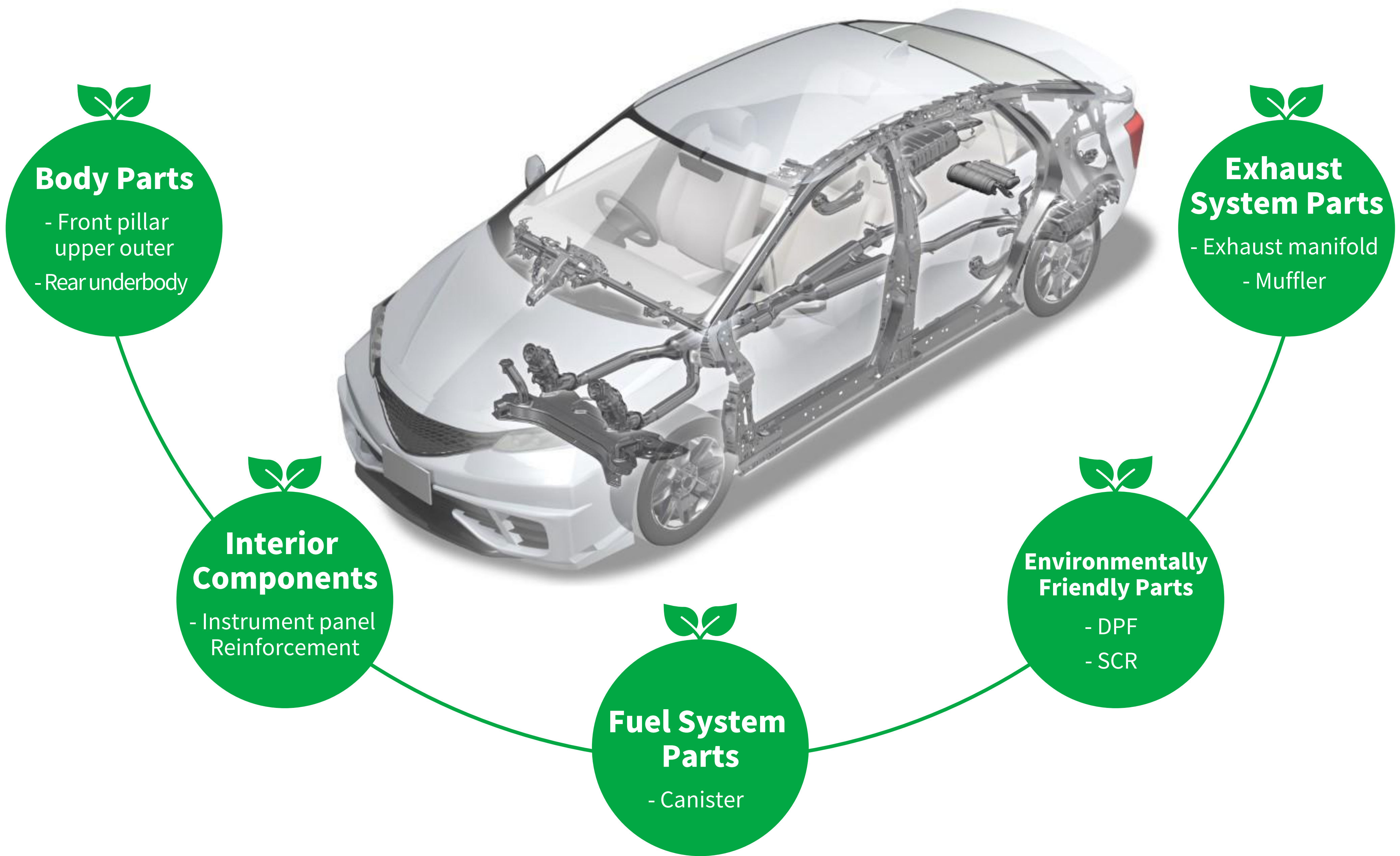


Many Manufacturers Select FUTABA’s Products

Futaba Industrial domestically and globally produces a wide range of products—enough to make up a whole vehicle—and supports manufacturers with its expertise and advanced technology



Why is FUTABA Chosen?

01 Integrated System



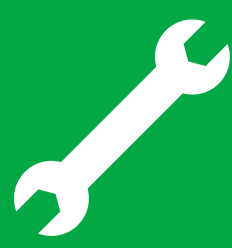
Futaba carries out the entire process—from product planning and design development to production preparation and manufacturing—not only in Japan but also globally

02 Technological Development Capabilities

★★★

Futaba has planning and proposal capabilities from the initial phase, supported by a development and evaluation system

03 Manufacturing Capabilities



Futaba’s competitiveness lies in its forming and joining technologies cultivated since its founding, combined with digital and AI technologies

04 Innovation



Futaba has the ability to keep taking on future challenges through products such as batteries for electric vehicles and the creation of new markets

Trust built through manufacturing over the years

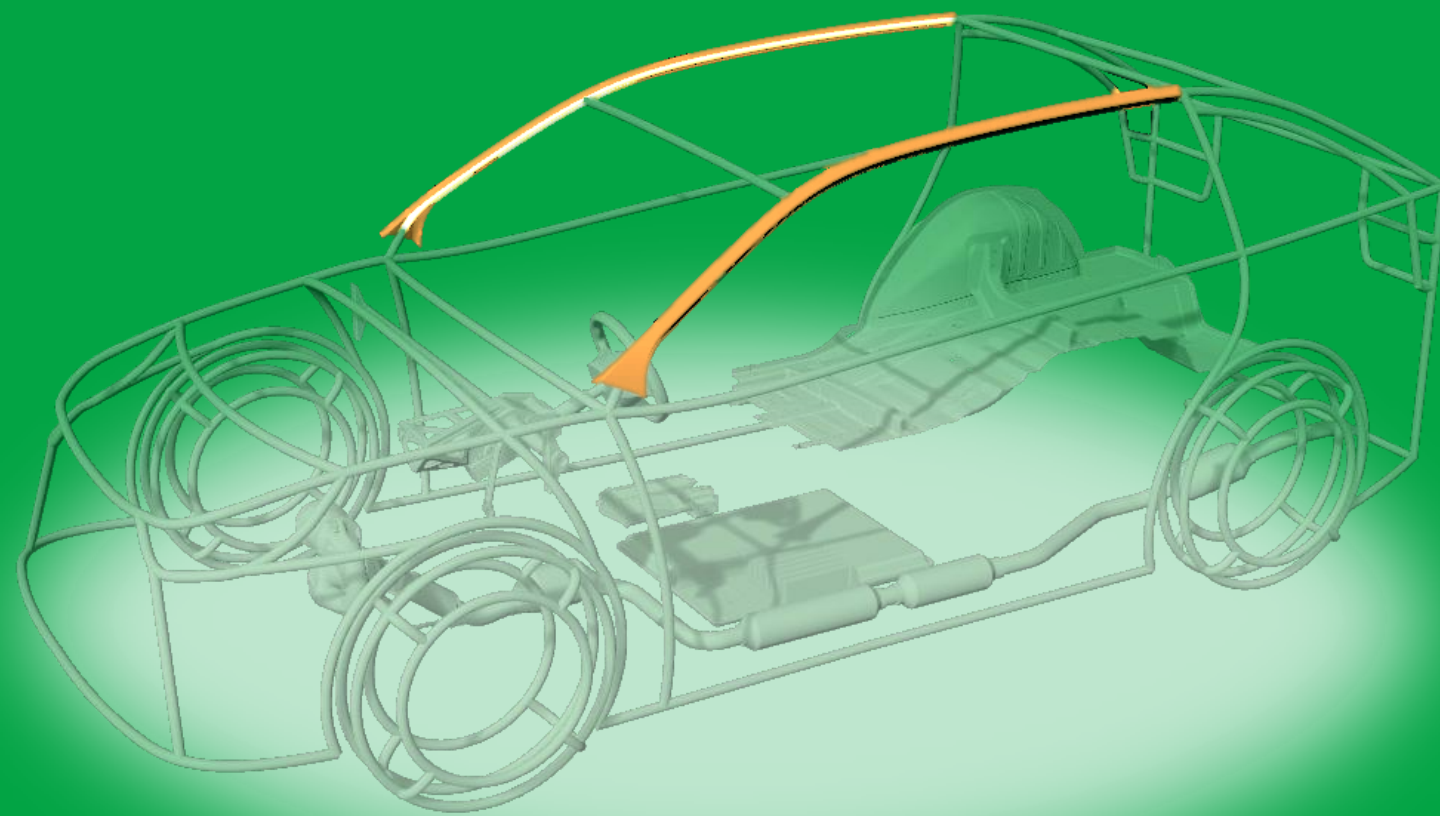
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Ever-Evolving Group of Technology Developers

