

DENSO Eco Vision 2025

- I Commitment
- II Environmental policy
 - Target 3
 - Action 1 0
- III Environmental action plan(7th)



I Commitment (- 2050)

DENSO group preserves the earth and delivers the bright future to the next generations by solving problems of environment and energy through all the cooperate behaviors and natural symbiosis and creating a new environmental value for the sustainable region and society in 2050.

II Environmental policy (- 2025)

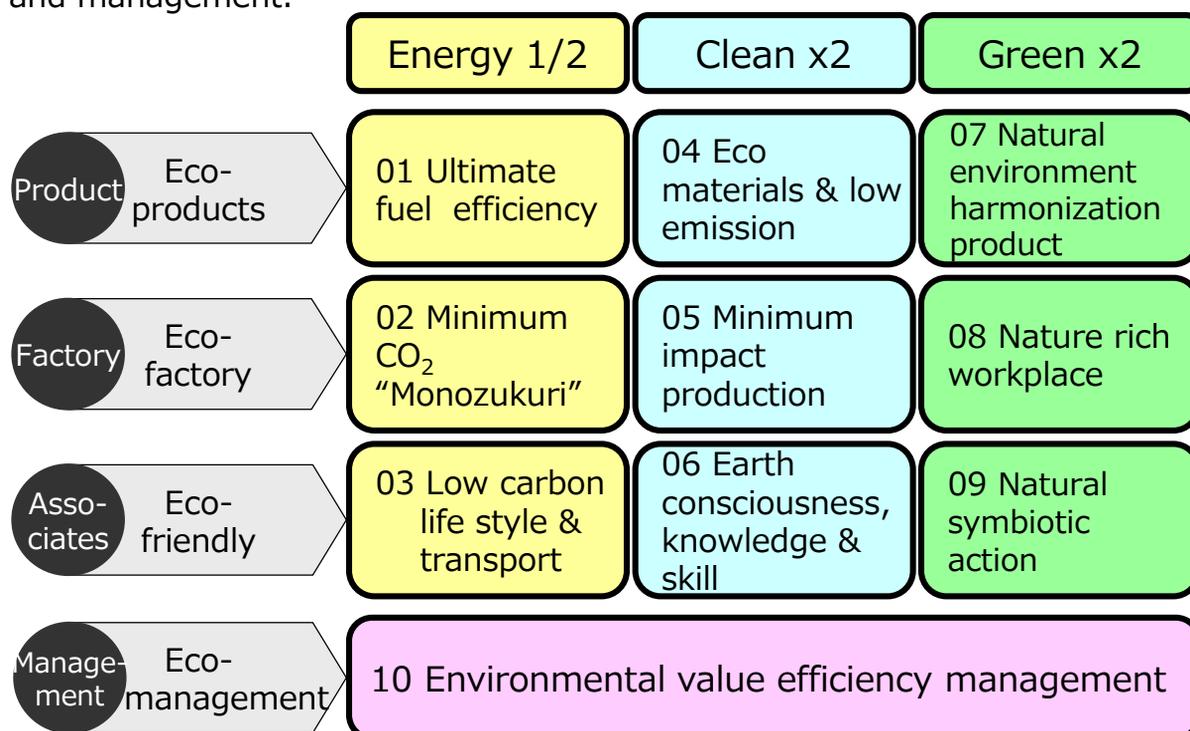
We define "Target 3" to be achieved in 2025 as a milestone of the commitment, and enhance "Action 10" as initiatives of ten concrete fields.

[Target 3]

Energy 1/2	Contribute to permanent maintenance of global environment by the technologies that can solve the problems of global warming, energy and resources.
Clean x2	Comply with law and promote continuous improvement in order to provide reassurance to all stakeholders and remain a cooperation that grows with the society.
Green x2	Realize a society with sharing nature's wisdom and benefit in order to take over rich natural environment to the next generation through cooperate activity aiming at symbiosis with nature.

[Action 10]

We define 10 action plans with three axes of "Energy", "Clean" and "Green" and approach in all business scope from viewpoints of product, factory, associates and management.



