TAMRON

# CSR Report 2018

Corporate Social Responsibility Report

# Message from the President

President & CEO
Tamron Co., Ltd.

Shiro Ajisaka

## Taking on the Challenge of the Technologies that Society Needs

At Tamron, through our core business of making lenses as the "New Eyes for Industry," we strive to be a company that creates joy and excitement, and which contributes to society and the environment. In recent years, expectations have been placed on companies to tackle solutions to social issues in the medium-to-long term through the Sustainable Development Goals (SDGs) adopted by the United Nations, and the Charter of Corporate Behavior[1] instituted by Keidanren (Japan Business Federation) . Similarly, a decade has passed since Tamron introduced CSR management, and we have reaffirmed the recognition that business opportunities lie in solutions to social issues. Car-mounted lenses and surveillance lenses hold promise to potentially solve their respective social issues in terms of a safe driving society and secure lifestyles. In new fields such as drone lenses, we will also contribute to social issues through technological development from a medium-to-long-term perspective. Looking ahead, we will work through our Opto-Science R&D Center on lenses for medical use serving future needs and high-sensitivity surveillance cameras while also quickly adapting to the latest technologies as they emerge.

Tamron formulates a medium-term management plan and reform-oriented themes as part of its corporate strategy.[2] Initiatives in the areas of the environment, society and governance that reflect current circumstances are crucial to achieving these goals. Given this, in FY2017 we reviewed our twelve CSR themes and identified key CSR issues. Moving forward, we will ensure steady implementation and outcomes consistent with the new twelve CSR themes, including CSR procurement.

On the other hand, unfortunately we failed to meet our $CO_2$ emissions reduction target for FY2017. Even so, we promoted energy saving initiatives and installed solar power generation at Tamron Optical (Foshan) Co., Ltd. In FY2018 we will make greater efforts to reduce $CO_2$ emissions.

## Cultivating High-quality Human Resources with an Awareness of Improving Productivity

At Tamron, we require our employees to be aware of productivity improvements so that they can become high-quality human resources who can adapt to change. Boosting productivity is essential to achieving a healthy work-life balance. This gives employees the opportunity to develop their skills and spend time with their family, leading to a more fulfilling life. By extension, these employees will go on to create technologies and products that excite our customers. At our overseas sites, we also require human resources who can respond to risks in a convincing manner and create value with a sense of speed. We hire research and development staff, including overseas, and implement schemes such as job rotations, thereby cultivating human resources who can succeed at the global level.

The lifeblood of a company is its people. With this in mind, Tamron will develop an internal environment that allows people to take on their work in a bright, enjoyable and positive way.

## Supporting the Ten Principles of the UN Global Compact

Tamron continues to be an active supporter of the 10 principles laid out in the U.N. Global Compact as part of its global expansion. We recognize that these 10 principles represent guidelines that truly multinational corporations must put into practice, and thoroughly educate our employees on the principles, including those in our overseas sites.

We have compiled this CSR report with a focus on engagement with stakeholders, and as a tool for disclosing non-financial information, which is encouraged by Japan's Corporate Governance Code. We would greatly appreciate your comments and suggestions for how we can further improve.

1. The Charter of Corporate Behavior was revised by Keidanren (Japan Business Federation) in 2017.
2. Please visit the Tamron website for information about our Mid-to Long-Term Management.
WEB http://www.tamron.com/ir/management_policy/

## Corporate Philosophy

With its firm commitment to developing high-quality, innovative and technologically advanced products that satisfy customer needs, Tamron is securing a leading position in the worldwide optical industry. Our primary objective is to sustain strong corporate growth based on a high level of customer satisfaction achieved by providing superior products at the right price, thus also contributing to the prosperity of our shareholders and employees.

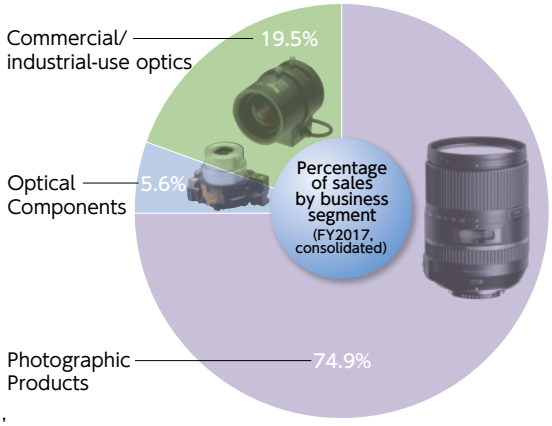
## Brand Message

New Eyes for Industry

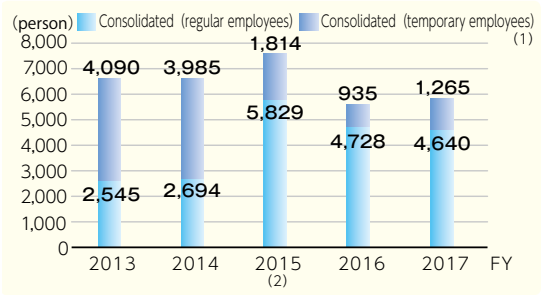
## Company Profile

| | |
|---|---|
| Trade name | Tamron Co., Ltd. |
| Head office | 1385 Hasunuma, Minuma-ku, Saitama-shi, Saitama, Japan |
| Tel. | +81-48-684-9111 |
| Founded | November 1, 1950 |
| Incorporated | October 27, 1952 |
| Capital | 6.923 billion yen |
| President & CEO | Shiro Ajisaka |
| Employees | 4,640 (consolidated ; excluding 1,265 temporary employees) |
| Net sales | 60.496 billion yen (consolidated ; as of December 31, 2017) |
| Listed | First Section of the Tokyo Stock Exchange |
| Domestic plants | One each in Hirosaki, Namioka and Owani in Aomori |
| Overseas plants | Foshan, China and Hanoi, Vietnam |
| Consolidated subsidiaries | United States, Germany, France, Hong Kong, China (Shanghai), Russia, and India |

## Outline of Business Operations

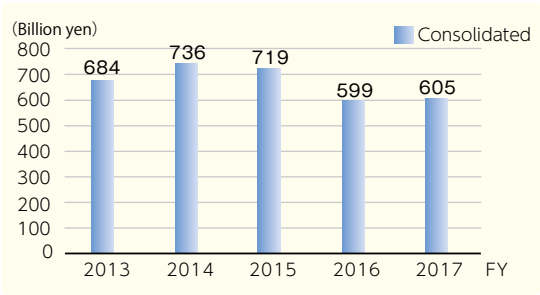



### [Employees]




1. "Temporary employees etc. (Consolidated)" shows the average number of temporary employees.
2. The increase in the number of regular employees in 2015 was mainly due to a change in the employment status of workers at Tamron Optical (Foshan) Co., Ltd. (Tamron's manufacturing subsidiary in China).

### [Net Sales for the Previous Five Years]

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### Editorial Policy

(1) This report was issued to disclosure to our stakeholders including customers, employees, shareholders, investors, business partners, local communities, public institutions, NGOs and NPOs, of our activities for protecting the environment and discharging our social responsibilities.
(2) This reports covers activities at all the Tamron Group including Tamron Co., Ltd., Tamron Optical (Foshan) Co., Ltd., and overseas sales subsidiary companies (except for some information on environment data and so on) .
(3) Guidelines mainly referred in compiling this report :
Environmental Report Guidelines, Ministry of the Environment (2012 version)
Greenhouse Effect Gas Measuring & Reporting Manual Version 4.3.1
Environmental Accounting Guidelines, Ministry of the Environment (2005 version) .
(4) We also referred to GRI Sustainability Reporting Guidelines and ISO 26000 : 2010 Manual on Business Entities' Social Responsibility in extracting the needs for disclosing information to our stakeholders.
(5) We worked on information disclosure sharing our perspectives with our stakeholders, by referring to the warranty processes in the AA1000 Warranty Standard.
(6) We selected the cover design to express our corporate attitude attempting to contribute to the environment of the earth and the harmony with all stakeholders through lenses.

Special Feature

# Striving to Create

Working from a medium-to-long-term perspective, Tamron has
Through the new twelve CSR themes, Tamron will contribute

## Striving to Create a Sustainable Society (Tamron's CSR Management)

Under a CSR policy[1] of contributing to the economy, society and environment as eyes for industry to realize its corporate philosophy, Tamron aims to enhance its corporate value and develop a sustainable society. In 2007, we set twelve CSR themes against the backdrop of the internal and external environment of the time. In the time since, we have set goals and targets on a yearly basis to inform our activities.
In today's world, however, as typified by the phenomenon of global warming, the sustainability crisis has steadily advanced, and with various social issues such as human rights and labor becoming increasingly serious, there is an even greater expectation placed on the initiatives companies pursue to solve social issues. In December 2017, Tamron identified key CSR issues and redefined its twelve CSR themes in order to promote initiatives designed to solve social issues in the medium-to-long term.

1. Please visit the Tamron website for information about our CSR Policy and Action Declarations.
WEB http://www.tamron.com/csr/csr.html

## Identifying Key CSR Issue and the Twelve New CSR Themes

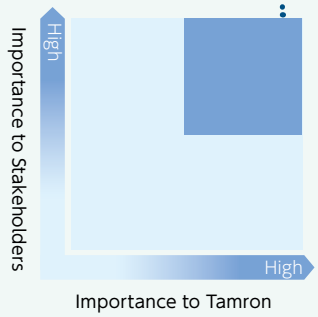
We identified key CSR issues (materiality) in the course of three steps in order to address social issues in a decisive manner.
First, in light of the fact that Tamron's business is global in nature, we identified and acknowledged social issues based on various guidelines and indexes, including ISO26000, the Ten Principles of the UN Global Compact, SDGs[2] and the RBA Code of Conduct (formerly known as the Electronic Industry Citizen Coalition, or "EICC"). Next, we evaluated the level of importance for each stakeholder involved with Tamron in a business capacity, and the level of importance to Tamron (the probability and the level of impact on a risk that would occur in relation to a social issue). After considering the validity of the evaluation results, we identified 15 key CSR issues. These were revised down to twelve CSR themes and consequently approved by the CSR Committee.
To respond to the key CSR issues that were identified, we have revised the twelve CSR themes under which we have operated since 2007, and newly added CSR Procurement and SDGs themes[2]. Our activities will be conducted under the new twelve CSR themes.

2. SDGs stand for "Sustainable Development Goals," and as the name suggests, refer to goals designed to further sustainable development.

**The process for identifying key CSR issues**

STEP1 Identify social issues → STEP2 Assess the degree of importance for each issue, and consider its appropriateness → STEP3 Identify key CSR issues and revise the CSR themes

《New Twelve CSR Themes Association Table》




| Twelve New CSR Themes | Key CSR Issues | Relevant Page in this Report |
|---|---|---|
| SDGs | Contributing to social issues through business (including new businesses) | P3～4 |
| Quality and Product Safety | Enhancing product quality and safety management | P9～12 |
| Environment | Reducing $CO_2$ emissions | P12<br>P15～18 |
| | Recycling resources and reducing waste | |
| | Environmentally friendly design | |
| | Reducing harmful chemical substances | |
| | Water management | |
| Human Resources and Human Rights | Human resource development (improved productivity) | P6 |
| | Providing comfortable workplace environments and promoting diversity | |
| Occupational Health & Safety | | P14 |
| Social Contributions | Fostering the development of the next generation | P19～20 |
| CSR Procurement | Promoting CSR procurement | P8 |
| Crisis Management | Preparing for (rebuilding from) major disasters | P13 |
| Compliance | Improving the governance framework | P7、14 |
| Corporate Governance | | P7 |
| Information Disclosure | Expanding the disclosure of non-financial information | P5、P7 |
| Information Management (Personal Information / Security) | Enhancing internal reporting systems | P7 |

# a Sustainable Society

identified key CSR issues as social issues to be addressed on a priority basis.
solutions to social issues through its core business activities.

## Tamron and the SDGs

In 2015, the United Nations adopted the Sustainable Development Goals (SDGs), a set of uniform international goals towards achieving a sustainable society. The SDGs are comprised of 17 goals and 169 targets. To eliminate poverty, nations and companies are expected to promote economic growth and address environmental issues while satisfying a wide range of social needs including education, health and employment opportunities.
Tamron recognizes the importance of the SDGs, and has examined them a number of times. In FY2017 we conducted verification to ascertain how the SDGs relate to Tamron's business activities. The following table ("Examples of Relationships between Tamron and the SDGs") illustrates the relationships between Tamron's current activities and the SDGs.
In FY2018, we will consider activities aimed at achieving the SDGs, including contributions to sustainable society through new business endeavors.