Futaba Industrial is supporting many manufacturers with the trust built through over 80 years of manufacturing together with various partners, and with technologies and development capabilities that have continued to evolve with the times

Front Pillar Upper Outer

Balancing Visibility and Safety with Ultra High-Tensile Strength Steel

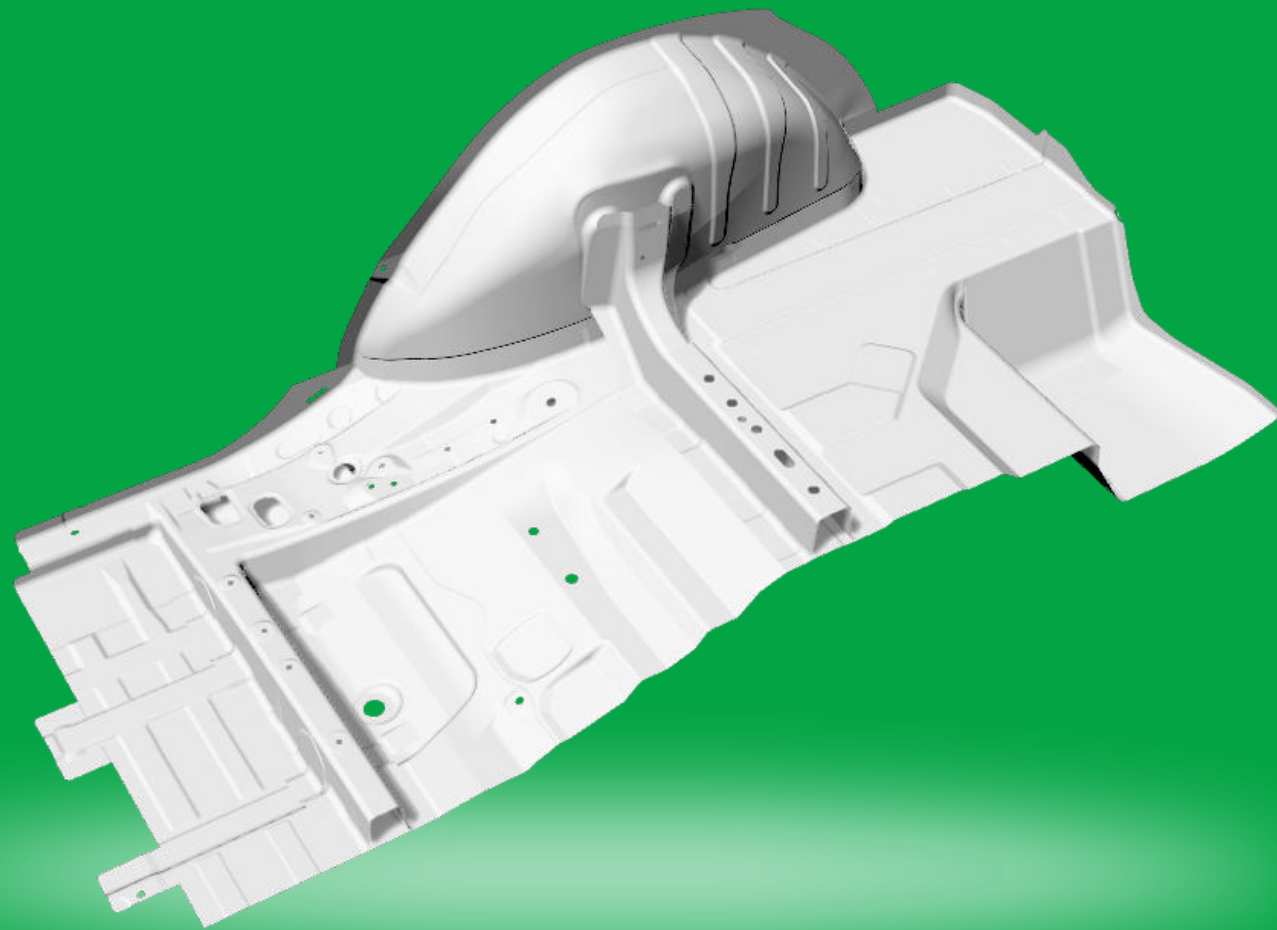


Futaba's front pillar upper outer uses ultra high-tensile strength steel to achieve a slimmer design while maintaining strength.

This reduces blind spots during driving and improves visibility. It enables both safety and comfort.

Rear Underbody

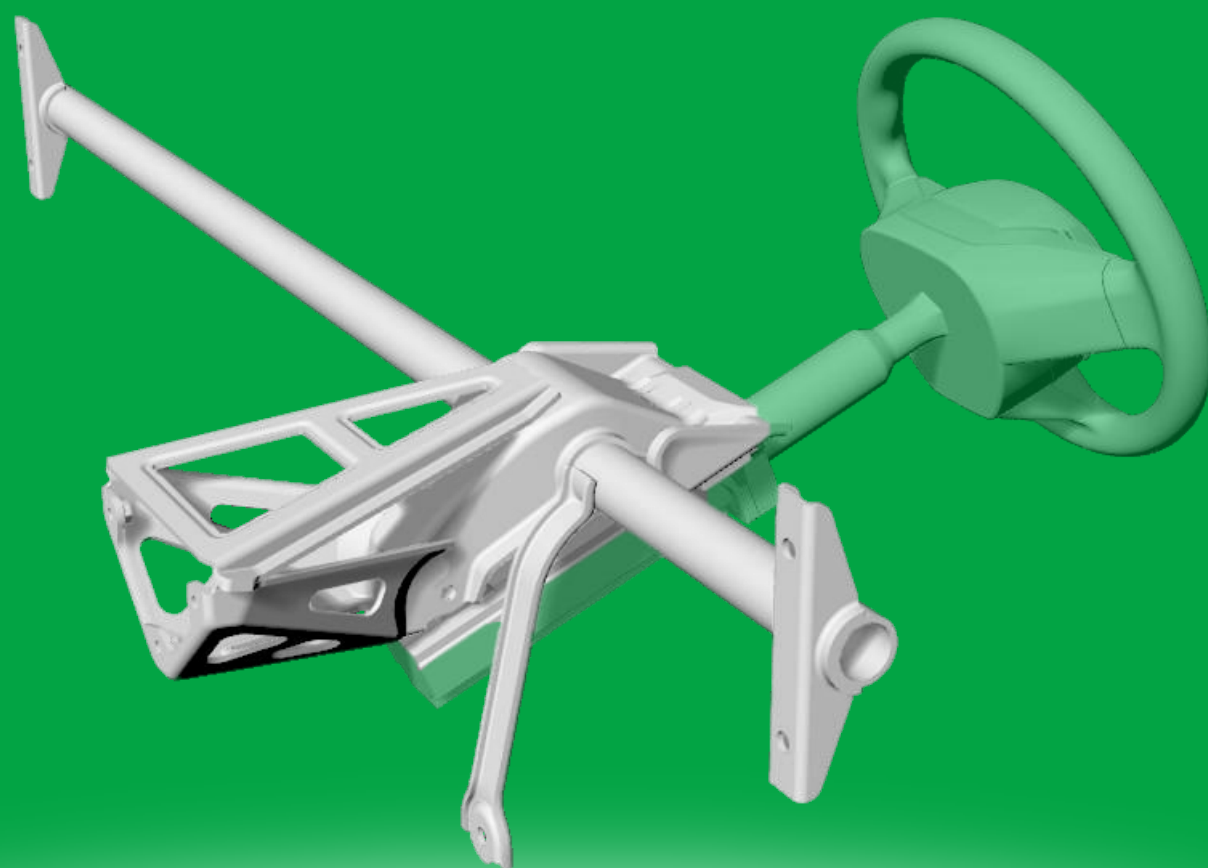
Achieving Strength, Lightweight, and Design Flexibility with an Integrated Structure



A rear underbody, an underfloor structure located at the rear of a vehicle, is a crucial component directly linked to crash safety and driving stability. Futaba utilizes tailored welding technology to integrate multiple components, achieving improved rigidity, reduced weight, and greater design flexibility. It embodies the evolution of structural design that supports the overall performance of a vehicle.