III Environmental action plan(7th) (-2025)

We define "Environment action plan" towards 2025 and approach it in order to embody the commitment and environmental policy.

Action	Concrete implementation items/target																									
01 Ultimate fuel efficiency	<p>[01-1 Enlargement of product contribution] Take leadership to reduce environmental load of automobile society by introducing products contributing in reduction of energy consumption and CO₂ emission to be the first in the world.</p> <ul style="list-style-type: none"> - Operate DENSO product EMS(Environment Management System) which incorporates environment prior assessment of new product in Early Stage Control*1 steadily and improve environmental performance and energy efficiency from the beginning by designing environmental consideration in the life cycle viewpoint *1 System to ensure that quality must be built in the process of planning-design-production for new product 																									
02 Minimum CO₂ "Monozukuri"	<p>[02-1 Reduction of Monozukuri CO₂] Promotion of CO₂ reduction in production and logistics for achieving energy half.</p> <p>(1) CO₂ reduction in production</p> <ul style="list-style-type: none"> - On-site energy saving activity by all member participation in facility (supply) side through to production (use) side - Promotion of autonomous loss improvement activity by visualizing energy utilizing EMS and development of Energy JIT (Just In Time) activity following the production changes - Promotion of making an innovative low CO₂ line by "co-creation of human and machine" utilizing F-IOT aiming at minimum energy production. - Introduction of high efficiency cogeneration and renewable energy creating and stocking system <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Index</th> <th>Scope</th> <th>Standard year</th> <th>2025</th> </tr> </thead> <tbody> <tr> <td rowspan="2" style="text-align: center;">Production CO₂ Basic Unit (value added productivity)</td> <td style="text-align: center;">DENSO</td> <td style="text-align: center;">2012</td> <td style="text-align: center;">▲50%</td> </tr> <tr> <td style="text-align: center;">Groups</td> <td style="text-align: center;">2012</td> <td style="text-align: center;">▲50%</td> </tr> </tbody> </table> <p>(2) CO₂ reduction in logistics</p> <ul style="list-style-type: none"> - Improvement of transportation, reduction by Eco-drive etc. <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Index</th> <th>Scope</th> <th>Standard year</th> <th>2025</th> </tr> </thead> <tbody> <tr> <td rowspan="3" style="text-align: center;">Logistic CO₂ Basic Unit (Sales)</td> <td style="text-align: center;">DENSO</td> <td style="text-align: center;">2012</td> <td style="text-align: center;">▲13%</td> </tr> <tr> <td style="text-align: center;">Groups within Japan</td> <td style="text-align: center;">2012</td> <td style="text-align: center;">▲13%</td> </tr> <tr> <td style="text-align: center;">Groups outside Japan</td> <td colspan="2" style="text-align: center;">Top level of each country</td> </tr> </tbody> </table>	Index	Scope	Standard year	2025	Production CO ₂ Basic Unit (value added productivity)	DENSO	2012	▲50%	Groups	2012	▲50%	Index	Scope	Standard year	2025	Logistic CO ₂ Basic Unit (Sales)	DENSO	2012	▲13%	Groups within Japan	2012	▲13%	Groups outside Japan	Top level of each country	
Index	Scope	Standard year	2025																							
Production CO ₂ Basic Unit (value added productivity)	DENSO	2012	▲50%																							
	Groups	2012	▲50%																							
Index	Scope	Standard year	2025																							
Logistic CO ₂ Basic Unit (Sales)	DENSO	2012	▲13%																							
	Groups within Japan	2012	▲13%																							
	Groups outside Japan	Top level of each country																								
03 Low carbon life style & transport	<p>[03-1 Reduction of life and moving energy] Reduction of fossil energy use in life and move aiming at realization of carbon neutral life.</p> <ul style="list-style-type: none"> - Thorough energy saving at office by air conditioning temperature adequacy, unnecessary time OFF etc. - Promotion of using smart move for associates, making efforts such as power saving by energy management at home, reduction of energy in life <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Index</th> <th>Scope</th> <th>Standard year</th> <th>2025</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Number of regions that takes environment action</td> <td style="text-align: center;">Global</td> <td style="text-align: center;">-</td> <td style="text-align: center;">100%</td> </tr> </tbody> </table>	Index	Scope	Standard year	2025	Number of regions that takes environment action	Global	-	100%																	
Index	Scope	Standard year	2025																							
Number of regions that takes environment action	Global	-	100%																							