### 〈Examples of Relationships between Tamron and the SDGs〉

**Goal 3:**
Ensure healthy lives and promote well-being for all at all ages
**[Target 3.6]**
By 2020, halve the number of global deaths and injuries from road traffic accidents

**Goal 11:**
Make cities inclusive, safe, resilient and sustainable

#### Tamron's Activities

[Lenses for Vehicle-Mounted Cameras]
- Supplementing driver awareness with lenses for cameras that visually recognize the surrounding areas and lenses for sensor cameras, etc.

[Traffic Monitoring Camera Lenses]
- The effect of preventing traffic accidents through lenses for high image quality traffic monitoring cameras


Traffic Monitoring Camera Lenses (Model DE005)

**Goal 9:**
Build resilient infrastructure, promote sustainable industrialization and foster innovation

**Goal 12:**
Ensure sustainable consumption and production patterns
**[Target 12.4]**
By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment

#### Tamron's Activities

Developing Technologies with a Medium-to-Long-Term Perspective
[Environmentally Friendly Design]
- Reducing waste and raw materials through parts recycling
- Considering people and the environment through the proper management of controlled environmental substances
- Reducing raw material usage through lighter and more compact products

Tamron Eco Label

# Participation in the UN Global Compact

In August 2007, Tamron began participation in the United Nations Global Compact in an effort to establish the foundations for its CSR initiatives. Advocated by the United Nations, the UN Global Compact is an international initiative supporting ten universal principles related to human rights, labor, the environment and anticorruption. Tamron has adhered to the Ten GC Principles and continued to engage in corporate activities that fulfill its social responsibilities.
In FY2017 Tamron conducted training on SDGs, mercury-related laws and the UN Global Compact, targeting the employees of Tamron Optical(Foshan) Co., Ltd., Tamron Optical(Vietnam) Co., Ltd., and Tamron's other overseas subsidiaries, as part of efforts to foster a strong recognition of the principles. Tamron's CSR Committee meets monthly to closely monitor the progress of CSR activities which is related to the Ten GC Principles. The committee is an organization under the direct control of the President and CEO. Representatives from all divisions at the head office and plants in Japan and overseas meet through videoconferencing. In FY2018, Tamron will continue to thoroughly disseminate the ten principles both in Japan and overseas, and strive to further enhance its performance.

UN GLOBAL COMPACT
COMMUNICATION ON PROGRESS

This is our **Communication on Progress** in implementing the principles of the **United Nations Global Compact** and supporting broader UN goals.

We welcome feedback on its contents.

For further details about the GC, please visit the United Nations website at: WEB http://www.unglobalcompact.org/

## COP Report (Communication on Progress)

The following table describes Tamron's accomplishments and efforts during FY2017 in line with the Ten Principles.

| | Principles | Tamron's Policies | Results for FY2016 | | Relevant Page |
|---|---|---|---|---|---|
| Human Rights | 1 Business should support and respect the protection of internationally proclaimed human rights. | ・We support basic human rights in our Action Declarations. | ・Implemented CSR related e-learning, with content including SDGs, mercury-related laws, and the UN Global Compact; e-learning was undergone by a total of 1,404 employees. | ・Carried out operations based on the Human Rights Protection & Labour Standard Management Regulations. | P6 |
| | 2 Business should make sure that they are not complicit in human rights abuses. | ・We declare respect for human rights and elimination of discrimination in our Compliance Regulations.<br>・We clarify management items and strengthen check function. (established the Human Rights Protection & Labour Standard Management Regulations) | | ・Clarified management items for operations and strengthened checks and balances (Japan and Tamron Optical Foshan) . | P6<br>P8 |
| Labour | 3 Business should uphold the freedom of association and the effective recognition of the right to collective bargaining. | ・We declare respect for the right of our employees to organize in our Labour Organization Memorandum. | | ・Established opportunities for periodic consultation between management and workers.<br>・Improve working conditions through labor union activities. | P6 |
| | 4 Business should uphold the elimination of all forms of forced and compulsory labour. | ・We stipulate the importance of complying with labour-related laws and regulations and maintaining a proper work environment for our employees in our Compliance Regulations. | | ・Operation of the "Tamron Kids Day-care Center"<br>・Making every day a "no overtime" day (Tamron head office) | P6<br>P14 |
| | 5 Business should uphold the effective abolition of child labour. | ・We vow not to use child labour. We do not employ workers under the age of 15, which is stipulated in our employment rules. | | ・Established a manual to check the age of applicants at the time of hiring (Tamron Optical Foshan and Tamron Optical Vietnam) . | P7 |
| | 6 Business should uphold the elimination of discrimination in respect of employment and occupation. | ・We have targets for employing persons with disabilities and a policy to increase the ratio of female managers in order to realize a diversified work place. | | ・Ratio of females promoted to management positions : 10.2% (domestic)<br>・Ratio of eligible employees taking parental leave : 100% (domestic)<br>・Ratio of hiring of persons with disabilities : 2.31% (domestic) | P6 |
| Environment | 7 Business should support a precautionary approach to environmental challenges. | ・We have a provision to prevent environmental deterioration through efforts such as the following:<br>(1) Reducing $CO_2$ emissions;<br>(2) Reducing industrial waste;<br>(3) Finding alternatives to harmful chemical substances ; and reducing the use of harmful chemical substances<br>(4) Conserving biodiversity | | ・Number of incidents involving leakage of harmful chemical substances : None<br>・Support for ecosystem protection (Tamron head office)<br>・Improve management system of mercury use products | P8<br>P20<br>P14～P18 |
| | 8 Business should undertake initiatives to promote greater environmental responsibility.<br>9 Business should encourage the development and diffusion of environmentally friendly technologies. | ・We have a policy to clearly establish environmental objectives and targets for the following:<br>(1) Reducing $CO_2$ emissions;<br>(2) Reducing industrial waste emissions to ultimately achieve zero emissions ; and<br>(3) Promoting environmentally-friendly designs. | | ・Rate of decrease in $CO_2$ emissions : 3% increase (compared to FY2016, on a unit sales basis)<br>・Waste reduction target : not achieved<br>・Efforts to reduce product weight and size: Weight : 0.7% increase, Size : 1.3% decreased<br>・Achieved compliance with chemical regulations | P12<br>P14～P18 |
| Anti-Corruption | 10 Business should work against corruption in all its forms, including extortion and bribery. | ・We have a policy to regulate acts of endowment and political donations and terminate ties with anti-social forces in our Compliance Regulations and Action Declarations. | | ・The Compliance Promotion Committee held workshops for employees to learn more about compliance. | P7 |

# Relationship with Employees

Tamron fosters self-disciplined employees with a challenging spirit and strives to provide positive workplace environments grounded in fair evaluations and compensation as well as mutual understanding.

## Overview of FY2017 Activities

- Considered measures aimed at achieving diversity
- Conducted training to strengthen the management skills of managers

## Challenges for FY2018

- Reforming personnel systems to focus on addressing diversity
- Further cultivating our global human resources

## Human Resource Development Systems

Tamron seeks to cultivate ambitious and self-disciplined employees. In FY 2017, we revised training for new employees in occupation-based training programs and further strengthened training for managerial reinforcement. In occupation-based training, we have held technical education and optical basic lecture for sales staff. In any educational training, we are working on improvement based on effect confirmation of education and satisfaction survey.

### 《Training System Diagram》


## Initiatives Aimed at Work-Life Balance

Tamron pursues a number of initiatives aimed at promoting harmony between work and home life. Regarding overtime, in 2015 we introduced a system where employees must obtain approval from their department general manager and officer in charge in advance and wear a permit in order to work overtime. Since FY2017, we have implemented twice-weekly no-overtime days without exceptions to better enhance the effectiveness of the initiative.

Tamron helps both male and female employees balance their work with their childcare responsibilities. For instance, the Tamron Kids Day-Care Center[1] was opened at the head office. The center employs permanent nurses and also offers care for sick children to ensure peace of mind. One hundred percent of female Tamron employees in Japan who have had a child have made use of leave before and after childbirth and the parental leave systems and subsequently returned to work. Through these initiatives, Tamron has met the standards set forth in the Act on Advancement of Measures to Support Raising Next-generation Children, and had also been awarded the "Kurumin Mark," which is given to companies that promote a childcare-friendly workplace.

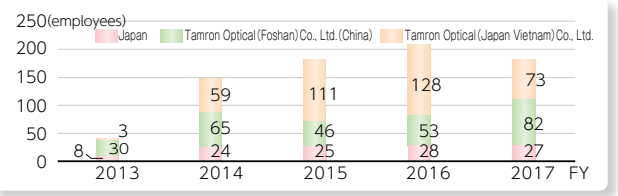

Tamron Kids Day-Care Center

1. "Tamron Kids Day-Care Center" has been certified as a small-scale office nursery office, five children of the area are also accepted.

### Main Benefits Programs for Childcare (Japan)

| Program | Term | Overview |
|---|---|---|
| Parental leave | Until the child turns 1 (Extendable up to 14 months of age) | An employee can take leave to care for a child. |
| Extended parental leave | Up to the day a child turns 18 months of age, or April 15 of the year after the child turns one, whichever is longer | An employee can take leave if certain circumstances apply, such as being unable to find a place at a day-care center. |
| Child care leave | Until the child begins elementary school (Up to 5 days per year) (10 days if the employee has two or more children) | An employee can take paid leave for a child care, vaccinations or health checkup for a child. |
| Reduced working hours | Up until April 30 of the school year in which the child becomes a fourth grader in elementary school. | An employee can shorten their working day by up to two hours as long as they work at least six hours. |

### Number of Female Employees Taking Paid Parental Leave[2]




2. The name of the parental leave system varies from country to country. Employees at Tamron Optical (Foshan) Co., Ltd. in China are entitled to 178 days leave after childbirth (98 statutory + 80 recommended) . Employees at Tamron Optical (Vietnam) Co., Ltd. can take up to six months' leave before and after childbirth. In Japan, male employees who have just become a father can take parental leave of up to one month. A total of 24 male employees took advantage of the system in FY2017.

## Promoting Diversity

Tamron believes in the importance of utilizing a diverse range of human resources and values in order to create new value, and aims to improve the percentage of female employees in management positions as a part of its diversity management[3] efforts. In FY2017, female employees accounted for around 10.2% of employees in management positions (domestic) . Saitama Prefecture, where our head office is located, has been promoting the Saitama Prefecture Womenomics Project, which is designed to invigorate the prefectural economy through the power of women. As part of this project, Tamron has been certified as a "Diversified Workstyle Promoting Enterprise" and elevated to "Platinum+," in recognition of achievements such as having male employees take childcare leave for at least five consecutive days. Japan requires companies to maintain a 2% hiring ratio for people with disabilities, and in FY2017 Tamron again exceeded this ratio at 2.31%. Tamron's overseas plans and sales subsidiaries are primarily run by local staff, ensuring that a diverse range of human resources enjoy success across the company.

3. This refers to efforts to accept diversity including gender and racial differences and people of different ages, characters, academic backgrounds and values, and to make broad use of human resources to improve productivity.

# Relationship with Shareholders and Investors

We are committed to fair and transparent management practices as well as enhancing corporate value, which is achieved by strengthening corporate governance to build up trust with shareholders and investors.

## Corporate Governance

### Basic Policy

Ever since the company was first established, we at Tamron have sought to forge good relationships with all stakeholders, achieve sustainable growth and enhance corporate value in line with our management philosophy. In support of those goals, we have adopted the basic approach of ensuring fair and transparent management practices while developing a highly effective corporate governance system that seeks to improve the speed and efficiency of decision making and business execution.

### Corporate Governance System Overview

Tamron is a company with corporate auditors and includes a Board of Directors that functions as a body to make important decisions and supervise the execution of operations, as well as an Audit & Supervisory Board as an auditing body that is independent of the Board of Directors. Tamron also appoints multiple independent external directors possessing a wealth of knowledge, expertise and independence and has set up a Nominating Committee and Compensation Committee as advisory bodies to enhance supervisory functions. In addition, by establishing a Management Meeting and introducing an Executive Officer system, we have developed a framework for executing business matters in a way that responds smoothly and quickly to changes in the external environment. To the Board of Directors, Tamron appoints 12 directors (two of whom are external directors) and 4 corporate auditors (three of whom are external auditors) .
Tamron respects the principles of the Corporate Governance Code which came into effect in June 2015, and is working to achieve a further strengthening of corporate governance, along with continued growth and the enhancement of corporate value over the medium and long term.

