



—Highlights of Our Environmental Activities in FY 2018—

Creating Value from Light and Illuminating a Bright Future

Here we will report on the new environmental activities that the Stanley Group has been working on, as well as activities that are worth taking note of.



Achieving energy-savings of 75%

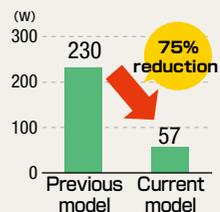
Switching to full LED headlamps and rear lamps for the Gold Wing

Stanley Electric products come equipped on the Gold Wing, a new motorcycle by Honda Motor Company, for its headlamps and rear combination lamps. Switching to full LED lights for both the head and rear lamps has contributed to lowering their power consumption and reducing their weight.

For the low beams on our headlamps, we have achieved dazzlingly brilliant light output via multi-lamp system LED modules. The light-guide position lamps have fine cuts that allow for uniform three-dimensional light distribution and serve as the signature lamp. As a whole, the headlamp contributes to enhancing the aerodynamic performance of the motorcycle. In this way, we have successfully struck a balance between design that abounds with a high class feel and functionality.

Moreover, for the rear combination lamps we adopted a design that is evocative of wings that is worthy of the name "Gold Wing." For these we harnessed our uniform light distribution technology for the tail, stop, and turn functions, and imbued them with design features befitting Honda's flagship model when seen from the rear of the motorcycle as well.

Power consumption per headlamp



Gold Wing Tour



Our PC backlight prevents data leaks due to snooping at the press of a button

We have developed the world's first backlight for PCs with built-in privacy functionality

We have developed the world's first backlight for PCs with built-in privacy functionality, which has been adopted by Hewlett-Packard as a privacy screen on their computers.

Ordinary snooping prevention films to date have suffered from drawbacks such as involving time and effort to mount, attach and detach, and carry around, while also reducing visibility by dimming the brightness when they are attached. Our backlight units are built into the display and can be switched on at the press of a button, thus clouding the display when viewed from the sides and preventing data leaks due to snooping. The high luminance display offers outstanding visibility in bright locations, is light weight and slim, and consumes less power while being equipped with privacy functions.



PC backlight that obscures visibility when viewed from angles other than the front



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Development Assistance: Motoko Ishii Lighting Design Inc.
 Planning & Production: Motoko Ishii and Akari-Lisa Ishii



Projecting golden light over great distances with minimal power

Developing the world's first golden LED floodlights

Our LED floodlights are used to light up a variety of historical structures and some of the world's leading tourist attractions, such as the Kabuki-za Theatre in Ginza and Niagara Falls in North America, where they are used to further brighten the appeal of such attractions. We recently developed the world's first golden LED floodlight, which has been adopted not only in Japan, but all around the world to wreath these sites in golden light.



Lighting up the Eiffel Tower

Our golden LED floodlights were adopted for the "Eiffel Tower Special Light-up: Eiffel Tower Dressed in Japanese Lights," which was the highlight of the official plans for Japonismes 2018, an event commemorating the 160-year anniversary of friendly relations between Japan and France. Produced by the world-renowned lighting designers Motoko Ishii and Akari-Lisa Ishii, the work saw Korin Ogata's painting Irises Screen, which is a National Treasure of Japan, projected onto the Eiffel Tower. The tower was lit up as if adorned with gold using the latest technology from Stanley Electric, further brightening the brilliance of nighttime in the "City of Lights."

For the occasion, 120 LED floodlights with ultra narrow light angle (gold) that were able to effectively focus the LED light using minimal power consumption were used. Through this, the Eiffel Tower was uniformly illuminated with about 7kW of power (equal to the amount from six hair dryers). As such, our environmentally-friendly products were able to make this historic light up event a resounding success.



Projecting golden light onto Phoenix Hall of Byodoin Temple

Byodoin Temple is a World Heritage site located in Kyoto that holds special nighttime visits every year in the fall. Out of a desire to further enliven nighttime sightseeing and to do something completely different from the past, a proposal was made and successfully implemented to use our golden LED floodlights, the first of their kind in the world, to project light onto the facilities.