Action	Concrete implementation items/target																	
04 Eco materials & low emission	<p>[04-1 Management and reduction of substances of environmental concern] Promotion of activity provide security to all the stakeholders through minimization of environmental concern of products focusing on global restriction tendency of substances of environmental concern.</p> <ul style="list-style-type: none"> - Promote changeover of substances ahead of tightening of regulations for substances of environmental concern. - Establish green purchasing system enriching further supply chain management, aiming further smooth and appropriate reduction of the restricted substances. 																	
	<table border="1"> <thead> <tr> <th>Index</th> <th>Scope</th> <th>Standard year</th> <th>2025</th> </tr> </thead> <tbody> <tr> <td>Number of violations of product substance of environmental concern(SOC) regulation</td> <td>Global</td> <td>-</td> <td>Zero legal noncompliance</td> </tr> </tbody> </table>				Index	Scope	Standard year	2025	Number of violations of product substance of environmental concern(SOC) regulation	Global	-	Zero legal noncompliance						
Index	Scope	Standard year	2025															
Number of violations of product substance of environmental concern(SOC) regulation	Global	-	Zero legal noncompliance															
05 Minimum impact production	<p>[05-1 Promotion of efficient resources use] Improvement of efficient resources use in production and logistics for to contribution recycling society</p> <p>(1) Reduction of total waste*²</p> <ul style="list-style-type: none"> - Promotion of total waste reduction by development and introduction of innovative technology and improvement of yield <p>*2 Recycle waste with receiving money (valuable resource) + recycle waste with paying money + landfill waste</p>																	
	<table border="1"> <thead> <tr> <th>Index</th> <th>Scope</th> <th>Standard year</th> <th>2025</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Total waste basic unit (value added productivity)</td> <td>DENSO</td> <td>2003</td> <td>▲50%maintain</td> </tr> <tr> <td>Groups within Japan</td> <td>2012</td> <td>▲6.5%maintain</td> </tr> <tr> <td>Groups outside Japan</td> <td>2012</td> <td>▲34%maintain</td> </tr> </tbody> </table>				Index	Scope	Standard year	2025	Total waste basic unit (value added productivity)	DENSO	2003	▲50%maintain	Groups within Japan	2012	▲6.5%maintain	Groups outside Japan	2012	▲34%maintain
	Index	Scope	Standard year	2025														
	Total waste basic unit (value added productivity)	DENSO	2003	▲50%maintain														
		Groups within Japan	2012	▲6.5%maintain														
Groups outside Japan		2012	▲34%maintain															
<p>(2) Landfill waste Zero(zero emission)</p> <ul style="list-style-type: none"> - Maintenance zero emission*³ <p>*3 Reduction of landfill waste over 99% from 1999</p>																		
<table border="1"> <thead> <tr> <th>Index</th> <th>Scope</th> <th>Standard year</th> <th>2025</th> </tr> </thead> <tbody> <tr> <td>Landfill waste (emission)</td> <td>Global</td> <td>1999</td> <td>Maintain zero emission</td> </tr> </tbody> </table>				Index	Scope	Standard year	2025	Landfill waste (emission)	Global	1999	Maintain zero emission							
Index	Scope	Standard year	2025															
Landfill waste (emission)	Global	1999	Maintain zero emission															
<p>(3) Reduction of packing and wrapping material in logistics</p> <ul style="list-style-type: none"> - Reduction of packing and wrapping material purchasing weight by slimming of wrapping and expansion of returnable containers etc. 																		
<table border="1"> <thead> <tr> <th>Index</th> <th>Scope</th> <th>Standard year</th> <th>2025</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Packing and wrapping material basic unit (Sales)</td> <td>DENSO</td> <td>2012</td> <td>▲13%</td> </tr> <tr> <td>Groups within Japan</td> <td>2012</td> <td>▲13%</td> </tr> <tr> <td>Groups outside Japan</td> <td colspan="2">Top level of each country</td> </tr> </tbody> </table>				Index	Scope	Standard year	2025	Packing and wrapping material basic unit (Sales)	DENSO	2012	▲13%	Groups within Japan	2012	▲13%	Groups outside Japan	Top level of each country		
Index	Scope	Standard year	2025															
Packing and wrapping material basic unit (Sales)	DENSO	2012	▲13%															
	Groups within Japan	2012	▲13%															
	Groups outside Japan	Top level of each country																