### (1) Board of Directors

Meetings of the Board of Directors are held twice a month, in principle, attended by all Directors and Corporate Auditors, for reviewing the execution of duties by the Directors and deciding on important issues as set forth in the basic policy of the company and the Companies Act.

### (2) Audit & Supervisory Board

Meeting once a month in principle, the Audit & Supervisory Board audits the process of decision making by the Board of Directors and the execution of duties by Directors, by attending the Board of Directors meetings and checking approval documents.

### (3) Nominating Committee and Compensation Committee

To enhance the independence and objectivity of Board of Directors functions concerning director appointment, dismissal and compensation, Tamron has established a Nominating Committee and Compensation Committee. Each committee is chaired by an external director, with a majority of its members external officers(external directors and external auditors).

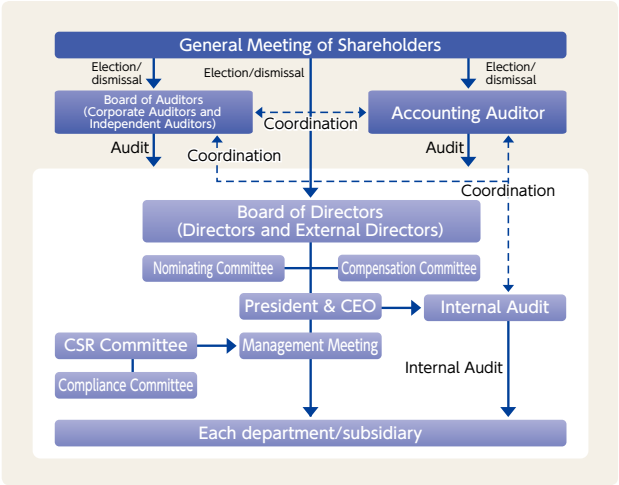
### (4) Management Meetings

Tamron has established management meetings attended by directors and full-time corporate auditors to discuss and consider issues related to management and the execution of duties, and to quickly respond to the changing management environment.

### (5) Accounting Auditor

Tamron has concluded an auditing agreement with Wako Audit Corporation and receives audit from this firm in its capacity as accounting auditor.

### Corporate Governance Structure




## Shareholder and Investor Engagement

To ensure that information is disclosed to shareholders and investors in a timely and appropriate fashion while deepening mutual understanding and forging a relationship of trust, Tamron endeavors to engage in two-way communication. In addition to twice-yearly earnings presentations for institutional investors and securities analysts delivered by the president and top management team, we also hold individual and small-group meetings and take part in conferences aimed at domestic and overseas investors run by securities firms.
Our earnings presentation for the fiscal year ended December 2017 was held on the same day our earnings were announced. In addition to the presentation materials used, earnings details were also posted to the company website that same day, underscoring our efforts to disseminate timely and unbiased information and enhance the information we disclose.

## Compliance

To promote compliance, Tamron has established the Compliance Committee, which is chaired by the Representative Director and deliberates on basic items for the promotion of compliance, and the Compliance Promotion Committee, which comprises members selected from each business division and provides training and education on legal compliance.
In FY2017, the committee conducted training on themes such as the lawful disposal of industrial waste, which is essential for Tamron's continuity as a manufacturing business, and on the beefed up operational standards in the Subcontract Proceeds Act. In addition, the committee offers support to overseas subsidiaries in developing their own internal regulations and periodically provides them with global legal information related to the Tamron Group's business activities. Information security and the protection of personal information are managed appropriately in accordance with internal regulations. Thanks to these company-wide initiatives, zero legal violations were reported in FY2017.

# Relationship with Business Partners

Tamron respects human rights, ensures compliance with laws and regulations, and establishes good relationships with business partners to grow and contribute to society together.

## Summary of Activities in FY2017

- Revised the Tamron Supplier Code of Conduct
- Launched the chemSHERPA scheme

## Tasks for FY2018

- Further reinforce CSR procurement with business partners
- Improve operation of the chemSHERPA scheme

## Business Partner Accreditation Program for CSR Procurement

In order to contribute to society in accordance with its CSR policy and Action Declarations, Tamron works together with its business partners to comply with laws and regulations, and continually aspires to serve as a partner that delivers high quality products and services. For product and environmental quality, we conduct surveys to check the status of our suppliers through on-site or paper-based audits in accordance with our assessment standards.

While Tamron has engaged in CSR procurement since 2008, in FY2017 we made revisions to the Tamron Supplier Code of Conduct based on the latest edition of the EICC Code of Conduct[1]. We distributed the revised code of conduct to all suppliers along with a request for their compliance. We also conducted an SAQ survey[2] for 130 business partners in Japan and overseas to gauge the current status of CSR promotion. Moving forward, we will analysis the results of the survey and further promote CSR procurement with the cooperation of business partners.

1. The EICC Code of Conduct sets out standards for environmental responsibility and ethical business practices in the electronic equipment industry supply chain, requiring safe working environments and the treatment of workers with dignity and respect. Due to a name change from EICC to RBA in October 2017, this is currently referred to as the RBA Code of Conduct.
2. Self-Assessment Questionnaire. This is a table of questions designed to enhance CSR procurement that is made up of themes such as "Corporate Governance Related to CSR," "Human Rights, "Labor," "the Environment," "Fair Corporate Activities," "Quality and Safety," and so on.

### Procedures for Selecting Suppliers


### History of Our Activities

2008 Requested all business partners to comply with the Tamron Supplier Code of Conduct
2009 Requested business partners to perform SAQ
2010 Introduced case examples on "occupational health and safety" and "human rights protection"
2011 Held CSR Procurement Workshops for all business partners in Japan and abroad
2012 Held internal training sessions and in-house hearings
2015 Requested business partners to perform SAQ
2016 Questionnaire Collection and Evaluation
2017 The Tamron Supplier Code of Conduct was revised and distributed to partners with a request for compliance. The SAQ survey was conducted in conjunction with this.

## Working Together with Business Partners to Manage Chemical Substances

Tamron maintains a policy of avoiding the use of harmful chemical substances in the materials used to make its products. We ask business partners to manage chemical substances based on the standards in Tamron's environmental quality assurance system. To reduce the workload associated with chemical substance management for Tamron and its business partners, in FY2017 we launched chemSHERPA[3], a new scheme for transmitting information on the chemical substances contained in products. This scheme provides an effective way to verify that the standards are being met by Tamron and its partners.

Tamron also implements internal analysis work using equipment including Inductively Coupled Plasma Atomic Emission Spectrometry (ICP-AES) and Gas Chromatography Mass Spectrometry (GC-MS) to ensure only the safest and most secure products are delivered to customers. In July 2019, the scope of application of RoHS is being expanded from the original six substances - Cadmium, Lead, Hexavalent chromium, Mercury, Polybrominated biphenyls (PBB) , and Polybrominated diphenyl ether (PBDE) - to include four additional substances, all of which are types of phthalates: Bis (2-ethylhexyl) phthalate (DEHP) , Benzyl butyl phthalate (BBP) , Dibutyl phthalate (DBP) , and Diisobutyl phthalate (DIBP) . Tamron's systems also allow it to analyze these four substances.

Tamron is also establishing the frameworks and systems needed to ensure compliance with other new regulations relating to the control of harmful chemical substances that may be established in different countries around the world in the future.

3. chemSHERPA is a new scheme for sharing information about the chemical substances in products in the supply chain. Through widespread adoption the scheme aims to reduce the burden on those providing and receiving information.

## Response to Conflict Minerals

A portion of the minerals (tantalite, tin, gold and tungsten) produced in the Democratic Republic of the Congo and neighboring countries of Africa are being used to fund armed militants that violate human rights and cause environmental destruction. These minerals are now collectively referred to as conflict minerals and are regulated.

Tamron has declared a policy of not using illegal conflict minerals related to the violation of human rights or environmental destruction in order to fulfill its corporate social responsibilities within its procurement activities[4]. In FY2017, Tamron asked 355 of the company's suppliers to complete surveys relating to conflict minerals. All of the suppliers responded, submitting completed questionnaires in relation to a total of 10,242 component items. The survey results show no evidence that Tamron makes use of conflict minerals that are used to fund armed militants.

4. Please see our corporate website to view our policy on conflict minerals.
WEB http://www.tamron.com/csr/procurement.html

# Relationship with Customers

Tamron is committed to contributing to society by supplying customers with safe, unique and quality products and services, putting the highest priority on satisfying customers, dealers and OEM customers.

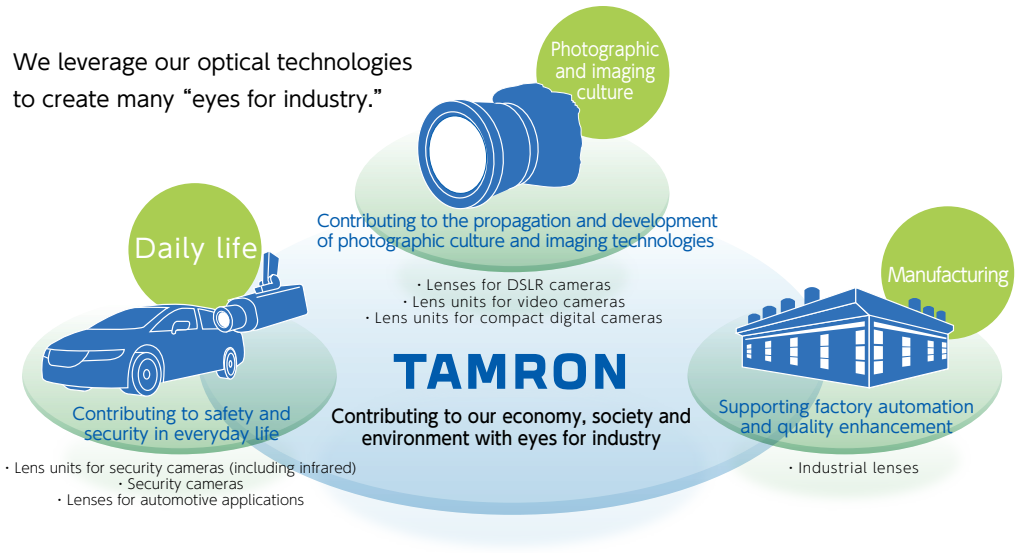
## Summary of Activities in FY2017

- Created unique products that customers appreciate
- Mass production of recycled materials

## Tasks for FY2018

- Create unique products and new challenges
- Promote environmentally conscious design

## Tamron Products Familiar to All




## Developing Unique Photographic Lenses

The SP 70-200mm F/2.8 Di VC USD G2 (Model A025) released in February 2017 is a large aperture telephoto zoom lens compatible with 35 mm full-frame digital SLR cameras. In addition to improved optical performance, the lens boasts higher AF speed and accuracy, enhanced vibration compensation (VC) [1] and a shorter minimum focusing distance. The lens employs an eBAND coating[2], fluorine coating[3] and a dust and drip-resistant construction, and also provides support for teleconverters[4], marking a significant advance across all the necessary performance metrics for a large-aperture telephoto zoom lens.

SP 70-200mm F/2.8 Di VC USD G2(Model A025)

## Appraisals of Tamron's Products

The 18-400mm F/3.5-6.3 Di II VC HLD (Model B028) is a revolutionary lens as the world's first[5] APS-C lens with a focal range of 18-400mm, offering a zoom factor of 22.2. Equipped with vibration compensation (VC) [1], sharp images can be captured even under low-light conditions such as sunsets. The Model B028 is also designed with a splash-resistant sealing making it well suited to outdoor shooting. The SP 150-600mm F/5-6.3 Di VC USD G2 (Model A022) is a next-generation lens with advancements in various features over the predecessor A011 model, including AF speed and accuracy, and a vibration compensation (VC) [1] mechanism. In recognition of their performance, these two models have won prestigious EISA Awards in Europe[6].

