

# Kubota Industrial Equipment Corporation

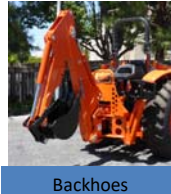
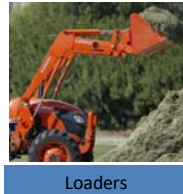
## 1. Outline

<b>Address</b>	1001 McClure Industrial Drive Jefferson Georgia, 30549 U.S.A
<b>Number of employees</b>	1179 (Dec, 2021)
<b>Site area</b>	360,170 m <sup>2</sup>
<b>Establishment day</b>	Oct. 01, 2005
<b>ISO14001 certification date</b>	16-Jul-2021
<b>Site overview</b>	Development and manufacturing of tractors, SSL and implements



## 2. Products

### Main products



## 3. Environmental policy

For Earth, For Life  
Kubota

### Kubota (KMA/KIE) Environmental Policy

Kubota is committed to preserving the environment. Our goal is to reduce our environmental impact by prevention of pollution resulting in clean safe communities, while producing products that meet or exceed our customers' expectations. Kubota is committed to continual improvement by implementing an environmental management system that fulfills our goal.



## 4. Environmental performance data (Jan. 2021 to Dec. 2021)

<b>Used amount of energy</b>	Crude oil equivalent KL	9,179
<b>Used amount of water</b>	thousand m <sup>3</sup>	54

<b>CO<sub>2</sub> emission*</b>	tons CO <sub>2</sub> e	16,175
---------------------------------	------------------------	--------

\*CO<sub>2</sub> emissions from energy sources.

Air Pollutant measurement results		Heating furnaces		
Main smoke and soot generation facilities		Control content	Control value	Maximum measured
	Unit			
SOx	-	-	-	-
NOx	ppm	Concentration control	30	21.4
Particulate	-	-	-	-

<b>Amount of discharge water</b>	thousand m <sup>3</sup>	54	
<b>Amount of pollutant in discharge water</b>	COD	kg/year	-
	Nitrogen	kg/year	-
	Phosphorus	kg/year	-

Water pollutant measurement results				
	unit	Control value	Maximum measured	
Public water areas	pH	-	-	-
	BOD	mg/L	-	-
	COD	mg/L	-	-
	Nitrogen	mg/L	-	-
	Phosphorus	mg/L	-	-
	Hexavalent chromium	mg/L	-	-
	Lead	mg/L	-	-
	COD, total emission control	kg/day	-	-
	Nitrogen, total emission control	kg/day	-	-
Phosphorus, total emission control	kg/day	-	-	
Sewerage lines	pH	-	6.0~9.0	6.4-7.5
	BOD	mg/L	250	43
	COD	mg/L	-	-
	SS	mg/L	250	26

<b>Waste discharge</b>	tons	2,111
<b>Recycling ratio</b>	%	53.6%
<b>VOC emission</b>	tons	0.04

# Kubota Industrial Equipment Corporation

## 5.Environmental Topics

**【In an effort to reduce the environmental impact KIE】**

① Waste Reduction:

- Started recycling cardboard from the Broadrange warehouse instead of disposing at a local landfill. This activity eliminated 496 tons of waste per year to the landfill. (Photo 1)
- Piloting a project to recycle the wood pallets. Pallets are sorted at KMA building 3 to reuse suitable pallets. The pallets to be disposed of are part of a pilot program to send to a recycling facility instead of a vendor to be burned up. The recycling facility recovers suitable wood pieces to reuse and grinds the remainder of the unusable pallets for landscaping mulch. This effort will reduce waste to the landfill by 1,550 tons at KIE per year and improves our recycling metric from 60% to 90%. (Photo 2)

② Energy savings:

- Continued the a 2020 year project to replace torque tools powered by compressed air with DC electric powered tools. This project when completed in 2022 will reduce the CO2 by 1.9 t at KIE. It also allows us to consider smaller and variable air compressors for more efficient power usage. (Photo 3)
- The air compressor in KIE building 2 was replaced with a variable speed drive compressor to match the required demand. This results in an energy reduction of 130 ton per year. (Photo 4)
- KIE building 2 paint system had 3 changes to improve energy efficiency. First, with root cause analysis and corrective actions in the maintenance practices, the paint system uptime has improved. This improved uptime impacts the energy utilization efficiency. Second, the sheet metal line conveyor speed was increased from 8 up to 10 fpm. The first step was from 8 up to 9 fpm that reduced 1.0 hour in run time per day and a 17.0 ton CO2 reduction. Step 2 from 9 to 10 fpm will further reduce the daily run time by 0.8 hours and an additional 12.8 tons of CO2 annually. The final change is to increase the paint hanger density for a run time reduction of 1.5 hours and 25.0 ton CO2 annually. (Photo 5)

**【Environmental Achievement Award】**  
KIE received the "Environmental Encouragement Award" for VOC emission reduction in liquid paint. (Photo 6)

**【Environmental Month Activity】**  
Conducted Environmental Month Clean-up activity in July. The clean-up activity extended beyond the KIE property to the road. (Photo 7)

**【Environmental Audits】**  
Legal audit in September  
Internal audit by GA Tech in March (Photo 8)  
External audit by BSI in July



Photo 2. Wood Pallet Recycling



Photo 1. Broadrange Cardboard Recycling



Photo 3. DC Torque Tool Conversion



Photo 4. Changing to VSD Compressor in Building 2

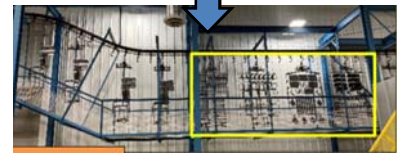


Photo 5. Paint Line Hanger Part Density in Building 2

## 6.Environmental Communication

**【Environmental Dojo】**  
Conducted the Environmental Dojo training 1 time in 2022 to educate supervisors and managers who influence their team members on the shop floors and the offices. The objectives are to teach environmental conservation and compliance as well as engaging Gemba for more being sustainable. Initiated two new e-learning modules for the Environmental Dojo in July. This trial is to reach out to more KIE participants and broaden the audience to be trained. The e-learning lesson is followed with a 6 question test for each module. (Photo 9)

**【Regulatory Training】**  
Conducted DOT and HAZWOPER training for team members who handle, ship and manage hazardous wastes.

**【Safety & Environmental Training】**  
Conducted Safety Dojo training for all employees including temporary employees. This training includes to teach environmental aspects and impacts caused by the manufacturing and human activities.

**【Internal Communication】**  
During the Environmental Month, supervisors conducted briefings to convey the team members the president Kitao's message and promoted the slogan of "Let's take on the challenge of carbon neutrality!". Conducted Monthly Environmental Objective Meeting



Photo 6. Environmental Encouragement Award



Photo 7. Environmental Month Street



Photo 8. GT Internal



Photo 9. Environmental Dojo e-Learning