Initiatives for the realization of a decarbonized society

Initiatives for environmentally friendly design

> Eco-product certification system

The eco-product certification system is an in-house system that certifies products with high environmental conformance that lead to solutions to climate change issues and to the reduction of agriculture's burden on the environment. Certified products that clear ISEKIoriginal evaluation criteria in areas such as conservation of energy and labor, environmental burden reduction, resource conservation, and consideration of biodiversity, are granted environmental labels, which are conveyed to customers through product catalogs and user manuals in an easily noticeable format. Further, the environmental label conforms to Type II stipulated under ISO14021 (selfdeclared type that does not need third-party certification).

Example of environmental label



> Examples of certified products

 SXG327 and SXG324 riding lawn mowers for Europe and Oceania

We certified the SXG327 and SXG324 riding lawn mowers as eco-products. These lawn mowers feature engines compliant with the EU Stage V emission standard, thereby meeting Europe's stringent exhaust gas regulations. They also offer improved engine horse power and maximum speeds compared with conventional models, as well as enhanced work efficiency thanks to higher-capacity grass catchers, and compatibility with use of HVO* fuel.

Use of HVO fuel promises to reduce environmental burden, primarily by curbing CO2 emissions.



*HVO (Hydrotreated Vegetable Oil): A biofuel manufactured from waste oil produced in the food industry and surplus vegetables resulting from agricultural production, among other raw materials. Vegetable oil is hydrotreated to convert it into aliphatic hydrocarbon, which can be used in diesel engines

HVO diesel is already available at gas stations in Europe, and is commonly used particularly in Northern Europe, where public regulations of environmental issues are most stringent.

Initiatives toward electrification of agricultural machinery

We believe that the electrification of agricultural machinery will grow into a major pillar for the realization of a decarbonized society. In anticipation of a decarbonized era, ISEKI Group started joint research with Ehime University in 2010 and announced a prototype electric tractor in 2012.

After conducting further technical research toward commercialization, in 2022 we undertook limited sales of the SXGE2, an electric riding lawn mower powered by lithium-ion batteries targeting the European landscaping market, and started identifying needs in the European market as a whole.

 Electric tractor prototype (2012)(2022)





Initiatives for the promotion and expansion of environmentally sound agriculture

ISEKI Group is working to promote and expand environmentally sound agriculture, which aims to reduce the volumes of chemical fertilizers and agrochemicals used. Reduction in the use of chemical fertilizers and agrochemicals derived from fossil fuels is expected to be effective in decarbonization. Our efforts to promote and expand environmentally sound agriculture include focusing on promoting sales of products that contribute to reduction of chemical fertilizers by utilizing advanced technologies and data, and products that contribute to reduction of agrochemicals by saving labor on maintenance work such as weeding. Other initiatives include working to create new agricultural technologies by collaborating with national and local governments, private-sector companies, and farm producers to conduct demonstrations of smart agricultural machinery and farm business technologies. (Please refer to p. 33 for information about innovation based on collaboration)

 A variable fertilizer rice transplanter Controls the quantity of fertilizer used in real time according to the results of soil measurements