18-400mm F/3.5-6.3 Di II VC HLD(Model B028)

| Category | Model | Award | Awarding Organization |
|---|---|---|---|
| Imaging (Photographic lens) | Model B028 | EISA PHOTO INNOVATION 2017-2018 | European Imaging and Sound Association (Europe) |
| | Model A022 | EISA DSLR ZOOM LENS 2017-2018 | |

1. VC stands for Vibration Compensation, which helps prevent blurry images. Tamron lenses for Sony cameras do not offer Tamron's VC mechanism because Sony includes an imagine stabilizing mechanism in the body of its DSLR cameras.
2. The acronym eBAND coating standard for Extended Bandwidth & Angular-Dependency Coating, which is a proprietarily developed membrane that makes images clearer and more complete. It uses a nanotechnology-based coating technique to form a multicoated surface with a super-low refractive index membrane to significantly reduce unwanted reflections compared to multicoated surfaces made from resins.
3. The fluorine coating is a coating with excellent water and oil-repelling properties applied to the front surface of the lens element. The coating makes the lens surface easier to wipe clean and offers excellent durability.
4. A teleconverter is an accessory mounted between the camera and lens to expand the focal length of the lens.
5. World's first among exchangeable lenses for DSLR cameras per a Tamron study in May 2017.
6. Tamron lenses have received an EISA award for twelve consecutive years since 2006. EISA is an acronym for European Imaging and Sound Association. This organization sponsors the EISA Awards along with editors and senior engineers from related media including photography, video, sound, and mobile electronics. Every year the awards recognize leading products in the fields of photography and audio visual media.

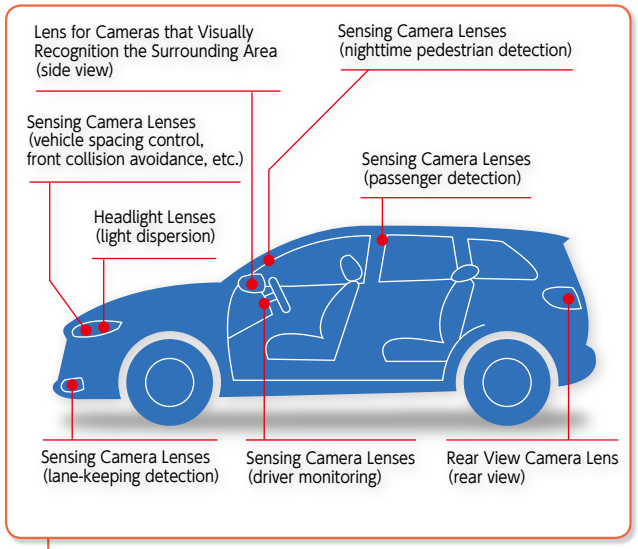
# Lenses Underpinning Safety and new challenges

## Lenses for Automobiles

To contribute to the safety and security of society, Tamron has focused on the developed of lens units(including infrared units) for surveillance cameras installed inside and outside buildings, as well as lenses for automobiles. Cameras and lenses have become essential features of cars. Tamron is engaged in the development of car-mounted lenses that are broadly categorized under two fields, lenses for cameras used for visual confirmation, such as rear-view cameras, and sensing cameras used for lane-keeping and autonomous driving systems. As regards traffic monitoring lenses, Tamron has developed a zoom lens that can be equipped with autofocus and remote operation capabilities, making it possible to flexibly monitor different types of road at different distances, and which incorporates image processing technologies so that users can extract the information they need for specific applications.

The Japanese government has set the goal of commercializing autonomous driving by the year 2020. In May 2017, the government unveiled a roadmap to the introduction of autonomous driving, kicking off a nationwide effort to promote the widespread adoption of autonomous driving technologies. In 2018, the Kids and Transportation Safety Act[1] went into effect in the United States, requiring the installation of rear view cameras and underpinning the growing awareness of automobile safety in Japan and overseas. In this way, there have been increasing demands for lenses tailored to this car-driving society, and Tamron will actively pursue development in this field.

1. Kids and Transportation Act. This law requires that all new cars come equipped with a rear-view monitor.




## Monitoring and Security Camera Lenses

By the year 2020, roughly 90% of the security market is expected to have transitioned from analog cameras to networked cameras. The majority of these cameras are believed to be fitted with image sensors that capture images up to two megapixels or three megapixels in size. To meet these market needs, Tamron has developed a zoom lenses(Model DF033) with 40x magnification for combination with 3-megapixel cameras. By moving multiple zoom groups and focus groups, the size of the lenses can be reduced while maintaining the high magnification. Moreover, the ability to move multiple zoom groups enables even higher resolution across the entire zoom range, from visible light to near-infrared.

a zoom lenses with 40x magnification (Model DF033)

## Shutterless Far-Infrared Camera Module

Tamron has successfully developed a Shutterless far-infrared camera module that does not require calibration[2] by means of a mechanical shutter. This lets users watch over someone for nursing or family care without interrupting their sound sleep because there is no shutter noise and videos are not interrupted part of the way through. By combining the far-infrared optical technologies and image processing technologies that Tamron has acquired to date, it is now possible to detect the temperature even in a pitch-black environment and record footage. This technology can be used to detect people, enabling night-time monitoring without lighting equipment, and to detect abnormal temperatures for equipment monitoring.

2. Calibration refers to corrective processing of the variation in images that occur due to far-infrared light optical characteristics, and various factors such as operating temperature and the shutter.

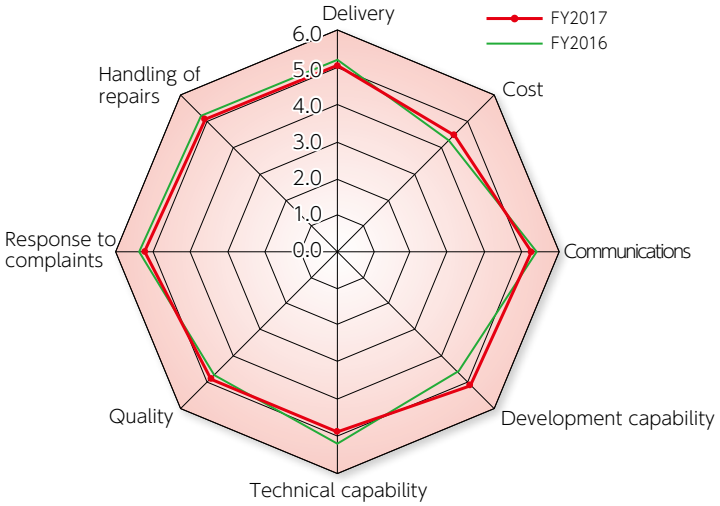

Shutterless Far-Infrared Camera Module

## Evaluation by Distributors and OEM Customers

Each year, we ask our OEM customers and Tamron brand distributors to complete a customer satisfaction survey. The results of this year's survey mirrored that of the previous year, with Tamron meeting its target to receive an overall score of 5.0 points. In the "development capability" category, which was down in the previous year, we received favorable comments such as that "there was an increase in the number of attractive products," and recorded a highly regarded score of 5.1 (+0.5 compared with the previous year) this year. Looking ahead, Tamron will devote all its strength to responding to the needs of its customers.

### Results of Customer Satisfaction Survey in 2017 (OEM Customers and Distributors)

The survey was conducted at 17 companies.




1.Very dissatisfied 2.Dissatisfied 3.Slightly dissatisfied
4.Slighly satisfied 5.Satisfied 6.Very satisfied

| | Delivery | Cost | Communications | Development capability | Technical capability | Quality | Response to complaints | Handling of repairs | Overall |
|---|---|---|---|---|---|---|---|---|---|
| FY2016 | 5.2 | 4.3 | 5.4 | 4.6 | 5.2 | 4.8 | 5.4 | 5.2 | 5.0 |
| FY2017 | 5.1 | 4.5 | 5.3 | 5.1 | 4.9 | 4.9 | 5.3 | 5.1 | 5.0 |
| Gap | −0.1 | +0.2 | −0.1 | +0.5 | −0.3 | +0.1 | −0.1 | −0.1 | 0.0 |

## Expanding After-sales Services Globally

This year marks seven years since Tamron started its "worldwide 3-day repair turnaround program," where it returns repaired products within three days of receipt. In addition to providing technical support to overseas subsidiaries, distributors and domestic contractors, Tamron pursues activities ensuring that it can provide services tailored to the characteristics of each market.

For the Japanese market, Tamron provides the Tamron Lens Life Members program, which provides members with services such as discounted repair fees. While customers can register for the service free of charge online, we have also begun accepting written registration applications in an effort to cater to customers who are not familiar with PCs. We make every effort to ensure our services are available to customers of all ages.

Through our repair acceptance desk in Ueno, Tokyo and the Tamron Lens Customer Service Desk telephone service, we will continue to field customer feedback to share internally as we strive to make further improvements to our products and services.

## Enhancing our Technological Development Capabilities

### Automating Assembly (Japan)

Having declared the goal of developing a production line with no human intervention, Tamron began to introduce assembly automation lines from FY2017, and is rolling out the systems on a sequential basis. As a precursor, we installed automated assembly equipment for the lens barrels of each lens group. By linking the transitions between each process with automated conveyors, we successfully developed a line capable of fully automated production. In developing the equipment, we adopted design philosophy of highly versatile equipment using as few custom parts as possible and also tried to make the units compact. This has enabled us to build a large variety of production lines.

Moving forward, we will look to automate processes that require a high level of proficiency and difficult tasks such as automated conveyance during inspection processes. In doing so, we will stabilize quality and steadily accumulate technologies and expertise. We aim to further boost productivity by rolling out these automated lines to each production plant.

Automated lens barrel assembly equipment

### Initiatives to Boost Productivity (Overseas)

#### Assembly Management System at Tamron Optical (Foshan) Co., Ltd.

Tamron Optical (Foshan) has installed an assembly management system uniquely developed to meet production needs. By digitizing record processing and management that was previously performed on paper, real-time results can be monitored, the notification process in the event of a fault has been simplified, and fault trends can be analyzed. The system also supports employee training. Training can be provided using operating standards (procedures) so that employees can easily understand the more challenging parts. By further digitizing assembly management, Tamron Optical (Foshan) aims to achieve efficiency improvements, visualization and cost reductions, leading to greater business improvement.

Assembly management system

#### Improving the Polishing Process at Tamron Optical (Vietnam) Co., Ltd.

Tamron Optical (Vietnam) was established in 2013, and it has been already five years since then. The production of many products is continually being transferred from Tamron Optical (Foshan) . The ratio of in-house machining rose to three times that of 2016 levels. In an effort to stabilize quality and improve the efficiency of production, improvements were made to machining methods during a section of the lens component polishing process. Work that was once performed with a single grip is now carried out using three grips, allowing the process to be carried out in sets of three lenses. As a result, machining productivity has improved three times within the same time period.

Grips during polishing

## Environmentally Friendly Design

Tamron performs product assessments starting from the design stage. Of the various product assessment items, particular emphasis has been placed on effective management of the light weight design and reduced volume items. Environmentally friendly design results with respect to new models released in FY2017 included a 0.7% increase in light weight design and a 1.3% decrease in volume.[1] The main reason for the increase was the switch to metal for some components to improve interchangeable photographic lens performance and fit design concepts. Moreover, Tamron practices the appropriate management of chemical substances based on its internal Environment-related Substance Management Regulations, which reflect the requirements of the RoHS directive and the REACH regulation. Tamron products that feature environmentally friendly design bear the Tamron Eco Label.[2]
Following on from its efforts in 2016, Tamron proceeded with efforts to standardize production lines and equipment. We have standardized different production line equipment for photographic and industrial-use optics businesses, which are now operating lines for new products. We will continue these efforts to reduce the environmental impact in terms of resources and energy consumption during production.

1. Calculated using production volume from FY2017comparing conventional models.
2. For more information about Tamron Eco Label certified products, please visit the Tamron website:
WEB http://www.tamron.com/csr/environmental_activities.html

Tamron Eco Label
The label was designed to resemble an eye gently looking at our economy, society and environment. The eyebrow symbolizes a flowing stream of air and water, the pupil represents the green in the earth, and the tree in the pupil stands for our work for the three Rs of "reduce," "reuse" and "recycle."

