

## CHIYODA CORPORATION Group CSR Report 2010 Fiscal Year Ended March 31, 2010



واللابغال بنكر وماتا للبعلال

## **Corporate Profile**

Chivoda Corporation is an integrated engineering company primarily engaged in the design and construction of plants and facilities in Japan and around the world. The Chiyoda Group strives to contribute to the sustainable development of society while promoting harmony between energy and the environment.

• Name:	Chiyoda Corporation		
• Address:	12-1, Tsurumichuo 2-chome, Tsurumi-ku Yokohama 230-8601, Japan		
Main Offices:	Yokohama Head Office (Tsurumi-ku, Yokohama, Japan) Koyasu Office & Research Park (Kanagawa-ku, Yokohama, Japan) Kawasaki Office (Saiwai-ku, Kawasaki, Japan)		
<ul> <li>Paid-in Capital:</li> </ul>	¥43,392 million		
• Main Business Fields:	Consulting, planning, engineering, procurement, construction, commissioning (test operation), consulting and training for operation and maintenance, research and development and technology services, project management for plants and facilities in fields including energy, chemicals, pharmaceuticals, biotechnology and the environment		
Number of Group Companies:	Domestic: 9 Overseas: 11		
<ul> <li>Number of Group Employees:</li> </ul>	3,670		
<ul> <li>URL: http://www.chiyoda-corp.com/en/</li> </ul>			



429.4

#### Consolidated Financial Highlights (Billions of yen)

Revenues

603.6

446.4

313.0

181 0

390.9

Net income

23.5

19.4

'06 '07 '08 '09

New contracts

258.8 209.4

804.2

5577

LNG Plants

(As of March 31, 2010)

Contents

## **Overview of the Chiyoda Group**

Corporate Profile	inside front cover
Editorial Policy	1
A Message from the President	2

## The Chiyoda Group's Unique CSR Initiatives

The Qatar LNG Project: Headed for Success	4
Group Company Activity Highlights	6

## The Chiyoda Group's CSR Vision in Action

Gas & Power Utilities Fine Industries & Others

Petroleum & Petrochemicals

CSR Vision 1	
A Reliable Company	8
CSR Vision 2	
Environmental Initiatives	10
CSR Vision 3	
Social Contributions through	
Business Activities	12
CSR Vision 4	
Respect for Human Rights	14
CSR Vision 5	
Commitment to Fairness	16

## **Editorial Policy**

## The Chiyoda Group reports its CSR activities on its website and in the CSR Report.

#### **Differentiation of Website and Report Content**

The diagram below shows the differentiation of the content reported on the website and the CSR Report. On the website, we provide detailed basic information on our CSR activities for different stakeholders, including customers and business partners, and employees, to make the information easily accessible for users.



#### **Composition of the CSR Report**

The CSR Report focuses on the highlights of activities in the fiscal year ended March 31, 2010, and is divided into three sections: Overview of the Chiyoda Group, The Chiyoda Group's Unique CSR Initiatives, and The Chiyoda Group's CSR Vision in Action. In this year's feature, we look at the Qatar LNG project and the activities of Group companies to illustrate how our business activities contribute to the development of a sustainable society.

#### Scope of the Report

The report encompasses the CSR activities of ten Chiyoda Group companies (Chiyoda Corporation and its nine domestic consolidated subsidiaries), unless otherwise specified.

#### **Applicable Period and Date of Publication**

Applicable Period: Fiscal year ended March 31, 2010 (April 1, 2009 to March 31, 2010) Date of Publication: August 2010



The "Commitment to CSR" section of our website includes full details of the Chiyoda Group's CSR activities, including initiatives outside the scope of the report as well as environmental data and other information.

CHIYODA CHIYODA		
Human + Rowal (201702)	+ Service + Technology + Praint	• Next = humphobies + CBR
	a utticker a tracker o	Commitment to CSR
(/ Japanese - English	A Message from the President	
Commitment to CSR A Personal Term	Since I became President and CEO of Chiyoda "intellectual property for the future," "environ	
With Gutpmens and	Commitment to CSR	Compliance
Bren Englishert +	CSR Policy	Code of Conduct of the Chiyoda Group
Social Contribution	Chiyoda Group CSR Vision	<u>Compliance</u> <u>Information Security Management</u> and Export Control
Corporate Governance	With Customers and Business Partners	With Employees
CSR Report 4	Quality Management Initiatives     Working with Business Partners	Employee Skill Development and Work Environment     Occupational Health and Safety
	Social Contribution Initiatives	Environmental Initiatives
	Social Contribution through Business Activities	Environmental Management     Environmental Conservation Activities
	Corporate Governance	CSR Report

We also publish the booklet *Legacy for the 21st Century*, which can be called the DNA of the Chiyoda Group, back issues of the CSR Report and other publications.



#### Guidelines

This report is prepared with reference to the Global Reporting Initiative's (GRI) Guidelines (G3) and the Reporting Guidelines (2007 Version) of the Ministry of the Environment in Japan.

## A Message from the President

# The Chiyoda Group carries out CSR activities that draw on its unique strengths to further build its worldwide reputation for reliability.

الله الله الله الله الم الم الله المعالية المعالية المعالية المعالية المعالية المعالية المعالية المعالية المعال



## Chiyoda Group Corporate Philosophy

Enhance our business in aiming for harmony between energy and the environment and contribute to the sustainable development of a society as an integrated engineering company through the use of our collective wisdom and painstakingly developed technology.

