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Kubota

**ON YOUR SIDE**

**Management Policy and Mid-term Business Plan Progress**

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**President and Representative Director**  
**Kubota Corporation**

February 18, 2022



## Achievements in 2021

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- Revenue exceeded 2 trillion yen, a record high.
- Operating profit reached a record high due to increased revenue despite soaring material prices and logistics expenses.

(Unit: billions of yen)	Year ended Dec. 31, 2021	Year ended Dec. 31, 2020	Changes	
			Amount	%
<b>Revenue</b>	2,196.8	1,853.2	+343.5	+18.5
Domestic	602.8	595.2	+7.6	+1.3
Overseas	1,594.0	1,258.0	+335.9	+26.7
<b>Operating profit</b>	11.2% 246.2	9.5% 175.3	+70.9	+40.5
<b>Profit attributable to owners of the parent</b>	8.0% 175.6	6.9% 128.5	+47.1	+36.7

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Revenue reached a record high, exceeding 2 trillion yen for the first time. In Japan, revenue from Farm & Industrial Machinery (Machinery) increased due to a recovery from adverse reaction from the rushed demand before the consumption tax hike in the previous year. Overseas, revenue from Machinery increased significantly because of increased demand in North America due to a boom of move to suburbs, a recovery from COVID-19 pandemic in Europe, and stable weather conditions in Asia outside Japan.

In terms of profit, we were also able to achieve a record high profit due to the effect of increased revenue, despite soaring material prices such as steel and logistics expenses.

## Outlook for 2022

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- Revenue is expected to reach a record high again due to growth in North America.
- Profit is expected to increase slightly despite an increase in revenue. It is because of a lagged positive effect of sales price increase and accelerated R&D activities.

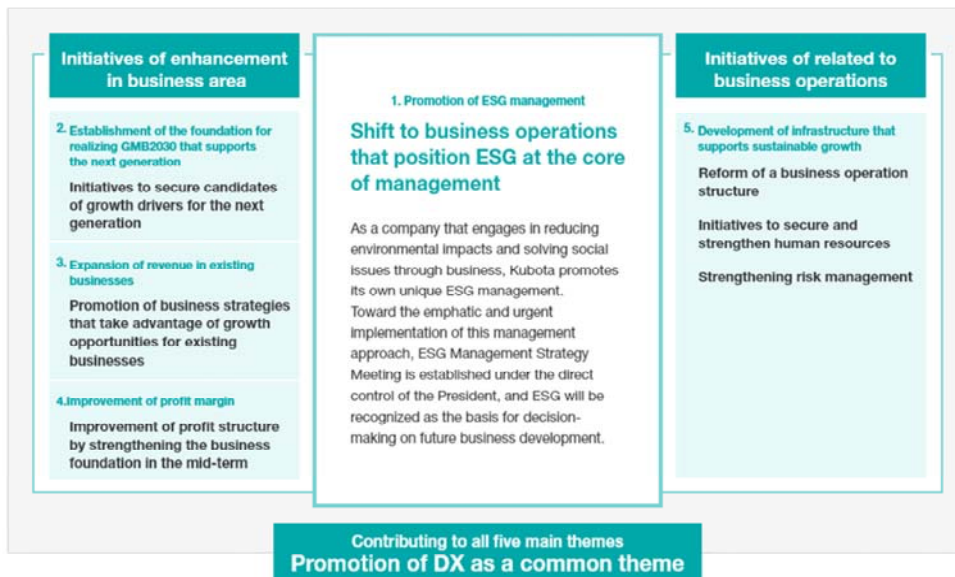
(Unit: billions of yen)	Year ending Dec. 31, 2022 (Forecast)	Year ended Dec. 31, 2021 (Actual)	Changes	
			Amount	%
<b>Revenue</b>	2,450.0	2,196.8	+253.2	+11.5
Domestic	645.0	602.8	+42.2	+7.0
Overseas	1,805.0	1,594.0	+211.0	+13.2
<b>Operating profit</b>	10.2% 250.0	11.2% 246.2	+3.8	+1.5
<b>Profit attributable to owners of the parent</b>	7.3% 178.0	8.0% 175.6	+2.4	+1.3

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Revenue is expected to reach a record high again due to growth in North America. Profit is expected to be a slight increase because it cannot take in all positive effect by price increase through the year due to the time lag of effect coming out, and we will utilize the effect of the increased revenue to accelerate R&D. The acceleration of R&D will be explained at the end of this presentation.



Our corporate management policy for this fiscal year is as follows. I will explain about an overview of the progress in the first year on these main themes.

