

Material CSR Issues 01

Creates the future Innovation for the future

Toyal

OUR APPROACH

The Toyal Group moves ahead with the R&D and commercialization of products primarily at its Advanced Technologies Division and New Business Creation Department, based on its core technologies, in response to currently manifested social issues and potential problems as well as changes in the market environment. We divide target markets into three types, i.e. existing, new, and next-generation markets, and invest R&D resources in each category. We actively promote open innovation, partnering with startups, universities, research institutes, etc. across the globe, to tackle challenges we cannot overcome alone.

Taking the Creating Shared Value (CSV) approach, we focus on R&D projects that will create value for both society and the Toyal Group while staying in close touch with stakeholders. We will think outside the box and push the envelope of our aluminium-based business to lead the world.

Relevant SDGs



Finding new business seeds in social issues, and contributing to attainment of SDGs with our unique technologies

New Business Creation Department transforms product concepts based on new ideas and new technologies produced by Advanced Technology Division into actual items and new business operations. Of course, new business cannot be created easily, but we can still realize business activities that can contribute to attainment of SDGs by confronting social issues squarely and finding something that we can do for them. To that end, human capital development and partnership expansion will be our new challenges.



Director, Managing Executive officer in Charge of New Business Creation Department

Yoshihiro Tomioka

We will create new values, based on one of our strengths in the proprietary surface treatment technologies, and by incorporating diverse ideas.

As a department entrusted with creation of technological seeds for new business, we are entering new markets and expanding our operations into the next-generation markets by creating new values based on our aluminium surface treatment technologies that we have constantly accumulated. To that end, we incorporate new ways of thinking flexibly and broadly by, for example, utilizing diversity and open innovation concepts. We also focus on creating environments and systems that can facilitate creation of new ideas.



Managing Executive officer in Charge of Advanced Technology Division

Zenya Ashitaka

Major activities in 2019

Human capital development	<ul style="list-style-type: none"> Study sessions for developing human capital capable of managing diverse aspects of people, goods, and capital. Efforts to produce workers with PhD
Promotion of Open Innovation	<ul style="list-style-type: none"> Activities for industry-university cooperation Collaboration with ventures, universities, and research institutes
Promotion of diversity	<ul style="list-style-type: none"> Promotion of empowerment of female workers Globalization of directors and employees

CSR Action Plan Achievements in 2019

- Existing business: Improving sales of products contributing to SDG3, 7, 9, 11, 12
 - Products contributing to SDGs to be selected by each business headquarters
- New business: Creating the fifth pillar (of the business)
 - Target of **one** or more cases of commercialization of products

Example activities for material CSR issues Practice case

case 01 New business: Creating the fifth pillar (of the business)

Promotion of Open Innovation

We are promoting various collaborative activities for creation of the next-generation markets. In the field of batteries, we started a joint development project with 24M Technologies, Inc. (Boston, USA), a developer of "semisolid lithium-ion batteries," which attract the public attention as a next-generation battery option. We can expect improved battery performances by applying our proprietary surface treatment technologies to electrodes that utilize their proprietary advanced battery technologies.

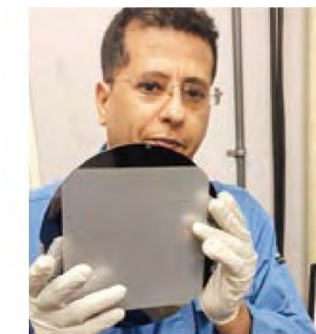


case 02 New business: Creating the fifth pillar (of the business)

Promotion of diversity

Diversified perspectives are necessary for activating R&D activities. Advanced Technology Division is working hard on recruitment to attain its target of raising the female workers' ratio to 20% or more by 2021. Globalization is another requirement.

Marwan Dhamrin, a director (Senior Specialist) from Yemen will be appointed as a specially appointed professor at Osaka University for the chair of "Toyo Aluminium Research Laboratory of Semiconductors" in September 2020. He is expected to transmit our product information to the world within the industry-university cooperation framework.



case 03 Existing business: Improving sales of products contributing to SDG3, 7, 9, 11, 12

Development of resin materials for insect repellent goods (compound resins)

Compound resins containing highly concentrated liquid insect repellents, etc. are produced. Our compound resins are used in insect repellent goods for its long-term insect repellent effects, and favorably received both domestically and overseas. We would also like to promote development of compound resins with antibacterial and antifungal effects, including insect repellent goods.



