

Sustainability

## The Approach to SDGs

### Meiden Group Initiatives for Sustainable Development Goals (SDGs)

At the UN Sustainable Development Summit in 2015, the world adopted common goals known as the Sustainable Development Goals (SDGs)\*. The SDGs are challenges the international community is addressing over the 15 years from 2016 to 2030.

The targets of the SDGs are very compatible with the President’s CSR Policy Statement and business activities of the Meiden Group. They include many areas where we can contribute to a solution with technologies and expertise we have cultivated over the years. Thus, to really learn and take advantage of the opportunities and challenges presented by the SDGs, we laid out the effects that our business activities have on the environment and society. This process considered the entire value chain and issues specific to the countries where we do business. It even included any negative impacts of our business activities.

The Meiden Group will continue to pursue manufacturing excellence that benefits society, create value, and help solve social issues that include those addressed by the SDGs.

Sustainable Development Goals (SDGs): Seventeen goals incorporated into the 2030 Agenda for Sustainable Development adopted by world leaders at the United Nations Sustainable Development Summit in September 2015. Based on these new goals—universally applied to all nations—each nation will end all forms of poverty, combat inequality, and take steps to address climate change while ensuring that no one is left behind over the next 15 years.

### Status of SDG initiatives

| <b>Understanding of SDGs<br/>FY2018</b>  | <b>Identifying Priority Issues<br/>FY2019</b>  |
|--|--|
| <ul style="list-style-type: none"> <li>· Organize impact areas in countries where we conduct business and business activities</li> <li>· Arrange related initiatives in accordance with each SDG</li> <li>· Conduct training for management</li> </ul> | <ul style="list-style-type: none"> <li>· Consideration of the connections between business activities and SDGs; establishing areas that contribute to the solution of social issues through our business strategies</li> </ul> |

## Conducting SDGs Training for Management

In FY2018, we invited outside instructors to give seminars about SDGs (Sustainable Development Goals) for management. At the seminars, we received instruction on topics such as “Why are SDGs attracting attention?” “The need for companies to work toward SDGs,” and “Challenges the Meiden Group is facing to achieve SDGs.” These seminars provided an opportunity to share ideas linking SDGs and management through active question and answer sessions.










## The Meiden Group’s Approach to SDGs




As a heavy electric equipment manufacturer supporting the future of social infrastructure, the evolution of industry, and achieving sustainable growth and development, the Meiden Group contributes to the Seventeen goals of the SDGs through all business activities. Furthermore, in order to continue contributing to the SDGs in the future, it is necessary to seriously address the expectations of society and accurately grasp key social issues as important issues for the company. To do this, we have established areas that contribute to solving social issues through business strategies.

The Meiden Group will continue to actively challenge itself to create new technologies and new value, in order to contribute to the realization of a vibrant and comfortable future society.



| Goals   | Relevance | Major Business Activities Contributing to Solution   |
|---|-----------|--|
|    | ★         | <ul style="list-style-type: none"> <li>Transformer business and railway system business in Southeast Asia (Thailand, Indonesia, etc.): Through these businesses, we contribute to the development of the rail and transformer industries, increase access to railroads for the impoverished, and help build resilience</li> </ul>  |
|    | ★★★       | <ul style="list-style-type: none"> <li>Workplace safety and health: We actively work to prevent workplace accidents and harm to health, for example by offering hands-on safety experience training (to increase sensitivity to hazards) using VR technology within and beyond the Group</li> <li>We promote management of chemical substances, including at suppliers</li> <li>Automobile testing equipment: We contribute to the spread of next-generation automobiles such as electrified vehicles for the global environment, safety measures, and ensuring freedom of movement for all people</li> <li>Electric power/energy: We contribute to electric power supply stability with, for example, cogeneration systems for medical facilities</li> <li>Water treatment systems: We provide clean water with our water treatment plants and contribute to water pollution prevention with our sewage treatment plants</li> </ul> |
|  | ★★        | <ul style="list-style-type: none"> <li>We create positive working environments through consideration of human rights and labor (including fair and equitable employment and respect for diversity) and workforce training</li> <li>By donating school facilities (Thailand) and endowing courses (Thailand and India), we help create educational opportunities for young people</li> <li>We hold “manufacturing workshops” and science teaching sessions and support education with internships for university and technical college students</li> </ul>  |
|  | ★★★       | <ul style="list-style-type: none"> <li>We create positive working environments by considering human rights and labor (including practicing fair employment, honoring diversity, and giving training on human rights and diversity)</li> <li>We promote consideration for human rights and labor at suppliers by practicing CSR procurement</li> </ul>  |
|  | ★★★       | <ul style="list-style-type: none"> <li>We contribute to safe water supplies by providing one-stop service for water supply and wastewater infrastructure, from equipment manufacturing to maintenance, inspection, maintenance management, and operation management. Specific examples include the substation equipment and monitoring and control systems essential to water supply and wastewater infrastructure, cloud services to support operation management,</li> </ul>   |