Instrument Panel Reinforcement

Tuning Steering Feel Through Material Engineering



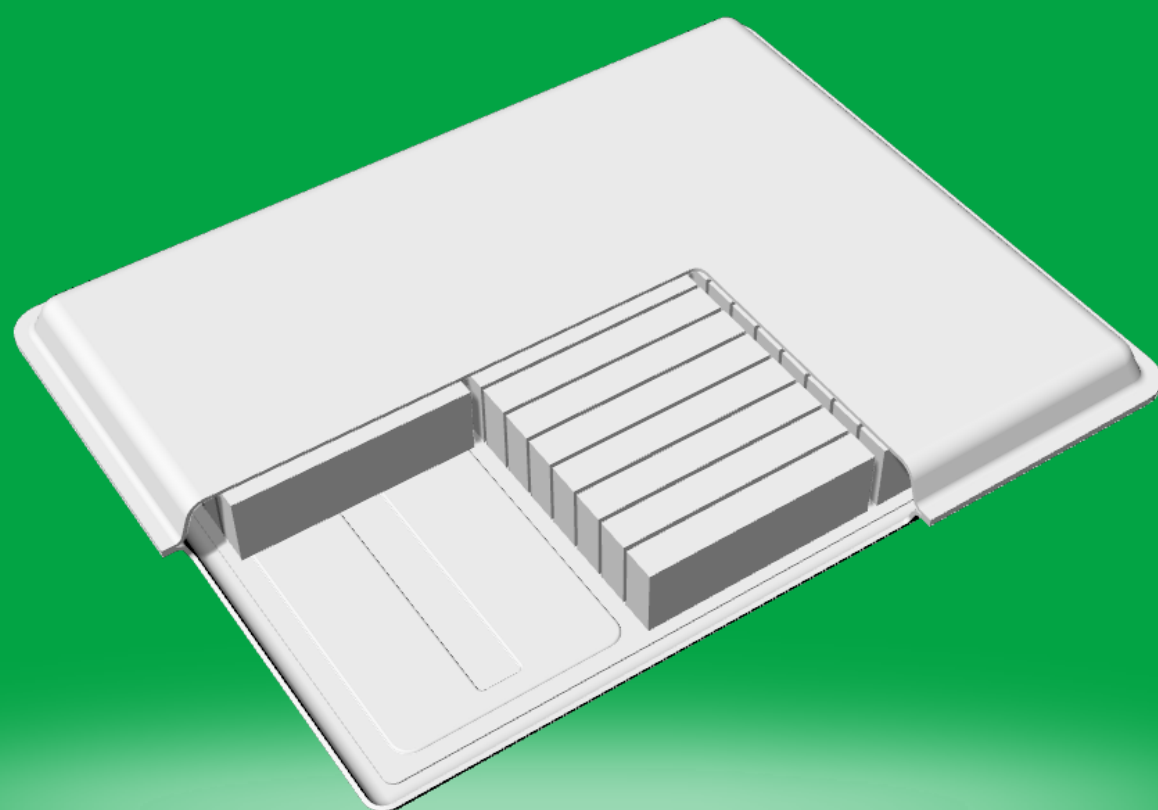
An instrument panel reinforcement is a key structural component that supports steering force transmitted from the steering wheel to the tires.

At Futaba, combining materials such as steel, aluminum, and resin allows for stiffness adjustment tailored to each vehicle type.

It achieves optimized steering feel, weight reduction, and cost efficiency.

Battery Products

Challenge for the Electrification Era: Evolution in Cooling and Structure



Futaba is actively engaged in developing battery components that support the safety and performance of electric vehicles.

The battery cooler employs high-speed laser welding and enhances thermal management performance through flow channel design developed from exhaust system technology.

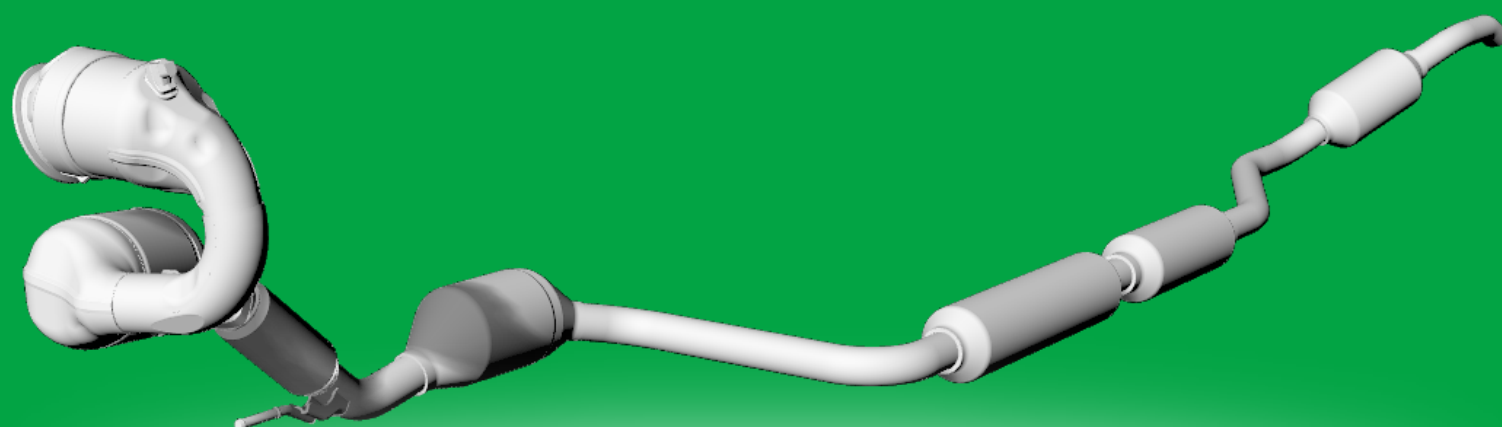
Futaba has also begun working on battery cell cases using its advanced processing technology. This technology achieves both the reliability and mass productivity required in the EV era.

Exhaust System (Modular Muffler)

Exhaust Technology That Achieves Lightweight, High Performance, and Low Cost

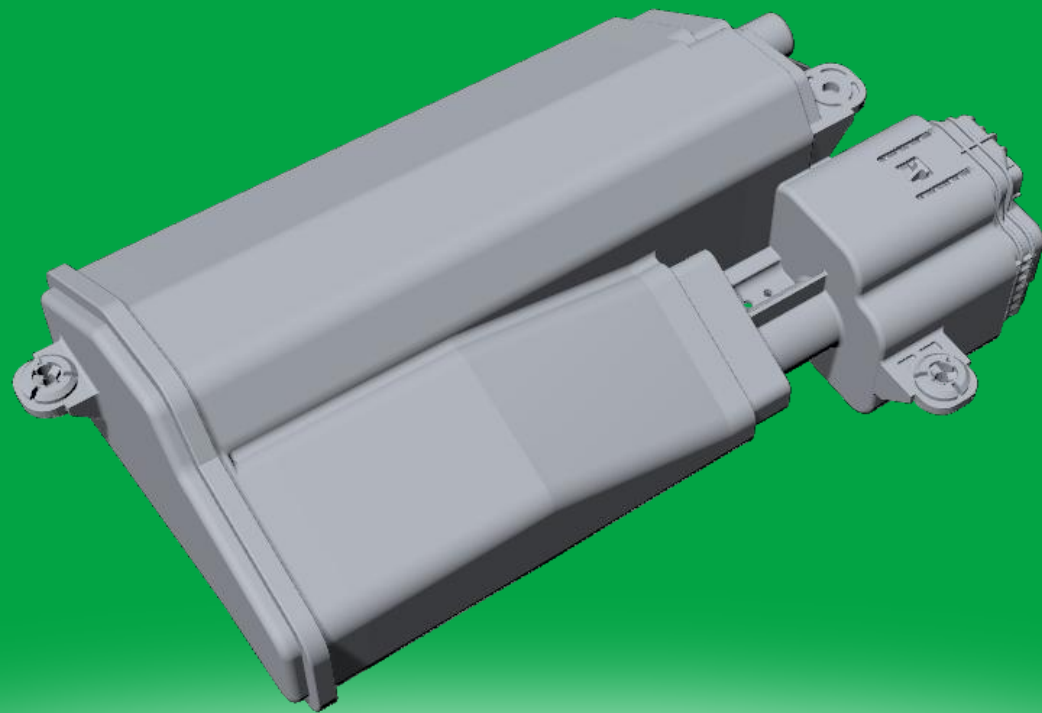
An exhaust system efficiently processes exhaust gases from the engine, suppresses noise, and maintains output performance.