In Phoenix Hall (a National Treasure), our miniature golden LED floodlights were used to illuminate the Amida Buddha statue (a National Treasure), which is the temple's principal object of worship located in the center of the hall, while our LED floodlights with ultra narrow light angle (gold) were used to illuminate the phoenix (also a National Treasure) on the roof. Illuminating these figures covered in gold leaf with golden light imbued them with a brilliant luster and gave them a mysterious silhouette that stood out amidst the dark night.



©Byodoin Temple

◀ Views



Realizing the Special Light-up of Eiffel Tower!
Ryosuke Yamazaki
 Design Department, Yokohama Technical Center

Adjusting the illumination direction of the floodlights in 1°denominations to achieve uniform lighting on the Eiffel Tower with a limited number of lamps was no easy feat. Yet we were successful in soaking the Eiffel Tower in golden color with a negligible power of 7kW. Moving forward, we will continue working to develop more products designed for the environment learning from this valuable experience.



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Achieving sustainable societies

Our environmental activities and the Sustainable Development Goals (SDGs)

Through our business activities, the Stanley Group promotes initiatives aimed at achieving a sustainable society.

In September 2015, the United Nations adopted the Sustainable Development Goals (SDGs), which consist of 17 goals and 169 targets for resolving a variety of social challenges in areas such as the environment, health, human rights, poverty, and peace. These have been positioned as "goals for all people" for the year 2030 that indicate an ideal vision for the future. For our part, the Stanley Group, which operates our businesses globally, has forged a connection between our environmental activities and the SDGs, and primarily promotes initiatives like those in the figure on the right in four areas found amongst the 17 goals. We also undertake awareness-raising activities for our employees every year through the use of level-specific training and our e-learning system. Moving forward, we will examine important challenges that ought to be addressed in a prioritized manner. Based on this, we will promote the establishment of a foundation for supporting medium to long-term growth by giving due consideration to the risks and opportunities brought about by our business activities. We will continue working to achieve the SDGs through products and services borne through Stanley's "boundless pursuit of the value of light."

Targets of the SDGs		Primary initiatives of the Stanley Group
6 CLEAN WATER AND SANITATION 	Ensure availability and sustainable management of water and sanitation for all	<ul style="list-style-type: none"> ● Providing safe water through the use of UV cold-cathode tube and deep ultraviolet LED products ● Maintaining water quality by reducing hazardous chemical substances ● Recycling water, etc.
7 AFFORDABLE AND CLEAN ENERGY 	Ensure access to affordable, reliable, sustainable and modern energy for all	<ul style="list-style-type: none"> ● Expanding the adoption and use of sustainable energy (solar power) ● Reducing our energy use through energy-conservation activities, etc.
12 RESPONSIBLE CONSUMPTION AND PRODUCTION 	Ensure sustainable consumption and production patterns	<ul style="list-style-type: none"> ● Complying with laws and regulations governing air, water, and soil pollution ● Miniaturizing and reducing the weight of products, while controlling the chemical substances contained within them ● Reducing the amount of waste generated and improving our recycling rate, etc.
13 CLIMATE ACTION 	Take urgent action to combat climate change and its impacts	<ul style="list-style-type: none"> ● Offering energy-saving products via LED headlamps, LED lights, and more ● Reducing CO₂ emissions at every stage of our products, from the raw materials to production activities, distribution, and use of the products



Initiating water risk evaluations

Water risks at the Stanley Group's production bases

In recent years, a diverse array of water problems has grown increasingly severe, including water shortages, water contamination, and flooding, as a result of factors such as rising populations and global warming. As such, initiatives to address these sorts of water risks have come to pose an important challenge.

The Stanley Group uses water in many of our processes, including coating processes for headlamp production, semiconductor production processes, and cooling our production equipment. For this reason, we performed water risk evaluations at the group's major production bases. Moving forward, we will continue evaluating water risks in response to matters like the establishment of new bases and changes in the business environment, and will take measures to reduce our water usage as needed.

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