

Quality

Approach to quality

Product evaluations and automaker brand value are dependent on customer perception of quality. Rapid technical innovations are seeing customers demand ever-higher levels of quality.

As mobility needs rise worldwide, driven by increased urbanization and structural changes in the global economy, Nissan is fulfilling its mission of offering people everywhere the rich benefits of mobility. At the same time, we believe that automakers have an important responsibility to always offer customers the kind of quality they expect.

The Nissan Social Program 2030 aims to achieve top-level quality*¹ and is undertaking initiatives to achieve the goal of eliminating quality defects and compliance issues.

Nissan aims to earn its customers' trust by addressing quality as a companywide issue. This means providing top-level quality to customers at every stage, from the planning of new vehicles through development, manufacturing, logistics, and sales to aftersales service.

Quality has many aspects, and we seek to provide high quality at all stages of the customer experience: how it feels to use the product itself, the way customers are treated by sales staff in showrooms, the response if problems arise with the product. To achieve this, we pursue effective companywide cooperation at the cross-functional and cross-regional levels, while listening to the feedback of every customer with sincerity.

Based on a customer-centric ethos, Nissan places the highest priority on customer feedback and aims to enhance the quality of products and services that provide customers with a deep sense of satisfaction to ensure they choose Nissan vehicles over the long term through efforts focused on product, sales and service quality.

Vehicle product quality is essential for safe and comfortable long-term use.

We aim to provide a high level of quality that meets customer expectations over the entire life cycle of the product. This includes the perceived quality when a customer opens the vehicle's door in the showroom, sits in the seat, and takes a test drive; the initial quality when the vehicle is delivered to the customer; and the durability that allows the vehicle to provide many years of use.

We also conduct initiatives to increase customer satisfaction (CS) regarding sales and service quality. Our aim is to exceed expectations at every customer contact point, including dealership visit, purchase, maintenance, inspection, and repurchase.

Quality management

Ensuring the safety of customers and providing the quality they expect are both important issues. To achieve sustainable growth as a trustworthy company, Nissan has created an organization to promote quality improvement globally, and all Nissan employees are engaging in activities as one. Clearly defined by an ISO9001-compliant quality management system, the persons in charge are assigned and the processes applied to a wide range of quality improvement activities on a global basis. A manual addressing all quality items is prepared and updated as necessary to ensure thorough quality management. Annual training on the guidelines for establishing and implementing a quality management system is also conducted. This training is mandatory for all employees.

24 out of 24 vehicle production bases*², including consolidated and non-consolidated sites, have acquired ISO9001 certification.

*1 Achieve the top 3 in each market in terms of product quality and sales & service quality.

*2 Excluding non-consolidated OEM plants

Management systems for quality

To achieve top-level quality, we have assigned a number of Senior Vice Presidents, headed by the Chief Quality Officer (CQO), to focus exclusively on quality issues. A CQO meeting, chaired by the CQO, is held every month and attended by executives representing each division and region.

These meetings work to promote the swift solution and improvement of issues related not just to product quality but also to sales and service quality experiences before and after purchase.

Additionally, in order to fully implement compliance, we have established a three-layer monitoring and audit system and are working to strengthen our audit activities. The first layer consists of each division implementing monitoring activities to ensure strict observance of laws and standards. In the second layer, the Conformity Audit Office conducts audits of those efforts to observe laws and standards. And in the third layer, the Internal Audit Office conducts risk-based audits in accordance with annual plans.

Quality achievements

Reflecting customer feedback in activities to enhance quality

To provide the value that customers expect and respond rapidly if they are not satisfied, we listen to all feedback and put what we learn to use in measures to improve quality at every stage, from design and development to aftersales service.

Responding rapidly to customer feedback and timely sharing of information

We receive and respond to customer comments and questions worldwide through a range of contact points, including dealers, call centers, and surveys. Our customer call center in Japan, for example, receives around 200,000 comments and questions from customers annually. To respond rapidly to customer feedback, we are utilizing digitized catalogs and technical materials from the past 50 years and a frequently asked question (FAQ) search system. A portion of this FAQ is made available to customers so they can solve problems themselves, saving them the trouble of making inquiries.

Opinions and comments received by our customer call center in Japan are anonymized and shared companywide on the intranet, where employees can access and view them at any time. Information is also promptly sent by email to executives and senior managers.

Incorporating customer feedback into products and services

We have implemented a system for reflecting customer feedback in our products and services. Reliable information sharing ensures that this feedback is incorporated in the work of all functions, including product planning, R&D, manufacturing, and sales. Product quality is about more than just a lack of mechanical faults—it includes any factors that could lead customers to feel dissatisfied.