Futaba's modular muffler modularizes the silencer section to increase design flexibility and achieve lightweight, compactness, high performance, and low cost all at once. It is a next-generation exhaust technology that supports both environmental and driving performance.



Canister

Environmentally Friendly Technology That Processes Invisible Emissions



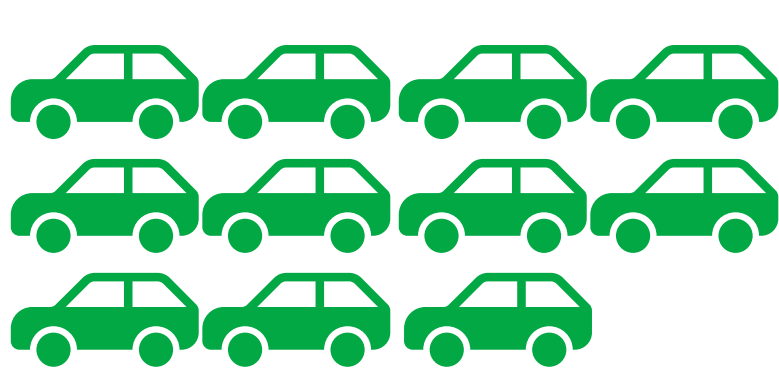
An environmentally friendly component that adsorbs and purifies fuel vapor gas. Futaba leverages its resin design and manufacturing technology to provide high-performance canisters.

Clean Production with Environmental Consideration

Using advanced technology, we achieve clean production that not only creates products but also reduces defects, waste, usage, and CO2 emissions.