## **Chiyoda Group CSR Vision**

- 1. A Reliable Company
- 2. Environmental Initiatives
- 3. Social Contributions through Business Activities
- 4. Respect for Human Rights
- 5. Commitment to Fairness

## Chiyoda Receives the Minister of Economy, Trade and Industry's Award at the Monodzukuri Nippon Grand Awards for the Qatar LNG Project

In July 2009, Chiyoda, which won the order for six trains of the world's largest LNG<sup>1</sup> plant (each train is designed to produce 7.8 million tons of LNG annually) in the Middle Eastern emirate of Qatar, received the Minister of Economy, Trade and Industry's Award in the Overseas Development Category of the Third Monodzukuri Nippon Grand Awards<sup>2</sup> sponsored by the Japanese government. This is the top prize in its category, and marks the first time this honor has been given to a Japanese engineering company operating overseas. It follows our receipt of the JAPAN Project International Award Minister's Prize from the Ministry of Land Infrastructure, Transport and Tourism for the Sakhalin LNG Project, which we featured in last year's CSR Report.

At the Qatar LNG Plant, we have completed four trains as of the fiscal year ended March 31, 2009, and plan to finish construction of the remaining two this year. When all six trains are in operation, Qatar will account for about one-third of the world's total LNG production.

In addition to developing engineering and procurement systems to ensure efficient material procurement and effective quality management, Chiyoda provided safety, environmental and health training to as many as 75,000 construction workers from 86 countries at the peak of construction. Our record of executing this project with a high level of quality and reliability, our



Awards ceremony for the Third Monodzukuri Nippon Grand Awards

cooperation in resource development in Qatar and our contribution to the global environment led to the Japanese government's high evaluation of engineering as a key area of *monodzukuri* (manufacturing).

## Market Changes Provide a Chance to Contribute to Formation of New Industries

Chiyoda has set energy, environment and resource development as its business domains in its medium-term management plan, "Engineering Excellence, Value Creation 2012," culminating in the fiscal year ending March 31, 2013. We are currently in the second year of the plan.

In the domestic market, Japan is beginning to convert its infrastructure to realize an energy-efficient, low-carbon society over the medium to long term. Responding to paradigm shifts such as restructuring and the shift to overseas locations in various industries, the Chiyoda Group intends to play a major role in the formation of new industries. We will use our established engineering capabilities to achieve balanced business expansion with a focus on such fields as new energy and pharmaceuticals in addition to the conventional energy field.

In overseas markets, we will aggressively expand EPC<sup>3</sup> operations and establish the business in new regions not only in Asia, which is receiving attention as the growth engine of the global economy, but also in Oceania, Africa and Latin America. In addition to enhancing our competitiveness in gas and LNG projects, our core business, we plan to focus on other types of projects, including heavy oil processing and coal gasification, synthetic gas, floating LNG<sup>4</sup> and PLE<sup>5</sup> projects.

## Contributing to Society through Sustained Growth

The Chiyoda Group's corporate philosophy is to enhance our business to achieve harmony between energy and the environment and contribute to the development of a sustainable society as an integrated engineering company through the use of our collective wisdom and painstakingly developed technology. Based on this philosophy, we are committed to earning the trust and support of all our stakeholders, including shareholders, customers, suppliers, employees and local communities.

Last year, we revised the Chiyoda Group CSR Vision in light of this corporate philosophy and trends in society. We will continue to promote the Chiyoda Group's unique CSR activities to further build our reputation for reliability worldwide.

July 2010

Takashi Kubota President & CEO



- 1. LNG: Liquefied natural gas
- 2. Monodzukuri Nippon Grand Awards: The Japanese government established this awards program in August 2005 to support the advancement of Japanese industry and culture and steadily pass on the monodzukuri (manufacturing) that has been instrumental in allowing people to lead comfortable daily lives. The awards are given every two years to people who play central roles in manufacturing and production and others recognized for excellence, including skilled individuals who sustain traditional and cultural arts.
- EPC: Engineering, procurement and construction (the sequence of business of an engineering company)
- 4. Floating LNG: Floating natural gas liquefaction facilities
- PLE: Plant lifecycle engineering. A business model for providing customerfocused service throughout a plant's lifecycle, from business plan to construction, operation, maintenance, expansion, renovation and decommissioning.

## The Chiyoda Group's Unique CSR Initiatives The Qatar LNG Project: Headed for Success

## **Completion of the World's First Mega LNG Plant in Qatar**

Following the February 2009 completion of Russia's first LNG plant in Sakhalin, in the same year the Chivoda Group completed the fourth of six trains of the world's largest LNG plant in the Middle Eastern emirate of Qatar. Each train is capable of producing 7.8 million tons of LNG annually. The LNG plant is a major national project for the government of Qatar, which aspires to make the country the world's largest LNG producer by the end of 2010, with annual production of 77.0 million tons, or about one-third of the total world supply. The Chiyoda Group continues to execute the project in a concerted effort to complete the last two trains during the fiscal year ending March 31, 2011.

