# DNP **DNP Group** CSR Report 2011

#### **Top Message**

# Embracing Our Founding Principles as We Move Forward in Harmony with Society

President

On behalf of everyone at DNP I would like to express my sincere condolences to those who lost loved ones in the Tohoku-Pacific Ocean Earthquake that struck Japan on March 11, 2011, and my heartfelt prayers for speedy reconstruction.

Despite damage to some of our plants in northeastern Japan and some temporary suspension of operations, we confirmed that all DNP Group employees in affected areas we fortunately safe and sound after the earthquake. From May on all of the plants that had sustained damage were operating has they had prior to the quake. DNP has always sought to have the strength to withstand the impact of a disaster, and having prepared a business continuity plan (BCP) adjusted to suit the characteristics of each field of business and worksite we were ready when the crisis occurred. That we suffered no human casualties and were able to recover quickly after the recent earthquake was, I believe, the result of our efforts during normal times.

Nonetheless, the earthquake generated unimaginably powerful tsunamis, which resulted in the enormous accident at the Fukushima nuclear power plant. That caused massive damage to the electrical power and water infrastructures, which in turn caused supply instability due to the damage sustained at many major suppliers of materials such as paper, ink, and film. While DNP has made strong efforts to employ alternate production and similar measures at our production centers across Japan, this does not the meet the needs of some of our customers. We will draw upon the les-

sons of this disaster in building an even more resilient corporate constitution so as to ensure we fulfill our responsibility to maintain supplies to our customers.

Joditali Etajina

### **Creating New Value through a New Way of Working**

I believe that contributing to the development of society through the creation of new value is the primary responsibility of a corporation. Society and the corporate world have come to interact more deeply than ever. Society is always continuing to change, and as a company we must perceive and meet these changes and challenges by finding new roles for the company to play. By doing so we will grow as a company as we gain the trust of society. Responding sensitively to social change requires that each one of us develops greater social awareness, so engaging in deeper TAIWA\* with a variety of stakeholders is vital. We have throughly reviewed our approach to work at DNP, making the transformation to a more efficient and self-standing way of working. This new way of working incorporates a healthier work-life balance, combining an efficient workstyle with a fulfilling personal life. Effective use of the personal time created by our employees through efficient workstyles results in more opportunities for employees to engage in TAIWA with society, which itself sparks the creation of imaginative ideas that can lead to the challenging of new business models. I believe that progress in such ef-



forts will enable us to create a DNP that is brimming with vitality, in which our employees can work energetically.

\*TA/WA is a Japanese word describing process for identifying problems and finding solutions through the exchange of viewpoints and ideas.

#### For Integrity in Conduct

The second responsibility of a corporation is always to engage in management that meets the expectations of society; in other words, to act with integrity. To that end DNP is engaged in a variety of education and training programs, as well as efforts to strengthen our daily activity checking functions. Nonetheless, nowadays business is conducted along a value chain linking a number of companies, so it is necessary to engage in high-quality activities that meet the demands of society by broadening our checking functions to cover the entire value chain.

The DNP Group CSR Procurement Criteria were established in March 2006, when we revised our Basic Procurement Policy, and in cooperation with our materials suppliers we were able engage in improvements in accordance with social standards in a number of areas, such as compliance, environmental conservation, appropriate working conditions, and data security. We expanded these efforts to include contractors as well as materials suppliers. This means that rather than demanding unilateral compliance on the part of suppliers, we first examine the degree of integrity of our own actions. We will work with our suppliers to ensure the integrity in conduct required by society

across the entire value chain.

#### **Embracing Our Founding Intent**

DNP's predecessor, Shueisha, was founded in 1876, and this year marks our 135th year of operation. Japan in those days was eager to hasten as much as possible its achievement of technological parity with the West. Doing so meant broad adoption of advanced Western science and learning, and Shueisha took as its mission the achievement of such parity through printing. This founding intent to contribute to society through our business was handed down to DNP, and is expressed in our Management Concept as "Contributing to the emergently evolving society of the 21st Century."