We see these factors as issues requiring action and strive to improve quality across all areas. The value that customers expect from products varies according to their region, age, and personal tastes and can also be affected by market factors, such as product diffusion levels or even climate. Although we have basic specifications for global design, we fine-tune these to meet regional needs. The Chief Quality Engineer (COE) performs this role, participating in the vehicle manufacturing process from the product planning stage in order to reduce customer dissatisfaction and defects. We glean customer perspectives from questionnaires submitted by vehicle owners, market information and employee monitors and prioritize our response to these from the planning and development stages for both products and services.

Adopting a customer perspective

We believe all employees must have a customer-centric perspective and are implementing a variety of activities, including companywide training to foster this mindset and efforts to provide opportunities to experience customer feedback on a daily basis.

One example of this is the companywide “Customer Centric Workshop,” in which participants learn to understand customers’ concerns, think about what they can do for them, and experience the importance of providing products and services that exceed customers’ expectations motivated by compliments from customers.

We have also held Nissan Quality Forums for executives, employees, and suppliers. These annual forums use information displays, video presentations and actual vehicles, and parts to showcase our latest quality results, customer feedback from the market, improvement activities based on customer feedback, and activities aimed at meeting targets. The forums are organized cross-functionally by all divisions from R&D to service that incorporate experiential events to raise all employees' focus on customers and the importance of quality. They are held globally in Japan, North America, Europe, China, Southeast Asia, and other regions.

Improving product quality

Product quality is a basic feature in allowing customers to use a product safely and comfortably over the long term. For Nissan, which has played a key role in *monozukuri*, Japan's tradition of careful craftsmanship, product quality is the foundation for our sustainability as a company. We consider quality from the customer's perspective at all times and respond quickly if a defect occurs, striving to prevent recurrence. In addition, we are improving product quality to satisfy as many customers as possible by reliably identifying customer dissatisfaction and implementing countermeasure activities in all processes to eliminate any issues.

Approaches in development and at manufacturing plants

Improving perceived quality and developing vehicles with valued designs

Perceived quality is the quality felt when seeing, touching, and operating a vehicle. The perception of quality is a particularly subjective matter, and applying objective criteria requires thorough studies. We conduct consumer research around the world targeting customers who have purchased or are considering purchasing a Nissan car in order to understand their perceptions better and incorporate those perceptions in new vehicles. Our perceived quality specialists communicate the voice of customers around the world and support us to develop attractive stylish vehicles that are valued by our customers.

Producing products of consistent quality worldwide

At Nissan, we will continue to produce products of a quality that exceeds our customers' expectations. At the Tochigi Plant, we launched the Nissan Intelligent Factory to meet environmental considerations, such as carbon neutrality and the effective use of resources, and to meet the needs for electrified, intelligent cars, and are realizing *monozukuri* that places less of a burden on our employees. The Intelligent Factory will be deployed horizontally to global plants in the years to come. Including these activities, Nissan will deploy quality initiatives in four areas, make comprehensive efforts from the development stage of new vehicle offerings to the pipeline that delivers vehicles to customers, and stably supply high-quality products.

Four areas in Nissan production/supply chain management (SCM)

New model quality initiatives	At the digital stage of a new model, we will simulate a virtual factory, utilize simulation and virtual reality, and collaborate with design departments to create vehicle designs in digital form. The Global Production Engineering Center is also making efforts to realize high-quality vehicle production from the outset at all plants worldwide through the verification of the structural construction method of prototype vehicles.
Power train quality initiatives	To complete quality manufacturing in each process, we set Quality Gates for each process, establish non-defective product conditions, and carry out activities designed to deliver non-defective products to the next process. We will also reflect the opinions of our customers in product and process designs, work to further improve the quality of new products, and contribute to the realization of stable quality.
Production vehicle quality initiatives	Having developed highly reliable forming and joining techniques and tools that can reliably comply with quality requirements, we are improving the Built in Quality of each process. In addition, to leverage the Global Training Center and to devise ways to stabilize the quality brought about by manual labor, we are promoting the global development of advanced skills through the Master Trainer training program, and aiming to realize stable quality at all global plants.
Logistics quality initiatives	In the transport process that delivers completed vehicles to customers, we utilize the same global evaluation index to rate the quality of logistics transport operations. Through benchmarks at each site, we are promoting further improvements, maintaining factory shipping quality, and promoting the provision of high-quality vehicles to our customers.

Implementing quality evaluation envisioning a myriad of situations

Each of our production cars and development models is evaluated using a system called VES*1 to monitor quality on a daily basis. Feedback from customers is incorporated in standardized evaluation criteria, which are used to train quality assessment specialists. Only these company-certified experts, known as “VES Masters,” can perform our strict daily assessments.

The assessment process evaluates the vehicle’s interior and exterior and evaluates it while it is in operation, focusing on whether it meets quality standards defined in terms of customer requirements. During the running evaluations, carried out on actual roads, assessors evaluate the vehicle in areas including unexpected noise, vibration, stability of handling, and the functionality of its various advanced systems. Final responsibility for overall quality is the responsibility of the CQE, who envisages different use scenarios for Nissan vehicles and carries out stringent quality checks accordingly.