In the nearly 35 years since it constructed two 1.1 million ton trains of an LNG plant in Abu Dhabi in 1976, the Chiyoda Group has been at the forefront of global LNG plant expansion, and has engineered and built facilities equivalent to 40 percent of the world's LNG plants. The Chiyoda Group built the three trains (annual production of 2 million tons each at the time of the first train, now 3 million tons) of Qatar's first LNG plant from 1996 through 1998, and has been executing LNG-related projects in Qatar ever since.

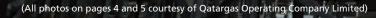
LNG is counted as a clean energy source because it emits less carbon dioxide than the other fossil fuels when burned — about 20 percent less than oil and 40 percent less than coal. It plays an important part in Japan's national energy strategy to ensure a stable supply of energy and diversify supply sources. At the same time, the realization of a mega

LNG plant that can leverage economies of scale offers many advantages that can help to lower the cost of energy, including lower construction costs, higher operating efficiency and better safety. This huge project is truly a challenge for an integrated engineering company.



The LNG plant construction project





The Chiyoda Group is completing construction of the first mega LNG plant in the world. The plant will make a significant contribution to resource development in Qatar and to the global environment.

CHIYODA CORPORATION Group CSR Report 2010

## Building a Mega LNG Plant: Challenging the Unknown

Building a mega LNG plant involved much more than simply extending conventional engineering technology. It only became possible after overcoming various obstacles by refining technologies and developing new technologies with a high degree of difficulty.

### **Challenging New Engineering Techniques**

- We developed process innovations and used a number of new designs and large-scale machinery, including high-power gas turbines. The system as a whole required us to overcome very high technological issues, both mechanical and electrical.
- In tackling the challenge of new designs focused on construction, we employed the Air Pipe Cooling System\* in constructing the foundation of the refrigeration compressor to prevent the cracks that form in the concrete of large foundations. This method received the ACI Construction Award from the American Concrete Institute, a first for a Japanese company.

\*Features of the construction method:

Compared to conventional water cooling systems, the Air Pipe Cooling System is easier to use in a desert area, where water is precious, and in a remote location where it is difficult to mobilize equipment and skilled workers. The system is also highly effective in reducing energy consumption and environmental burden.



The LNG plant under construction



### Project Management That Makes Full Use of Experience and IT

- By forming task teams with major equipment and material vendors, we achieved thorough and efficient quality control and delivery management.
- The use of our proprietary integrated database system allowed us to manage more than 10 million materials and to plan and execute smooth material management.
- A much greater-than-expected construction boom created a shortage of resources, including skilled workers, experienced site supervisors and construction materials. To cope with the situation, Chiyoda maintained close contact and cooperation with customers and business partners in an effort to move construction forward.

#### Safety Measures at the Scorching Hot Construction Site

- At the scorching hot construction site, where summer temperatures can exceed 45°C and the humidity approaches 100 percent, Chiyoda places the highest importance on the safety of construction workers, who at the peak of construction numbered about 75,000 people from 86 countries with differing cultures and customs. We conducted safety and environmental health training, covering maintenance of food, clothing and living environments, and have executed construction safely.
- For our extensive safety initiatives we earned ExxonMobil's Safe Contractor Award as the best contractor, and have also received praise from customers, the governments of Qatar and Japan, and third parties.



Chiyoda President Takashi Kubota and the head of a customer company exchange a firm handshake at the completion ceremony.

## The Chiyoda Group's Unique CSR Initiatives

## **Group Company Activity Highlights**



Chiyoda Keiso Co., Ltd.

Business: Engineering, procurement, construction and maintenance of electrical, instrumentation, control and factory automation equipment

## Promotion for Acquiring Certificate of Qualification for Managing Engineer to Provide Quality Assurance and Reliability to Customers

Under the Construction Industry Law, a full-time managing engineer with governmental qualification must be assigned depending on the contract amount of the main contractor or the amount of orders to subcontractors. To be qualified as a managing engineer, an employee must take a training course after obtaining certain national certifications such as First-Class Electrical Construction Managing Engineer.

Chiyoda Keiso strongly encourages employees to acquire the Certificate of Qualification for Managing Engineer that is essential to its contracting business. In the fiscal year ended March 31, 2010, 12 employees passed the First-Class Electrical Construction Managing Engineer exam, which had a nationwide pass rate of about 20 percent. The company now has a total of 58 certified supervising engineers.



Quality management at the construction site

## Chiyoda TechnoAce Co., Ltd.

Business: Engineering, construction, supervision, surveying, planning and consulting for research laboratories and fine chemical and hydrocarbon facilities

#### **Design for Environment Initiatives and Results**

Chiyoda TechnoAce (CTA) implements a CASBEE<sup>1</sup> evaluation as a Design for Environment tool whenever it designs a new building with a total floor area of 2,000 square meters or more.

The Regenerative Medicine and New Drug Research and Development Center for the Central Institute for Experimental Animals, for which CTA won the order for engineering and supervision, received an "A" ranking in the CASBEE evaluation from Kawasaki City, the site of construction.

In particular, lifecycle CO<sub>2</sub> emissions<sup>2</sup> were evaluated for the target of an 18 percent reduction compared to conventional buildings (the benchmark).



Extract from CASBEE Kawasaki website (created by Kawasaki City Environmental Office)



Project planning meeting

1. CASBEE: Comprehensive Assessment System for Building Environmental Efficiency CASBEE was developed jointly by industry, government and academia, including the Ministry of Land, Infrastructure, Transport and Tourism and academic experts, to simultaneously assess environmental quality and performance and environmental load.