### Lens Assessment Item Table

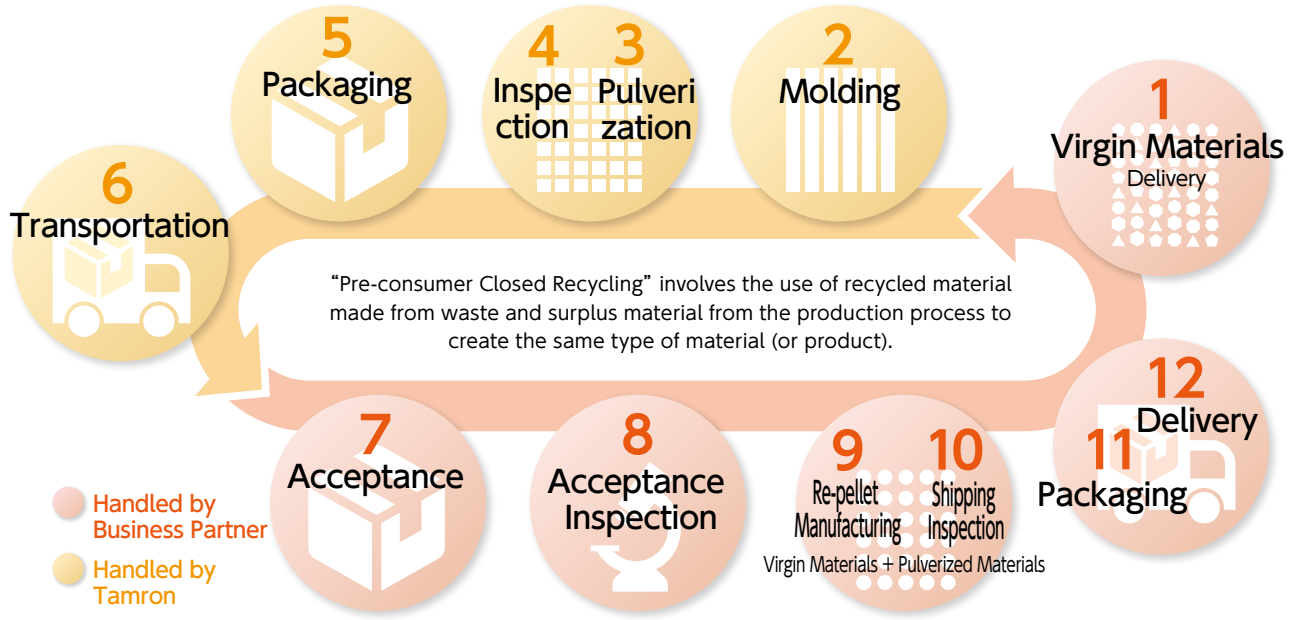
| Evaluation Items | |
|---|---|
| 1. Extended usage of lens | 7. Reduced use of packaging materials |
| 2. Light weight design | 8. Use of recycled materials for packaging materials |
| 3. Reduced volume | 9. Product labeling requirements |
| 4. Energy efficiency during usage | 10. Packaging labeling requirements |
| 5. Use of recycled materials | 11. Proper management of controlled environmental substances |
| 6. Ease of disassembly | |

### Component Recycling

In particular, we have been focusing on reducing the amount of plastic waste generated, which amounted to over 150 tons per year. In order to reduce the amount of waste deriving from manufacturing processes, the rear caps for Tamron's DSLR camera lenses are made using 100% recycled plastic runner materials.[3] From FY2010 to FY2017, we used a cumulative total of 147 tons of recycled material (in 6.66 million rear caps). Tamron has also considered new recycling methods at Integrated Design, Production Technology and Production Sub-committee meetings to further promote recycling. As a means of reducing waste while maintaining quality standards and ensuring that product functionality is not affected, Tamron adopted "Pre-consumer Closed Recycling, which involves mixing recycled materials with virgin materials. Since FY2017, Tamron started to utilize these recycled materials for the mass production of the filter screw rings, a component of interchangeable lens for SLR cameras. Tamron will continue to expand the introduction of recycled materials in components, examine new areas to target and promote waste reducing and recycling.

3. Waste material that occurs when pouring plastic resin during the production process.

### The Process of Pre-consumer Closed Recycling



# Management Systems

At Tamron, we strive to enhance our product and service quality while reducing environmental impacts through our integrated management system. Additionally, we ensure the continuity of our business by avoiding various management risks using our risk management system.

## Management System

Tamron has been awarded blanket ISO 9001(quality) and ISO14001 (environment) certification applicable to the entire Tamron Group's integrated management system, including Tamron's head office, its domestic sites including the Hirosaki, Namioka and Owani plants, as well as overseas production sites including Tamron Optical (Foshan) in China. Tamron has also completed its migration to the new ISO 9001, 14001-2015 edition of the standards. Tamron's plant in Vietnam is also operating after obtaining blanked ISO 9001 and 14001 certification. On another front, Tamron is working to obtain TS16949(to be migrated to IATF16949) certification, quality management systems for the automotive industry in relation to car-mounted lenses requiring greater quality.
Under the integrated management policy, Tamron aims to achieve the development of high-quality products that are used safely and securely by customers and provide satisfaction, while also taking environmental considerations into account.

## Audit System and Identifying Problems

Tamron regularly performs internal quality and environmental audits covering the head office and three Aomori plants. In addition to the internal audit, the head office and three Aomori plants audit each other to check their systems and manufacturing processes. We periodically arrange to receive audits from external audit organizations to maintain certifications while continually improving the integrated management system. As a result of external audits implemented in FY2017, the effectiveness of the policy and management processes adopted at our sites was assessed at level 4 on a scale of one to five. We quickly develop improvements to address in the areas identified in these three audits, disseminate the improvements throughout the Tamron Group, and endeavor to continually improve in our activities.

## Risk Management

In the past, Tamron has used a risk management system and identification of risks and opportunities through SWOT analysis to build consensus in the management review process. We identified both external and internal issues, determined priority risks in terms of risk and opportunity, and translated this into action. In terms of business continuity planning(BCP) , we have completed development at Tamron's plant in Foshan, China in addition to the head office and three plants in Aomori Prefecture, and the necessary systems have already been put in place. Tamron is also working to strengthen its crisis management systems so as to be prepared in the event that a major natural disaster does occur in the future.

### Responding to Emergencies

As part of their risk management initiatives, Tamron's head office and three plants in Aomori Prefecture, as well as Tamron Optical Foshan, hold firefighting drills led by employees, while departments that handle chemicals carry out emergency response drills for chemical spills. Additionally, Tamron's head office stepped up its initial response capabilities, by implementing training on how to start back-up power generators in case of a blackout in accordance with the BCP and by making changes to its emergency contact system.

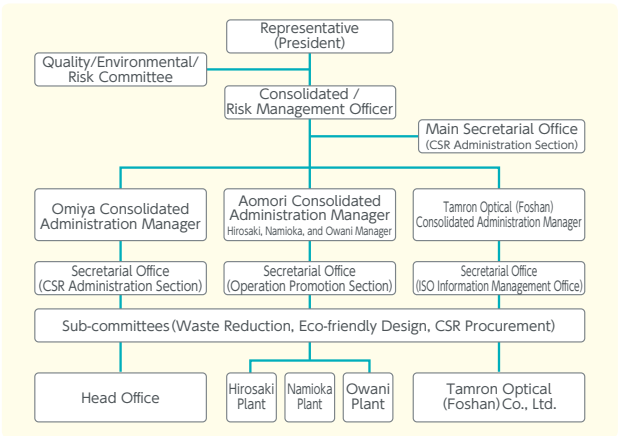
## Integrated Management Policy

As a member of the international optical industry, we will continue to manufacture products that deliver customer satisfaction and help achieve our goal of Contributing to Society by Creating Eyes for Industry, while being considerate of environmental conservation.

1. We will supply our customers with high quality and reliable products by using our originality, ingenuity and technology, pursuing sustainable development with profits arising out of customer delight and satisfaction.
2. We will keep abreast of both internal and external issues affecting the company, as well as the needs of employees, shareholders, customers, suppliers and other stakeholders, so as to maintain an accurate awareness of risks and opportunities.
3. In running our business, we will comply with all related laws, standards and treaties at home and abroad, respecting the requests and demands made by our customers and the local community.
4. We will work on preventing environmental contamination, reducing $CO_2$ emissions, as well as reducing waste emissions and the use of harmful chemicals, while seeking alternatives and contributing to the safeguarding of biodiversity.
5. We will continue to work on improving the effectiveness of our integrated management system.
6. To achieve this management policy, we will establish specific objectives and targets, periodically evaluating our progress.
7. To enhance recognition of our integrated management, we will maintain good communications while providing sufficient education and training to all people working for Tamron.
8. We will closely cooperate with society in all countries and regions where we operate and disclose information to stakeholders as necessary on our quality assurance and environment conservation efforts.
9. To ensure the company's smooth operation, without the occurrence of negative impacts on the economy, society or the environment, we will implement preventative actions to the maximum extent possible in line with the company's Integrated Management System; in the event that a negative impact does occur, we will fulfill our responsibility to society by taking prompt action to mitigate the damage and support recovery efforts, and will also take steps to prevent reoccurrence.

March 30, 2016
Integrated Management System Representative

### Integrated Management System Implementation System




※In an emergency, we have established a risk management system under risk management officer.

## Creating Safe and Comfortable Workplace Environments

To protect the safety of its employees, Tamron aims to maintain and improve mental and physical health, and create a safe, healthy and comfortable workplace environment. We have set out Occupational Health and Safety Regulations and established an Occupational Health and Safety Committee, with patrols being carried out by health and safety administrators to prevent occupational accidents, etc.

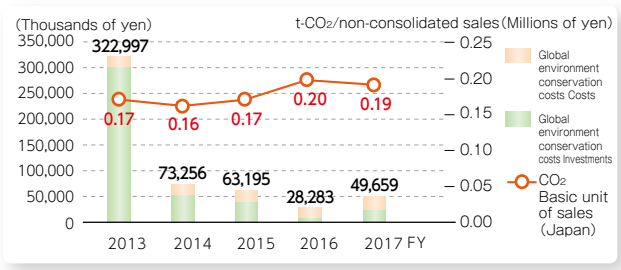
In FY2017, there were 9 occupational accidents(4 of which occurred in Japan, 1 of which occurred in Tamron Optical (Foshan) in China, and 4 of which occurred in Tamron Optical (Vietnam)) and 4 commuting-related accidents(3 of which occurred in Japan and 1 of which occurred in Tamron Optical (Vietnam)) . Most occupational accidents involved injuries sustained at production sites, while most commuting-related accidents occurred while employees were commuting by bicycle or on foot. Tamron analyzes the cause of each accident and thoroughly ensures measures are taken to prevent repeat occurrences. Regarding commuting-related accidents, we hold traffic safety seminars to boost awareness and are making efforts to prevent accidents, including the recurrence of similar accidents. In addition, to prepare for serious accidents, each year we hold regular first-aid training sessions covering topics such as CPR, and take measures to minimize injuries.

Regarding mental health issues, mental health checks are held twice a year. In-house seminars are also held in relation to self-care and caring for one's direct subordinates; in FY2017, a total of 85 employees participated in these seminars. Tamron also provides services such as health consultations as part of its efforts to create a safe and health workplace environment.

## Environmental Accounting (Japan)

In FY2017, total environmental accounting in Japan amounted to investments of 30.18 million yen and costs of 277.44 million yen. The changes in investments and costs related to reducing $CO_2$ emissions(i.e. global environment conservation costs), which is a particularly important item, are shown in the graph below. In FY2017, a total of 49.66 million yen was spent on investments and costs associated with reducing $CO_2$ emissions.

### <Change in Global Environment Conservation Costs>




* The greenhouse gas coefficient from the Greenhouse Effect Gas Measuring & Reporting Manual Version 4.3.1 is used for managing medium-term targets with a benchmark year of FY2016. For consistency purposes, this same coefficient has been used to re-calculate basic unit of $CO_2$ emissions from FY2016 to FY2017.

## Compliance with Laws and Regulations

In FY2017, revisions were made to mercury-related laws in Japan in connection with the Minamata Convention on Mercury[1] taking effect. Mercury is currently a prohibited substance for use in Tamron's products, and none of our products contain this substance. We conducted a survey of past Tamron products that are no longer in production, and determined that fluorescent lamps containing mercury are used in some Fotovix series products. Information is provided on Tamron's website so that customers can dispose of these products appropriately. In terms of equipment and fittings, we have developed a management system to ensure that when mercury is used in a product, it is disposed of appropriately in accordance with the law. Tamron also completed the proper disposal of PCB[2] waste that had been stored on Tamron premises.

At Tamron Optical(Foshan) , the environmental management level has increased year after year. In FY2017, three surprise inspections were conducted by the Guangdong Province Environmental Protection Review Team, and Tamron Optical (Foshan) earned high marks each time.

