

Environmental Targets for Fiscal 2015 and Results Achieved

R&D	Initiatives	Promotion of products containing no substances of concern (SOCs)	Medium- and long-term Targets	Complete the conversion to lead-free sintered material by 2020 (for local and bullet trains)		
	Targets for Fiscal 2015		Results Achieved in Fiscal 2015		Plans for Fiscal 2016 and After	
	<ul style="list-style-type: none">• Further promote a changeover to the lead-free sintered material for applicable categories of rolling stock• Develop lead-free materials that suit for other categories of rolling stock		<ul style="list-style-type: none">• Lead-free rate is 55% as of fiscal 2015 (46% the previous fiscal year)• Completed the development of a lead-free sintered material (not applicable to certain categories of rolling stock)• Promoted a changeover of conventional materials to a lead-free material Lead-free rate is 46% as of fiscal 2014		<ul style="list-style-type: none">• Further promote a changeover to the lead-free sintered material for applicable categories of rolling stock• Develop lead-free materials that suit for other categories of rolling stock	

Production	Initiatives	Reduction of total CO ₂ emissions at production plants in Japan	Medium- and long-term Targets	Improve CO ₂ intensity more than 1%		
		Continue ISO14001-related activities and improve environmental management system		Continue to enhance environmental activities		
		Promotion of zero-emission activities at production sites: eliminate direct landfill disposal		Maintain zero emissions		
	Targets for Fiscal 2015		Results Achieved in Fiscal 2015		Plans for Fiscal 2016 and After	
	• Improve CO ₂ intensity more than 1% every year		Improved CO ₂ emission intensity by 5.1% compared with fiscal 2014 through a changeover of oil fired boilers to heat pumps and the application of thermal barrier coatings to building rooftops		• Collect information globally on CO ₂ reducing measures and energy-saving technologies	
	• Firmly root ISO14001 in operations and steadily renew certifications		Renewed the ISO14001 certifications at four sites, including Akebono Brake (Thailand) Co., Ltd.		• Continue to firmly root ISO14001 in operations and steadily renew certifications	
	• Maintain zero emissions; generate no direct landfill disposal		Maintained zero emissions; generate no direct landfill disposal		• Continue to maintain zero emissions; generate no direct landfill disposal	

Environmental Education	Initiatives	Environmental training center	Medium- and long-term Targets	Nurture human resources to disseminate environmental preservation methods to locations nationwide through training programs implemented at Environmental training center	
	Targets for Fiscal 2015		Results Achieved in Fiscal 2015		Plans for Fiscal 2016 and After
	• Get feedback from the trainees and reflect it in the program		• In response to comments that the program was overly technical, we introduced simpler experiments, such as making the volume of CO ₂ gas visible by collecting it in plastic bags, in this way offering a greater degree of choice to the trainees • Started introducing the online education program implemented at ABCT (United States) to Japan		Get feedback from the trainees and reflect it in the program

Refer to the following for performance data for each principal company.
Akebono Environmental Data by Principal Company in Japan(PDF download 1,065 KB, 5 pages)

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Logistics	Initiatives	Response to revised Energy Conservation Law (energy saving obligation of cargo owners)	Medium- and long-term Targets	Reduce unit energy consumption 1% on a year-on-year basis
	Targets for Fiscal 2015		Results Achieved in Fiscal 2015	
	Plans for Fiscal 2016 and After			
	Continue efforts to reduce unit energy consumption 1% on a year-on-year basis		Reduced CO ₂ emissions from logistics by 4.8% on a year-on-year basis <Improvements> <ul style="list-style-type: none"> • Eco-friendly driving activities and seminars • Introduced the real-time management system of truck operations 	
			<ul style="list-style-type: none"> • Continue efforts to reduce unit energy consumption 1% or more on a year-on-year basis 	

Purchasing	Initiatives	Promotion of green purchasing	Medium- and long-term Targets	Establish structure that ensures purchasing activities in line with the Green Purchasing Guidelines
	Targets for Fiscal 2015		Results Achieved in Fiscal 2015	
	Plans for Fiscal 2016 and After			
	Revise supplier quality management (SQM) standard manuals		<ul style="list-style-type: none"> • Conducted research in tandem with suppliers into the possibility of materials that use fewer environmental impact substances and require lower energy input with the aim of making concrete proposals for new material development • Carried out the following revisions to SQM standard manuals to ensure the greater understanding of suppliers with regard to the Company's approach to environmental impact substance reduction <ul style="list-style-type: none"> • Enhanced GADSL*1 explanations • Provided clearer descriptions of procedures for the handling of environmental impact substances 	
			<ul style="list-style-type: none"> • Encourage suppliers to upgrade their environmental management systems • Continue supply chain survey using IMDS*2 	

Production Engineering	Initiatives	Promotion of resource-saving design	Medium- and long-term Targets	Develop manufacturing facilities that are reusable, achieving a greater yield ratio, energy saving and eco-friendly operations, thereby realizing environmentally friendly manufacturing
	Targets for Fiscal 2015		Results Achieved in Fiscal 2015	
	Plans for Fiscal 2016 and After			
	<ul style="list-style-type: none"> • Further enhance energy-saving and resource-saving technologies 		<ul style="list-style-type: none"> • Completed installation of next-generation facilities at Fukushima Manufacturing to realize a 70% improvement to energy efficiency of sintering process in metal disk production 	
			<ul style="list-style-type: none"> • Further enhance energy-saving and resource-saving technologies 	

*1 Global Automotive Declarable Substance List

*2 International Material Data System used by automobile industry to report data on materials

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