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## Promotion of ESG Management

- Establishing ESG Management Strategy Conference and ESG Promotion Department under the direct control of the President.
- Defining 4 areas and 12 materiality in ESG management.
- Set KPI for each materiality, and gain understanding and empathy through disclosure and dialogue with stakeholders.

### GMB2030

“‘Essentials Innovator for Supporting Life,’  
Committed to a Prosperous Society and Cycle of Nature.”

**Materiality of K-ESG management**

Solving environmental and social issues through business

- Enhance the productivity and safety of food
- Promote the circulation of water resources and waste
- Improve urban and living environments
- ◆ Mitigation of and adaptation to climate change (Common items / prerequisites for the three items)

Drive-Support

**Accelerating innovation to solve problems**

- Business operations based on diverse values
- Strengthening R&D and partnerships.

**Stakeholder empathy and participation**

- Improvement of employee growth and job satisfaction
- Customer satisfaction and safety
- Enhancement of transparency and dialogue

**Building governance to enhance sustainability**

- Strengthening of corporate governance
- Penetration and practice of K-ESG management
- Strengthening of risk management

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I would like to talk about the promotion of ESG management.

We have established ESG Management Strategy Conference and ESG Promotion Department, which are under the direct control of the President, and have defined 4 areas of ESG management:


- Solving environmental and social issues through business
- Accelerating innovation to solve problems
- Stakeholders empathy and participation
- Building governance to enhance sustainability

And we have defined 12 materiality from the 4 areas.

We will set KPI for each materiality, and gain understanding and empathy through disclosure and dialogue with stakeholders.

## Promotion of ESG Management

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Items	Status of Promotion
<b>E: Environment</b>	<ul style="list-style-type: none"> <li>● Set of Environmental Vision</li> <li>● Establishment of Carbon Neutral Promotion Department</li> <li>● Promotion of conversion of cupolas to electric furnaces</li> <li>● Selected as a Zero Emission Challenge Company</li> <li>● Promotion of TCFD compliance</li> </ul> 
<b>S: Society</b> + <b>Stakeholders*</b>	<ul style="list-style-type: none"> <li>● Implementation of measures to improve employee growth and job satisfaction (workstyle reforms, talent development, etc.)</li> <li>● Strengthening partnerships with society (Academic-industrial collaboration with the University of Tokyo, Learning farming at Hokkaido Ballpark, and Supporting new farmers)</li> </ul>
<b>G: Governance</b>	<ul style="list-style-type: none"> <li>● Promotion of diversity of management team (Gender, Nationality)</li> <li>● Recruiting presidents of overseas subsidiaries from local source</li> <li>● Penetration of management policies through dialogue between management and employees</li> <li>● Adding of ESG factors for evaluation of officer</li> <li>● Improving the effectiveness of the meetings of Board of Directors by evaluation questionnaires</li> </ul>

\* "S" in K-ESG means "society" as well as "all of stakeholders"

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We will explain our approach to each item of ESG management.

In the field of Environment, we have set Environmental Vision for 2050, which states that while challenging to achieve zero environmental impact, we will contribute to realizing a carbon neutral and resilient society in the fields of "food, water, and the environment.". We will make systematic efforts to reduce environmental impact to realize Environmental Vision.

In addition, we established Carbon Neutral Promotion Department in Research and Development Headquarters and Carbon Neutral Business Planning Section in Innovation Center and have begun studying for new technologies and business, for example, conversion of cupolas to electric furnaces to reduce CO2 emissions, and demonstration research for agricultural tractors equipped with fuel cells, which have been selected for a project by New Energy and Industrial Technology Development Organization (NEDO). In recognition of this, we have been selected as a Zero Emission Challenge Company by the Ministry of Economy, Trade and Industry.

As a compliance to TCFD, we are studying the impact on our business activities and countermeasures based on a scenario of rising temperatures by the end of this century.

Next is the field of Society. In our ESG, S also includes the meaning of stakeholders. We are implementing measures such as strengthening talent development and introducing diverse work styles to enhance employee growth and job satisfaction.

As to strengthening partnerships with society, we promote various initiatives:

- Initiatives to create a bio-loop that will lead the way in symbiosis with nature and a recycling-oriented society by working with the University of Tokyo in an academic-industrial collaboration.
- Set up of an agricultural learning facility at Hokkaido Ballpark.
- Support for new farmers in Ibaraki Prefecture and other locations.

The last is the field of Governance. We are promoting diversity of the management team in terms of gender and nationality.

We recruited management of overseas subsidiaries in North America and Europe from local source. In addition, we work to strengthen governance in various ways:

- Having a dialogue between management and employees, implementation of initiatives to penetrate management policies through town hall meetings
- Adding ESG factors for the evaluation of officer.
- Improving the effectiveness of the meetings of Board of Directors by evaluation questionnaires.