Reduce Usage

33,000 t
reduction



×22,000

Equivalent to resources saved for 22,000 vehicles

Reduce Waste

65 %
reduction

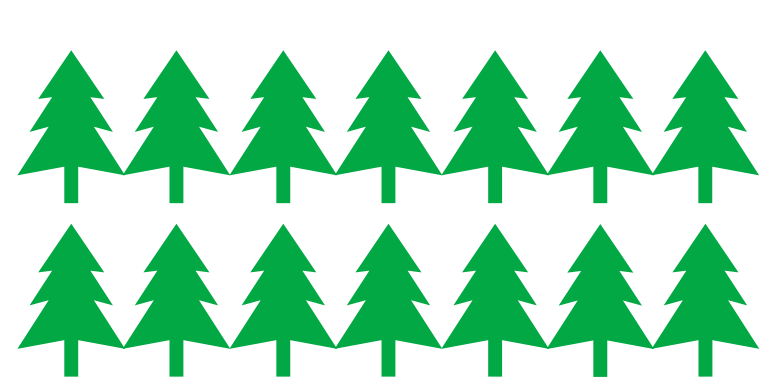
2024	1,800t
2027	600t

65% reduction

Further reduce waste by more than half from the 2024 level

Reduce CO2

5,740 t
reduction



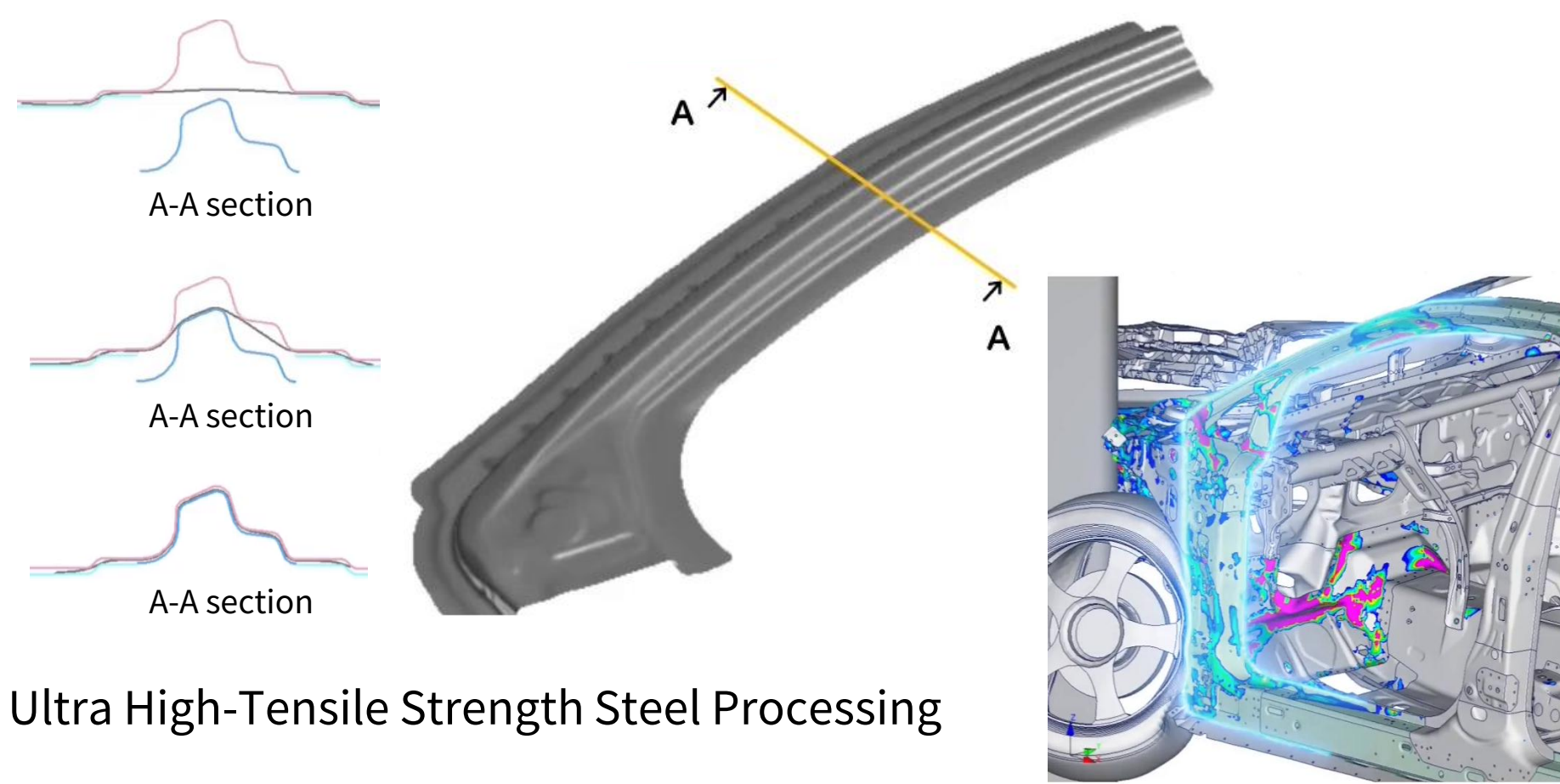
×410,000

Equivalent to the amount of CO2 absorbed annually by 410,000 cedar trees

*All of the above are cumulative targets for 2027

Examples of Technologies that Support Clean Production

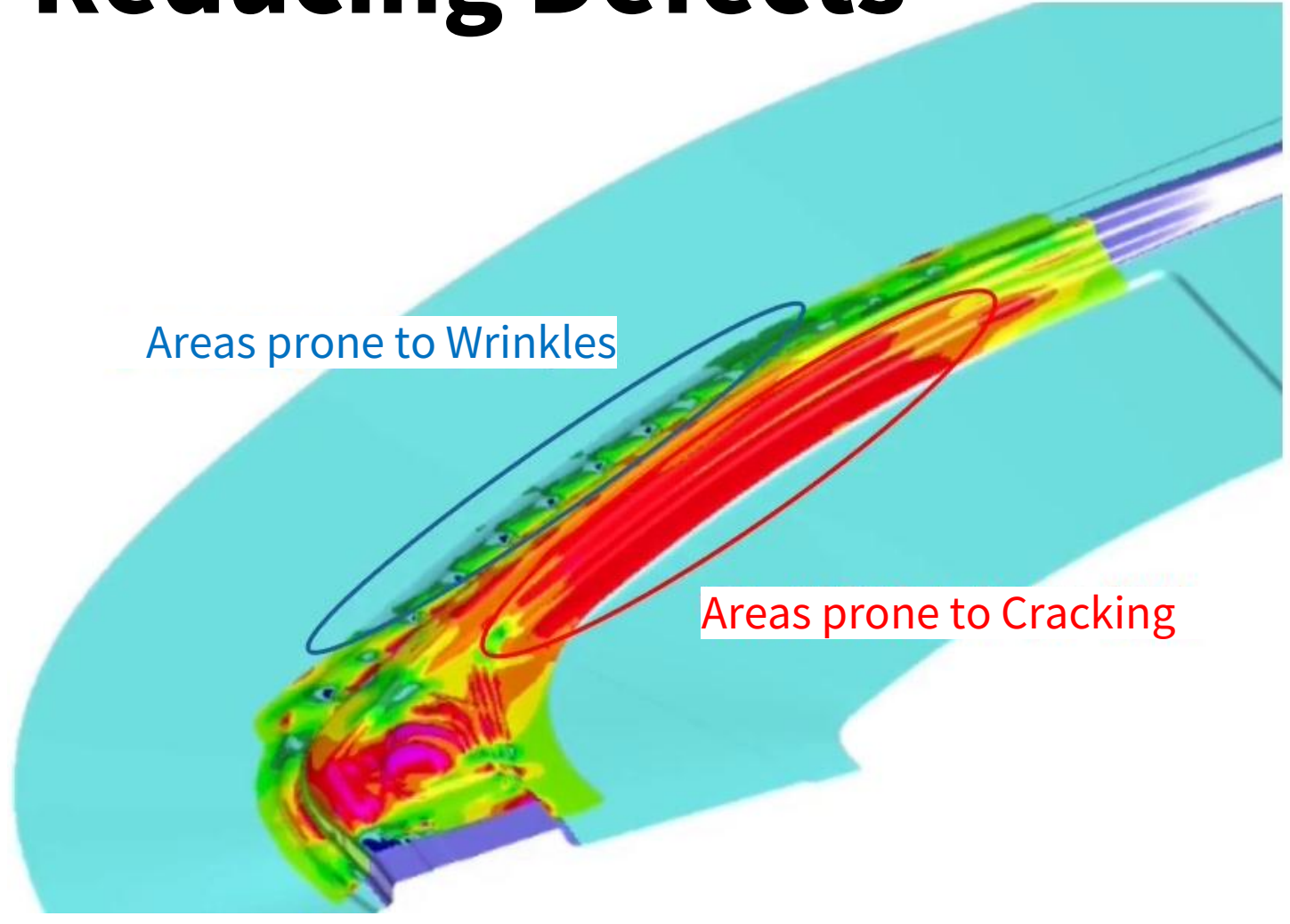
Processing Technology for Reducing Weight



Ultra High-Tensile Strength Steel Processing

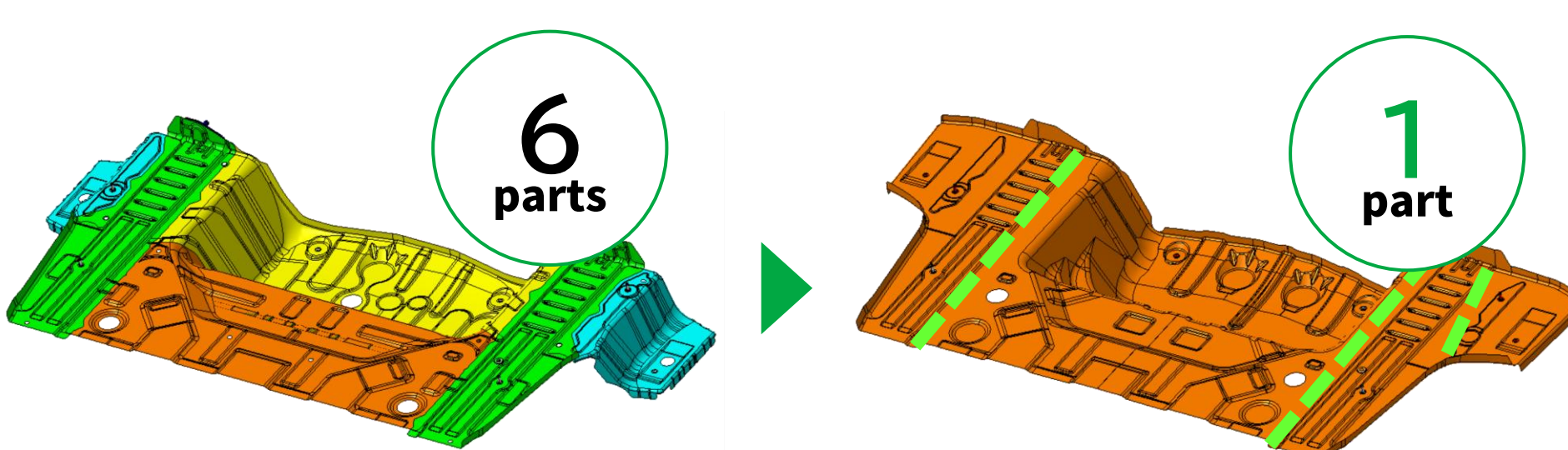
We process hard and thin materials to achieve weight reduction and utilize collision simulation technology to realize optimal structures

Press Forming Analysis for Reducing Defects



Enhancing the level of analyzing difficult-to-form materials and setting optimal processing methods reduces defects such as cracks and wrinkles that tend to occur during press forming