2. Lifecycle CO2 emissions:

Total CO<sub>2</sub> emissions associated with all aspects of a building's operation and use, including maintenance, manufacturing, construction, renovation, recycling, scrapping, and planning and design.

Chiyoda promotes CSR activities together with its Group companies. In this feature, we look at some key initiatives by four Group companies in the fiscal year ended March 31, 2010.

CHIYODA CORPORATION Group CSR Report 2010



## **Chiyoda Advanced Solutions Corporation**

Business: Consulting and engineering solutions related to engineering analysis, improvement of production facilities, computer-based systems, and the space environment.

#### Industrial Furnace Diagnosis Technology and Results

Oil refineries and petrochemical plants in Japan are required to appropriately address facility integrity over time, particularly for industrial furnaces. Chiyoda Advanced Solutions Corporation (ChAS) has developed a furnace diagnosis program to determine the integrity of a furnace over its life cycle, assess risks and develop proposals for improvement. It thus helps to enhance safety, reduce energy consumption in the plant, and optimize maintenance and operation. More than half the refineries in Japan have adopted

this program, and over 100 improvement proposals have been developed through detailed analysis of furnaces.

Based on these results, Chiyoda Corporation and ChAS co-hosted an Industrial Furnace Symposium to promote technological exchanges with petroleum companies, petrochemical companies and furnace manufacturers.



Participants at the Chiyoda Industrial Furnace Symposium

## Arrow Human Resources Co., Ltd.

Business: Temporary staffing, job placement, outsourcing services for engineering, administrative and government office related work, and education and training

#### Award for Measures to Promote Work-Life Balance

Arrow Human Resources (AHR) received the Yokohama Good Balance Award from Yokohama City in the fiscal year ended March 31, 2010. AHR continues to work to provide better services to its corporate customers and its registered staff. Part of that

effort involves initiatives to promote work-life balance. AHR seeks to develop the skills and expand the job categories of employees regardless of gender, while also working to establish workplaces that help both male and female employees balance work and family life.

This award recognizes AHR's initiatives, which include holding in-house seminars and career counseling as needed, launching the Work-Life Balance Committee made up of people with child-rearing experience, and engaging in ongoing discussions with the theme of "Enrichment of Work and Private Life."

AHR intends to step up activities to encourage employees to lead fuller lives by balancing their work and private life.



Yokohama Good Balance Award certification and award ceremony (Seated in the center of the front row is Fumiko Hayashi, Mayor of Yokohama City)

# **CSR** vision

## **A Reliable Company**

We strive to be a reliable company for our customers and other business partners by providing world-class technologies and knowledge.

## **CSR Medium-Term Policies**

- Provide industrial plants that earn customer trust through engineering of outstanding quality
- Share our CSR principles with vendors, subcontractors and other business partners

## Activities in the Fiscal Year Ended March 31, 2010

- Contributed to society through technology
- Conducted technology exchanges with customers and business partners
- Reflected customer compliance requests in supply chains

## Providing Advanced Pharmaceutical Plant Engineering and Construction Technology through Unified Group Operation

In August 2009, Chiyoda completed construction of a new ophthalmic solution facility at the Sagami Ohi Plant of WAKAMOTO PHARMACEUTICAL CO., LTD. Chiyoda worked together with Chiyoda TechnoAce on this project, which followed our construction of a lactobacillus culture facility for the same company in 2008.

Manufacturing ophthalmic solutions requires the same sterility assurance as the production of injectable products. We used a cutting-edge system to achieve an even higher level of sterility assurance that minimizes contamination risk in the crucial filling section of the production line.

This was a major construction project requiring 200,000 man-hours, but it was executed smoothly, backed by the Chiyoda Group's experience in engineering manufacturing plants for injectable agents and other highly sterile pharmaceutical preparations, as well as its strong relationship of trust with the customer. We will continue to contribute to the health and well-being of society through the engineering of pharmaceutical manufacturing facilities.



New ophthalmic solution facility of WAKAMOTO PHARMACEUTICAL CO., LTD.



Our company's management philosophy is to contribute to the creation and development of a healthy and affluent society through the research and development, production, and supply of pharmaceuticals. We conduct our business to be a people- and environment-friendly company, focusing on the ophthalmology field, lactic acid products and our "Strong Wakamoto" brand. We built the new ophthalmic solution facility not just to expand production capacity for our own products, but also with our sights set on contract manufacturing for other companies. This state-of-the-art manufacturing facility incorporates various concepts such as a high sterility assurance level. I am very grateful to the Chiyoda Group, whose technological expertise and experience played a large part in the facility's smooth completion.

Comment from the Customer

Takashi Ishii President, WAKAMOTO PHARMACEUTICAL CO., LTD.

### **Technology Exchange Based on Trust**

Chiyoda originated and developed CT-121 FGD technology (CT-121) in the 1970s when the air pollution caused by SOx and NOx was a serious social issue in Japan. Almost forty years of technology exchange with Southern Company Services (SCS), an engineering firm of Southern Company (SoCo), one of the largest utility companies in the United States, has played a great role in furthering the development and deployment of the technology worldwide.