During the 135 years since our founding Japan has rebounded from crises such as the Great Kanto Earthquake and military defeat, and gone on to grow. Having also experienced these crises, DNP has succeeded in growing with society during such times by contributing to the renewed development of society. the Tohoku-Pacific Ocean Earthquake of March 2011 can be described as the greatest disaster of post-war Japan, but we are certain that Japan shall not fail to overcome this crisis, and that a new Japan shall emerge. DNP's most important mission henceforth is to help society get back on track and contribute the value required by new social structures. Our goal is to maintain the trust of society as we seek to fulfill this role to our greatest potential.

#### **Editorial Policy**

The matters discussed in this Report are arranged according to two themes, "Matters of Importance to Society" and "Matters of Importance to DNP." The Report focuses on DNP Group efforts concerning highly important matters associated with both themes.

#### Vertical axis:

#### [Matters of Importance to Society]

We examined the following in making our selection:

- \* Opinions and requests expressed by readers of the 2010 report
- \* Content of questions in CSR Survey conducted by news organizations and others \* and SRI (Socially Responsible Investment)
- \* The 10 Principles of the UN Global Compact
- \* Core issues of the ISO26000
- \* Social issues listed in the GRI Guideline
- \* Sustainable Asset Management, Experts in Responsible Investment Solutions, Center for Public Resources Development, The Japan Research Institute, Limited, The Good Bankers Co., Ltd., Mitsubishi UFJ Research and Consulting Co., Ltd., Integrex Inc., Carbon Disclosure Project, Nikkei Inc.



#### Horizontal axis:

#### [Matters of Importance to DNP]

These are items considered important based upon the DNP Management Concept/Vision for the 21st Century and the DNP Group Code of Conduct.

[Selected matters]	
DNP Management Concept/Vision for the 21st Century and the DNP Group Code of conduct	P9-10
Corporate governance	P12
Business contributing to the resolution of social issues	P19-26
Compliance with laws and social ethics	P27-28
Information security and personal information protection	P29-30
Promotion of social responsibility in the supply chain	P31-32
Proper disclosure of information	P33-34
Realization of a 'universal society'	P35-36
Ensuring the safety and quality of our products and services	P37-38
Creating a vibrant workplace	P39-42
Social contribution as a corporate citizen	P43-44
Environmental conservation and realizing a sustainable society	P49-60

#### The DNP Website - CSR Efforts http://www.dnp.co.jp/eng/csr/corporate.html

A PDF version of this report, as well as information not added to this report (such as CSR policy documents, CSR structure charts, and a list of CSR systems) can be accessed at the website. Also available there is our DNP Group Environmental Report 2011, which contains detailed information about our environmental activities compiled in a PDF.



CO2の「見える化」 カーボンフットプリント http://www.cfp-japan.jp 検証番号: CV-BS01-015

#### Calculation and display of the CSR Report's carbon footprint

An item's "carbon footprint (CFP)" mark is an easy way to understand and display the total emissions of greenhouse gas, converted to CO<sub>2</sub>, generated by that item over its entire lifecycle, from materials procurement through disposal or recycling. DNP was an early participant in the CFP System Trials conducted by the Ministry of Economy, Trade and Industry and related agencies, and we are engaged in calculating and displaying the CFP of our own publications as well as encouraging the use of the CFP system.

Details about the calculation of the CFP for this report are available in the DNP Group Environmental Report 2011, which can be downloaded as a PDF at the DNP website.









Green Power: We have started using Green Power (1.15 million kWh annually). The printing of this report was powered by "natural" energy (2,476kWh).



CUD: Approach to Color Universal Design: This report was designed using a color scheme that the majority of readers will find easy to understand. It has been certified by the Color Universal Design Organization, a non-profit organization.