## Establishment of the foundation for realizing GMB 2030 that supports the next generation

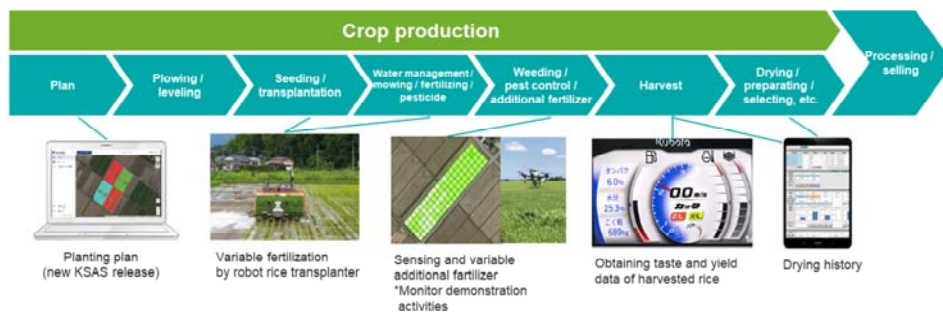
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### Solutions to enhance the productivity and safety of food

#### Efforts to realize smart agriculture

##### Expansion and evolution of KSAS

- Opening KSAS (data linkage with systems and applications provided by other companies)
- Adjustment of fertilizer volume by planning based on yield and other data



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In solutions to enhance the productivity and safety of food, smart agriculture is in progress.

The first point is the evolution of KSAS (Kubota Smart Agriculture System). We are promoting to open KSAS, in other words, to put data linkage between KSAS and other systems/applications provided by other companies.

In terms of data utilization, we have introduced a system that enables automatic adjustment of fertilizer volume to increase fertilizer applied to places, where yield is low, during rice transplanting. Information of yield and protein data acquired during rice harvest is taken account for the next year planning. We are promoting the provision of solutions in cooperation with KSAS for each of these processes of agricultural production.

## Establishment of the foundation for realizing GMB 2030 that supports the next generation

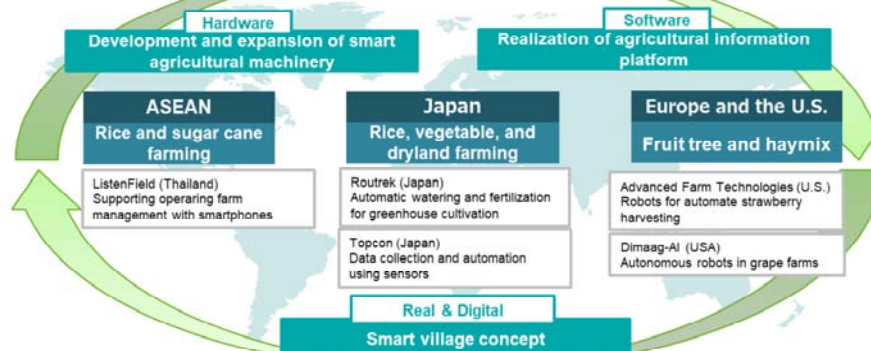
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### Solutions to enhance the productivity and safety of food

#### Efforts to realize smart agriculture

##### Setting Grand Design

Kubota's goal is to contribute to establishing a sustainable society through promotion of smart agriculture and to become an "agricultural platformer" that co-creates new values with local communities, customers and business partners.



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The second point is to set Grand Design for smart agriculture in order to clarify the targets for each region of Japan, Europe, the United States, and ASEAN.

To realize this grand design, we have had partnership with companies as follows:

#### Japan

- Working with Routrek to develop AI system that automatically determines the optimal watering and fertilization based on data such as moisture content in greenhouse cultivation.
- Working with Topcon to research the collection of agricultural work data using sensors and solutions for cultivation using big data.

#### Europe and the US,

- Working with Advanced Farm Technologies to develop robots for strawberry harvesting that instantly determine the timing to harvest by using image sensors and AI and then use a robotic arm to do the harvesting.
- Working with Dimaag-AI to develop autonomous robots and electric tractors for grape farms.

In addition, in ASEAN, we are also working with ListenField to provide supporting farming operation that allows farmers to view weather, soil, and other data and exchange information with other farmers on their smartphones.