Material CSR Issues 02

Environmental protection

Environmental Protection

OUR APPROACH

Environmental preservation is an important field in our business activities, to which we contribute not only by means of our products but also through reduction of environmental loads in our operations. In our daily operations, for example, we promote reduction of energy used in each manufacturing process, and reduction, reuse, and recycling of generated wastes. For prevention of global warming, in particular, we have set a long-term target of reducing CO₂ emission by 30% (compared with the 2013 level) by 2031, the centennial year for the Toyol Group, based on the Paris Agreement and SDGs, and will promote specific actions to attain the target. We have also obtained ISO14001 certifications at 15 business locations, which are mostly production sites. Through effective implementation of the environmental management system, we will prevent environment-related problems and comply with the relevant laws and regulations, reduce environmental loads, and promote sustainable business activities that are harmonious with the global environments.

Relevant SDGs



Environmental loads should be considered throughout life-cycles to promote environmental activities to be required by society.

For environmental protection activities, we need to press forward with dual fronts of seeking business growth and suppressing environmental loads. Specifically, as aluminium processing requires tremendous energy, we also need to study possible transition to alternative energy sources other than fossil fuel as an urgent issue. We are hit by large-scale natural disasters almost every year, evidencing the rising risks associated with climate changes. As it is commonly said that the conventional ways of living and thinking have been changed by COVID-19, we may be in the midst of significant transitions in technologies and ideas, as exemplified by 5G, DX, and the mobility revolution, etc. We can no longer accept comfortably accepted conventional ways and should look at our manufacturing practices from fundamentally different perspectives. For environmental issues, we will not take conventional approaches but seek innovative ways of thinking.



Executive Officer
In Charge of Engineering Center

Satoshi Asou

Major activities in 2019

Reduction of CO ₂ emission	<ul style="list-style-type: none"> ■ Visualization of energy uses ■ Promotion of inter-departmental resource recycling to improve yields ■ Replacing existing lighting fixtures with LED devices at all business offices
Constructing the energy-saving/recycling system	<ul style="list-style-type: none"> ■ Collection and recycling of used aluminium foil products ■ Completion of a system to recover evaporating rolling oil ■ Implementation of the recovery system for ink to be disposed ■ Promotion of paper-less office ■ Studying new disposal/handling methods to respond to abolishment of incinerators
Preservation of biodiversity	<ul style="list-style-type: none"> ■ Participation in clean-up activities at Mihono-Matsubara Beach ■ Participation in plastic litter cleanup activities near business offices ■ Observation of sewage drains

CSR Action Plan Achievements in 2019

- Reducing CO₂ emission from business activities (from the 2013 level)
→ Target: Reduction of 2.5% (year-to-year) **Actual: Reduction of 6.1%**
 - Constructing the solar battery recycling system
→ Starting dialogs with stakeholders
 - Constructing the aluminium recycling system
→ Starting dialogs with stakeholders
 - Constructing the paper container recycling system
→ Starting dialogs with stakeholders
 - Reducing industrial wastes from business operations
→ Target: Reduction of 2% in basic unit (year-to-year) **Actual: Increase of 21.5% in basic unit**
- * Targets were not attained because waste solvents/plastics that used to be sold for profit need to be disposed of as industrial wastes due to changing market conditions.

Practice case

case 01 Reducing CO₂ emission from business activities

Promotion of visualization of energy uses by effective uses of IoT

We are constructing a system to acquire real-time data on energy uses by introducing equipment that can collect operational data at each production facility. We will utilize the data to enhance our efforts in optimizing energy uses.



case 03 Reducing CO₂ emission from business activities

Replacing existing lighting fixtures with LED devices

In all business sites, we have completed the changeover of the conventional halogen bulbs into LEDs (80% in 2019). This measure not only reduced the energy consumption but also brought insect repellent effects to boost the overall product quality.



case 02 Constructing the aluminium recycling system

Collection and recycling of used aluminium foil products

Toyo Aluminium Ekco Products Co., Ltd. promotes collection and recycling (secondary alloying treatment) of used aluminium products through collaboration of users. In 2019, we promoted information exchanges with local companies and co-ops in the three prefectures of the Hokuriku region, with which we have come in contact through Hokuriku Green Energy System Society, so that we, as a business enterprise, can establish more specific collection/recycling routes. In 2020, we will continue our efforts to win more understanding and support of local residents concerned about their daily lives by directly communicating meanings of our activities and how to cooperate with us through our participation in local fairs and events sponsored by municipal governments.

case 04 Contribution to recycling-oriented society

Completion of rolling oil recovery system

We have completed a system to recover rolling oil evaporated at rolling operations. This is expected to generate the best recovery quantities in the industry, enable the recycling of rolling oil, and contribute to reduction of emission of VOC (volatile organic compound) in the atmosphere.



