

Environmentally-Friendly Products

To offer environmentally friendly products, the KUBOTA Group is promoting measures to reduce environmental impact at the R&D stage in a well-planned manner.

● Development of environmentally-friendly products

■ Action plan under the Next Generation Nurturing Support Measures Promotion Law

In our effort to design environmentally-friendly products, we make it a rule to conduct an environmental assessment on products at the R&D stage to measure the environmental impact through the lifecycle of the products and to minimize that impact.

The image shows a complex spreadsheet titled 'Product environmental assessment form'. It contains multiple columns for different assessment categories and rows for various product components or processes. The data is organized in a grid format with alternating colors for readability.

Product environmental assessment form

Primary areas covered by the product environmental assessment (in part)

Materials	Reduction of substances of environmental concern in materials and components; reduction in mass, volume, and the number of components; increase in the use of recycled materials; reduction in the use of rare materials
Production	Energy conservation; waste reduction
Physical distribution	Ease of transportation; reduction of packing materials
Construction	Energy conservation at construction sites; resource conservation; reduction of environmental impact
Operation of equipment	Energy conservation; reduction of noise and vibration; improvements to durability
Waste disposal, recovery, reuse	Recycling; proper waste disposal
Information disclosure	Disclosure of materials and components; instructions for maintenance and disposal

Product group	Content and cases of involvement at the R&D stage
Tractors	Compliance with exhaust emission regulations; improvements in fuel-efficiency; reduction in the use of substances of environmental concern in painting and coating materials
Combine harvesters	Compliance with exhaust emission regulations; reduction in fuel consumption by reducing mass per horsepower; reduction in the use of substances of environmental concern in painting and coating materials
Rice transplanters	Reduction in total energy consumption by applying fertilizer, herbicide, fungicide, and pesticide at the same time as rice transplanting
Agriculture-related product	Development of new models of the Rice Robo automatic rice cooker that require 30% less water and grass cutters that contribute to a reduction in the use of herbicide
Agricultural facilities	Reduction in the weight of the seedling box supplying device (by 10% over KUBOTA's equivalent models); reduction in the use of substances of environmental concern in painting and coating materials
Construction machinery	Compliance with exhaust emission regulations; reduction of noise emitted by vehicles; improvements to fuel-efficiency by employment of an automatic idle elimination system
Engines	Compliance with exhaust emission regulations; reduction of fuel consumption, noise, and vibration; development of biodiesel-compatible engines
Iron pipes	Reduction of waste soil during construction work; reduction in the number of parts; improvement of durability
Valves	Enhancement of durability of sheets; reduction of weight to increase ease of installation; reduction in use of lead-containing alloys
Drainage pipes	Reduction of materials used for installation of drainage system products; improvement of work environment during drainage pipe installation; reduction of drainage noise
Service water and sewerage-related	Improvement of energy efficiency of sewage treatment equipment; reduction of weight of machines that dewater sludge; development of wastewater recycling technology
Recycling-related	Reduction in energy consumption by enhancing performance of shredders
Pumps	Reduction in energy consumption by enhancing the performance of pumps (vertical shaft mixed flow, volute, and non-clog pumps)
Membrane business-related	Development of energy-saving membrane devices; development of wastewater recycling and treatment systems; development of longer-life membrane cartridges for membrane methane unit
Septic tanks	Development of compact energy-saving septic tanks for home use; development of medium- and large-sized septic tanks
Plastic pipes	Development of components and installation methods for the renewal of existing pipes; development of bioplastic products
Cast steel	Implementation of life cycle assessment (LCA) of new products; evaluation of environmental impact levels
Rolls	Improvement of resource- and energy-saving efficiency at customers' sites by adopting longer-life rolls for sheet-rolling mills
New material	Development of high-performance titanate compounds to contribute to the preservation of the global environment
Steel pipes	Reduction of construction work time through use of mechanical joints; promotion of resource conservation through use of higher-strength steel pipes; reductions in CO ₂ emissions
Electrical equipment	Elimination of RoHS-designated substances in new measurement instruments and agricultural products; reduction in the use of substances of environmental concern in existing products
Vending machines	Installation of energy-saving heat pumps in an increasing number of canned and packaged beverage vending machines (Heat pumps have been installed in all major models.)
Air-conditioning equipment	Reduction of fan noise; reduction of substances of environmental concern; reduction in the weight of new products