Action	Concrete implementation items/target											
05 Minimum impact production	<p>[05-2 Regional contribution through preservation of water resource] Promotion of reduction activity of water consumption considering water environment conditions of each country and region</p> <p>(1) Development of water management - Aggressive development of water resource securement for emergency according to regional needs, utilization of rainwater, etc. along with tracking water consumption and understanding water risks for improvement of regional security through water globally</p> <p>(2) Minimization of water consumption - Reduction of water consumption by process improvement (such as changeover to no washing process), expansion of water JIT or reuse of drainage water, etc.</p> <table border="1" data-bbox="261 524 1360 737"> <thead> <tr> <th>Index</th> <th>Scope</th> <th>Standard year</th> <th>2025</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Water consumption Basic unit (value added productivity)</td> <td>DENSO</td> <td>2015</td> <td>▲5%</td> </tr> <tr> <td>Groups with large water consumption</td> <td>2015</td> <td>▲10%</td> </tr> </tbody> </table>	Index	Scope	Standard year	2025	Water consumption Basic unit (value added productivity)	DENSO	2015	▲5%	Groups with large water consumption	2015	▲10%
	Index	Scope	Standard year	2025								
Water consumption Basic unit (value added productivity)	DENSO	2015	▲5%									
	Groups with large water consumption	2015	▲10%									
06 Earth consciousness, knowledge & skill	<p>[05-3 Reduction of substances of environmental concern] Reduction of risk of chemical substances discharged in the environment by new technology development (without using and substitution), optimization of consumption, collecting and recycling, etc.</p> <p>- Promotion of individual approach for the particular problems of each country and region</p> <p><Promotion items></p> <p>- Reduction of VOC(Volatile Organic Compound),regulation correspondence</p> <p>- Reduction of Greenhouse gas except the energy derivation (Gas for the semiconductor manufacture)*⁹ *⁹ PFCs, HFCs, SF₆ etc.</p> <p>- Air emission (such as PM_{2.5}) etc.</p>											
	<p>[06-1 Expansion of environmental education] Expand environmental education for the purpose that each associate of DENSO group focuses on “preservation of global environment” and takes action aimed at sustainable society in each position and situation on a voluntary bases as our mission.</p> <p>- Improvement of environmental management of site managers/managers</p> <p>- Improvement of competence/expertise of environmental staffs</p> <p>- Improvement of business operation ability based on life cycle viewpoint of person related to product design</p> <p>- Improvement of environmental staff’s knowledge and capability for environmental equipment and operation risks</p> <p>- Development of activity to raise environmental awareness to each associate of DENSO group</p> <table border="1" data-bbox="265 1725 1365 1860"> <thead> <tr> <th>Index</th> <th>Scope</th> <th>Standard year</th> <th>2025</th> </tr> </thead> <tbody> <tr> <td>Environment education results based on annual plan</td> <td>Global</td> <td>–</td> <td>100%</td> </tr> </tbody> </table>	Index	Scope	Standard year	2025	Environment education results based on annual plan	Global	–	100%			
Index	Scope	Standard year	2025									
Environment education results based on annual plan	Global	–	100%									

