delivered parts, Requirement of IMDS ID numbers with</td>
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</tr>
<tr>
<td>delivery inspection reports</td>
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<tr>
<td>Indirect materials</td>
<td>Vehicle Production Engineering Division Environment and Facility Engineering Department</td>
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<tr>
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<tr>
<td>Packaging materials</td>
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<td></td>
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