Material CSR Issues 03

Human resources

Human

capital

diversity



OUR APPROACH

We are a company that values people, and that's why we value employee diversity as well as individual personalities and characters, and aim to foster "human capital diversity." As our operations quickly expand across the globe, we are actively hiring workers from overseas, including foreign nationals, and equipping employees with skills needed to work in the global arena through various training programs, including long-term and short-term programs for studying abroad. We have built a work environment where all employees can reach their full potential regardless of gender or disabilities by enhancing the child-care leave program and shortened work hour system for employees with childcare responsibilities, promoting barrier-free work environments, and implementing other measures to address Japan's declining working-age population due to the falling birth rate and the graying of society. We also provide female employees with career support by assigning them to global staff positions. We are also focusing on reducing total working hours per year by reducing meetings, making them more efficient, and boosting communication through the use of new IT systems as part of our work reform initiatives, which also include introduction of the flextime system. We continue creating an engaging environment where people from diverse backgrounds can fulfill their potential while ensuring that all employees maintain a healthy work-life balance.

Relevant SDGs



Promoting autonomous and self-reliant human capital expected to take responsibility for autonomous organizations the Toyal Group is intended to make.

At the Toyal Group, we refer to human resource as human capital because our business growth depends on how each worker can achieve the full potential. We thus work on the three priority issues: "work style reform," "nurturing autonomous human capital," and "diversity." In 2019, remote-work has been made greatly popularized due to COVID-19. I hope this will provide employees with a positive outlook toward drastic changes. As part of the reforms aimed at autonomous organizations proposed in the "Management Platform Reforms," planned for our centennial, we would make additional efforts in promoting autonomous human capital.



Managing Executive officer in Charge of Personnel Affairs Department and Tokyo Personnel/General Affairs Department

Masashi Yamamoto

Major activities in 2019

Human capital development	<ul style="list-style-type: none"> Development of autonomous human capital Starting reforms of training/personnel systems
Human capital recruitment	<ul style="list-style-type: none"> Employment of foreign nationals Enhancement of recruitment of female workers
Promotion of diversity	<ul style="list-style-type: none"> Activities for promoting empowerment of female workers
Activities for human rights	<ul style="list-style-type: none"> Activities for elimination of disparities, including reviews of employment formats
Work style reform/health-oriented management	<ul style="list-style-type: none"> Enhancement of various measures and systems

CSR Action Plan Achievements in 2019

- Improving female recruitment ratio (as global staff) → Target: New female recruit ratio at 20% **40% achieved**
- Enhancing work opportunities for senior human capital → Starting system reviews for extending the retirement age to 65
- Empowering autonomous human capital → Introducing selective training system
- Promoting health-oriented management practices → Implementing cancer tests for female employees

Example activities for material CSR issues Practice case

case 01 Empowering autonomous human capital

Reorganization/review of system

Various systems have been reorganized to realize more flexible and autonomous work styles.

- Expanding shorter work hours for childcare
 - Expanding the relevant children from third graders to sixth graders
- Introducing half-day paid holidays
 - Removing the limitation of 12 uses a year
- Implementing a flextime system
 - Expanding the seven-stage staggered work system to the nine-stage system as part of our responses to COVID-19 pandemic

case 02 Empowering autonomous human capital

Revising personnel system

We are now moving out of the conventional "management by objective (MBO)" and adopting a new personnel system where goals are formulated autonomously in a team to be organized according to OKR*, and all members in the team can work harmoniously toward shared goals; we are also revising evaluation/remuneration systems accordingly. In parallel with this series of reforms, we are trying to visualize personal career plans, supporting individual competence development, and working on a transition to a promotion system in which performance appraisals are based on the new performance definitions. * OKR: Objectives and Key Results

case 03 Promoting health-oriented management practices

Enhanced actions to realize health-oriented management

New cancer tests for female employees were implemented. We also requested the healthcare staff/nurses stationed at manufacturing sites to change their status from temporary staff members to regular employees(*) to enhance our health/safety system, and collect information concerning occupational health and safety issues at respective work sites. We will also respond to persons with mental health issues as one of our urgent issues. * Applicable to full-time workers

Column

Engagement between female employees and an outside director - "Lunch Communication" -

At a suggestion of Ms. Shirai, an outside director, "Lunch Communication" is conducted regularly as a forum of personal interaction for female employees. Having lunch together, they can exchange information about work styles and other issues at workplaces, the contents of which are presented in in-house newsletters and shared with all employees. Subsequently, feedback interviews between the participants and their superiors are conducted to ensure that employees' opinions are properly reflected on management practices.