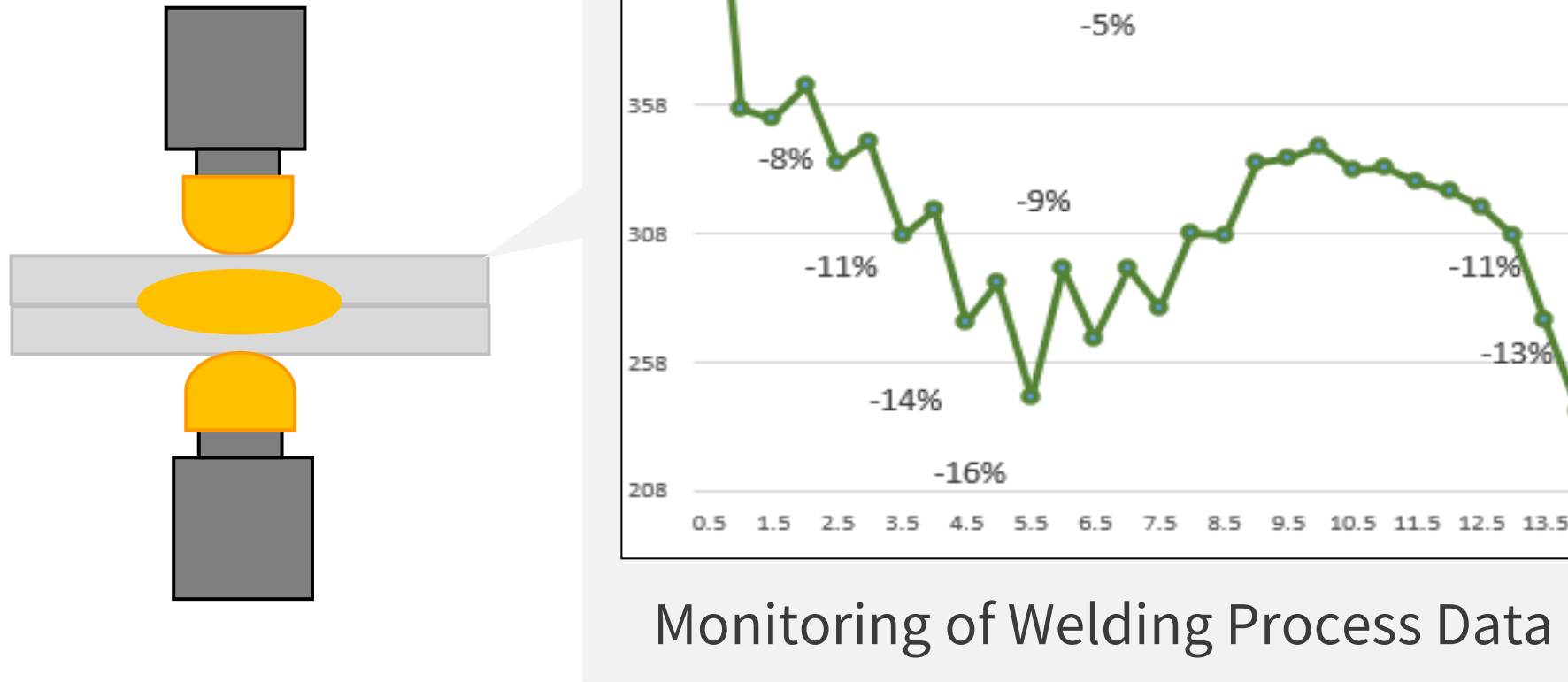
Integration Technology for Reducing Materials



Mass-produced product FUTABA-developed products

Reducing the number of parts to one decreases assembly man-hours while improving collision safety and reducing the overall amount of materials used

Real-Time Monitoring for Reducing Defects

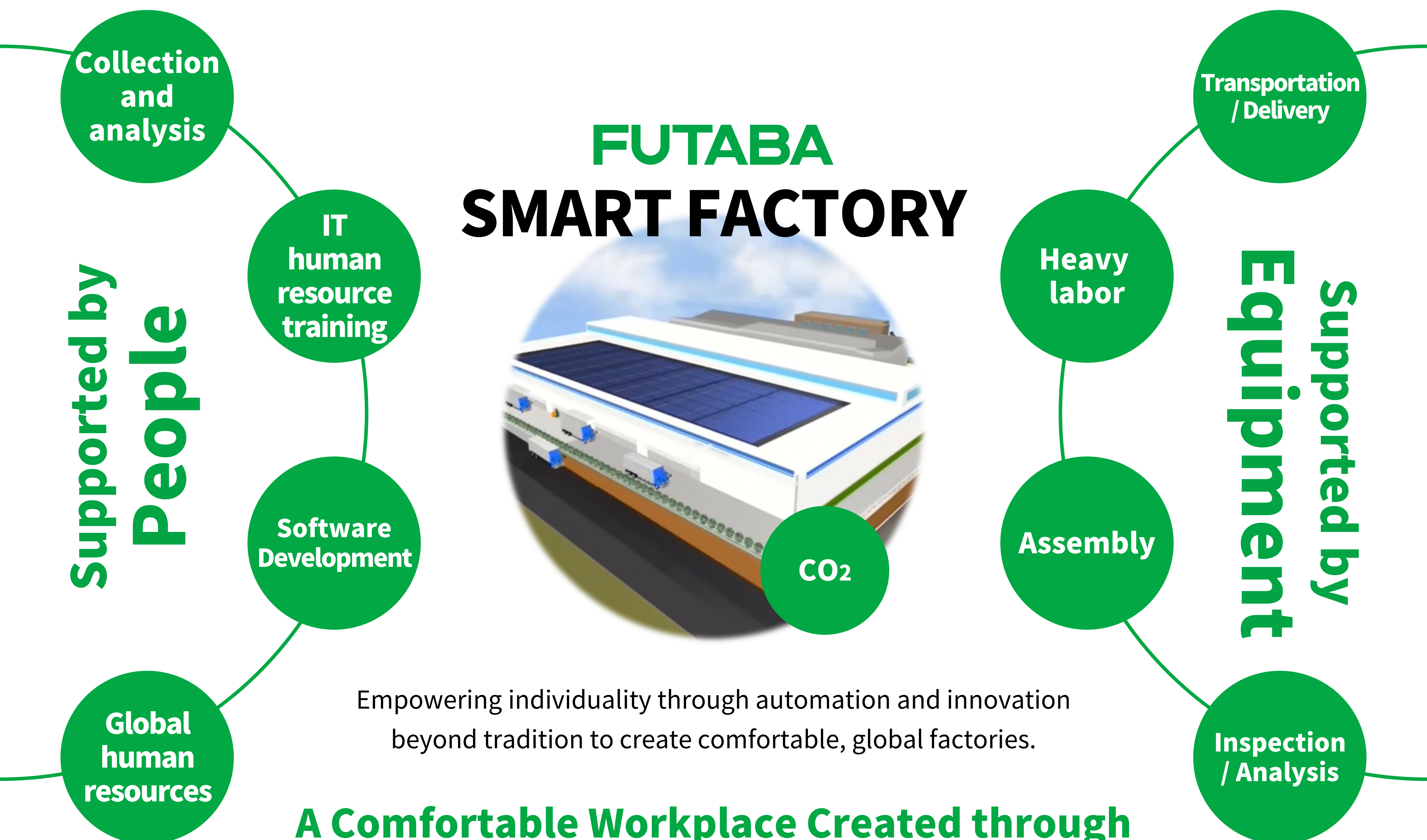


Monitoring of Welding Process Data

Instead of checking after completion, we check and correct welding conditions in real time to create a process that does not generate defects

New Ways of Working for People and Equipment

We aim to create a new work environment that shapes the future by combining AI-powered equipment with skilled talent.