#### CONTENTS

- \* With the goal of ensuring objectivity in the evaluation of our activities, we have asked a variety of stakeholders, including Co-Chair Saburo Kato of the Japan Association of Environment and Society for the 21st Century, to provide opinions about our performance and advice on how to proceed in the future. In addition, we have sought to provide a clearer picture of these activities by including comments by those who are actually in charge of the various efforts.
- \* To ensure the reliability of the information in our Environmental section, we submitted it to a third-party review conducted by the Ernst & Young ShinNihon Sustainability Institute Co., Ltd. Also, the report was granted the Environmental Report Assurance and Registration Mark in recognition of its compliance with the Environmental Report Assurance and Registration Mark Standards established by the Association of Assurance Organizations for Sustainability Information.
- \* In compiling this report, we have referred to the Global Reporting Initiative's "Sustainability Reporting Guidelines Version 3.0" and the Japanese Ministry of the Environment's "Environmental Reporting Guidelines (2007 edition)," and have sought to disclose the important environmental data necessary to environmental report certification.

#### [Period covered by this report]

This report focuses on the period from April 1, 2010 through March 31, 2011. In some instances, the reporting of information about important items not occurring within that period may also be included.

#### [Divisions covered]

This report covers the CSR efforts of all companies and divisions in the DNP Group. The data in the environmental section is compiled for a total of 38 companies, including DNP and the companies reported in our consolidated financial accounting, which includes 36 of our domestic manufacturing companies, one distribution company, and one in-company food service company.

#### **DNP Group CSR Report 2011**

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#### **Outline of the DNP Group**

Company Name	Dai Nippon Printing Co., Ltd.	Employees	11,016 (Non-consolidated) 40,188 (Consolidated)
Head Office	1-1, Ichigaya-Kagacho 1-chome, Shinjuku-ku	Sales Office	49 locations in Japan
	Tokyo 162-8001, Japan		20 locations overseas (including local affiliates)
	Tel: +81-3-3266-2111	Main Plants	60 domestic plants 12 overseas plants (including affiliates)
	URL http://www.dnp.co.jp/	R&D Facilities	12 locations in Japan
Established	October 1876	Net sales	¥1,589.3 billion (up 0.4% over the previous term)
Capital	¥114.464 billion	Net operating Income	¥67.8 billion (up 2.0% over the previous term)
		Ordinary Income	¥62.7 billion (down 8.8% over the previous term)
		Net Income	¥25.0 billion (up 7.5% over the previous term)

#### FY2010 Financial Data (FY ending March 2011)

At the base of our printing operations lies the vision of P&I Solutions. DNP is working to provide solutions to customers by fusing the printing technologies cultivated since our founding with the information technologies that have advanced through digitalization.

In FY2010, in addition to actively developing our business and offering products and services corresponding to customer

 Net Sales (Yen billions)

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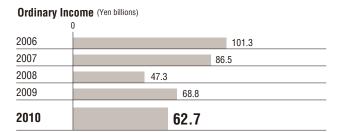
 2006
 1,557.8

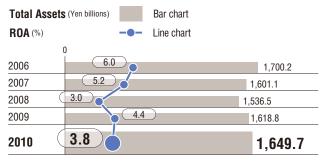
 2007
 1,616.0

 2008
 1,584.8

 2009
 1,583.3

 2010
 1,589.3

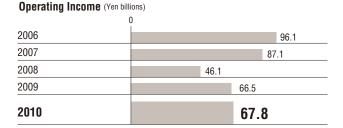


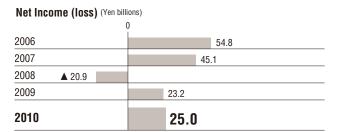


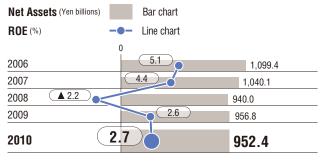
<sup>\*</sup>ROA is calculated using recurring profits.

needs, we worked hard to maintain our business results through our Group-wide "Production 21" efforts, which are aimed at establishing a solid foundation for aspects of our business, such as quality, cost, and delivery.

As a result, consolidated sales for the term were  $\pm 1,589.3$  billion, with consolidated revenues of  $\pm 67.8$  billion, consolidated profits of  $\pm 62.7$  billion, and a consolidated term net profit of  $\pm 25.0$  billion.