In the early 1970s, SCS conducted FGD demonstration projects using several technologies to cope with future U.S. SO<sub>2</sub> emission controls and CT-121 received the highest evaluation among those technologies. The results of the demonstration project were highly regarded by the Electric Power Research Institute (EPRI) and the technological excellence of CT-121 became well known in the U.S. electric utility industry.

In the 1980s, SCS participated in the Clean Coal Technology (CCT) program sponsored by the U.S. Department of Energy and again successfully demonstrated the excellent performance of CT-121 through the three-year demonstration.

In the 2000s, SoCo installed nine commercial units with maximum output of 900 MW, adopting CT-121 for their



Signing ceremony of CT-121 technology licensing agreement. Chiyoda President Kubota shakes hands with Ed Day, Executive Vice President, Engineering and Construction Services at Southern Company Generation.

coal fired power plants to comply with the stringent U.S. SO<sub>2</sub> emission regulations. All the CT-121 units in operation meet the regulatory performance requirements. To date, CT-121 has been selected for several coal-fired power stations of other electric utilities as well, and holds a large share of the market for this type of technology in the United States.

Thus, CT-121 was born in Japan, was nurtured and grew up in the United States, and has been adopted in the United States, EU, China, Japan and many other countries. SCS and Chiyoda share the common value of "Contributing to society with technology," based on mutual trust developed through longstanding technology exchange.

I have been involved with CT-121 since the first test unit at Gulf Power Company in Florida, USA in the early 1970s. Chiyoda's dedication to improving CT-121 over the years has always impressed me. They have truly followed in the footsteps of their founder Dr. Tamaki, who saw a sacred duty to better society through engineering. The CT-121 FGD process is a shining example of this philosophy.

Randall E. Rush General Manager, Gasification Technology, Southern Company Generation





# CSR-vision

## **Environmental Initiatives**

We will work to remain an invaluable company to society by utilizing refined technologies to promote harmony between the global environment and economic and social activities. Our environmental initiatives include measures to reduce greenhouse gas emissions and waste.

## **CSR Medium-Term Policies**

- Develop and provide environmentally friendly energy and conservation technologies
- Conduct business activities that contribute to environmental conservation

## Activities in the Fiscal Year Ended March 31, 2010

Toward realization of a low-carbon society,

- Constructed LNG facilities, environmental facilities and others
- Maintained ISO14001 certification and improved operations
- Expanded energy-saving office facilities
- Conducted eco-office activities

## Contributing to Stable Energy Supply and Greenhouse Gas Reduction

## Gas to Liquids (GTL) Technology Using CO2 as a Raw Material

A demonstration test project aimed at establishing domestic Gas to Liquids (GTL)<sup>1</sup> technology is moving ahead in Niigata Prefecture, with a production rate of 500 barrels per day. This is a joint project between the Japan Oil, Gas and Metals National Corporation and the Nippon GTL Technology Research Association composed of six private companies: INPEX Corporation, Nippon Oil Corporation, Japan Petroleum Exploration Co., Ltd., Cosmo Oil Co., Ltd., Nippon Steel Engineering Co., Ltd. and Chiyoda.

Fuels produced using GTL technology are promising as clean, environmentally friendly fuels because they are free of sulfur and aromatic compounds. Existing GTL technology uses natural gas as a raw material, but CO<sub>2</sub> must be removed.

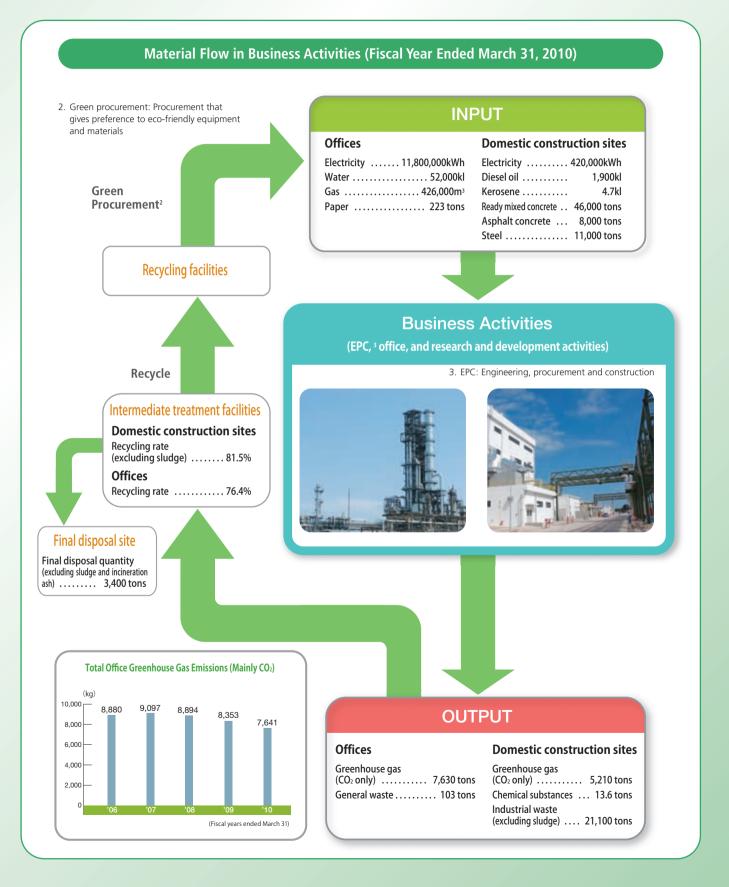
However, a feature of the Japan-GTL technology is that it employs Chiyoda's unique CO<sub>2</sub> reforming catalyst that allows natural gas containing significant amounts of CO<sub>2</sub> to be used as a raw material. This breakthrough technology opens a path to new, clean fuels using natural gas, which is found widely throughout the world, as a raw material.