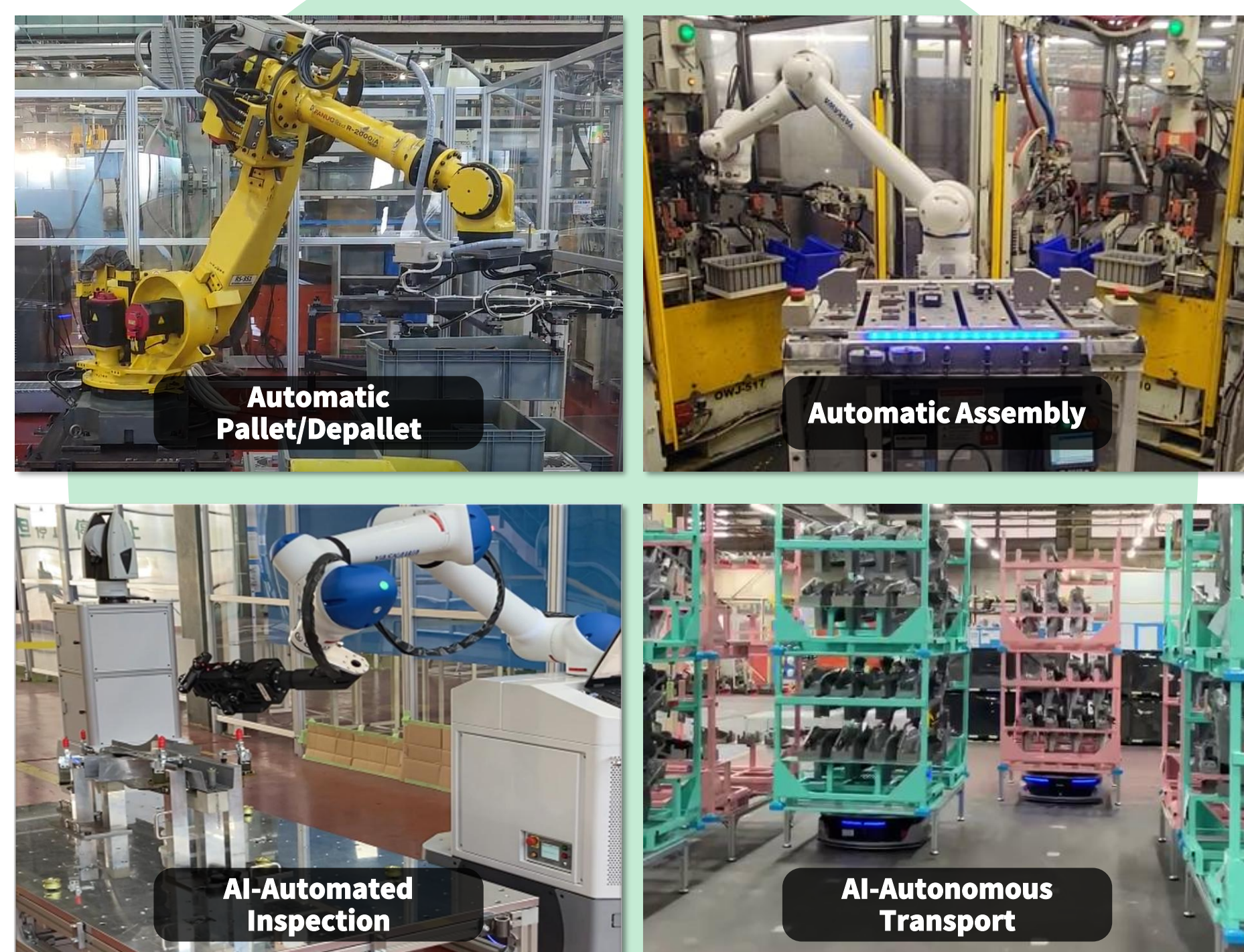


**A Comfortable Workplace Created through
“Every employee plays an active role”**

Supported by People



Supported by Equipment



New Challenges through Digital Utilization

Build a comfortable environment, develop digital employees, and offer opportunities for their success.

Automate Current Tasks with AI Autonomy

Automate tough or sensitive task and let AI make autonomous decisions for efficient production.

Bringing Futaba’s Technology to Everyday “Itadakimasu”

Aiming for a people-friendly future, Futaba is utilizing the technologies it has developed over the years to expand into fields that support Japan’s proud agricultural products and the farmers who cultivate them



CO₂ System



The first agricultural-use product utilizing purification and storage technologies cultivated through exhaust pipe development. It efficiently captures and stores CO₂ from greenhouse heater exhaust gas to promote photosynthesis in crops

*1 “Green infrastructure certification”
Certified by the Ministry of Agriculture, Forestry and Fisheries



Laser Weeding Robot



By applying laser processing and image recognition technologies cultivated through automobile manufacturing, a robot can identify and remove only weeds near and between crops without damaging them

*2 Development and supply plan certified based on the “Act on the Promotion of Smart Agricultural Technology Utilization to Improve Agricultural Productivity”
Certified by the Ministry of Agriculture, Forestry and Fisheries

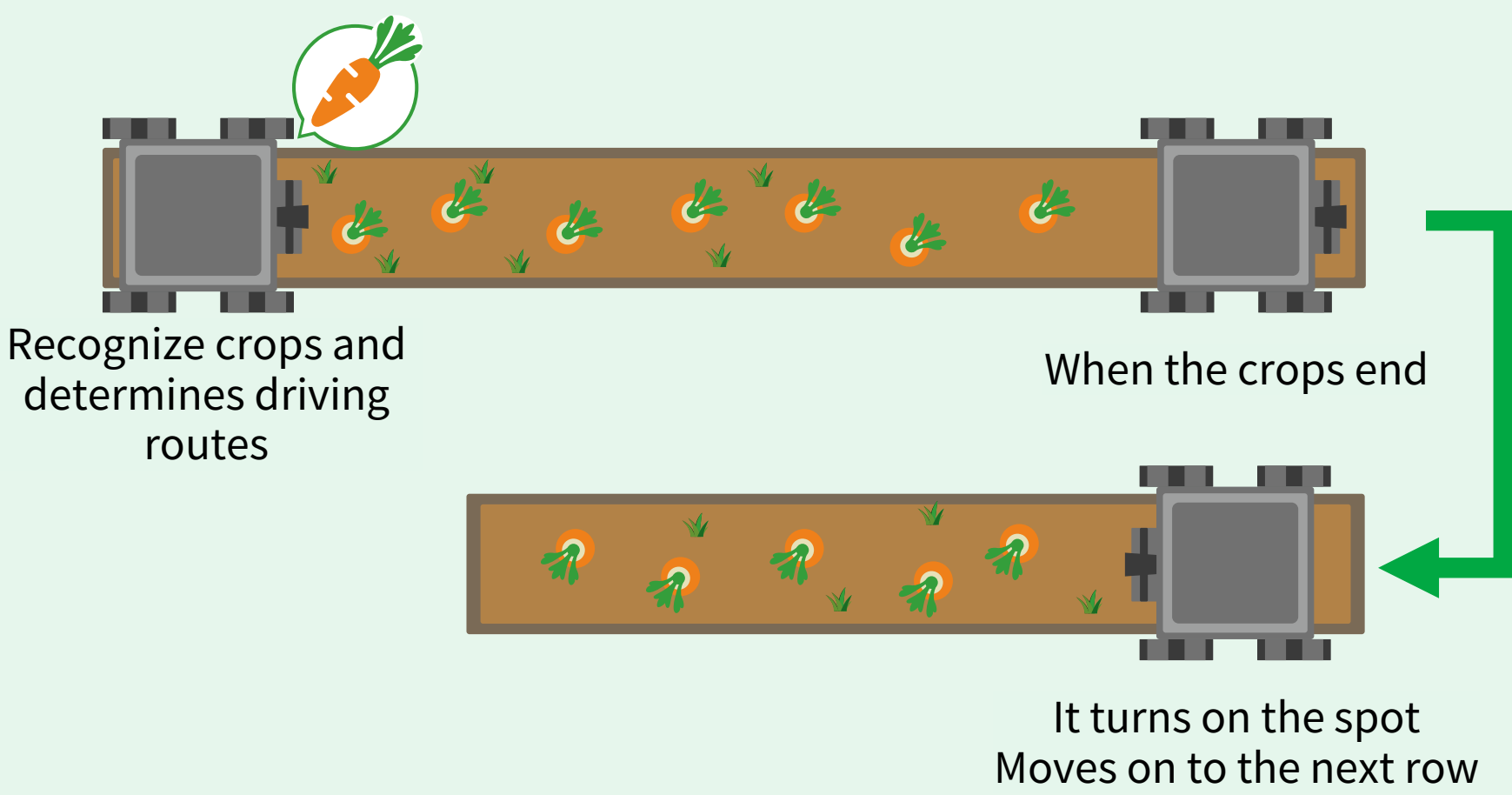
Q Why has Futaba, a manufacturer of automobile parts, developed a laser weeding robot for the agricultural sector?

