




Practice of Strategy and Performance | Group Vision 2030: Goals and Results in the Three Focal Fields

Focal field and goal	Main actions	Social outcomes (results)	Targets for 2030	Key performance indicators (KPIs)	Specific measures	Achievements in fiscal 2023
<p><b>A safe and secure remotely connected society</b></p> <p><b>New value creation using remote technology</b></p> <p>Create a society that is rich, safe, and secure for all with remote technology</p> 	<ul style="list-style-type: none"> <li><b>Healthcare</b> <ul style="list-style-type: none"> <li>Realization and dissemination of minimally invasive and advanced robotic endoscopic surgery using <b>robotic-assisted surgery system</b></li> <li>Practical application of telesurgery using <b>robotic-assisted surgery system</b></li> <li>Social implementation of nursing care robots</li> </ul> </li> <li><b>Business in automated, autonomous, and remote technology support for manufacturing and service industries</b></li> </ul>	<ul style="list-style-type: none"> <li><b>Improve patient quality of life through</b> minimally invasive and advanced <b>robotic-assisted surgery</b></li> <li><b>Eliminate regional disparities</b> in healthcare through <b>telesurgery</b></li> <li>Reduce the burden on healthcare and nursing care workers</li> <li>Improve productivity and alleviate labor shortages</li> </ul>	<ul style="list-style-type: none"> <li><b>Robotic-assisted surgery system</b> made widely available <b>globally</b> and being used in many surgeries</li> <li><b>Practical application of telesurgery</b> using <b>robotic-assisted surgery system</b></li> <li>Eliminate 5% of <b>Japan's approximately 2,000,000 shortage in healthcare and welfare workers</b> (market estimated at over ¥1 trillion)</li> <li>Eliminate 5% of <b>Japan's approximately 4,000,000 shortage in manufacturing and service industry workers</b> (market estimated at over ¥2 trillion)</li> </ul>	<ul style="list-style-type: none"> <li>(a) <b>Annual number/cumulative total of cases using surgical robot system</b></li> <li>(b) <b>Steady achievement of telesurgery development milestones</b></li> <li>(c) <b>Remote platform active users</b></li> </ul>	<ul style="list-style-type: none"> <li>Realization of easy-to-use <b>robotic-assisted surgery system through improved operability and functions</b></li> <li>Obtaining <b>regulatory approvals in respective regions toward global expansion</b></li> <li><b>Implementation of telesurgery demonstration tests</b> using <b>robotic-assisted surgery system</b></li> <li>Adoption of nursing care robots in hospitals</li> <li>Market introduction of personal care products that use remotely connected technologies</li> <li>Development and implementation of robots for warehouses and stores</li> <li>Practical application of humanoid robots</li> <li>On-site work using remotely controlled robots at plants (proof of concept demonstration begun in fiscal 2021)</li> </ul>	<ul style="list-style-type: none"> <li><b>hinotori™ surgical robot system (Medicaroid Corporation)</b> <ul style="list-style-type: none"> <li>Systems installed: cumulative total of 55 facilities</li> <li>Number of operations conducted: over 2,900 annually / cumulative total of over 4,200</li> <li>Obtained regulatory approval in Singapore</li> <li>Implemented telesurgery demonstration test with Singapore at a distance of approximately 5,000 km</li> </ul> </li> <li>Launched the <b>RemolinkBuilder, a service to enable remote system development</b> and the <b>Remolink™, a service to connect businesses and workers using remote robots</b></li> <li>Implemented demonstration test of <b>support service business for nursing care work to support sites of nursing care</b> utilizing nursing care devices and robots</li> <li>Introduced <b>indoor positioning service</b> in commercial and other facilities</li> </ul>
<p><b>Near-future mobility</b></p> <p><b>Transforming the movement of people and freight</b></p> <p>Create a society where people and freight move safely, quickly, and efficiently using new forms of mobility</p> 	<ul style="list-style-type: none"> <li><b>Offer new equipment and systems</b>, such as delivery robots and unmanned transport helicopters</li> <li><b>Offer automated, autonomous, and remote solutions</b> for the logistics industry</li> <li>Reduce environmental burden and utilize advanced safety technology in transportation equipment</li> </ul>	<ul style="list-style-type: none"> <li>Handle increasing logistics volumes and <b>alleviate labor shortages</b></li> <li>Provide safe working conditions</li> <li>Realize a society that enables the environmentally friendly and safe movement of people and freight</li> </ul>	<ul style="list-style-type: none"> <li>Eliminate 20% of Japan's approximately 200,000 <b>shortage in logistics workers</b></li> <li><b>Commercialize new mobility</b> <ul style="list-style-type: none"> <li>Delivery robots</li> <li>Unmanned VTOL aircraft (vertical take-off and landing aircraft)</li> <li>Autonomous four-wheelers</li> <li>Supply chain optimization services, etc.