# Environmental Value

Main Objective: **Measures against global warming**

## Reduce $CO_2$ emissions

| Medium-term Goal | **Reduce $CO_2$ emissions per unit of sales by more than 4% from 2017 to 2021** |
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| Action Plan | | - Enhance energy-saving facilities |
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| Fiscal 2018 | Targets (Main measures) | - Increase LED lighting, Increase number of eco-cars<br>- Raise the rate of car sharing<br>- Advance the modal shift<br>- Install high-efficiency air conditioning |
| | Results | - Converted lighting from fluorescent to LED at all production sites when the fluorescent lighting required repair<br>- Introduced eco-cars at sales sites at appropriate opportunities |
| Fiscal 2019 | Targets (Main measures) | - Continue converted lighting from fluorescent to LED at all production sites<br>- Continue raising awareness about the conversion to eco-efficient operations<br>- Examine the feasibility of eco-cars when acquiring promotional vehicles |
| Scope of Application | | Maruha Nichiro Group (Japan) |
| Department Responsible | | Corporate Planning Department, Maruha Nichiro Corporation |

| Action Plan | | - Improve energy efficiency |
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| Fiscal 2018 | Targets (Main measures) | - Improve energy efficiency (manufacturing and logistics divisions), control oil-equivalent energy volume |
| | Results | - Controlled number of boilers and air compressors in use, manually switched to energy-efficient mode during night hours |
| Fiscal 2019 | Targets (Main measures) | - Manage boiler usage, efficiently use steam compressors, and promote efficient use of compressors |
| Scope of Application | | Maruha Nichiro Group (Japan) |
| Department Responsible | | Corporate Planning Department, Maruha Nichiro Corporation |

| Action Plan | | - Switch to non-CFC freezers |
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| Fiscal 2018 | Targets (Main measures) | - Switch to non-fluorocarbon refrigerators and introduce new models |
| | Results | - Switched to non-fluorocarbon refrigerators and introduced new models |
| Fiscal 2019 | Targets (Main measures) | - Continue switching to non-fluorocarbon refrigerators on each production line at all plants |
| Scope of Application | | Maruha Nichiro Group (Japan) |
| Department Responsible | | Corporate Planning Department, Maruha Nichiro Corporation |

| Action Plan | | - Reduce electrical usage |
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| Fiscal 2018 | Targets<br>(Main measures) | - Time control air conditioning and lighting, use Cool Biz campaign to reduce energy consumption |
| | Results | - At the headquarters, automatically turned off air conditioning in the morning and set an automatic default temperature for twice each day in summer; managed the automatic turn off at the end of the business day |
| Fiscal 2019 | Targets<br>(Main measures) | - Continue implementing Cool Biz in summer<br>- Continue time controlling air conditioning and lighting |
| Scope of Application | | Maruha Nichiro Group (Japan) |
| Department Responsible | | Corporate Planning Department, Maruha Nichiro Corporation |

| Action Plan | | - Reduce heavy oil and gas usage |
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| Fiscal 2018 | Targets<br>(Main measures) | - Verify conversion to energy-efficient boilers |
| | Results | - Verified conversion to energy-efficient boilers and continued to replace boilers with new models<br>- Reduce consumption volume of heavy oils |
| Fiscal 2019 | Targets<br>(Main measures) | - Continue replacing boilers |
| Scope of Application | | Maruha Nichiro Group (Japan) |
| Department Responsible | | Corporate Planning Department, Maruha Nichiro Corporation |

Main Objective: **Build a recycling-oriented society**

## Reduce waste and improve recycling rates

| Medium-term Goal | **Reduce the volume of waste per unit of sales by more than 4% from 2017 to 2021**<br>**Aim for 99% waste recycling rate by 2021** |
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| Action Plan | | - Reduce manufacturing problems |
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| Fiscal 2018 | Targets (Main measures) | - Inspect equipment at the start and end of operations, thoroughly repair anything that needs repairing |
| | Results | - Used preventive maintenance to reduce repair necessity and improve operating efficiency (reduce major repairs) |
| Fiscal 2019 | Targets (Main measures) | - Fully share information, and focus on preventive maintenance |
| Scope of Application | | Maruha Nichiro Group (Japan) |
| Department Responsible | | Corporate Planning Department, Maruha Nichiro Corporation |

| Action Plan | | - Reduce waste of raw materials,resources and products |
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| Fiscal 2018 | Targets (Main measures) | - Develop products from currently discarded materials |
| | Results | - Developed products from previously discarded crested squid cartilage (reduced annual waste by 12 tons)<br>- Examined other seafood for potential to produce new products |
| Fiscal 2019 | Targets (Main measures) | - Examine making products from crested squid internal organs<br>- Continue developing products from other current waste materials |
| Scope of Application | | Maruha Nichiro Group (Japan) |
| Department Responsible | | Corporate Planning Department, Maruha Nichiro Corporation |

| Action Plan | | - Turn waste into valuable resources |
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| Fiscal 2018 | Targets (Main measures) | - Render animal and plant residue into feed |
| | Results | - Captured the value in unusable processed and packaged products<br>- Examined potential to capture value from other product discards at all sites |
| Fiscal 2019 | Targets (Main measures) | - Capture value from waste products while also examining ways for each site to contribute to food banks |
| Scope of Application | | Maruha Nichiro Group (Japan) |
| Department Responsible | | Corporate Planning Department, Maruha Nichiro Corporation |