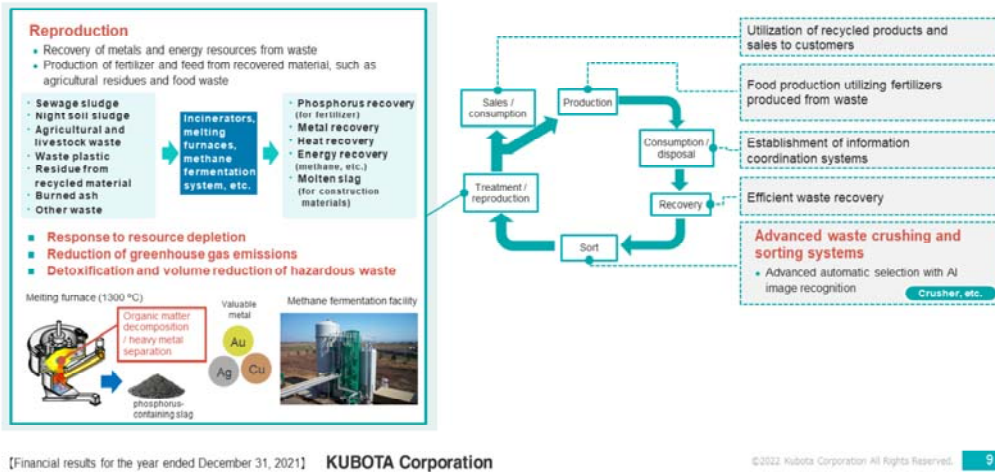
## Establishment of the foundation for realizing GMB 2030 that supports the next generation

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### Solutions to promote the circulation of water resources and waste

#### Efforts to build a resource circulation business model

- Investment in a leading waste treatment company in resource circulation field
- Launching a project team to realize resource circulation by utilizing Kubota's technology
- Initiatives for effective use of agricultural organic waste



In solutions to promote the circulation of water resources and waste, we are working to build a resource circulation business model.

With Ichikawa Kankyo Holdings we invested in, a leading waste treatment company in resource circulation field, we have launched a project to realize resource circulation by their resources and know-how with our own technologies.

Furthermore, We are also working to reduce CO2 emissions in agriculture, which is closely related to our business, by starting initiatives for the effective use of organic waste from agriculture, such as rice husks and rice straw, which has become an issue for carbon neutrality.

## Expansion of revenue in existing businesses

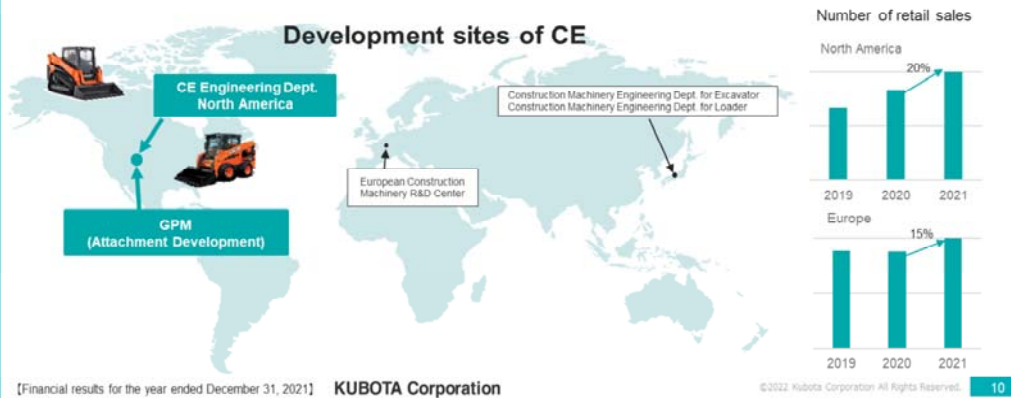
Growth Drivers

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### CE business in North America

Aiming for a significant increase in market share by expanding product lineup and locally integrated operations of development, production, and sales

- Building local development structure by establishment of CE Engineering Dept. North America and planning further expansion
- Promoting development of new CTL models led by CE Engineering Dept. North America
- Promoting development of implement (Smart Attachment) linked with machinery
- Steady progress of start up of CTL production in North America in the second half of 2022



I will explain the progress of the growth drivers for expansion of revenue in existing businesses.

The first growth driver is construction machinery (CE) business in North America, where further growth is expected mainly in compact track loaders (CTL) that have grown significantly over the past few years.

We have established the local R&D Dept. in North America, and we will further expand this in the future.

This department develops new CTL models and smart attachment such as implement linked with machinery.

The start-up of CTL production in North America is progressing steadily toward mass production planned in the second half of 2022. We aim to further increase our market share through integrated management of development, production, and sales.

Farm & Industrial Machinery business in ASEAN

Aiming for a further increase in sales of farm equipment and CE along with urbanization

- Local development of implement for various agricultural operations, mainly for dryland farming
- Introduction of mini excavators (3T) to meet needs in Thailand
- Strengthening collaboration among KRDA (R&D), SKC (manufacturing and sales), and Kubota Farm (demonstration and training)

Implement for dryland farming developed locally



The second growth driver is Machinery business in ASEAN, where further expansion in demand is expected for both farm equipment and CE along with urbanization.