The demonstration plant, completed in April 2009, is currently undergoing a two-year demonstration operation. We are looking at practical applications for this unique GTL technology to secure a stable energy supply while contributing to the global environment.



The Japan-GTL demonstration plant in Niigata Prefecture

1. Gas to Liquids (GTL) Technology: Technology in which natural gas passes through a syngas (hydrogen and carbon monoxide) to become liquid hydrocarbon fuel.



11

## Social Contributions through

Through its engineering business in Japan and overseas, Chiyoda contributes to local communities in ways including human resources development, technology transfer and environmental protection.

## CSR Medium-Term Policies

- Contribute to society through integrated engineering business activities
- Enhance social contribution activities by providing knowledge and labor

## Activities in the Fiscal Year Ended March 31, 2010

Through our engineering business in Japan and overseas,

- Contributed to national and regional development through participation in local community activities
- Supported education of the next generation and transferred technology

## Field Office Activities: Taivo Field Office (Kikumacho, Imabari, Ehime Prefecture)



## **Hosting of Sports Tournament**

The Taiyo Field Office sponsored a volleyball tournament with 12 teams from the Kikumacho Recreational Volleyball League and two of Chiyoda's elite teams. The event was a way of thanking the community for its support in our projects and promoting our activities.



## **Coastal Cleanup**

The Chiyoda Health and Safety Council sponsors a monthly cleanup of the Kikumacho Hayama coastal area that links the Taiyo Field Office and the commuter parking lot.

The beautiful coast of Hayama is home to ducks and herons, and always drives away our exhaustion. The cleanup is our small way of giving back to this community of kind residents and natural beauty.

We were born in Kikumacho, and work as Chiyoda office employees.

Kikumacho is a town of mountains, sea and tile roofs, so when a major construction project was started here, it attracted attention locally.

Chiyoda has been involved with this town for 40 years, and is thoroughly integrated with the community. The company has gladly contributed and given back to the community through activities such as hosting the volleyball tournament, cleaning up beaches and roadsides, and participating in summer festivals.

We're proud to be members of Chiyoda and proud that Chiyoda people conduct activities like these not only here in Kikumacho, but throughout Japan and around the world.

Kazuko Ishino (left) and Nana Kawaharada (right)



## **Business Activities**

## Social Contribution Activities in the Fiscal Year Ended March 31, 2010

**Environmental Classes** 



On March 2, 2010, Chiyoda conducted an environmental class for 105 fourth-grade students at Higashihara Elementary School in Zama City, Kanagawa Prefecture. The class combined a quiz about the importance of water and a water purification experiment. Chiyoda also held classes at two other schools for a total of 161 students.

## **Overseas Group Company Activities**

L&T-Chiyoda Limited (India) is engaged in numerous social contribution activities. On World Environment Day, June 5, 2009, the company's management took the initiative in planting trees in the area around its offices. In addition, the company carries out a blood donation campaign with the cooperation of employees and their families each year on November 7, the anniversary of its establishment. L&T-Chiyoda's activities also include providing food aid to frail children and donating personal computers and books to local schools.



#### **Cleanup Campaign**



On July 11 and November 15, 2009, Chiyoda Group employees and their families volunteered alongside members of the neighborhood association in a cleanup campaign in Tsurumi-ku, Yokohama City, where Chiyoda's Yokohama Head Office is located. Cleanup campaigns were also conducted twice in the neighborhood around Chiyoda's Koyasu Office & Research Park in Kanagawa-ku, Yokohama City.

## "TABLE FOR TWO" Program



"TABLE FOR TWO" (TFT) is a program in which companies offer a healthy TFT lunch menu in their employee cafeterias. For each TFT meal bought by an employee, ¥20 is donated to an NPO that provides school lunches for children in developing countries. Chiyoda began offering TFT meals once a week at its Yokohama Head Office cafeteria in the fiscal year ended March 31, 2010. A total of 2,369 TFT meals were served during the year.

- 1. Participation in university education (instructors dispatched): 10 people
- 2. Course for elementary school teachers: 13 people
- **Other Activities 2.** Course for crementary school courses is **3.** Training of internship students: 13 people
  - 4. Observation tours and training for energy-saving equipment installed in Chiyoda's office buildings: 34 people

## CSR VISION 4 Respect for Human Rights

We are dedicated to respecting the human rights of all people. We will create a corporate culture where the diversity, individuality and character of employees are respected, where people are motivated to do their best, and of which employees and their families are proud.

