

Subaru Voluntary Plan for the Environment

The 5th Voluntary Plan for the Environment (FY2013 to FY2017)

[1] Global Warming

Field	Item	Target/Initiative (Up to FY2017)	FY2017				
			Target	Results	Evaluation		
A. Green Products	Fuel economy improvement	◆ Continue to improve fuel economy through full model changes and annual improvements.	◇ Improve fuel economy by 30% over older models through innovations to environmental engines/CVTs. ◇ Introduce horizontally opposed direct-injection turbo engines to the market.	• Introduce the next generation IMPREZA incorporating the environmental engine and CVT to the marketplace.	• Introduced the New Impreza from the domestic to the global marketplace.	—	
		◆ Promote fuel economy improvements to conform to fuel economy/GHG emissions standards in each country/region.	◇ Japan: Meet the 2015 Fuel Economy Standards. ◇ Overseas: Meet the fuel economy/GHG emissions standards in each region.	• Continue to conduct monitoring in each country/region.	• Japan: Met the FY2016 fuel economy standards in eight of the nine categories, and made it possible to compensate with credit for remaining one categories. Calculation results expected to be ready in mid-June. • EU: Met the target with exceeded regulatory values. • China: Met 2016 fuel economy regulations.	○	
	Clean energy use	Automobiles	◆ Introduce hybrid cars into the market.	◇ Introduced hybrid cars into the Japanese market in 2013.	• Transition from advanced development to the mass production development stage, and prepare for making design specifications more precise and adding an outlook that includes productivity.	• Completed confirmation of the performance confirmation phase as planned and shifted to the production development completion confirmation phase.	○
			◆ Conduct research aimed at the launch of electric vehicles in the market.	◇ Promote electric vehicle research.	• Continue to promote research for introducing electric vehicles and PHEVs to the market.	• Completed basic development and started motorized parts trial production toward advanced development of vehicles starting next fiscal year.	○
		Industrial products	◆ Promote diesel engines' improvement and launch into the market of diesel engines.	◇ Promote compliance with the Euro 6 for horizontally opposed diesel engines.	(Completed the final target for the Fifth Voluntary Plan one year ahead of schedule).	(Completed the final target for the Fifth Voluntary Plan one year ahead of schedule).	—
			◆ Promote and establish technologies to reduce exhaust gas and improve fuel economy by fusing electronic control and general purpose engines.	◇ Promote development of fuel-injection general-purpose engine models and promote their wide introduction into the market.	• Make efforts to reduce exhaust gas and improve fuel economy with feedback control technology.	• Introduced feedback control into the fuel-injection system and completed air-fuel ratio optimization tests.	○
	Control of global warming from air conditioning refrigerants	Automobiles	◆ Promote the development of air conditioners that use low global warming potential refrigerants.	◇ Further promote the development of low global warming potential air conditioners.	• Further promote development of low global warming potential air conditioners.	• Development proceeded as planned to expand deployment of low global warming potential air conditioners.	○
B.Green Factories, Distribution, and Offices	Production facilities	◆ Reduce CO ₂ emissions per unit of production at domestic production facilities.	◇ Reduce CO ₂ emissions per unit of production by 10% from FY2007 level by FY2017 at domestic production facilities.	• Reduce CO ₂ emissions per unit of production at domestic production facilities by 10% from FY2007 level.	• Reduced CO ₂ emissions per unit of production at domestic production facilities by 43.0% from FY2007 levels.	○	
		◆ Promote activities to reduce CO ₂ emissions at overseas production facilities [※] .	◇ For overseas production facilities, set medium term CO ₂ emissions targets and conduct activities to attain them.	• CO ₂ emissions increased due to factory expansion. The target is set to 251,151-CO ₂ .	• Achieved the target with the result of 191,031 t-CO ₂ .	○	
	Distribution	◆ Promote CO ₂ emissions reduction activities synchronized with the Energy Saving Law.	◇ Use FY2007 per unit of CO ₂ emission as BM, and reduce emission by 1% every year.	• Aim for a 10% reduction in per unit of CO ₂ emissions using FY2007 as the reference point. (Annual target for completed cars: CO ₂ base unit of 30.94 kg/unit)	• Achieved per unit of CO ₂ emission goals for completed cars, CKD, parts and accessories. • Achieved a 10% reduction in per unit of CO ₂ emission from FY2007 for completed cars. (Achieved CO ₂ base unit of 26.23 kg/unit rather than the annual target of 30.94 kg/unit).	○	
	Offices	◆ Ensure compliance with the Energy Saving Law.	◇ Use FY2010 per unit of energy use as BM, and reduce energy use by 1% every year (across the company including offices).	• Achieve average annual reduction of 1% per base unit.	• Achieved the 1% average annual reduction from BM year across the entire business.	○	

※ SIA : Subaru of Indiana Automotive, Inc.