At Tamron Optical(Vietnam) , wastewater that had not been adequately treated was temporarily released into the purification system of the industrial zone. Thorough wastewater treatment measures are now being enforced to ensure appropriate wastewater handling. In the future, we will proceed with further measures in consultation with the industrial zone and Hanoi Environmental Office. The state of compliance with major laws and regulations in FY2017 are presented in the following table.

1. The Minamata Convention on Mercury is an international treaty adopted at the Diplomatic Conference held in October 2013. Its purpose is to protect people's health and the environment from human-caused emissions and discharges of mercury and suchlike, by way of management throughout the entire mercury lifecycle.
2. PCB is an abbreviation of Poly Chlorinated Biphenyl. While PCB has generally been used as an insulating oil for electrical equipment and as a heating medium for heat exchangers, adverse health effects due to the gradual accumulating of PCB following chronic ingestion have been reported.

### Compliance at Respective Sites

◎ : Compliance ○ : Exceeded statutory requirement temporarily
△ : Request for improvement made by local government
× : Administrative action as a result of violation of law/regulation

| | Head office | Aomori plants | Foshan | Vietnam |
|---|---|---|---|---|
| Energy saving (Energy Saving Act) | ◎ | ◎ | — | — |
| $CO_2$ reduction (Act on Promotion of Global Warming Countermeasures) | ◎ | ◎ | — | — |
| Chemical substance management[3] | ◎ | ◎ | ◎ | ◎ |
| Air | ◎ | ◎ | ◎ | ◎ |
| Water quality | ◎[4] | ◎ | ◎ | ○[5] |
| Soil | ◎ | ◎ | ◎ | ◎ |
| Noise | ◎ | ◎ | ◎ | ◎ |
| Vibration | ◎ | ◎ | ◎ | ◎ |
| Odor | ◎ | ◎ | ◎ | ◎ |
| Occupational health & safety | ◎ | ◎ | ◎ | ◎ |

3. Laws related to managing and investigating chemical substances apply to domestic sites; international directives including RoHS and REACH apply to the entire group.
4. Values for groundwater temporarily exceeded certain standards, but our treatment measures prevented contamination from spreading outside our facilities.
5. Although the wastewater temporarily exceeded standard values, countermeasures are currently being taken and standard values are now being met.

# Relationship with the Environment

Tamron is considerate of the environment in all aspects of its business operations and constantly works to be in harmony with the environment.

## Summary of Activities in FY2017

- Implemented measures to reduce $CO_2$ emissions
- Implemented environmental management systems

## Tasks for FY2018

- Examine ways to reduce $CO_2$ emissions further
- Formulate a medium-term plan for key CSR issues

## Environmental Impacts

In Japan, Tamron carries out design work, creates prototypes and fabricates metal molds at its head office plant located in Saitama Prefecture, while the Namioka Plant manufactures lenses, the Owani Plant molds plastic components, and the Hirosaki Plant assembles products. Tamron manufactures parts and assembles products at Tamron Optical(Foshan) in China and at Tamron Optical(Vietnam) .
These sites use electricity, heavy oil, kerosene and other energy sources for developing, designing and manufacturing, which produce $CO_2$. Our plants in Namioka, Foshan and Vietnam also use water for polishing and cleaning lens elements.

The Owani Plant and Tamron Optical(Foshan) manufacture plastic components used to make peripheral components for lenses, and these processes produce runner materials[1] and other waste. Air cargo, marine shipping, and trucks are used to transport components and products between plants, which results in $CO_2$ e missions from the burning of fuel.(Please see p.17 of this report for more data.)

1. Waste material that occurs when pouring plastic resin during the production process.

## INPUT (2017)

### Energy

| | |
|---|---|
| Electric power | 79,132,000kWh |
| Heavy oil | 195kℓ |
| Kerosene | 9kℓ |
| Diesel | 16kℓ |
| Gasoline | 2kℓ |
| LPG | 4,000㎥ |
| Natural gas | 100,000㎥ |
| Total | 726,000GJ |

### Paper

| | |
|---|---|
| Copy paper | 20t |

### Water

| | |
|---|---|
| Clean water | 589,000㎥ |
| Groundwater | 186,000㎥ |
| Total | 775,000㎥ |

### Raw/auxiliary materials

Metal (brass and aluminum)
Glass
Plastic
Chemicals (drugs, solvents, and cleaners)
Gas (nitrogen, oxygen, and argon)
Electrical components
Cardboard

### Transportation energy[2]

| | |
|---|---|
| Diesel | 167kℓ |
| Gasoline | 45kℓ |
| Total | 212kℓ |

Sites covered
Head office (including Tokyo Sales Office and Osaka Sales Office), the three plants in Aomori Prefecture, Tamron Optical (Foshan) and Tamron Optical (Vietnam).

Site coverage:96%

2. Data during transportation covers energy used to transport parts and finished products by ground and commercial vehicles connecting Tamron's five satellite offices in Japan and Tamron Optical (Vietnam). Tamron Optical (Foshan) data covers company-owned vehicles only.

Manufacturing of raw materials/ components at suppliers → Development, design and production at Tamron → Transportation between factories and distributors (logistics/commercial vehicles) → Use by customers

## OUTPUT (2017)

### $CO_2$

| | |
|---|---|
| Electric power | 43,268t-$CO_2$ |
| Heavy oil | 529t-$CO_2$ |
| Kerosene | 21t-$CO_2$ |
| Diesel | 43t-$CO_2$ |
| Gasoline | 4t-$CO_2$ |
| LPG | 27t-$CO_2$ |
| Natural gas | 222t-$CO_2$ |
| Total | 44,114t-$CO_2$ |

### Waste contracted for intermediate processing

| | |
|---|---|
| Industrial waste[3] | 1,186t |
| General waste | 862t |
| Total | 2,048t |

### Recycling

| | |
|---|---|
| Plastic[4] | 164t |
| Cardboard | 283t |
| General waste (thermal recycling) | 247t |
| Waste liquid | 135t |
| Waste oil | 105t |
| Metal | 145t |
| Paper | 28t |
| Polishing sludge | 10t |
| Other | 12t |
| Total | 1,129t |

### Products

| | |
|---|---|
| Total for products | 1,261t |

### $CO_2$ emissions during transport[2]

| | |
|---|---|
| Diesel | 437t-$CO_2$ |
| Gasoline | 106t-$CO_2$ |
| Total | 543t-$CO_2$ |

Reference guideline:
Manual for Calculating and Reporting Greenhouse Gas Emissions Ver. 4.3.1

3. Regarding to Pollutant Released & Transfer Registered (PRTR) substances, industrial waste includes 1.3 tons of xylene and 1.9 tons of ethylbenzene. 0.3 tons of xylene and 0.5 tons of ethylbenzene were also released into the atmosphere.

4. The amount of plastics recycled represented 48 tons of thermal energy and 116 tons of material.

# Environmental Objectives and Targets Achieved

While we worked toward achieving medium-term environmental objectives and targets for the first year of the program, we failed to meet the $CO_2$ emissions reduction target.

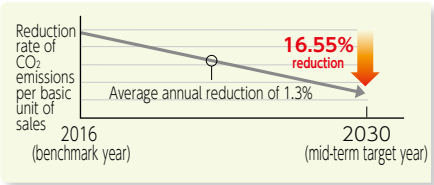
## Achievement of Environmental Objectives and Targets in FY2017

In consideration of the Paris Agreement[1] and the policies of JEITA[2], Tamron has set new medium-term environmental targets working from FY2016 as a benchmark year, to cut Group-wide $CO_2$ emissions (on a unit sales basis[3]) by an average of around 1.3% each year, and by 16.55% by FY2030.

In FY2017, while the target was to achieve a 1.3% reduction in $CO_2$ emissions, emissions actually rose by 3%, missing the target. This is primarily due to the fact that we missed our initial sales targets and were thus unable to achieve $CO_2$ reductions consistent with sales.

As regards environmental impacts other than $CO_2$ emissions, each Tamron site has set individual targets, because each site manufactures a different category of products. In FY2017 we were unable to meet three targets. One missed target was the reduction in the amount of waste plastic from the Head Office Mold & Tooling Technology Center. Significant increases reflected an increase in molding volume due to the transfer of dies, and molding inspection work associated with the introduction of a new molding resin. Two other factors were our failure to meet the targeted waste plastic material recycling rates at the Mold & Tooling Technology Center and Hirosaki Plant. In each case, we were unable to discharge the planned amount of waste plastic due to changes in the status of the recycling process.

### FY2016 to FY2030 Mid-Term Environmental Targets[4]




### Progress in FY2017

| | FY2017 |
|---|---|
| $CO_2$ reduction target (versus FY2016 basic unit of sales:cumulative annual average) | 1.3 reduction (approx.) |
| Results | 3% increase |
| Status | × |

### Environmental Targets Achieved in FY2017

| Environmental targets | FY2017 targets | | FY2017 results | Status |
|---|---|---|---|---|
| Reduce industrial waste | Head Office (Mold & Tooling Technology Center) | Waste plastics volume 3% reduction vs. 2016 (basic unit of sales) | 28.7% increase | × |
| | | Material recycling[5] rate for waste plastics 50% | 32.3% | × |
| | 3 Aomori plants | Material recycling rate for waste plastics Hirosaki Plant : 50% | Hirosaki Plant : 44.3% | × |
| | | Namioka Plant : 25% | Namioka Plant : 25.4% | ○ |
| | | Owani Plant : 6% | Owani Plant : 6.1% | ○ |
| | Tamron Optical (Foshan) | Industrial Waste Reduced by 2% compared to 2016 (basic unit of sales) | 12.7% decrease | ○ |
| Promote Environmentally-friendly design | All sites | ・Promoted environmentally-friendly designs<br>・Incidents of environmental nonconformity : 0 | ・Promoted environmentally-friendly designs Lightweight : 0.7%increase, Compact : 1.3% decrease (compared to conventional models ; calculated based on 2017 production volume)<br>・Incidents of environmental non-conformity : 0 | △ |

### Environmental Targets for FY2018

| Environmental targets | FY2018 targets | |
|---|---|---|
| $CO_2$ reduction target | All sites | Reduce $CO_2$ emissions by approximately 2.55% compared to FY2016 (basic unit of sales ; cumulative annual average) |
| Reduce industrial waste | Head Office (Mold & Tooling Technology Center) | Waste plastics volume 3% reduction vs. FY2017 (basic unit of sales) |
| | 3 Aomori Plants | Material recycling rate for waste plastics Hirosaki Plant : 45%<br>Namioka Plant : 20%<br>Owani Plant : 3% |
| | Tamron Optical (Foshan) | Industrial Waste Reduce by 2% compared to FY2017 (basic unit of sales) |
| | | Material recycling rate for waste plastics 10% |
| Promote environmentally-friendly products | All sites | ・Promote environmentally-friendly designs<br>・Incidents of environmental non-conformity : 0 |

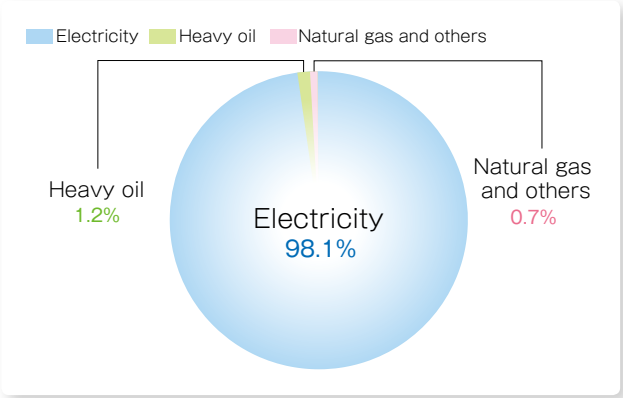
1. A multilateral international agreement to curb climate change adopted on December 12, 2015 in Paris, where the 2015 United Nationals Climate Change Conference (COP21) was held, and went into effect on November 4, 2016. The agreement set forth overall targets such as limiting the average rise in global temperatures to under 2° C compared with pre-industrial levels.
2. The Japan Electronics and Information Technology Industries Association (JEITA) is an industrial group representing companies in the fields of IT and electronics that seeks to contribute to the comprehensive development of the electronics and information technology industry as well as facilitate the development of the Japanese economy and cultural prosperity by promoting the sound production, trade and consumption of electronic equipment and components.
3. Basic unit per sales : $\frac{\text{Total } CO_2 \text{ emissions (t-}CO_2\text{)}}{\text{Consolidated sales (million yen)}}$
4. The greenhouse gas coefficient from the Greenhouse Effect Gas Measuring & Reporting Manual Version 4.3.1 is used for managing medium-term targets with a benchmark year of FY2016.
5. The material cycle refers to the process of collecting waste from used products and production processes, treating the waste and using the result as a raw material for products. Tamron reuses a form of waste plastic known as runner materials, and is also seeking to improve its material recycling rather than thermal recycling (heat recovery) , so that recycled materials can be reused outside of Tamron. The material recycling ratio of waste plastics indicates the percentage for which material recycling was carried out compared to the total amount of waste plastics.