We are working to promote mechanization in dryland farming market by locally developing and introducing implements for various agricultural operations such as cassava, sugarcane, and corn.

As for CE, we introduced mini excavators (3T) to meets local needs.

We will continue to contribute to ASEAN agriculture through proposals for advanced and efficient agricultural operation not only in Thailand but also in the entire ASEAN region through the collaboration of our R&D, manufacturing, sales, demonstration, and training bases in Thailand. In addition, we also aim to expand CE business.

## Expansion of revenue in existing businesses

Growth Drivers

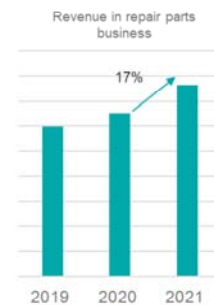
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### After-market business of Farm & Industrial Machinery

Aiming to expand "after-sales business" by utilizing abundant operating machinery on a global level

- Widening commercial product lineup through alliance with aftermarket companies in Japan and Europe
- Initiation of experiment of operation data collection by construction machinery telematics in Japan.
- Completion of the European Central Parts Center in 2022 (establishment of 3 pillars for repair parts supply, Japan, North America, and Europe)

#### Establishment of global parts supply structure



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The third growth driver is after-market machinery business, where there is more room for business expansion by taking advantage of abundant operating machinery in the field.

In terms of commercial products, we have expanded our product lineup through alliances with companies in Japan and Europe.

About telematics, we have started a demonstration experiment in Japan to collect operational data and have begun to make proposals for repair parts based on it.

In terms of infrastructure for parts supply, the European Central Parts Center is scheduled to be open this year. We are going to have three pillars for repair parts supply system, in Japan, North America, and Europe.

In the future, we will continue to build up our system in Asia and strengthen our supply system on a global level to achieve zero downtime for our customers.

## Water &amp; Environmental solutions business

Along with the labor shortages in local governments and aging infrastructure, aiming to shift from equipment sales-oriented business to O&M- and solution-oriented business by utilizing IoT and other technologies

## Establishment of structure

- Enhancement of cooperation among business units led by Water & Environmental Solutions Developing and Sales Department
- Strengthening of cooperation by integrating group companies into Tokyo headquarter

## Expansion of environmental O&amp;M and pipeline solutions businesses

- Water Supply Pump Project: Sagamihara city DBM system
- Pipeline Development Project: Osaka wide area DB system
- Joint Water Treatment Plant Project: Naruto City DB system

## Utilization of IoT technology

- Automatic control of paddy water level by KSIS and WATARAS (related to smart agriculture)

The fourth growth driver is Water & Environmental solutions business, which aims to shift from equipment sales-oriented to O&M- and solution-oriented.

Water & Environment Solutions Developing and sales Department is playing a central role in enhancing cooperation among related business units for more solutions business.

In addition, we integrated group company office into one Tokyo headquarter for smoother communication and collaboration.

These strengthened cooperation has yielded positive results.

For example, we got orders for a DBM (Design, Build, and Maintenance) project for a water supply pump project in Sagamihara City, pipeline development project in Osaka wide area, and DB (Design and Build) project for a joint water treatment plant project in Naruto City. These are some of the results.

In terms of use of IoT technology, we are also contributing to the realization of smart agriculture in water-related fields by reducing labor hours and water consumption for water management through remote management systems using KSIS (Kubota Smart Infrastructure System) and automatic control of paddy water level using WATARAS.



## Expansion of revenue in existing businesses

Growth Drivers

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### (New) Expansion of India Machinery business and entry into the basic market

Leveraging synergies with Escorts, aiming to increase market share in India, which is the largest tractor market in the world, and expand business globally by exporting basic machinery

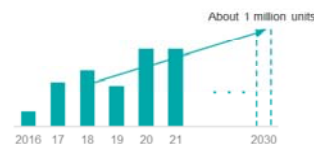
#### Synergies with Escotes

R&D	<ul style="list-style-type: none"><li>Combining Escotes' cost-cutting philosophy with Kubota's technology</li><li>Promoteing Kubota product development by utilizing Escotes R&amp;D resources</li></ul>
Manufacturing · Procurement	<ul style="list-style-type: none"><li>Introducing Kubota Production System (KPS) to improve the level of manufacturing</li><li>Adupting low-cost and high-quality parts widely by utilizing India's procurement network and supplying to other Kubota manufacturing sites</li></ul>
Sales	<ul style="list-style-type: none"><li>Enhancing market coverage ratio by effectively combining mutual sales networks and product lineup</li></ul>

#### Business Expansion Policy

- Increasing share of the tractor market in India
- Expanding basic machinery exports
- Studying development and manufacture of basic machinery products in India (Including combine harvesters and construction machinery etc)

Tractor market in India



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We have now added expansion of India Machinery business and entry into the basic market as our fifth growth driver.