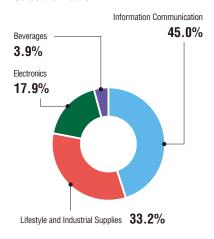
<sup>\*</sup>ROE: Return on equity is calculated on an owned capital and current net asset basis after deduction of share options and minority interest from net assets.

#### Segment Results (FY ending March 2011)

The business of the DNP Group is made up of our Printing Operations and Beverages Operations.

- \* Printing: We are developing our printing business across a broad range of applications. These include the Information Communication segment, made up of operations such as publishing/commercial printing, Smart cards, and network businesses; the Lifestyle and Industrial Supplies segment, which includes packaging, decorative materials, and industrial supplies; and the Electronics segment, which includes display products and electronics devices.
- \* Beverages: We produce and market carbonated beverages, coffee, tea and other beverage products, mainly through Hokkaido Coca-Cola Bottling.

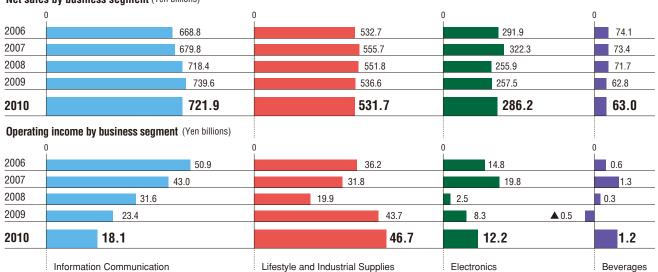
#### Sales distribution





13

#### Net sales by business segment (Yen billions)



Production and marketing of beverages 13 through Hokkaido Coca-Cola

Beverages

### **An Even More Resilient DNP Group**

The DNP Group's basic disaster policies and disaster-response organizational structures are established in the Basic DNP Group Disaster Prevention Regulations.

Our basic policy is minimize the damage caused by a disaster creating disaster response plans and conducting disaster response efforts through a joint effort including each organization, thereby achieving our goal of group-wide resilience in times of. In addition, we have created a business continuity plan (BCP) containing measures for post-disaster recovery, which give top priority to preventing injury to our employees or any of our stakeholders. We will continue to strengthen our fundamental disaster response based upon these policies.

#### **DNP Group Disaster Measures**

#### **Organizations and Structures**

The Central Disaster Prevention Council has been established at our Head Office to conduct comprehensive and systematic enhancement and promotion of disaster response measures. Operations and Group Company Disaster Prevention Councils have also been placed within each business operation and Group company. Furthermore, we have placed Regional Disaster Prevention Councils in each region to promote interlinked disaster response measures suited to the characteristics of each region.

In the event of a large-scale disaster, these Councils automatically function as disaster response head-quarters, assuming overall control of and driving both emergency disaster response and restoration/recovery measures.

#### **Business Continuity Plan (BCP)**

Actual disaster response measures are executed according to our disaster response plans. The Central Disaster Prevention Council is charged with drawing up the DNP Group Disaster Prevention Basic Plan, which is a comprehensive, long-term plan for the overall Group. Each operation and Group company creates Disaster Work Plans for practical disaster response that take into consideration the special characteristics of each region and operation, and conducts disaster response measures.

Each operation and Group company also has established its own business continuity plan (BCP), which is aimed at the restoration of important business and work within a given period of time, even in the event of a large-scale disaster.

#### **Education and Training**

We seek to improve proper understanding and awareness among employees and ensure that they behave calmly and safely during emergencies through educational programs such as disaster information leaflet distribution and the holding of disaster-preparedness seminars. Regular drills are also conducted in each area.



Disaster information leaflet distribution to improve employee awareness



Disaster-preparedness seminars conducted by outside instructors



Disaster drill held in Ichigaya with the cooperation of the fire department

#### Post-Tohoku-Pacific Ocean Earthquake restoration

The Tohoku-Pacific Ocean Earthquake struck on March 11, 2011. DNP immediately convened the Central Disaster Prevention Council, the structure we created for swift response in the event of disaster, and worked to gather information and respond appropriately.