## **CSR Medium-Term Policies**

- Create a lively and energetic working environment and help employees develop their talents
- Instill in everyone involved that safety is a core value

## Activities in the Fiscal Year Ended March 31, 2010

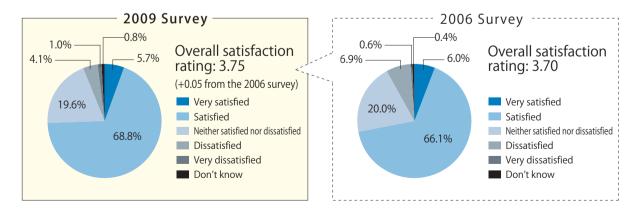
- Worked to realize a motivating workplace environment
- Enhanced safety awareness
- Supported foreign engineers

## **Employee Survey Results**

## We conducted a survey of employees in working to enliven and energize the workplace environment and help employees develop their talents.

Survey subjects: (Chiyoda employees)	1,404
Respondents:	1,039
Response rate:	74%

We determined an overall satisfaction rating for employees through the final question on the questionnaire — "Are you satisfied to be an employee of this company?" — to which 74.5 percent of employees answered either "Very satisfied" or "Satisfied". This is a 2.4 percent increase from the previous survey and a figure that can be regarded as a passing grade slightly above average for employee satisfaction surveys in general.



Chiyoda will reflect the results of this survey in measures to further improve employee satisfaction. Going forward, we will conduct similar surveys regularly to confirm the effectiveness of improvement measures.

#### CHIYODA CORPORATION Group CSR Report 2010

## **Support for Foreign Engineers**

Chiyoda supports the health of its engineers from the Philippines, India, and other countries who are employed in Japan in ways such as providing immunization and information on how to avoid contracting the H1N1 influenza virus. In addition, we support their safety in various ways. For example, we conduct disaster drills for each dormitory with the cooperation of fire departments and have them participate in community disaster drills to learn about emergency evacuation methods.

Chiyoda also cooperates with the Tsurumi Ward Office in order to build a network linking foreigners working in Tsurumi-ku and local residents.



Fire extinguisher training

#### **Initiatives to Enhance Safety Awareness**

#### **Personal Safety Goals**

Safety in daily life goes hand-in-hand with safety on construction sites. Chiyoda therefore realizes the importance of heightening awareness of and cultivating everyday attention to safety and hazards.

We started a Personal Safety Goal initiative in which employees freely set their own safety goals and consciously act to attain them. In this initiative, all employees formulate personal safety goals and evaluate their own performance at the end of the year. The term "safety" used here is not limited to

the narrow sense of the word, but encompasses all aspects of HSE,<sup>1</sup> and individuals work to attain their personal goals through their daily actions.

1. HSE = Health, Safety and Environment

#### **Examples of Personal Safety Goals:**

- Walk over 10,000 paces per day
- Spend at least 30 minutes exercising every week
- Be aware of traffic and do not walk in groups side by side

#### **Accident Rate**

The frequency rate of accidents at construction sites was 0.15<sup>2</sup> and the severity rate was 0.15.<sup>3</sup> (Fiscal year ended March 31, 2009 frequency rate: 0.14; severity rate: 0.13)

- 2. The frequency rate of accidents is the number of individuals in accidents (excluding accidents with no loss of working time) per total working hours, times 1 million. A lower figure indicates higher safety.
- 3. The severity rate of accidents is the number of lost-time days per total working hours, times 1,000. A lower figure indicates higher safety.

#### **Health and Safety Inspection Tours**

Chiyoda undergoes health and safety inspection tours by third-party institutions to raise awareness of occupational health and safety.



A project engineer responsible for equipment installation shows people around a construction site.

15

# CSR-vision.

## **Commitment to Fairness**

We are dedicated to achieving even greater transparency and stability by conducting our operations fairly in accordance with the highest ethical standards.

## **CSR Medium-Term Policies**

- Conduct business activities based on strict compliance and a high degree of transparency
- Conduct a thorough risk management program

## Activities in the Fiscal Year Ended March 31, 2010

- Revised the Code of Conduct of the Chiyoda Group and the CSR Handbook
- Conducted compliance education for the entire Group

## **Compliance Initiatives**

## Expanding and Enhancing Collaboration with Group Companies and Construction Site Offices Overseas

Every year, we conduct a survey of the compliance framework and initiatives of our overseas subsidiaries and affiliates, and the results are used to improve activities.

In the fiscal year ended March 31, 2010, we



conducted surveys of and visited Group companies overseas and the construction site offices of the large-scale LNG projects in Qatar. This combined effort spread awareness of the Code of Conduct of the Chiyoda Group at each location and helped clarify individual risks.

We distributed an English-language poster of the Code of Conduct of the Chiyoda Group to Group companies and construction site offices overseas.

## Internal Compliance Consultation and Reporting System

In April 2009, we held training for staff members of the Chiyoda Group's consultation hotlines. Sixteen people participated to exchange opinions on and receive a lawyer's review of actual reports and consultations.



Compliance training

#### Reports during the fiscal year ended March 31, 2010

1. Reports related to workplace improvements	3
2. Reports related to compliance with workplace rules	3
3. Requests for reminders	0
4. Other	2
Total	8

## Revision of the Code of Conduct of the Chiyoda Group

On April 1, 2010, we revised the Code of Conduct of the Chiyoda Group and the Chiyoda Group Compliance Manual due to heightened social demand for an emphasis on compliance in corporate activities. At the same time, we issued the second edition of the CSR Handbook in Japanese and English and distributed it to Chiyoda Group employees.