By leveraging the synergy with Escorts, which we announced to increase our shareholding in November last year, we aim to expand our market share in India, which is the largest tractor market in the world, and to expand our global business by exporting basic machinery.

As for the main synergies with Escorts, in R&D, we will work to improve quality while maintaining cost competitiveness by combining Escorts cost-cutting philosophy, frugal engineering, with Kubota's quality stabilization design. By utilizing Escorts substantial R&D resources, Kubota will also be able to increase the speed of its product development.

In manufacturing and procurement, KPS (Kubota Production System) will be introduced to improve the level of manufacturing and quality at Escorts. By utilizing low-cost and good-quality procurement network in India that Escorts possesses, we supply competitive components to other Kubota manufacturing sites.

In the area of sales, we aim to effectively combine the sales networks and product lines of both our company and Escorts to enhance our market coverage ratio.

By maximizing these synergies, we aim to double our current market share to 25% and achieve revenue of 300.0 billion yen in the Indian tractor market, which is estimated to be one million units in 2030.

We will also work to expand exports to markets outside India, where basic machinery is demanded.

In addition, we will also promote the development of other products for the basic market, not only tractors, by utilizing enhanced R&D resources of Escorts.

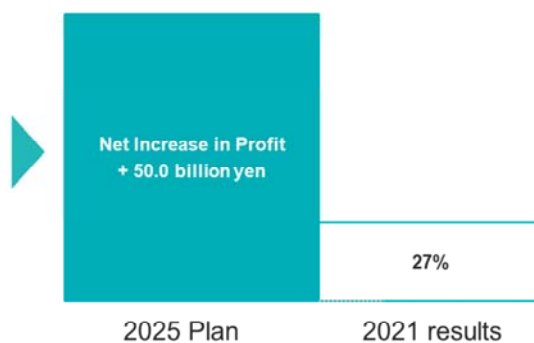


## Improvement of profit margin

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- Kubota aims to generate a net increase in profit of ¥50.0 billion (compared to FY2019) in 2025 and achieve both securement of investment resources and improvement in profitability.
- Steady progress of growth in profitable margin business due to expansion in overseas repair parts business
- Kubota is also working on other measures. The effects will become apparent in the last half of Mid-term Business Plan.

- ① Steady growth in profitable business  
(Expanding repair parts business and O&M business)
- ② Establishment of a profitable structure  
(Reduction of material, logistics, and fixed costs, promotion of investment effects, etc)
- ③ Streamlining business operations thoroughly  
(Improvement of productivity by fundamental reform of operations through utilizing DX and others)



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Regarding improvement of profit margins, overseas sales of repair parts to existing customers are expanding, and contribute to growth in profitable business steadily. As of last year, we have made 27% progress toward our mid-term target of net increase in profit by +50.0 billion yen compared to FY2019. We are also working on establishment of a profitable structure and streamlining business operations thoroughly, which will take a relatively long time to take effect, and we believe that we will be able to further accumulate the effects of increased profits in the last half of the Mid-term Business Plan.

## Promotion of DX as a common theme

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Completion of developing the DX platform, which serves as the management foundation, by deploying regional cloud platforms worldwide. In 2021, Registered as a DX Certified Business Operator by the Ministry of Economy, Trade and Industry. Alliance with Microsoft and Accenture

### Innovation in products, services, and production sites



- Diagnosis of ductile iron pipes by utilizing AI
- Early identification of repair service points by AI data analysis of defect information
- Enhancing communication with customers by utilizing customer management systems
- Start of AI image inspection in manufacturing inspection process
- Digitization of skills in production sites by analyzing workers' perspectives
- Vehicle management by construction machinery telematics

### Innovation in business processes

- Reduction and efficiency of office work through process automation
- Accelerating data utilization across departments, such as quality assurance, procurement, service, and logistics, through the DX platform

### Innovation in communications and collaborations

- Promoting communication with external parties by using video (online events, etc.)
- Enhancement of interdepartmental communication through internal SNS and two-way communication between management and employees

As to promotion of DX as a common theme, we have completed development of the DX platform, which serves as the management foundation, by deploying regional cloud platforms worldwide. In addition, in recognition of our various efforts, we were certified as a DX Certified Business Operator by the Ministry of Economy, Trade and Industry last year. We also affiliate with Microsoft and Accenture to further accelerate DX in the future.