# Reducing Environmental Impacts

Tamron strives to reduce $CO_2$ emissions, electricity consumption, waste and water consumption at the company's plants using its integrated management system.

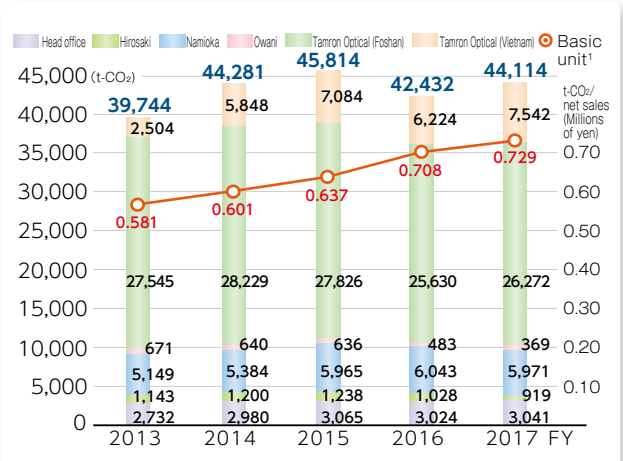
## Breakdown of $CO_2$ emissions

$CO_2$ accounts for most of the greenhouse gases released by Tamron. As regards the sources of $CO_2$ emissions(excluding distribution and logistics) , electricity usage accounts for 98.1%, followed by heavy oil at 1.2%. Given this mix, our energy saving activities focus on reducing electricity consumption.




## Trends in $CO_2$ Emissions

Since FY2011, the $CO_2$ emissions(excluding emissions during transportation)from Tamron's head office, the three plants in Aomori Prefecture, Tamron Optical(Foshan)in China and Tamron Optical(Vietnam)has been on the rise. In FY2017, overall $CO_2$ emissions rose 4.0% compared to FY2016 levels. Viewed by geographic location, our sites in Japan saw a 2.6% decrease, while Tamron Optical(Foshan) saw a 2.5% increase and Tamron Optical(Vietnam) saw a 21.2% increase. The rise from Tamron Optical(Vietnam) is primarily due to a higher rate of in-house production from capital investment, and the heightened requirement for precise air conditioning for humidity control in lens machining rooms as a result. The basic unit of sales for overall $CO_2$ emissions increased by 3.0% compared with the FY2016 level. In FY2018, we will consider comprehensive energy saving measures to reduce emissions by 16.55% by the year 2030 by adding Tamron Optical(Vietnam) to the integrated management system.




1. The greenhouse gas coefficient from the Greenhouse Effect Gas Measuring & Reporting Manual Version 4.3.1 is used for managing medium-term targets with a benchmark year of FY2016. For consistency purposes, this same coefficient has been used for this report to re-calculate basic unit of $CO_2$ emissions from FY2010 onward.

## Measures to Reduce $CO_2$ Emissions

In FY2017, Tamron implemented activities through the $CO_2$ Emissions Reduction Committee, and used streamlined electric power management sensors to identify excess power usage. When excess power was discovered, the committee examined whether reductions could be made. When possible, reduction measures including operational improvements were implemented and the effects verified. A solar power generating system was installed at Tamron Optical(Foshan) in China in August 2017. Cumulative power generation has now reached 128,000 kWh, which is equivalent to reducing $CO_2$ emissions by 70 tons. Tamron Optical(Foshan) has also replaced 4,167 lights with LED lighting and switched to energy efficient types of motors. At Tamron Optical(Vietnam) , efforts are being made to reduce standby power consumption. For instance, on plant closure days, the power supply to equipment such as compressors, cooling towers and process cooling water supply systems is cut, provided it does not run the risk of causing malfunction. In addition, the third Friday of every month has been designated as No My Car Day, and certain days in the summer and winter are designated as Eco Life Days(an initiative launched by Saitama Prefectural Government) , as part of the company's efforts to raise environmental awareness among all of the executive officers and employees at the head office. $CO_2$ emissions were reduced by 13.1t-$CO_2$ through these efforts in 2017.

Tamron will continue to work on further $CO_2$ reductions by sharing information and taking a long-term approach in considering the introduction of energy-saving equipment.

The measures taken to reduce $CO_2$ emissions in FY2017 are outlined below.

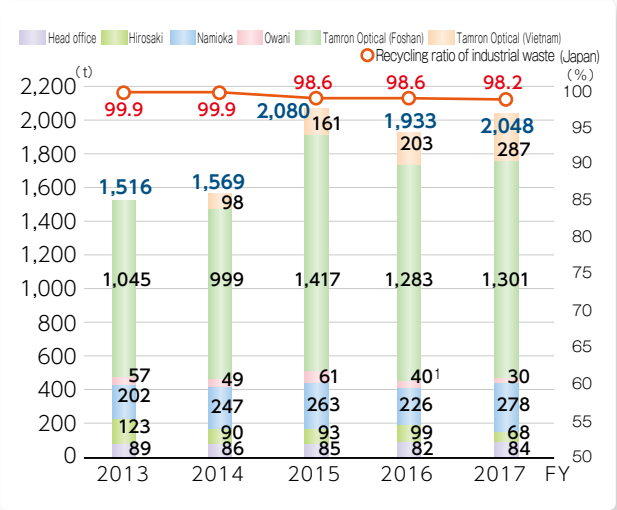
A solar power generating system (Tamron Optical(Foshan) in China)

### Main $CO_2$ Emissions Reduction Measures Implemented in FY2017

| Site | Measure | Reduction (t-$CO_2$) |
|---|---|---|
| Head Office | Improving compressor operation (Mold & Tooling Technology Center) | 1 |
| Namioka Plant | Improving operation of continuous evaporation machine | 17 |
| Owani Plant | Switching air conditioning units to energy-saving types (9 units) | 57 |
| Tamron Optical (Foshan) (in China) | Introduction of a solar power generating system | 70 |
| | Switching over to LED lights (4,167 lights) | 250 |
| | Switching to energy efficient motor types (38 units) | 50 |
| Tamron Optical (Vietnam) | Reducing standby power consumption | – |

## Waste Reduction Initiatives

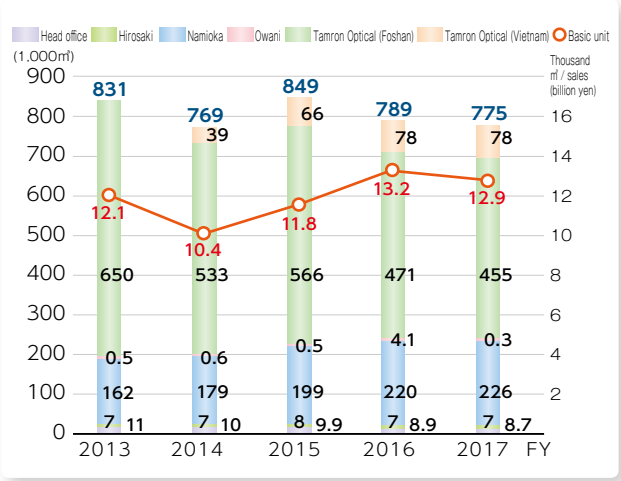
The total amount of waste generated in FY2017 by the Tamron Group as a whole, increased by 5.9% compared with FY2016. This is mainly due to the increased rate of in-house manufacturing, higher molding volume and the increase in disposal of cardboard and waste plastic at Tamron ptical (Vietnam) .




1. Waste volume for the Owani Plant reported in FY2016 was corrected from "4lt" to "40t." Accordingly, Group-wide waste volume was corrected from "1,934t" to "1,933t."

## Trends in Water Consumption

The total water consumption of the Tamron Group as a whole in FY2017 decreased by 1.8% compared with FY2016. In May 2017, reclaimed water recycling facilities were installed at Tamron Optical(Foshan) in China. We have since managed to recycle 2,957 tons of production wastewater. Tamron Optical(Vietnam) made improvements to the cooling water systems of its molding machines to reduce water usage and wastewater production. As a result, water usage and wastewater generation were reduced by 12%. The increased usage at the Namioka Plant was due to a higher number of operating days compared with the previous year, and longer operating times for equipment.




## Ascertaining $CO_2$ Emissions in the Supply Chain(FY2016)

Tamron calculates its $CO_2$ emissions based on direct emissions (Scope 1) and energy-derived indirect emissions(Scope 2) . In 2017, we received support from the Ministry of the Environment in calculating supply chain emissions and also calculated indirect emissions(Scope 3) for FY2016. As a result, we verified that among Scope 3 emissions, Category 1 emissions(emissions generated from the extraction and production of all products and services that have been purchased or acquired) accounted for a large proportion of the total. Moving forward, we will work to improve the accuracy of our calculations and further reduce $CO_2$ emissions.

### $CO_2$ Emissions for FY2016 by Scope and Category *

| Scope | | | $CO_2$ Emissions(t-$CO_2$) |
|---|---|---|---|
| Scope 1 | Scope 1 : Direct greenhouse gas emissions from the use of fuel, etc. | | 1,395 |
| Scope 2 | Scope 2 : Indirect greenhouse gas emissions generated due to the use of purchased electricity or heat | | 41,541 |
| Scope 3[2] Indirect greenhouse gas emissions related to business activities in the supply chain (except for Scope 1 and Scope 2 emissions) | Category 1 | Emissions generated from the extraction and production of all products and services that have been purchased or acquired | 112,203 |
| | Category 2 | Emissions generated from the manufacturing or transportation of purchased or acquired capital goods | 50,939 |
| | Category 3 | Upstream emissions from purchased fuel and upstream emissions from the electricity and heat manufacturing process | 2,365 |
| | Category 4 | Emissions associated with distribution of purchased products and services from a supplier to the company | 13,720 |
| | Category 5 | Emissions from the external disposal and treatment of waste generated from business activities | 3,644 |
| | Category 6 | Emissions from the use of transportation by employees for business purposes, such as employee business travel | 328 |
| | Category 7 | Emissions from the use of transportation by employees to commute for and from plants and offices | 8,393 |
| | Category 8 | Emissions associated with the operation of leased warehouses, etc. | 50 |
| | Category 11 | Emissions due to the use of sold products and services by consumers | 1,274 |
| | Category 12 | Emissions due to the disposal and treatment of sold products, their containers and packaging when they have been used | 4,409 |
| | | Scope 3 Total | 197,325 |

* Scope of Calculation : Head Office, Hirosaki Plant, Namioka Plant, Owani Plant, Tamron Optical(Foshan) , Tamron Optical(Vietnam) (including $CO_2$ emissions of 504t-$CO_2$ during transportation)
* Method of Calculation : "Emission factor database for corporate GHG emissions accounting over the supply chain Ver. 2.4" and "Carbon Footprint Communication Program Basic Database Ver. 1.01"

2. Please visit the Tamron website for more details such as information on the categories excluded from the calculation of Scope 3 emissions.

WEB http://www.tamron.com/csr/environmental_activities.html

# Relationship with Society

Tamron supports activities that contribute to the development of photographic and imaging culture, while striving to be a company that fosters future generations, takes part in local communities and is beloved by society.

## Contributions to Photographic Culture

### The 10th Railroad Scenery Photo Contest

Tamron sponsors the Railway Scenery Photo Contest in order to promote train culture and local revitalization in Omiya, known as an important railroad town in Japan and also site of our head office. As part of this contest, a photo exhibition is held at the Omiya Sogo Department Store showcasing the winning entries. This local event is made possible with the much-appreciated support of the City of Saitama, the Saitama Chamber of Commerce and Industry and the Saitama City Board of Education. In 2017, a railroad photography talk show presented by contest judges was held at the Railway Museum to celebrate the 10th iteration of the contest. A total of 5,809 submissions were received for the general and student divisions combined.

General Division Grand Prize(Saitama City Mayor's Prize)

**Mr. Sakae Takehana "The Passage of Time"**

"I was moved by the unseen passage of time hidden in the Quadrantids meteor shower, the diurnal motion of the stars, the flowing river and a rushing homeward-bound commuter train."