Material CSR Issues 04

Quality and safety

Quality and Safety

OUR APPROACH

We have obtained ISO 9001 certification at 17 locations, including our affiliates across the globe, and are working on the continuous quality improvements. In order to ensure safety, a safety and health office has been set up at each production site while CSR Promotion Office plays a central role in maintaining a safety management system. This allows for concerted efforts between the head office and production sites in implementing safety and health initiatives. We also ensure that subcontractors who provide us with the processing services that support our daily operations fulfill their quality and safety responsibilities in order to prevent accidents and problems from occurring at production sites other than ours. We actively help them by monitoring their quality control measures, conducting safety inspections for equipment we lend, and more while respecting their autonomy. We are committed to not only complying with social norms but also making continuous improvements to further enhance quality and safety with an aim of earning greater customer trust.

Relevant SDGs



We proceed with construction of systems that can provide high quality, which cannot be supplemented by machines.

In order to survive global competition, we need to ensure two types of quality issues; "product quality" and "quality to guarantee product quality" on a steady and stable manner; yet, it is quite difficult to maintain high quality on a continuous basis. Quality problems cannot be seen when things go smoothly. That is why we have to focus on constructing systems that can prevent occurrence of accidents in advance.

Safety has top priority over any other issues. We will pursue with effective and workable measures instead of idealistic theories.

The first and foremost in CSR of the Toyal Group is safety. For all accidents that have occurred, the causes are determined and the findings are applied to all business offices to ensure that countermeasures are thoroughly implemented. In order to prevent countermeasures from losing their effects over time, and from belonging to particular persons, thorough accident prevention measures are taken, including the effective uses of IoT. To respond to the outbreak of COVID-19, we have started reviewing how our BCP should be implemented.



Executive Officer
In Charge of Quality Assurance Department

Norio Kasetani



Executive Officer
In Charge of CSR Promotion Office

Minoru Kawaguchi

Major activities in 2019

Application of rules/regulations	<ul style="list-style-type: none"> Investigations conducted on implementation status of corrective actions for past problems Construction of a system for preventing falsification of inspection data
Responses to laws/regulations/guidelines	<ul style="list-style-type: none"> Responses to updates of laws/regulations, including REACH regulation
Safety management	<ul style="list-style-type: none"> Accident prevention by risk assessment based on the occupational health and safety system and KY activities Regular implementation of internal controls at business offices and safety monitoring by the President

CSR Action Plan Achievements in 2019

- Reducing serious quality complaints
->Target: No significant quality complaint **Actual: 0**
- Reducing accidents accompanied by lost worktime, accidents not accompanied by lost worktime, and fire-related accidents
->Target: No accident accompanied by lost worktime **Results None**
->Target: No accident not accompanied by lost worktime **Results 7 cases**
->Target: No fire-related accident **Results 4 cases**
->Halving extremely minor accidents (year-to-year) **Results 22 cases/ 28 cases**

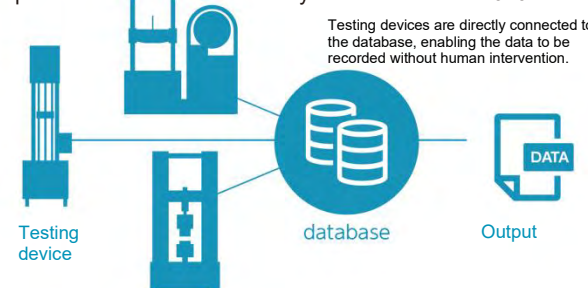
* No specific causes were detected; they were different in all cases, including wrong operations and facility defects, etc. Still, as those involved in accidents were mostly inexperienced workers, we will improve our safety education in collaboration with business offices in parallel with investigations into root causes.

Practice case

case 01 Reducing serious quality complaints

System for preventing falsification of inspection data

In order to enhance reliability of inspection data, we are constructing a system of connecting testing devices to measurement results and of recording data without human intervention. The introduction of this system is schedule to be completed at all business offices by the end of our FY2020.



case 02 Reducing accidents accompanied by lost worktime, accidents not accompanied by lost worktime, and fire-related accidents

Enhanced measures against accidents by entanglement, etc.

In recent years, both domestically and overseas, the number of work-related accidents is decreasing, but has never reached zero. Of all kinds of accidents, those caused by entanglement, etc. in production facilities tend to be quite serious, and can be seen as a major risk for the Company. Naturally, all manufacturers have to invest heavily on safety; specifically, we have budgeted 1.3 billion yen to conduct activities to reduce those risks in 2019. Specifically, in 2019, we conducted general inspections and risk assessment on hazardous spots concerning entanglement accidents in rotating machines. In response to a particular accident accompanied by lost worktime in April 2020, we conducted additional inspections and risk assessment on hazardous spots that may cause entanglement accidents. We will continue these activities for complete elimination of entanglement accidents.