As for the status of DX promotion in each field, in innovation in products, services, and production sites, we are working on efforts related to products and services as follows:

- Vehicle management by CE telematics
- Diagnosis of ductile iron pipes by utilizing AI through terrain data analysis
- Early identification of repair points by AI data analysis of defect information

At the production sites, we are starting AI image inspection in manufacturing inspection process, such as detecting labels sticking. In addition, We are also working on the digitization of skills in production sites by analyzing visual point of skilled and unskilled workers.

In innovation in business processes, we achieved a reduction of 28,000 hours of office work by reducing office work and improving the efficiency through the automation of processes such as order forms. In addition, with the data platform in place, data is being shared among departments by development of data platform.

In innovation in communications and collaborations, we have established a system that allows us to communicate with our customers at exhibitions and events using online video, as well as during COVID-19 pandemic.

In terms of internal communication, we have aimed to enhance interdepartmental communication through internal SNS and two-way communication between management and employees.

## Development of infrastructure that supports sustainable growth

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### Reform of the business management system

#### Transforming operation structure in response to globalization

- Promotion of local production for local consumption at manufacturing sites
- Consider two-site production from the viewpoint of risk management
- Enhancement of consolidated performance management reports

### Initiatives to secure and strengthen human resources

#### Aiming to strengthen human resources who support sustainable growth by strengthening recruitment and cultivation, as well as providing opportunities

- Strengthen human resources by expanding employment of new graduates and careers
- Promotion of the right person in the right place by expanding employment fields by job type
- Improving employee skills through on-demand education and business skills training
- Start of development of human resources who can lead DX

In terms of development of infrastructure that supports sustainable growth, as reform of the business management system, we are promoting local production for local consumption such as start-up a CE manufacturing site in North America. In addition, we are also considering two-site production from the viewpoint of risk management. We will continue to set up a flexible production structure according to the situation.

Furthermore, we are working to speed up decision-making through the enhancement of consolidated performance management reports.

As for initiatives to secure and strengthen human resources, we are working on

- Strengthening human resources by expanding employment of new graduates and careers
- Deploying the right person in the right place by expanding employment fields by job type
- Improving employee skills through on-demand education and business skills training

Furthermore, we are also starting to develop human resources who can lead DX, with the goal of developing 1,000 DX human resources.

## Development of infrastructure that supports sustainable growth

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### Strengthening Risk Management

Aiming to develop and expand organization that can develop countermeasures more actively in response to various risks

#### BCP

- Implementation of disaster countermeasure construction
- Formulation of a draft policy to stabilize procurement  
(Short-term: inventory holding, mid- to long-term: procurement from multiple countries and multiple suppliers)

#### Compliance

- Shift of the concept of risk management from rule-based to risk-based approach
- Promotion of risk diversification through risk financing

#### Cyber

- Strengthening security measures at the global level
- Enhancing global security governance by building regional IT control structures

With regard to strengthening risk management, in terms of BCP, we are moving forward disaster countermeasures, such as earthquake-proofing of factories and other facilities with plans to complete construction or at least start construction by 2025 at all locations, where countermeasures are needed.

Under the recent global supply chain disruptions, we formulate a draft policy to stabilize procurement and work on building a strong supply chain.

With regard to compliance, we are shifting our concept of risk management from rule-based to risk-based approach and are promoting awareness raising from within Japan.

In addition, we are also considering risk diversification through risk financing.

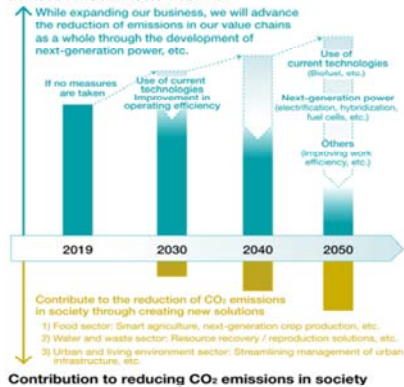
In response to cyber risks, we have strengthened security measures on a global level. We have established a regional IT control system to enhance global security governance.

## Accelerating R&D in response to changes in business environment

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- Kubota plans R&D of ¥400.0 billion in total for 5 years in Mid-term Business Plan
- Investing in an additional budget of ¥100.0 billion to enhance and accelerate R&D in priority fields in a view of a carbon neutral society.

### In-house CO<sub>2</sub> emission control



### R&D acceleration fields

- ① Powertrain decarbonization technology
- ② Smart/Autonomous Technology (Automatic)
- ③ Resource circulation technology



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Our market environment has changed significantly from what was assumed when we formulated Mid-term business plan. As the world accelerates its efforts to carbon neutral, it is necessary to develop a variety of related technologies. Success or failure of these developments will determine our company's positioning 5 to 10 years from now.