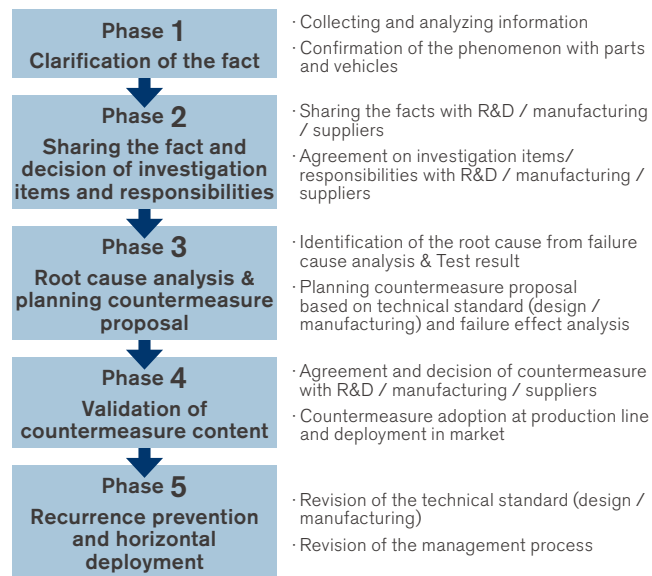
Activities to improve market quality

Swiftly improving quality in local markets

We are strengthening direct communication with sales companies and customers to promptly identify and respond to customer dissatisfaction and defects. Our Total Customer Satisfaction Function Division (TCSX) addresses customer dissatisfaction and quality issues based on information from sales companies and the customer call center. It shares information with the R&D and manufacturing divisions to investigate the causes and come up with countermeasures. These countermeasures are incorporated in production models on the market. In this way, we seek permanent solutions to prevent outflow of quality issues. The global expansion of our corporate activities has increased our potential exposure to customer dissatisfaction

and quality issues in more regions around the world. In response, we have established Field Quality Centers (FQCs) with the goal of promptly gaining an understanding of regional quality issues and analyzing their causes locally. There are now 15 FQCs in Japan, the U.S., Europe, China, Mexico, Brazil, South Africa, India, Australia, Thailand, and other locations. Our FQCs conduct market quality research and analysis in five phases.

Conceptual representation of the five phases of market quality research and analysis



Improving initial quality

We are strengthening our efforts to deliver high-quality new vehicles to our customers. The Chief Vehicle Engineer (CVE), who is responsible for development, meets with the CQE to share information from the market in order to promptly respond to customers’ wishes and potential satisfaction concerns. We confirm quality improvements for each process and explore necessary risk-reduction measures by visualizing potential risks at the planning stage. Applying all of these processes with transparent criteria lets us ensure that new models offer high quality from the outset.

Enhancing durability

So that our customers are able to continue enjoy driving in our vehicles for many years, we are promoting efforts to address the deterioration caused over time by long-term vehicle use, such as the discoloration or deformation of resin, abrading of the surface materials, stripping away of chrome plating, and abnormal noises due to material fatigue. We consistently obtain data of warranty after the initial sale and conduct quality checks on recovered vehicles and parts actually used by customers to identify defects earlier. Analyzing this data helps us develop technologies that are more resistant to durability issues.

Fair and prompt response to material quality issues

While we consider it our responsibility to do our best to prevent product defects from occurring, it is also our duty to be prepared for any contingency in the manufacture of cars, which are complex industrial products. Nissan’s basic stance on recalls is to respond in a transparent, fair, and prompt manner. It is our policy that decisions on recalls should be made from the perspective of compliance with laws and regulations, as well as from the perspective of how the issue affects customer safety. Specifically, Nissan makes decisions on recalls with the highest priority on ensuring customer

*1 VES stands for “Vehicle Evaluation Standard.” VES is a quality evaluation system, in which specially trained experts assess vehicles using more than 300 quality assessment criteria established from the customer’s perspective.

safety, minimizing customer inconvenience, and complying with laws and regulations. When the recall decision is made, Nissan encourages customers to receive prompt repair information and visit repair facilities.

If a problem is found in a vehicle manufactured or sold by Nissan, a recall decision is made in accordance with internal regulations together with representatives from the region closest to the customer.

After a recall decision is made, the following measures will be implemented to enable prompt repairs with top priority given to customer safety and security.

- Notification will be sent in a prompt and fair manner by postal mail to customers who own vehicles covered by the recall. Dealers will also contact customers, if necessary.
- Recall notifications will be posted on the website and on the mass media to inform the customer.
- We also make the required reports, including notifications to the authorities in accordance with the laws and regulations of each country.