Main Objective: **Protect marine resources**

## Promote sustainable use of fishery resources

| Medium-term Goal | **Promote certification acquisition for sustainable fishing and farming**<br>**Strengthen efforts to abolish illegal, unreported, and unregulated fishing (IUU)**<br>**Expand egg-to-harvest business**<br>**Promote eco-friendly farming technology** |
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| Action Plan | | - Promote the use of marine products obtained through sustainable fishing/aquafarming certificates (MSC/ASC) |
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| Fiscal 2018 | Targets (Main measures) | - Promote CoC certification at contracted processing plants |
| | Results | - Increased the number of products offered that are manufactured at sites with CoC certification and bear MSC ecolabels |
| Fiscal 2019 | Targets (Main measures) | - Continue developing products for ecolabeling after CoC certification is received |
| Scope of Application | | Maruha Nichiro Group (Japan) |
| Department Responsible | | Corporate Planning Department, Maruha Nichiro Corporation |

| Action Plan | | - Promote acquisition of sustainable aquafarming certificates |
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| Fiscal 2018 | Targets (Main measures) | - Support efforts to earn certification, promote measures for contracted processing plants to earn CoC certification |
| | Results | - Received certification for the Tarumizu processing plant in Kagoshima |
| Fiscal 2019 | Targets (Main measures) | - Continue supporting and promoting efforts to receive certification |
| Scope of Application | | Maruha Nichiro Group (Japan) |
| Department Responsible | | Corporate Planning Department, Maruha Nichiro Corporation |

| Action Plan | | - Implement a stricter verifications of imported fishery product traceability |
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| Fiscal 2018 | Targets (Main measures) | - Strengthen traceability of imported seafood by thoroughly verifying fish catch certificates |
| | Results | - Thoroughly verified fish catch certificates |
| Fiscal 2019 | Targets (Main measures) | - Continue thorough verification processes |
| Scope of Application | | Maruha Nichiro Group (Japan) |
| Department Responsible | | Corporate Planning Department, Maruha Nichiro Corporation |

| Action Plan | | - Promote dialogue in Japan and abroad |
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| Fiscal 2018 | Targets (Main measures) | - Participate in the Seafood Business for Ocean Stewardship (SeaBOS) Keystone Dialogues<br>- Engage in dialogue with academic institutions and other organizations |
| | Results | - Participated in the SeaBOS Keystone Dialogues as secretariat and CEO (May, September)<br>- Developed promotion tools with university tie-ups<br>- Presented university lectures on marine resources. Engaged in dialogue with students and the public |
| Fiscal 2019 | Targets (Main measures) | - Continue participating in the Keystone Dialogues<br>- Continue activities to build positive relations with stakeholders |
| Scope of Application | | Maruha Nichiro Group (Japan) |
| Department Responsible | | Corporate Planning Department, Maruha Nichiro Corporation |

| Action Plan | | - Increase production of egg-to-harvest bluefin tuna |
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| Fiscal 2018 | Targets<br>(Main measures) | - Ship 489 tons |
| | Results | - Shipped 409 tons |
| Fiscal 2019 | Targets<br>(Main measures) | - Ship 608 tons |
| Scope of Application | | Maruha Nichiro Group (Japan) |
| Department Responsible | | Corporate Planning Department, Maruha Nichiro Corporation |

| Action Plan | | - Strengthen R&D systems for aquafarming technologies |
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| Fiscal 2018 | Targets<br>(Main measures) | - Start full-fledged effort to expand the farmed fish operation |
| | Results | - Produced yellowtail at the Minami Satsuma Hatchery in Kagoshima. Moved the fish to the Company's fish farm where they are being raised<br>- Produced broodstock candidates for greater amberjack |
| Fiscal 2019 | Targets<br>(Main measures) | - Produce yellowtail and greater amberjack, including egg-to-harvest, at the Minami Satsuma Hatchery |
| Scope of Application | | Maruha Nichiro Group (Japan) |
| Department Responsible | | Corporate Planning Department, Maruha Nichiro Corporation |