Column

Responses to the COVID-19 pandemic and enhanced response functions to emergency situations (BCM/BCP-preparedness)

In conjunction with the spreading COVID-19 pandemic, we have established the COVID-19 Task Force to collect/transmit relevant information, and have coordinated response systems properly, based on the anti-epidemic action checklists at respective business offices, according to external experts' advice. Specific measures included telework primarily for corporate staff, and the so-called border control actions were thoroughly implemented, including entry restriction into Company premises, measurements of bodily temperatures and requests to entrants to apply disinfectants and face masks at gates, etc. We have also enhanced ventilation and taken measures to avoid the "Three Cs (closed spaces, crowded places, and close-contact settings)." We will establish countermeasure timelines shared within the Group, instead of working on complicated manuals that cannot be used in real-life situations, so that everyone can respond quickly and effectively to emergency situations including viral infections (including COVID-19), major earthquakes, and floods, etc. We will thus continue working on the necessary training and rectification of any problems detected in such training sessions.



Discussion in the task force secretariat by remote-working setting

Material CSR Issues 05

Collaboration with stakeholders

Cooperation with stakeholders

OUR APPROACH

We, at the Toyal Group, contribute to social and economic activities of the local communities through our production and employment activities. Furthermore, in collaboration with local communities, we also support local cultural activities and environmental protection efforts, and are engaged in the Food Bank and other support activities through NPOs. We also emphasize contribution to nurturing the next-generation citizens through encouraging their company visits (accepting junior or senior high school students), planned by NPOs. Other activities include, for example, volunteer local clean-up activities by employees and volunteer help activities for communities hit by natural disasters; through these various activities, we will actively promote movements contributing to a sustainable society, so that we can enhance our corporate value.

Relevant SDGs



As a leading company in the aluminium industry, and as a “company with dignity,” we maintain a strong desire to be a company required by society.

In our relationships with stakeholders, we emphasize “dignity of company.” It is revealed in our employees’ conduct and public reception of our products and services, and should be the foundation of our brand power. For its realization, we emphasize provision for the environment where they can fully exert their personal capabilities. It is also important to provide high-quality products to our clients and win market supports. While we would like people around the world to know more about the Toyal Group and wish to enhance our raison d’être in society, we also feel responsible, as a representative aluminium manufacturer in Japan, to popularize this material called aluminium among Japanese children, on whom our future depends.



Executive Officer
In Charge of General Affairs
Department
Hideo Ishiguro

Major activities in 2019

Employee relations	<ul style="list-style-type: none"> Improvement of work environments where employees can fulfill their potential
Communication with local community/society	<ul style="list-style-type: none"> Holding workshops for primary school children Entry to the Osaka Marathon as charity runners Inviting French graduate students to introduce the Toyal Group business and other Japanese companies Supporting “Yokohama FC Yokohama Porto Cup” sponsored by Yokohama FC (a football team) Supporting Osaka Symphony Orchestra (a public interest incorporated association) Conversation with customers and national/local governments

CSR Action Plan

- Improving reliability and satisfaction through direct communication with various stakeholders (local communities, customers, employees, etc.)
- Conversation with business partners

Example activities for material CSR issues

Practice case

case 01 Communication with local community/society

Holding workshops on the topic of aluminium

In October 2019, we participated in an event for primary school children, at Fukui Atomic Energy Science Museum, “At Home,” established by Fukui Atomic Information Center, to present a workshop on aluminium. Through experiments using aluminium, children deepened their understanding about aluminium in a joyful learning experience.



case 02 Communication with local community/society

Entry to the Osaka Marathon as charity runners

Five of our employees entered the 9th Osaka Marathon held on December 1, 2019 as charity runners. This activity was made possible by a suggestion of “Japan Habitat Association,” for which Mari Christine, an outside director of Toyal, works as a Vice Chairperson, and conducted to support a donation campaign to present textbooks and school lunches to Laotian children.



case 03 Communication with local community/society

Conversation with customers and national/local governments

Powder & Paste Headquarters promotes conversation with customers and government officials to introduce our business and SDGs activities. When we visited the municipalities of Gose, Katsuragi, and Hino where the business offices are located, the respective mayors joined our talks and exchanged opinions about community revitalization.

Column

Opening YouTube registration channel

The Toyal Group’s official YouTube channel was opened to familiarize as many people as possible with what we are. The site not only introduces our business activities and products but also presents candid opinions and impressions of employees for the recruitment purpose.