</li> </ul> </li> <li>Autonomous marine transport (Marine Collaboration Project)</li> <li><b>Take part in super city projects</b></li> </ul>	<ul style="list-style-type: none"> <li>(a) Number of unmanned VTOL aircraft and total volume transported</li> <li>(b) Number of delivery robot users and total volume transported</li> </ul>	<ul style="list-style-type: none"> <li><b>Logistics chain optimization</b> <ul style="list-style-type: none"> <li><b>Phase 1</b> <ul style="list-style-type: none"> <li>Autonomous transportation and loading equipment (autonomy that extends to the last mile)</li> </ul> </li> <li><b>Phase 2</b> <ul style="list-style-type: none"> <li>Supply chains (create seamless connections: improve efficiency, including for reloading systems)</li> <li>Overseas expansion by 2030</li> </ul> </li> </ul> </li> <li><b>New mobility</b> <ul style="list-style-type: none"> <li>Commercialize delivery robots and autonomous four-wheelers by 2025</li> <li>Full-scale operation of VTOL and integrated transport service business by 2030</li> </ul> </li> <li><b>Realize super cities</b> <ul style="list-style-type: none"> <li>Coordinate with municipalities to take part in super city projects (total optimization of urban transportation, including the movement of people)</li> <li>Build overarching management systems for the movement of people and freight (local MaaS)</li> <li>Organically link these with other Group businesses</li> <li>Build cooperative relationships with logistics companies and software companies</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Commissioned by Ina City, Nagano Prefecture, for its Unmanned VTOL Cargo Transport Platform Development Project (ongoing)</li> <li>Participated in the Shinshu DX Promotion Consortium; currently constructing <b>communications systems in mountainous areas</b> (ongoing)</li> <li>Conducted verification tests and demonstrated the high effectiveness of robot introduction in specimen delivery at Fujita Health University Hospital <b>toward realizing the "Smart Hospital" concept</b> (deployed multiple delivery robots in actual tasks and succeeded in having both human and robots ride together in elevators at the same time)</li> <li><b>Provided the Z-Leg™ one-stop service for air travel arrangements by helicopter</b>, in collaboration with municipalities, travel agencies, railway companies, and others</li> </ul>
<p><b>Energy and environmental solutions</b></p> <p><b>Working toward the stable generation of clean energy</b></p> <p>Quickly achieve a stably powered, carbon-neutral society at low cost</p> 	<ul style="list-style-type: none"> <li><b>Build a hydrogen supply chain</b> High-volume, stable supply of hydrogen</li> <li><b>Expand the use of hydrogen</b> Power generation systems, transportation equipment, etc.</li> <li><b>Electrify products</b> Transportation equipment and systems as well as components for construction machinery</li> <li><b>Alternative fuels</b> Sustainable aviation fuel (SAF), biomass, etc.</li> <li><b>CCUS</b> Capture and use CO<sub>2</sub> in fields that cannot eliminate fossil fuels</li> </ul>	<ul style="list-style-type: none"> <li><b>Reduce the price of hydrogen energy</b></li> <li><b>Help address climate change by reducing CO<sub>2</sub> emissions</b></li> <li><b>Provide clean travel and transportation by land, sea, and air</b></li> </ul>	<p><b>Hydrogen</b></p> <ul style="list-style-type: none"> <li>Hydrogen supply from Kawasaki solutions: 225,000 t/year (when commercialized)</li> <li>CO<sub>2</sub> reduction of 1.6 million tons (theoretical value) through hydrogen energy from Kawasaki solutions</li> </ul> <p><b>Existing products</b></p> <ul style="list-style-type: none"> <li>Manufacture of even more environmentally friendly products</li> <li>Reduction of CO<sub>2</sub> emissions from products</li> </ul>	<p><b>Hydrogen</b></p> <ul style="list-style-type: none"> <li>(a) Hydrogen supplied by Kawasaki solutions</li> <li>(b) CO<sub>2</sub> reductions from Kawasaki's hydrogen energy solutions</li> </ul> <p><b>Existing products</b></p> <ul style="list-style-type: none"> <li>(a) Reduction of CO<sub>2</sub> emissions through product-based contributions</li> <li>(b) Number of registered products and revenue in Kawasaki Ecological Frontiers (formerly Green Products)</li> </ul>	<ul style="list-style-type: none"> <li><b>Form a hydrogen consortium</b></li> <li>Technological development Establish technologies for larger scale, leveraging NEDO subsidized projects and partnerships</li> <li><b>Increase transport volume</b> (Two or more carriers in 2030; 80 or more carriers in 2050)</li> <li>Develop hydrogen-fueled rolling</li> </ul>	<p><b>Hydrogen</b></p> <ul style="list-style-type: none"> <li>Signed a collaboration agreement with Kawasaki City with a view to building a liquefied hydrogen supply chain centered on the Kawasaki Coastal Area. Furthermore, signed an MOU with Resonac Holdings Corporation, a power generation business active in the Kawasaki area, on collaboration for development of the hydrogen power generation business in the Kawasaki area</li> <li>Completed the basic design of a "Hydrogen Platform," a mechanism to "visualize" distribution of hydrogen throughout the supply chain, from production to utilization, through digital management, and thereby facilitate the tracing of hydrogen</li> </ul> <p><b>Existing products</b></p> <ul style="list-style-type: none"> <li>(a) CO<sub>2</sub> reduction contribution by products: 16.30 million t-CO<sub>2</sub></li> <li>(b) Number of registered products and net sales in Kawasaki Ecological Frontiers: 68 products registered with net revenue of ¥242.9 billion</li> </ul>
	<ul style="list-style-type: none"> <li>Reduce environmental burden throughout the value chain</li> </ul>				<ul style="list-style-type: none"> <li>Mass production of hybrid and electric motorcycles and off-road four-wheelers</li> <li>Deliver hybrid and electric marine propulsions</li> </ul>	<ul style="list-style-type: none"> <li>Begin pilot-scale demonstration testing of energy saving CO<sub>2</sub> separation and capture system (Kansai Electric Power Company)</li> </ul>

Refer to pp. 47-50 for more on the promotion of carbon neutrality. For other initiatives, please refer to information regarding sustainability on the Company website.