We have decided to invest an additional budget of 100.0 billion yen by 2025 in addition to 400.0 billion yen of R&D envisioned in Mid-term Business Plan in order to enhance and accelerate R&D in priority fields in a view of a carbon neutral society.

As carbon emissions increase with the growth of the business, Scope 3 issue has become a major problem. Kubota is committed to tackling this issue by balancing the growth of this business with the issue of carbon neutrality.


About a quarter of CO<sub>2</sub> emissions in the world are emitted from agricultural-related activities. Most of these emissions are methane gas and N<sub>2</sub>O from paddy fields and dryland, not from farm machinery.

I will explain about our three R&D acceleration fields in the next page.



**Accelerating R&D in Response to Changes in Business Environment** For Earth, For Life 

**① Powertrain decarbonization technology**



- HV
- BEV
- FCV
- Hydrogen engine
- Engine for decarbonized fuel
- CO<sub>2</sub> recovery from exhaust gas

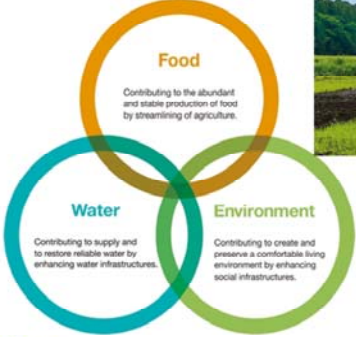
**Food**

Contributing to the abundant and stable production of food by streamlining of agriculture.

**② Smart Autonomous Technology**



- Autonomous unmanned operation
- Cooperated operation
- Data-driven agriculture




**Water**  
Contributing to supply and to restore reliable water by enhancing water infrastructures.

**Environment**  
Contributing to create and preserve a comfortable living environment by enhancing social infrastructures.

**③ Resource recycling technology**




Municipal and industrial waste




Biomass (rice straw, etc.)

Rare metal



Bio-charcoal and carbon fixation



- Recovery of resources and energy from urban mines
- Recovery of resources and energy from biomass and agricultural residues
- Carbon fixation and negative emissions
- Water resource circulation
- Recovery and reuse of CO<sub>2</sub>

[Financial results for the year ended December 31, 2021] **KUBOTA Corporation** ©2022 Kubota Corporation All Rights Reserved. 20

The first point is powertrain decarbonization technology. We are working on development in order to fit technologies to our market applied to technological progress, and we are deepening our collaboration with external parties, universities, government agencies, and start-up companies.

The second point is smart agriculture. We aim to reduce carbon emissions by KSAS to reduce the amount of fertilizer through automated fertilizer and WATARAS to manage water in the paddy fields. In addition, we will establish future business in the smart agriculture market that is expected to grow significantly from now.

The third point is resource recycling technology. With the increase of municipal and industrial wastes, how to recycle these resources has become a major social issue now. The first is recovery of resources and energy from urban mines. In the past, we have a track record of building melting furnaces in Teshima and Naoshima and recovering rare metals from industrial waste effectively. The second is recovery of resources and energy from biomass and agricultural residues, Carbon fixation, and negative emissions. CO<sub>2</sub> is generated by burning and plowing rice straw. We can take various measures, such as fermentation of methane from rice straw. The third is water resource circulation. Water management in rice paddies has an effect on suppressing flooding and river overflow. We are trying to reduce disasters by managing. The Last is recovery and reuse of CO<sub>2</sub>. We have the technology for flue gas desulfurization equipment. Through applying this, we believe to the separation and recovery of CO<sub>2</sub> by amine absorption and membrane separation methods.

We are currently working on these initiatives in Research and Development Headquarters, and we would like to increase our investment to accelerate these efforts.

In Mid-term Business Plan, Kubota will firmly establish a foothold for the future in terms of technology and expand our business dramatically. In addition, Kubota will strive to achieve the Long-term Vision, GMB2030. Our management policy and progress in the first year of Mid-term Business plan are as described above.



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### Cautionary Statements with Respect to Forward-Looking Statements

This document may contain forward-looking statements that are based on management's expectations, estimates, projections and assumptions. These statements are not guarantees of future performance and involve certain risks and uncertainties, which are difficult to predict. Therefore, actual future results may differ materially from what is forecast in forward-looking statements due to a variety of factors, including, without limitation: general economic conditions in the Company's markets, particularly government agricultural policies, levels of capital expenditures both in public and private sectors, foreign currency exchange rates, the occurrence of natural disasters, continued competitive pricing pressures in the marketplace, as well as the Company's ability to continue to gain acceptance of its products.

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**ON YOUR SIDE**

**For Earth, For Life**  
**Kubota**