|   |            |   |
|---|------------|---|
|   |            | <p>and flat-sheet ceramic membranes with outstanding filtering performance</p> <ul style="list-style-type: none"> <li>· We help solve the variety of social challenges facing local governments in Japan, such as population declines and aging facilities, by developing public-private partnership projects and one-stop services in the water treatment business</li> </ul>  |
| <p><b>7</b> AFFORDABLE AND CLEAN ENERGY</p>                | <p>★★★</p> | <ul style="list-style-type: none"> <li>· We help ensure the stable supply of electric power by manufacturing, marketing, and providing equipment for emergency and non-emergency power generation, hydroelectric power generation, and power transmission, conversion, and distribution and by providing energy solution services such as smart grids</li> <li>· We help build a carbon-free society by manufacturing, selling, and supplying power generation systems for renewable energy sources like solar power and small-to-medium size hydro power</li> <li>· We contribute to the electrification of automobiles by manufacturing and selling motors and inverters for electric forklifts, PHEVs, and EVs</li> <li>· We achieve energy conservation by providing energy-recovering water treatment using anammox and community-based water treatment systems (developing new aeration air flow rate control)</li> </ul>   |
| <p><b>8</b> DECENT WORK AND ECONOMIC GROWTH</p>          | <p>★★★</p> | <ul style="list-style-type: none"> <li>· We practice work style reform and make work more efficient by implementing RPA*1</li> <li>· We give locally-hired staff in Southeast Asia training in specialized technologies like design, construction, and maintenance (including quality control and safety management) to improve comprehensive engineering and support infrastructures around the world with high-quality engineering services</li> </ul>  |
| <p><b>9</b> INDUSTRY, INNOVATION AND INFRASTRUCTURE</p>  | <p>★★★</p> | <ul style="list-style-type: none"> <li>· We contribute to a stable supply of electric power by developing, marketing, and providing energy solution services such as smart grids</li> <li>· With the online smart diagnostic service using IoT, we can provide appropriate maintenance of social infrastructures and the prevention of serious failures such as power outages</li> <li>· We help achieve leading-edge technology and contribute to the development of a prosperous society through technological innovation in semiconductor and FPD manufacturing equipment components (vacuum capacitors, industrial controllers, pulse power supplies, etc.)</li> <li>· We contribute to comfortable water treatment and stabilization of industrial infrastructure with drainage solutions using methods such as water treatment systems and flat-sheet ceramic membranes</li> <li>· We contribute to technological innovation in the automobile industry with our industry-academic-government partnerships, by</li> </ul> |

|   |            |  |
|---|------------|--|
|   |            | <p>developing and selling test devices for automobile research institutes, universities, and manufacturers of automobiles and auto components</p> <ul style="list-style-type: none"> <li>· We help increase industrial productivity and reduce labor burdens in all industries, including manufacturing, through labor-saving, space-saving, and efficiency improvements in factory transport using automated guided vehicles (AGV).</li> <li>· We contribute to technological innovation in the semiconductor, film, and other industries, by establishing room-temperature deposition technology through OER technology*2 using pure ozone</li> </ul>  |
|    | <p>★★★</p> | <ul style="list-style-type: none"> <li>· We employ fair employment practices and respect diversity</li> <li>· Aiming to realize respect for human rights, the Meiden Group undertakes human rights awareness initiatives throughout the organization</li> <li>· We appoint local staff to management positions at overseas affiliates</li> <li>· We communicate the principles of CSR (including human rights and labor) and the Meiden Group's CSR approach to our business partners and conduct supplier evaluations</li> </ul>  |
|  | <p>★★★</p> | <ul style="list-style-type: none"> <li>· We promote urban development and help to alleviate traffic congestion through railroad projects such as KVMRT*3 in Malaysia and MRT*4 in Singapore</li> <li>· We contribute to the construction of transportation infrastructure using overhead contact line inspection equipment and transformer equipment for electric railways</li> <li>· We prevent equipment breakdown by diagnosing the early signs of irregularities in large motors, generators, transformers, and switchgears and make optimal equipment upgrades</li> <li>· Our elevator hoisting machines and inverters for higher-rise cities and barrier-free support (home elevators), and elevator rope testers reduce inspection time and improve efficiency</li> <li>· We help make communities resilient to disaster with mobile power supply cars, building power generators, and other emergency power generation equipment</li> <li>· We provide sustainable, inexpensive, and good services for waterworks through public-private partnerships</li> </ul> |
|  | <p>★★★</p> | <ul style="list-style-type: none"> <li>· We promote eco-friendly design by making products smaller and more efficient, controlling chemical content, practicing life cycle assessment (LCA), etc.</li> <li>· Through CSR procurement, we promote the management of chemical substances, consideration for reducing environmental impact, and response to conflict minerals issues at suppliers</li> <li>· By implementing a range of initiatives to improve product and service quality, we improve our development and design quality,</li> </ul>   |