Action	Concrete implementation items/target																
07 Natural environment harmony product	<p>[07-1 Promotion of product, business in accord with natural environment] Contribute to society by thorough making natural environment harmony product and new business which supports sustainable, rich future by technology.</p> <p>Work on green environment field positively utilizing the automobile field technology</p> <ul style="list-style-type: none"> - Continuous promotion of biofuel research and business development utilizing micro algae. - Promotion of development and utilization of renewable bio resource (sustainable green material) -Promotion of efficient resource use and recycling technology development <table border="1" data-bbox="278 445 1358 549"> <thead> <tr> <th>Index</th> <th>Scope</th> <th>Standard year</th> <th>2025</th> </tr> </thead> <tbody> <tr> <td>Development results based on annual plan</td> <td>Global</td> <td>-</td> <td>100%</td> </tr> </tbody> </table>	Index	Scope	Standard year	2025	Development results based on annual plan	Global	-	100%								
Index	Scope	Standard year	2025														
Development results based on annual plan	Global	-	100%														
08 Nature rich workplace	<p>[08-1 Promotion of rich greenery plant] Promotion of greenery activity that regional community harmonizes with, customers can sympathize with, and associates can work comfortably</p> <p>Creation of rich greenery plant (Develop DENSO original greenery evaluation)</p> <ul style="list-style-type: none"> - Region: Integrate with public sidewalk as open enterprise toward harmony and contribution with the region environment - Customer : Simple, symbolic design which gives clean impression, catches eyes - Associates : Provide comfortable working environment and promote pleasant working environment, gathers, relaxes, heals, and mood changes <table border="1" data-bbox="264 886 1358 1102"> <thead> <tr> <th>Index</th> <th>Scope</th> <th>Standard year</th> <th>2025</th> </tr> </thead> <tbody> <tr> <td>Existing Plant redevelopment based on annual plan</td> <td>DNJP</td> <td>2019</td> <td>100% maintain</td> </tr> <tr> <td>New plan Biological diversity maintenance</td> <td>DNJP</td> <td>-</td> <td>100% implementation</td> </tr> </tbody> </table>	Index	Scope	Standard year	2025	Existing Plant redevelopment based on annual plan	DNJP	2019	100% maintain	New plan Biological diversity maintenance	DNJP	-	100% implementation				
Index	Scope	Standard year	2025														
Existing Plant redevelopment based on annual plan	DNJP	2019	100% maintain														
New plan Biological diversity maintenance	DNJP	-	100% implementation														
09 Natural symbiotic action	<p>[09-1 Natural symbiotic action and human development] Promotion of biodiversity crisis understanding and its conservation actions toward sustainable natural symbiosis society</p> <ul style="list-style-type: none"> - Water area conservation - Forest/SATOYAMA conservation - Tree planting/planting 																
10 Environmental value efficiency management	<p>[10-1 Fusion of environmental preservation and business management] Enhance environmental management by operating steadily DENSO group EMS which is merged product EMS (Environment Management System) and manufacturing EMS, improving global environment from a life cycle viewpoint, the beginning management by each associate of DENSO group</p> <table border="1" data-bbox="258 1514 1358 1618"> <thead> <tr> <th>Index</th> <th>Scope</th> <th>Standard year</th> <th>2025</th> </tr> </thead> <tbody> <tr> <td>Practice rate of DENSO group EMS</td> <td>Global</td> <td>-</td> <td>100% maintain</td> </tr> </tbody> </table> <p>[10-2 Minimization of Environmental risk] Thorough environmental compliance</p> <ul style="list-style-type: none"> - Thorough compliance through reduction activity of environmental risk <table border="1" data-bbox="258 1748 1358 1881"> <thead> <tr> <th>Index</th> <th>Scope</th> <th>Standard year</th> <th>2025</th> </tr> </thead> <tbody> <tr> <td>Number of cases of environmental violation/abnormal/accident</td> <td>Global</td> <td>-</td> <td>Maintain 0 counts</td> </tr> </tbody> </table> <p>[10-3 Disclosure of information] Aggressive disclosure of environmental related information to all the stakeholders</p>	Index	Scope	Standard year	2025	Practice rate of DENSO group EMS	Global	-	100% maintain	Index	Scope	Standard year	2025	Number of cases of environmental violation/abnormal/accident	Global	-	Maintain 0 counts
Index	Scope	Standard year	2025														
Practice rate of DENSO group EMS	Global	-	100% maintain														
Index	Scope	Standard year	2025														
Number of cases of environmental violation/abnormal/accident	Global	-	Maintain 0 counts														