

2007 - 2009 Medium-Term Environmental Action Plan

The Showa Shell Group is promoting a number of environmental programs based on its Environmental Action Plan using a mid-term perspective. The HSSE Committee first establishes policies for Medium-Term Environmental Action Plans, then each department and operational site formulates and implements specific annual programs. The performance of each program is periodically verified in accordance with the PDCA process, is confirmed by the HSSE Committee, and the result is reflected to a program for the following year to fulfill the mid-term targets. The current Medium-Term Environmental Action Plan was adopted in 2007, and is a three-year plan ending in 2009. The Showa Shell Group as a whole has more than 1,000 programs in force, but only an overview is given here.

Program Theme	Main Medium-Term Targets (for 2009)	Accomplishments in 2007	Targets for 2008
Advancing environmental management	Introduce and implement HSSE-MS throughout the group.	Established HSSE-MS in four subsidiaries and affiliates (At present, the system is in place at 22 of the 25 companies scheduled for implementation)	Establish HSSE-MS in the three remaining target companies.
	Conduct scheduled internal audits and HSSE audits in each department.	Conducted internal audits and 100% of the HSSE audits scheduled at the beginning of the year, and confirmed the status of HSSE-MS and utilization of the PDCA process.	Ensure implementation of scheduled HSSE audits. Conduct internal audits. 100% performance of an audit plan that incorporates proposals growing out of the previous year's audits. Improve the implementation of HSSE-MS at all sites.
Promoting energy conservation and preventing global warming	Reduce unit energy consumption at refineries to 8.02 by 2010.	Reduced unit energy consumption to 8.03 (a 15.0% reduction in comparison to 1990).	Reduce unit energy consumption to 7.98 (a 15.6% reduction in comparison to 1990).
	Conserve energy and reduce consumption of resources in our offices through the ECO TRY 21 campaign.	Introduced ECO TRY 21 campaign at all departments and operational sites that are adopting HSSE-MS; reduced consumption of electricity in our offices by 8% (in comparison to 2006).	Reduce consumption of electricity in our offices by 5% (in comparison to 2007).
Preventing environmental pollution and reducing waste	Reduce the volume of industrial waste generated by our refineries that is consigned for final disposition by 95% or more from 1990 levels, and ultimately to less than 1%.	Reduced the volume of industrial waste consigned for final disposal by 88.7% in comparison to 1990, to 4.2%.	Reduce the volume of industrial waste consigned for final disposal by 97% in comparison to 1990, to 0.6%.
	Continue to practice soil contamination countermeasures.	Continued to implement countermeasures and follow-up at approximately 1,300 company-owned service stations. Conducted inspection at additional 130 service stations, and implemented 30 countermeasures.	Develop low-cost cleanup technology for reducing adverse environmental impact.
	Continue to pursue the integrated management of chemical substances.	Completed a draft of chemical substance management regulations. In addition, responses to the revisions to the Industrial Safety and Health Law (GHS-related) continue.	Adopt chemical substance management regulations and put integrated management into practice. Continue response to the revisions to the Industrial Safety and Health Act (responses in relation to the Globally Harmonized System of Classification and Labeling of Chemicals).
Offering environmentally friendly products and services	Continue pilot distribution operation of bio-gasoline (gasoline blended with ETBE) for scheduled launch of full-scale sales in 2010, in cooperation with the Petroleum Association of Japan.	Commenced a pilot distribution operation of bio-gasoline (blended with bio-ETBE) at seven service stations in Tokyo, Chiba Prefecture, and Kanagawa Prefecture on April 27, 2007, in cooperation with the Petroleum Association of Japan. This project is supported by the Ministry of Economy, Trade and Industry.	Commence test marketing of bio-gasoline at nine additional locations in Chiba, Kanagawa, Saitama, Gunma, and Miyagi prefectures in June 2008. Bio-gasoline is now available at a total of 16 Showa Shell service stations (100 locations in Japan).
	Promote and expand sales of CIS solar powered cells.	Commenced commercial production of Solacis CIS solar powered cells. Decided to build second plant, with an annual manufacturing capacity of 60MW.	Achieve stable operation of the first CIS solar-powered cell plant, and gain expertise. Commence construction of the second plant.
	Gain acceptance for household fuel cell systems.	Established ten new large-scale experimental fuel cell test locations. Continued testing at a total of 26 locations.	Establish 10 more locations and close six; conduct test at a total of 30 locations.
	Study the feasibility of widespread use of hydrogen fuel.	Achieved a 98% successful operating rate of our hydrogen stations (222 operating days of 226 scheduled operating days), supplying hydrogen to 569 vehicles.	Work to prevent problems through periodic inspections and maintenance, increase the operating rate to 99%, and promote the acceptance of hydrogen fuel.
	Develop practical use of GTL fuel	Expanded the sales area and bases for Shell Eco-Toyu, and conducted test marketing. The number of sales bases reached 40.	Increase the number of sales bases and continue test marketing.
Enhancing environmental protection programs and environmental communication	Engage in environmental communication with stakeholders through the Environmental Photo Contest.	Received 2,733 entries in the junior department and 660 in the general department, for a total of 3,393 photo contest entries. Some schools participated in the contest as part of environmental education for students.	Increase the number of entrants, and provide support for environmental education in schools.
	Engage in projects through cooperation between local communities and employees.	Participated in the Project for the Reforestation of Mt. Fuji run by the Organization for Industrial, Spiritual and Cultural Advancement (OISCA). Approximately 120 employees volunteered to plant one hectare of forest.	Increase the planted area to two hectares; continue planting and cultivation. Heighten the environmental consciousness of employees by increasing the number of volunteers.
	Support environmental science.	Established the Energy Sustainability Forum in cooperation with the Integrated Research System for Sustainability Science (IR3S), and commenced research in the field of sustainability science.	Hold public symposia to conduct lectures and panel discussions on the future of energy demand.
	Establish e-Learning program for all employees, and conduct intensive HSSE training.	Conducted e-Learning as a part of the Group-wide companywide Quality First 2007 campaign.	Conduct e-Learning as a part of the Group-wide Quality First 2008 campaign.