While some damage to buildings and equipment was found in the hard-hit northeastern region, such as at DNP Tohoku (Sendai, Miyagi Prefecture), fortunately none of our employees was injured. Despite ongoing difficulties with public infrastructure, such as power, water, gas and transport, as a result of the concerted effort made by our Group to restore operations as quickly as possible we were again operating normally in May.

Nonetheless, the DNP Group learned many important lessons in the course of getting through the Tohoku-Pacific Ocean Earthquake. We view the experience as demonstrating the importance of correct awareness of disaster risk and the creation of appropriate measures for disaster response. The experience also spurred us to reexamine measures for continuous secure provision of supplies to our customers.

#### **Future Measures and Business Continuity**

#### **New Awareness of Disaster Risk**

The damage from the Tohoku-Pacific Ocean Earthquake itself has been followed by the serious secondary impacts of the tsunamis and the nuclear power plant accident, which has resulted in power shortages and radioactive fallout concerns. All of our worksites are reexamining their risk exposure, not only the risk of natural disasters but also the risk of damage originating in their surrounding regional environment, and are looking into preparing necessary responses.

#### **Promoting Disaster Response** Measures

We clearly saw the benefits of the disaster response measures that were executed according to plan in response to the recent earthquake. Through the use of our emergency

communications/safety confirmation systems, which we had tested during our companywide drills on September 1, 2010 (National Disaster Prevention Day), the Head Office was able to conduct safety confirmation even in northeastern Japan, where the power and telecommunications infrastructure had been paralyzed. The primary emergency response procedure when disaster strikes is to gather and transmit information, so our goal is to have a fully-functional disaster response headquarters system and emergency communications system. We also enhance our disaster response measures by taking into account the results of disaster risk inspections and reinforcement of buildings and equipment, as well as of our disaster equipment and supply stockpiles and our infrastructure.

We also strive to make our employees aware that the basic principle of disaster response is "Be

responsible for your own safety." We seek to encourage each person to ensure the safety of their workplace and home, and we engage in drills to that purpose.

#### **Revision of Business Continuity** Plans (BCP)

Problems in securing supplies due to damage at manufacturers or distributors, as well as at places like chemical plants that supply raw materials, can also be a problem in the printing industry, with shortages of materials like paper, ink, or film, not to mention problems such as rolling blackouts or gasoline shortages, causing the serious disruption of production plans and distribution. We are taking a fresh look at items such as the supply chain, logistics, and an alternative production system, as well at the location of our production sites both within and outside Japan, so as to maintain secure and continuous supplies to our customers.

#### Supporting the Victims of the Tohoku-Pacific Ocean Earthquake

The DNP Group has been involved in a variety of support activities for the victims of the Tohoku-Pacific Ocean Earthquake, including donations to the Japan Red Cross, in the hope that their lives and homes can be restored as quickly as possible. Our Group companies in the stricken regions are seeking to support other regional companies. The DNP Group will continue to do everything in our power to support the restoration of the areas affected by the disaster.

#### Main support efforts

All DNP Group employees	Donations to the Japan Red Cross (¥6 million)
DNP Group	Donation to the Japan Red Cross (¥100 million)
DNP	In cooperation with Shobunsha Publications, we created the "Tohoku-Pacific Ocean Earthquake Restoration Support Map," which has been distributed free of charge to disaster response centers in the stricken areas http://www.mapple.co.jp/news/news_release110525.html
DNP	Placement of link for donations of support funds at the "Mangakocchi" mo- bile comics sales website
Kyoiku-Shuppan	Provision of textbooks and supplies to schools in the stricken areas
Maruzen Publishing	Books and articles about earthquakes, tsunamis, radiation, and psychology made freely available at the website
DNP Social Link	Making point-based donations at their point service site, "Elne"
Hokkaido Coca-Cola Bottling	Donation of 30 thousand cases of beverages (720 thousand individual drinks), and other efforts





### DNP Group CSR

CSR (Corporate Social Responsibility) is generally defined as "the responsibilities of a corporation to society," but we at the DNP Group go further, viewing CSR as "being a company that is trusted by society."

