

## Feature 2: Solutions to Solve Social Issues

# Expanding our solutions business for disaster prevention and energy

One of TAIYO YUDEN's materiality for generating economic value is to "create solutions to solve social issues." We strive to take unprecedented approaches to creating solutions in the belief this will lead to the resolution of social issues.

### TAIYO YUDEN Solutions 01

#### River water level monitoring system



#### Preparing for natural disasters through disaster-prevention and mitigation initiatives

As rains of torrential rain occur with greater frequency, so flooding of rivers and urban areas is becoming more common. TAIYO YUDEN's river water level monitoring system uses cloud servers to gather real-time data from water level gauges, monitoring cameras, and overflow sensors, and is designed to provide stable streams of data even when disasters are in progress. We provide this gathered information via a service that charges a fixed fee for data usage only. This reduces the burden on the customer for installing, operating, and maintaining sensors, and so contributes to the creation of safer and more secure towns.

**Target SDGs**

- Goal 11 Sustainable Cities and Communities
- Goal 13 Climate Action



### TAIYO YUDEN Solutions 03

#### Bridge monitoring system



#### Detecting minute displacements to monitor traffic and infrastructure

The deterioration of bridges, roads, water supply and sewage systems, and other forms of social infrastructure has become a major social issue. TAIYO YUDEN's optical displacement sensors, which have been developed using proprietary technologies, can detect nanometer-scale displacements in various structures. These optical displacement sensors can be placed in concrete bridges to monitor traffic conditions—such as how many vehicles have passed, and how heavy they were—and can also be used to analyze the behavior of high-rise buildings. Data from these sensors can be used to carry out efficient maintenance and repairs, which leads to the creation of safer and more secure communities.

**Target SDGs**

- Goal 9 Industry, Innovation and Infrastructure
- Goal 11 Sustainable Cities and Communities



#### Realizing a decarbonized society through new forms of mobility

Electric assisted bicycles are receiving attention as a form of zero-emissions mobility. TAIYO YUDEN's regenerative electric assist system generates electricity from a motor during braking or when the pedals are not being rotated, which is then used to charge the battery. The system significantly reduces the frequency with which the battery has to be charged externally, and thereby helps to increase the operational efficiency of share bicycles, and contributes to the creation of environmentally friendly towns.

**Target SDGs**

- Goal 3 Good Health and Well-being
- Goal 7 Affordable and Clean Energy



### TAIYO YUDEN Solutions 02

#### Regenerative electric assist system



#### Contributing to labor savings and improved productivity at plants

soliot™ is a data management engine that utilizes TAIYO YUDEN's proven short-range wireless communication technologies to gather a variety of data from small sensor tags via small-scale gateways, then visualizes this data in an optimal manner. The locations of the sensor tags can be calculated by analyzing the strength of the radio waves received by the gateways, and be used for visualization purposes. This location detection system can be used to improve the efficiency of various worksites, such as by increasing the efficiency of triage processes in hospitals, and by boosting productivity at plants through the management of person and object location information.

**Target SDGs**

- Goal 8 Decent Work and Economic Growth
- Goal 9 Industry, Innovation and Infrastructure



### TAIYO YUDEN Solutions 04

#### soliot™ IoT engine location detection system

