Sustainability News

Target and achievement (Isuzu Fujisawa Plant and Tochigi Plant) Reduction of CO2 emissions - Changes in CO2 emissions per production unit Target

CO2 emissions per production unit: Reduction of 5% or more from FY2010 by FY2015

FY 2014 achievements

CO2 emissions amount: 185,000 tons

CO2 emissions per production unit: 21.8 tons/hundred million yen (8% reduction from FY2010)



The production volume increase triggered greater CO2 emissions in FY2013, but Isuzu continued CO2 reduction initiatives helped to achieve the reduction target for emissions per production unit. We are further engaging in activities to achieve the target value by promoting energy JIT (Just In Time).

Major CO2 Reduction Initiatives

- • Use of a large-scale combined heat and power system to provide electricity and a heat source for plants
- • Use of small-scale combined heat and power systems for new buildings
- • Use of highly efficient multi-can boilers
- • Use of inverter air-conditioning equipment and power equipment
- • Promotion of "eco-stop" and "no-idling"
- • Improving the working efficiency of large-scale air compressors (deployment of small-sized equipment)
- • Introduction of lighting equipment which uses renewable energy
- • Introduction of high-efficiency lighting equipment
- • Added the Co-generation system for new buildings (Tochigi Plant)
- Installation of a solar power facilities (Fujisawa Plant)



Tochigi Plant Co-generation System



Fujisawa Plant's solar power panels

Reduction of waste - Changes in amount of final landfill wastes

Target

Amount of landfill wastes (tons)/Total waste (tons) = 1.0% or less

FY 2014 Achievement

Amount of landfill wastes (tons)/Total waste (tons) = 0.0 %

* Amount of landfill waste: 0 tons, Total industrial waste amount: 7,710 tons



Isuzu succeeded in maintaining a landfill waste level of zero tons by thoroughly practicing classification control and various waste reduction efforts.

Waste reduction activities

- • Expansion of items to be converted to valuable resources by seeking new purchasers
- • Careful sorting and collection; promoting recycling after disassembly and scrapping
- • Reduction of the total amount of waste and reduction of by-products

- • Promotion of material recycling of plastic products
- • Expansion of recycling by sorting waste oil
- • Promotion of recycling the clay attached to foam polystyrenes
- • Reduction of emission by returning wooden pieces used as partitions
- • Promotion of turning helmets and safety caps as valuables
- • Recycling of compact rechargeable batteries
- • Reduction of paint residues by changing the chemicals used in the circulation tank
- • Recycling of iron powders from the forging process into as steel materials



Waste oil separation device

Effective use of water resources



Paper and Iron separation device

Isuzu effectively uses water resources by promoting water saving and water recycling in the final water treatment process, and filtering ground water for daily life usage.

FY 2014 Achievement

Water Consumption : 2,110,000 m³

Fujisawa Plant, which consumes a high volume of water, leads water-saving activities by re-using washing water from the electro coating process and recycling treated sewage for bathroom use. In FY2014, however, water consumption rose by approximately 4% in comparison to FY2013 due to the increase in production volume.



Reducing VOC^{*} emissions in Fujisawa Plant

*VOC: Volatile organic compounds (mainly organic solvents)

Target

VOC emission rate: under 19.2 g/m²

FY 2014 Achievement





Training Programs of Environmental education

Isuzu provides training programs about general environmental education, related laws and regulations, and various programs for ISO internal auditors.

FY 2014 Achievements

Item	FY2014 achievements		
General environmental education	For the new employees	541 employees	
	For 3R promotion month		
	For energy-saving month		
Environmental law and regulations trainin	91 employees		
ISO internal auditor training	New employee training	191 employees	
	Skill training		
	Improvement training		
	Workshop		

Business activity and environmental hazard (FY 2014)

Through a product life cycle (development, procurement, manufacturing, logistics, product operation, and disposal), Isuzu reduces environmentally hazardous substances. They are analyzed in each process with the focus placed on the ones highly likely to pose a risk.

FY 2014 Achievement

INPUT				OUTPUT	
Raw materials input Iron and steel 383,000 tons Aluminum 42,000 tons Chemicals (plastic) 3,500 tons	Development /Design		Greenhouse gas CO₂ emissions 1 Waste Total generated Amount recycled Amount of landfill waste	85,000 tons 7,700 tons 7,700 tons 0 tons	
Energy input 11,083kl (Converted to crude oil) Water resources		Procurement		Air pollution material (Actual measurements) Nox(ppm) Fujisawa Plant Maximun	n Average
211 million m ³			Boiler 2 Metal melting furnace 40 Paint/ 10 drying furnace	35.5	
		Production		Tochigi Plant Maximun Boiler 80 Metal furnace 130) 9
		İ ##		Dust and soot(g/Nm ³) Fujisawa Plant Maximun Boiler 0.004 Metal melting	0.0023
	*lsuzu only			furnace 0.01 Paint/ 0.068 drying furnace	3 0.011
				Tochigi Plant Maximun Boiler Metal furnace	n Average
				VOC emission rate Water discharged	18.3g/m ³ 1550,000m ³
		Transportation	rtation CO ₂ emissions 39,658 (tons-Converted to crude CO ₂)		crude CO ₂)
		Sale/Usage/Service The recycling results			
				Shredder dust(ASR) 97.7% Air bags 94.8% Freon Recovered CFC 282.9kg Recovered HFC 3,091.7kg	
		Recycle			
		23	*CFC:Chloro-fluorocarbon HFC:Hydrochloro-fluorocarbon		