Recalls in FY2023*1

Country / Region	Number of recalls	Recalled vehicles (1,000 units)
Japan	13	1,164
North America	22	1,546
Europe	10	507
Other	25	1,578
Global	48*1	4,795

Approaches with suppliers

Nissan is working with suppliers to improve the quality of parts from the design stage at all production sites, including addressing risks related to parts quality and supply.

Promoting risk evaluation and reduction management among suppliers

We work to enhance our own global quality management. Nissan representatives visit each supplier's plants and check the quality control conditions on their production lines. We also offer support for suppliers' efforts to meet the quality control standards we require.

In addition to these activities, we work not only with direct suppliers but also with tier-2 suppliers to implement quality improvement measures.

Supplier inspections and training for improving product safety and quality

To ensure product safety, we work together with suppliers and conduct inspections for products as well as components. Each component from our suppliers represents the end-product of a complex manufacturing process that includes planning and development validation, turning design blueprints into prototypes, performance testing, and mass production. We have created a system called Nissan Product Quality Procedure (NPQP)*2 for regulating the necessary quality assurance across this entire series of activities. The NPQP requires tests to be carried out on every component delivered to confirm their high quality.

We developed the Automotive-parts Supplier Evaluation Standard (ASES)*2 system.

The ASES contains 240 evaluation criteria to determine if a component is defective and analyze the systems in place to prevent problems occurring.

The ASES is applied on-site, at the supplier's factory. We also ensure that all parts are material certified through a quality control system that coordinates with suppliers, both in the manufacturing process as well as for component materials. More than 1,000 personnel from all suppliers participate in NPQP training held each year. Through this training, we promote and ensure supplier understanding of the NPQP, thereby establishing a system such that accurate parts are delivered.

For all Nissan suppliers, we are implementing a "Supplier Score Card" containing an assessment of diagnostic measurements such as delivered quality and market quality as well as the Supplier Health Check (SHC)*2 supplier audit to check their management system. This ensures that suppliers maintain their systems for consistently delivering high-quality components and conduct new initiatives to further improve quality.

*1 Each recall action is counted as one case, so the total number of recalls in each country and region is not equal to the global number of recalls. We respond to all safety-related investigation requests from authorities in each country.

*2 Click here for more information on NPQP, ASES, and SHC. <https://www.nissan-global.com/EN/SUSTAINABILITY/SOCIAL/QUALITY/PRODUCTS/ASSURANCE/>

Improving sales and service quality

Nissan continues to improve not only vehicle quality but also quality of services at Nissan dealerships seeking to exceed customer expectations at all touch points. Certainly, it's not an easy task as customer expectations are constantly evolving. However, at Nissan we have a clear plan on how to manage it. Operational excellence will be continuously focused to address the basics of customer satisfaction. Additionally, we strive to provide our customers with an enriched dealership experience that is seamless and personalized, through innovative management of sales and service quality at dealerships around the world.

Global dealership guideline updates

Several examples out of many are explained below to showcase how Nissan exerts its efforts to exceed customer expectations.

First, Nissan Sales and Service Way (NSSW) is a set of global process guidelines aiming at constantly improving customer experiences especially during his/her vehicle purchasing and servicing process, which involves any dealership interactions. We regularly revise these guidelines to reflect the evolution of customer trends and needs, and ultimately offer a better experience at all touch points whether it is physical or digital, or both.

Nissan Academy, our Learning and Development team for dealers, creates and conducts various training programs to support dealer personnel from dealership staff to management, to better serve our customers now and in the future. We have created a diverse set of programs including brand, product, and behavior trainings.

To enhance our activities at the dealership, we also continue training our field team members, who support our dealer partners to be successfully sustainable by analyzing dealer operations, developing improvement plans based on their individual situations, and supporting their implementation.

Nissan Retail Concept (NRC) is a new dealership layout and

design that has been rolled out globally with an intention to appeal to all customers. Customers that come for purchasing new vehicles or the ones coming to service their cars can be hosted in a welcoming and comfortable environment. The key elements of the brand such as, electrified vehicles, NISMO performance sub-brand, light commercial vehicles, Nissan Intelligent Choice (Certified Pre-Owned vehicle program) are all showcased in the NRC environment. We continuously develop this concept around the world.

Quick Voice of Customer (QVOC) to reflect customer feedback

Focusing on the voice of each individual customer and quick problem resolution, we implemented QVOC. It is not only a survey but rather a powerful tool to capture customer's feedback with simple questions and free comment. In case a customer shows any concern, QVOC provides the dealer / Nissan a hot alert and allows the dealer to quickly resolve the specific customer's concern and thereby increases customer advocacy for Nissan. It is still one of our important focus initiatives to consistently improve customer satisfaction. At Nissan, we are always thinking of the customer and QVOC is just one of the tools that we use to provide customers unparalleled customer experience.



New logo Nissan dealer outlet