The Japanese- and English-language versions of the second edition of the CSR Handbook



### Implementing the Intensive Compliance Campaign Month

Since October 2008, we have designated October every year as Intensive Compliance Campaign Month. During this month, we conduct compliance education through e-learning and seminars by outside professional instructors covering laws related to the Chiyoda Group's operations. Seminars to date as part of the campaign and participation from related departments are shown here.

	Participants	Lecturers
1. Construction Industry Law <sup>1</sup>	Approximately 110	Institute for the Promotion of Fair Trade in the Construction Industry
<b>2.</b> FCPA <sup>2</sup>	Approximately 70	Lawyer and Director, Legal Group, Nippon Export and Investment Insurance
3. Intellectual property <sup>3</sup>	Approximately 40	Lawyer



FCPA seminar given by a lawyer

1. Construction Industry Law: The most fundamental law for construction companies, establishing rules that must be followed when accepting and placing construction orders and during the construction stage.

2. FCPA: Foreign Corrupt Practices Act. A U.S. law established to prevent corruption and bribery in business.

3. Intellectual property: Inventions, ideas and knowledge that have formally recognized economic value or legal standing.

## **Information Security Measures**

Chiyoda regularly holds liaison conferences with Group companies, and works in unison to maintain and enhance its information security system. Every February and September, which have been designated Information Security Check Months, we repeatedly issue a variety of reminders about information security and conduct biannual Group training. In addition, we conduct basic and practical e-learning tests for all regular and temporary employees to confirm their understanding.

Chiyoda and two Group companies, Chiyoda Advanced Solutions Corporation and IT Engineering Limited, have acquired ISO/IEC27001:2005/JIS Q27001:2006 third-party certification for their information security management systems.

#### Results of Group Training in the Fiscal Year Ended March 31, 2010

**1. e-learning:** Approximately 500 people completed the second basic course, for a cumulative total of approximately 5,500 people. Approximately 2,800 people completed the first practical course.

2. Group training: Approximately 100 people attended the fifth and sixth sessions, for a cumulative total of approximately 220 people.

## **Security Trade Control Initiatives**

For overseas projects, we comply with the Foreign Exchange and Foreign Trade Act, and have registered our Compliance Program for Export-Related Regulations (CP) with the Ministry of Economy, Trade and Industry. Based on the CP, we work to control exports through the Export Control Committee, which includes members from throughout the Chiyoda Group.

We carry out regular training on the fundamentals of export control, as well as training on each specific area of export control duties. In addition, we have prepared an operations manual for employees in response to the U.S. Export Administration Regulations (EAR<sup>4</sup>).

4. EAR: Regulations that must be complied with when exporting U.S.-made products or providing technologies that are determined to be potential threats to the security of the United States if exported improperly.



## We consolidate Group strengths in our business operations.

Major Group Companies (Chiyoda Corporation's consolidated subsidiaries or companies accounted for using the equity method as of March 31, 2010) **Domestic Group Companies** 



Chiyoda Kosho Co., Ltd.

Engineering, construction and maintenance of domestic energy and chemical plants; life and non-life insurance agent



() Chiyoda Keiso Co., Ltd. Engineering, procurement, construction and maintenance of electrical, instrumentation, control and factory automation equipment



Chiyoda TechnoAce Co., Ltd.

Engineering, construction, supervision, surveying, planning and consulting for research laboratories and fine chemical and hydrocarbon facilities



Chiyoda U-Tech Co., Ltd.

Feasibility studies and consulting for energy, oil, chemical and environment-related plants and various types of industrial facilities

## **Overseas Design Bases**

Chiyoda Philippines Corporation (Philippines) L&T-Chiyoda Limited (India)

### **Overseas Project Execution Bases**

Chivoda Singapore (Pte) Limited (Singapore) PT. Chiyoda International Indonesia (Indonesia) Chiyoda (Thailand) Limited (Thailand) Chiyoda Malaysia Sdn. Bhd. (Malaysia) Chiyoda & Public Works Co., Ltd. (Myanmar) Chiyoda Almana Engineering LLC (Qatar) Chiyoda Petrostar Ltd. (Saudi Arabia)

### **Overseas Sales Bases**

Chiyoda International Corporation (United States) Chiyoda Nigeria Limited (Nigeria)



12-1, Tsurumichuo 2-chome, Tsurumi-ku, Yokohama 230-8601, Japan Please direct inquiries about this CSR Report to: CSR Division Tel: (81) 45-506-7535 Fax: (81) 45-506-6857

Recognition by SRI (Socially Responsible Investment) evaluation bodies as a company fulfilling CSR standards (As of June 30, 2010)





Included in the Morningstar Socially Responsible Investment Index (MS-SRI) of Morningstar Japan K.K.



Included in the Dow Jones Sustainability Asia Pacific Index (DJSI Asia Pacific)



air cargo agent

#### Chas Chiyoda Advanced Solutions Corporation Consulting and engineering solutions related to engineering analysis, improvement of production facilities, computer-based systems, and the space environment



Consulting on finance, accounting and ta **Arrowhead International Corporation** 

Business travel and relocation agent; materials export and



**IT Engineering Limited** IT system planning, development and operation support; project management and presentation of production management solutions



Arrow Human Resources Co., Ltd.

(Company name changed January 1, 2010) Temporary staffing, job placement, outsourcing services for engineering, administrative and government office related work, and education and training