Student Division Grand Prize(Saitama City Board of Education Superintendent's Award)

**Mr. Yusei Oka "Cherry Blossoms of Katsunuma"**

"A station enveloped in cherry blossoms. It was as if a station on an abandoned line had been restored."

Humorous Photo Contest Award(Saitama City Chamber of Commerce and Industry President's Award)

**Ms. Honoka Kuzuya "Mouth Tunnel"**

"My younger sister loves trains and is always watching them from the side of the river. I took this photo when we visited together. When I showed it to her, she was delighted."

### 14th Macro Lens Photo Contest

This photo contest accepts entries shot from any macro lens, regardless of manufacturer. For the 14th contest a total of 3,854 entries were received. The contest has two categories:the Nature Division for nature enthusiasts that enjoy taking pictures of plants and insects and the Genre-Free Division for amateur photographers using DSLR cameras to take pictures of food, their children or pets. Many of the entries featured beautiful, warm natural scenes captured delicately in only ways a macro lens can.

14th Macro Lens Photo Contest Grand Prize **Ms. Mami Fujimoto "Oh! Summer vacation"**

# Growing Together with Local Communities

## Supporting Adaptive Athletes

Tamron has provided support to adaptive athletes to spread recognition of adaptive sports through the power of sports photography. 2017 marked a year of activities as each of the three athletes we support narrowed down the specific goals in the lead-up to Tokyo Paralympics to be held in 2020. The environment surrounding the athletes has also undergone significant change, with the London 2017 World Para Athletics Championships broadcast live on television. Tamron will support various athletes providing hope and inspiration around the world through sports together with the power of photography.

WEB http://www.tamron.co.jp/special/athlete/

Mr. Hokinoue

Ms. Takakuwa

Ms. Tsuchida

## Contributions to the Local Community Made by the Three Tamron Plants in Aomori Prefecture

The Hirosaki Plant, one of the three Tamron plants in Aomori Prefectures, has reached its 50th anniversary of operation. In recognition of its contributions to industrial development and job creation, the plant received a certificate of appreciation from the Governor of Aomori Prefecture.
Each of the three plants are active in their local communities, running bottle top and pull-tab collection activities with the proceeds going to charity, and sponsoring local festivals such as paper lanterns at the Hirosaki Cherry Blossom Festival and the Owani Hot Springs Summer Festival. Each Tamron plant also takes part in neighborhood clean-up activities. Going forward, the three plants will continue to make a concerted effort to contribute to their local communities.

Tamron receiving a certificate of appreciation from Aomori Prefecture

## Supporting Nature Restoration

Tamron's Omiya head office continues to support the nature restoration project carried out by the Ecosystem Conservation Society-Saitama together with local citizen groups at the Shibakawa Daiichi Flood Control Reservoir and surrounding areas. Many years ago the Minuma Tambo area of the reservoir area was an abundant wetland with white herons. Today the reservoir continues to see a number of wildfowl such as swans and even short-toed eagles visit the area to feed.

Shibakawa Daiichi Flood Control Reservoir

## Supporting the Cookie Project

Tamron provided advertising support and donations to Cookie Bazaar 2017 held in Saitama City in March 2017 and organized by the Cookie Project. This organization works to help the disabled live independently in the community.

Cookie bazaar 2017

# Developing Future Generations

## Cooperating with Photography Workshops

Tamron provides assistance for photography workshops and photo shoots that help to foster the next-generation of photographers. At a workshop titled "How to Take Photos While Paying Attention to Lens Choice" held by the photography club of the Tokiwamatsu Gakuen junior and senior high school, Tamron provided simple lectures covering basic knowledge and the selection of interchangeable lenses, and also loaned out lenses. This was a valuable opportunity for students to touch and use a range of lenses they wouldn't normally have the opportunity to shoot with, such as large aperture lenses.

Loaning out lenses for students to try

## Science Classes for Children

Tamron has organized science classes for children at local public halls and elementary schools in Saitama City to spur interest in the sciences. In FY2017, we held a total of 10 classes, with a total of 220 people participating. In January, we also held classes in the town of Owani in Aomori Prefecture, where the Owani Plant is located.

"Milk carton camera" (Owani)

# Activities at Tamron's Overseas Subsidiaries

Tamron's subsidiaries outside Japan continue to strengthen their relationship with local communities.

## Tamron Europe GmbH

Seven years have passed since, as part of the expansion of the company's premises, Tamron Europe installed photovoltaic (PV) panels on its roof to generate its own power and reduce $CO_2$ emissions. In FY2017, due to unfavorable weather conditions, the amount of power generated by these PV panels decreased by 10% to 56,000 kWh from the previous year, equivalent to a reduction in $CO_2$ emissions of 30t-$CO_2$. To date, the system has produced a total of 433,000 kWh of electric power and reduced $CO_2$ emissions by approximately 300 tons. From the summer of 2017, Tamron also began replacing the light bulbs in all company buildings with their LED equivalents. About 95% of the bulbs have now been replaced.
As part of its CSR activities begun in 2009, Tamron Europe also continues to provide donations of 7,500 Euros to an organization in Cologne(Koln) that provides support for children with cancer. The group has undertaken wide-ranging activities such as newly establishing and renovating hospital wings within university hospitals, constructing and operating lodgings where family members accompanying patients undergoing treatment can stay, providing financial assistance for families of patients, and promoting research into new treatments. Moving forward, Tamron will continue to support the cause as much as possible.

Rooftop PV panels as Tamron Europe GmbH

## Tamron Optical Shanghai

In an expansive development, Tamron Optical Shanghai retired the scholarship project it has continued since 2014 and held a photo contest dubbed "Youth Attitudes" as a new endeavor from 2017. Over a six-month period, a total of more than 2,000 submissions were received from university students attending five institutions in Sichuan Province, and many of the photos were exhibited in a gallery. In December, a grand presentation ceremony was held at Sichuan University of Media and Communications, one of the two major media universities in China. Six entrants won awards and were presented with Tamron lenses. After the award ceremony, a photography lecture was held for the university students in attendance, where they were able to enjoy hands-on experience with Tamron's lenses.
Tamron Optical Shanghai also provided stuffed toys to "Jingdong Charity Fund" organization. In addition, Tamron donated two cardboard boxes worth of clothing(around 80 items of clothing) to, Feimayi("Flying Ants") , another charity. The donated clothing is distributed through the charity organization to disaster affected areas and districts suffering from poverty.


Award ceremony for the "Youth Attitudes" photo contest(Sichuan University of Media and Communications)

Photographs being exhibited

## Tamron USA

Tamron USA took part in "Backpack Pirates Festival," an event to provide stationery supplies to children growing up in economically disadvantaged environments. Three Tamron USA employees photographed the event as volunteers. In addition, more than $850 in donations was raised from employees and their families to help those affected by Hurricane Harvey, which struck the state of Texas in August 2017. In 2017, Tamron again took part in a Food Drive and Coat Drive project to support the homeless with food and clothing, the Dress a Girl for her Prom project, which donates dresses and accessories so that more female students can attend their schools' proms, traditionally held around the time of high school graduation, as well as the Toys for Tots project that delivers toys and other Christmas presents to children in need.

Tamron USA will continue to actively pursue these kinds of CSR activities in the future.

BACKPACK PIRATES FESTIVAL

TOYS FOR TOTS

WEB Food drives http://www.licares.org/
Dress a Girl for her Prom http://www.jlli.org/
Toys for Tots http://www.toysfortots.org/

# Independent Third-Party Opinion

**Mr. Kimio Shibata**

**[Current Title]**

**Full-time Lecturer, Faculty of Economics and Business, Saitama Gakuen University (current position since 2015)**
**Part-time Lecturer, Yokohama City University / Kawaguchi Junior College**

[Career History]

MBA / Small and Medium Enterprise Management Consultant (both acquired in 2008)

Doctor of Economics (2004, Completed the Doctor's Program of the Graduate School of Economic Science, majoring Economic Science, Saitama University)

After working as an editor for a publishing firm, from 2008 to 2015 Shibata was responsible for CSR support as a management advisor (handling Yokohama's program to certify companies contributing to the local region) at IDEC Yokohama (Yokohama City Small and Medium Enterprise Support Center) .

[Areas of Specialization]

Research into regional CSR and CSV, strategic marketing, and internal marketing (to penetrate management philosophies)

[External Activities]

Judge in the OICHI Business Awards run by the NPO OICHI (Cooperative Labor Association) since 2012

[Works Authored]

*Penetration of Management Philosophy in Practice* (Soseisha, 2017)

*CSR evaluation system by local governments : About the subject of regionality evaluation and operation in the authorization system of Yokohama type area contribution company* (Journal of the Japan Association of Regional Development and Vitalization, Vol. 4, Pages 237-246, 2013)

69th Zen-Noh-Ren Conference Outstanding Research Paper (FY2017) – *A Study on Efforts of Managements to Promote Management Philosophy : the Case of Enterprises Engaged in Regional CSR as Examples*

## CSR Activities that Start with Reexamining the Obvious

A decade has now passed since Tamron started to practice CSR management, and along with the company's global expansion to overseas sites, its initiatives have proceeded to the next stage. However, as the business expands, Tamron's "local" stakeholders become increasingly ambiguous and difficult to identify. There is no clear definition as to the extent of the local community. For that reason, the true extent will differ depending on the subjective views of the person making use of the term, and the interpretation will also differ depending on the listener. In other words, the more Tamron's business expands, the vaguer the delineation of what "local" means. Generally speaking, when a company expands globally, it devotes greater attention to overseas endeavors. Consequently, the relationship between the head office and the local community tends to become less apparent. Tamron, however, involves local communities with photo contests that make use of its core business of lenses as a form of social contribution activities. This is impressive, as such activities suggest a strong awareness of CSV[1]. Having said that, social contribution activities that strengthen coordination with stakeholders are required by the SDGs that were newly added as CSR themes, making them all the more important. Accordingly, it will be vital for Tamron to have each employee recognize, understand and act upon this emphasis on the relationships they maintain with local communities, even beyond the ties established between Tamron and local communities to date.

The SDGs are a set of unified international goals made up of 17 goals and 169 targets, and many of the CSR activities already been pursued by Tamron likely correspond to each of these targets. However, unless each employee understands that the CSR activities and SDGs are connected, even if Tamron draws outside attention to its CSR management that also addresses SDGs, the sentiment will not readily translate into practice in the field. That's because it is the employees who put management philosophies and strategies into practice. In interviews, I get a strong impression that domestic employees understand the management philosophy embraced by Tamron, but now, with the increased number of overseas sites along with the company's expansion, further innovation in employee training will be needed to ensure the management philosophy is understood and put into practice to the same extent abroad as at home.

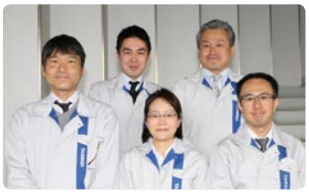
For this reason, Tamron will need to develop a renewed awareness of something which should be obvious : people don't think or feel the same, because the environments and cultures in which they grew up differ. For example, in Japan water is often thought of as something easily obtainable, but that is not always the case elsewhere. This idea is also a part of the SDGs, since "ensure availability and sustainable management of water and sanitation for all" is one of its goals. Water is essential in the production of lenses, which represent Tamron's core business, and a renewed acknowledgement of water may be the most important factor in Tamron's further globalization. I expect to see Tamron reexamine what is already under foot as it achieves business growth from a more global perspective.

1. CSV stands for Creating Shared Value. This is an approach where a company seeks to contribute to society by striking a balance between profits and solutions to social issues through its core business activities. (CSV was first advocated by Michael E. Porter)

## Editorial Team's Postscript

This report contains non-financial information on Tamron's annual activities as a way to facilitate engagement with our many stakeholders. The special feature section of the FY2018 report focuses on key CSR issues and the SDGs in Tamron's future CSR management.

We will accept the views expressed in the independent third-party opinion in all seriousness, strive to enhance areas such as education on the management philosophy including at overseas sites, and work to promote global CSR management. We encourage readers to share their frank comments and requests.



Head office

Tamron Optical (Foshan)

The three Aomori plants

Tamron Optical (Vietnam)


We are pleased to announce that our CSR report for 2017 was recognized with an award of excellence at the 21st Environmental Communication Awards sponsored by the Ministry of the Environment and the Global Environmental Forum, marking the four consecutive year that Tamron has won this award.

**Tamron Co., Ltd.** Corporate Business Planning & Administration Board

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