|   |     |   |
|---|-----|---|
|   |     | <p>preventing defects, rework prevention, quality control technology training, and more</p> <ul style="list-style-type: none"> <li>· We provide 24-hour support of customer equipment operation (troubleshooting, responding to inquiries, remote monitoring service)</li> <li>· We develop our workforce to support the provision of high-quality products</li> </ul>  |
|    | ★★★ | <ul style="list-style-type: none"> <li>· We help to build a carbon-free society through our renewable energy-related business</li> <li>· We provide eco-friendly products and B39:G49</li> <li>· We installed a solar power generation system at one of our major manufacturing sites (Numazu Works)</li> <li>· Through CSR procurement, we promote the reduction of GHG emissions at our suppliers</li> <li>· We help build disaster prevention platforms for local governments and support disaster prevention through our urban flooding monitoring service (flash flood countermeasures using manhole antennas)</li> <li>· We promote the spread of renewable energy through the wind power business of M WINDS Co., Ltd. (power generation, power sales, and maintenance)</li> </ul> |
|  | ★★  | <ul style="list-style-type: none"> <li>· We help prevent marine pollution with ceramic flat-sheet membranes for advanced wastewater treatment</li> <li>· Water treatment systems: We provide clean water with our water treatment plants and prevent water pollution with our wastewater treatment plants</li> <li>· We conduct aquatic organism impact studies in rivers where sewage treatment water is discharged</li> </ul>   |
|  | ★   | <ul style="list-style-type: none"> <li>· We make effective use of the sludge generated at water treatment plants</li> <li>· We reduce the use of printing paper and ink by implementing managed print services (e.g., increasing the number of multifunction printers)</li> </ul>   |
|  | ★★  | <ul style="list-style-type: none"> <li>· Through consideration for human rights and labor (prohibiting child labor, prohibiting practices such as corruption and bribery, and providing compliance training), we create a comfortable, positive workplace</li> <li>· We communicate the principles of CSR (including prohibitions on child labor, corruption, bribery, and other acts) and the Meiden Group's CSR approach to our business partners and conduct supplier evaluations</li> </ul>   |
|   | ★★  | <ul style="list-style-type: none"> <li>· We support the infrastructure development of developing nations by delivering equipment through Official Development Assistance (ODA)</li> </ul>   |

17 PARTNERSHIPS  
FOR THE GOALS



- We promote partnerships with local businesses in Southeast Asia (transformer business, switchgear business, etc.)
- We expand public-private projects by building partnerships with other industry sectors in the water treatment field
- We provide sustained water supply service that is both good and inexpensive through public-private partnerships
- We contributed to the realization a safe and secure water supply through comprehensive operations in waterworks by establishing the Gunma Tobu Suido Kigyodan (an amalgamation of several local water services in Eastern Gunma Prefecture)

\*1 RPA (robotic process automation): The use of robots to make work more efficient.

Programming robots to do white color work and other tasks that humans have always done helps to automate typical, repetitive tasks. By teaching robots a set of rules, it is possible for them to do work that includes decision-making based on certain standards. Software robots are being used to automate typical PC operation without changing existing systems.

\*2 OER technology: A proprietary Meiden technology that produces hydroxyl (OH) radicals at room temperature by causing a reaction between high purity ozone and ethylene gas.

\*3 KVMRT (Klang Valley Mass Rapid Transit): This urban transit system travels east to west for 51 km across the capital, Kuala Lumpur.

\*4 Singapore MRT (Mass Rapid Transit) : Singapore's Mass Rapid Transport System