A Inspired by the development of agricultural robots overseas, Futaba Industrial realized the robot through the passion of its engineers, who pursued what they could do

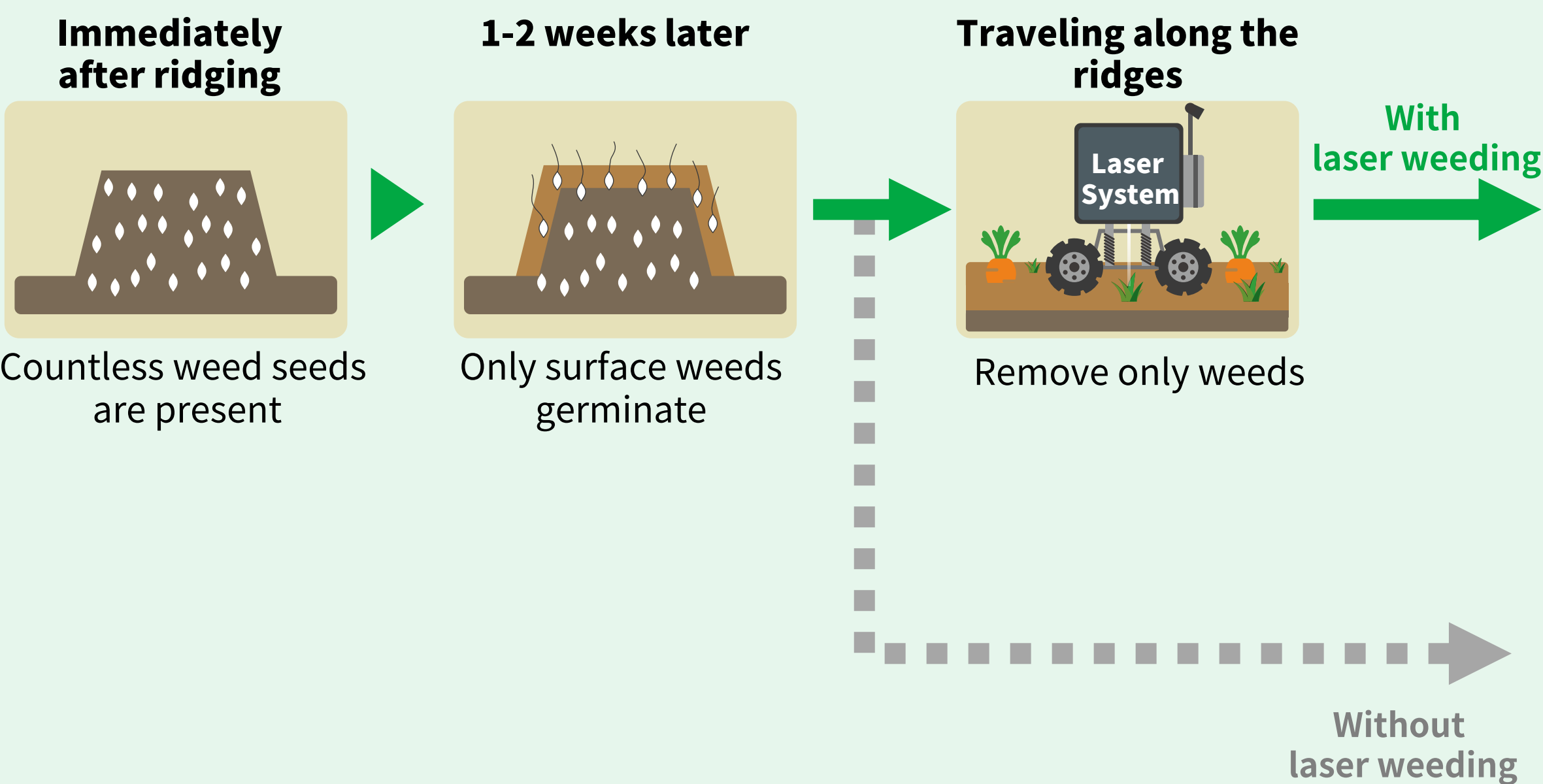


Q How does the laser weeding robot move?

A The robot recognizes crops and determines its driving route. When the crops end, it turns on the spot and moves to the next row autonomously



Effects of “Laser Weeding Robot”



Going forward, it will evolve into a robot that can automatically distinguish between beneficial and harmful insects and eliminate only the harmful ones

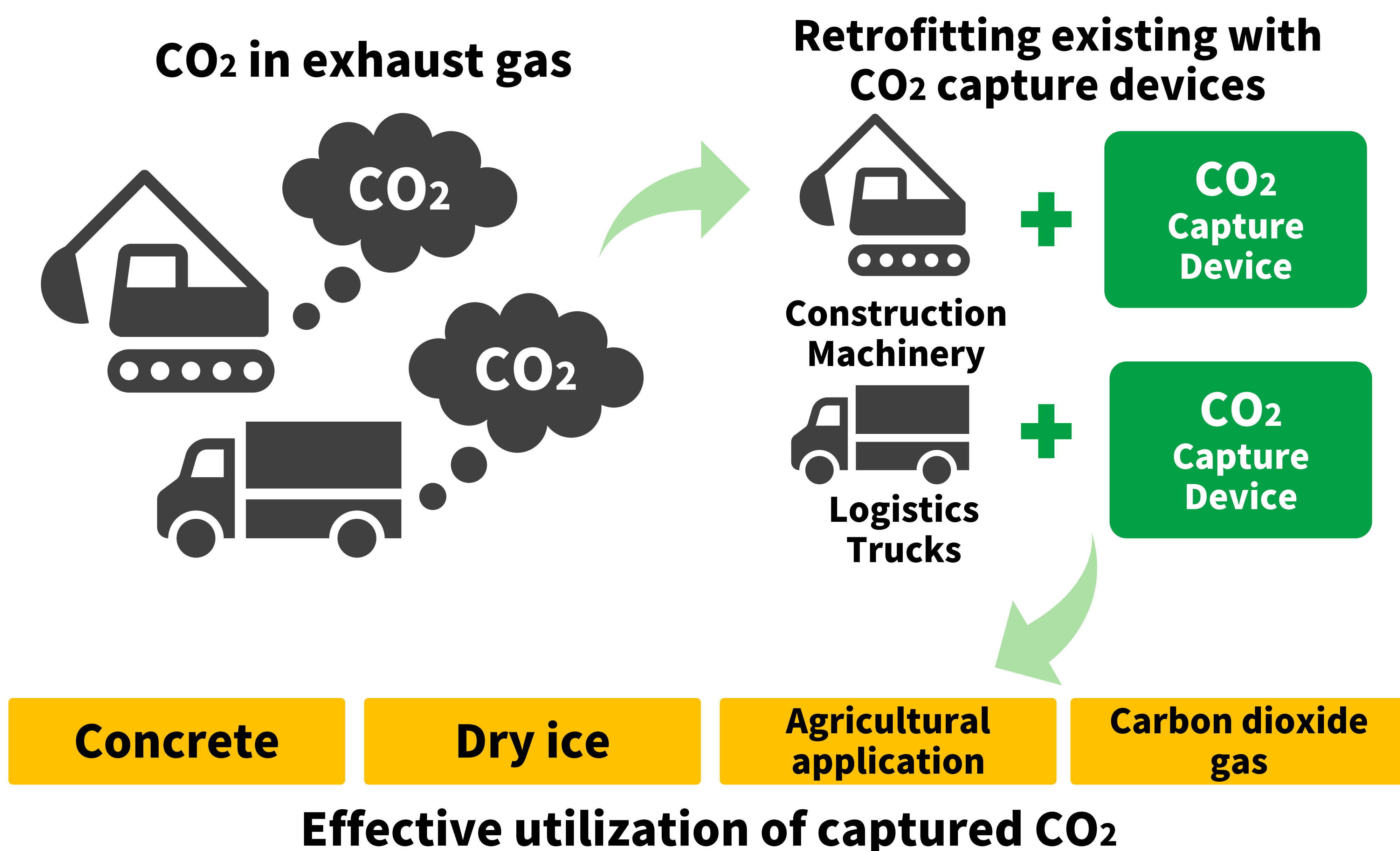
- Surface weeds grow less
- Crops grow better

- Weeds on the ridges increase further
- Weed growth hinders crop development

FUTABA's Vehicle-Mounted CO2 Capture System

Selected for **Tokyo Metropolitan Government Support Projects**

CO2 Capture and Utilization with the “Vehicle-Mounted CO2 Capture System”



**Environmental
Contribution**

**Utilization of
existing resources**

Circular Economy

Futaba's initiative for CO2 capture and utilization using its vehicle-mounted CO2 capture system has been selected for the Tokyo Metropolitan Government's “**Support Project for Early Social Implementation Toward Creation of GX-Related Industries**”

Futaba's “decarbonization solution using a vehicle-mounted system that directly captures CO2 from internal combustion engines” has been selected for the “Support Project for Early Social Implementation toward Creation of GX-Related Industries” promoted by the Tokyo Metropolitan Government.

Press release from
Tokyo Metropolitan Government's
Official Website