By simultaneously meeting the three vital corporate responsibilities – "Value Creation," "Integrity In Conduct," and "Transparency (Accountability)" – we seek to continue being a trusted company.

#### The Three Corporate Responsibilities

#### **Value Creation**

Providing new value to society



We at the DNP Group believe that the most important of the responsibilities of a corporation to society is "creating new values for society" We must make a connection between the offering of products and services necessary to the sustainable development of a society and the growth of the company. The DNP Group fulfills this primary responsibility by finding solutions to the issues confronted by our customers and society through the promotion of our P&I Solutions Business Vision.

#### **Integrity in Conduct**

Practicing fairness and impartiality in the value creation processes

2

Next is the corporate responsibility for fairness and impartiality in value creation processes. No matter how superior or useful to society the value produced is, value is compromised if, for example, environmental damage occurs during the value creation process or laws are broken. Therefore, the DNP Group seeks to fulfill this responsibility by ensuring that all employees "always conduct business with integrity" in accordance with the DNP Group Code of Conduct.

# Transparency (Accountability)

Being a company that is accountable and highly transparent

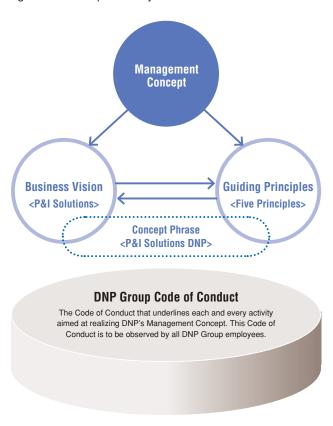


Finally, the third vital corporate responsibility is "accountability." The DNP Group seeks to fulfill this responsibility by encouraging all employees to engage in *TAIWA* with stakeholders during the course of their regular duties. Moreover, the DNP Group provides accurate information to stakeholders as a matter of course.

#### **DNP Group Vision for the 21st Century**

The DNP Group Vision for the 21st Century consists of our Management Concept, Business Vision, and Guiding Principles, and is an expression of our basic philosophy of co-existence and co-development with society and the environment.

Our Management Concept is the DNP Group's social mission, and is an expression of the most important value held by all DNP employees. Our Business Vision and Guiding Principles provide direction for the business and employee conduct that will enable us to make our Management Concept a reality.



DNP Group Vision for the 21st Century http://www.dnp.co.jp/eng/concept/

#### **DNP Group Code of Conduct**

The DNP Group has established the DNP Group Code of Conduct as the set of principles upon which our efforts toward realizing our Management Concept are based. The Code of Conduct is founded upon strong ethical principles in accordance with our own rules as well as the law of the land, and is built around themes we consider to be of mutual importance to both the DNP Group and society as a whole. The conduct of business with integrity at all times in accordance with this Code of Conduct is the foundation of our CSR activities.

#### Management Concept

The DNP Group will contribute to the emergently evolving society of the 21st Century.

#### **Business Vision**

#### [P&I Solutions]

We will identify and solve the problems and issues that consumers and corporate clients face within the emergently evolving society by fusing our Printing Technologies (PT) and Information Technology (IT).

#### **Guiding Principles**

- 1. Engage in TAIWA with all persons concerned
- 2. Work with an independent and collaborative mind-set in order to solve problems
- 3. Challenge courageously, even in the face of difficult issues
- 4. Act with integrity, fairness, and impartiality, at all times
- 5. Be responsible for your own decisions and conduct

#### DNP Group Code of Conduct

- 1. Contributing to the development of society
- 2. Social contribution as a good corporate citizen
- 3. Compliance with the law and social ethics
- 4. Respect for human dignity and diversity
- 5. Environmental conservation and the realization of a sustainable society
- 6. Realization of a 'universal society'
- 7. Ensuring the safety and quality of our products and services
- 8. Ensuring information security
- 9. Proper disclosure of information
- 10. Realization of a safe and vibrant workplace

#### **Endorsement of the Global Compact**

The DNP Group announced its endorsement of the United Nations Global Compact (GC) in July 2006. The GC covers 10 principles in four categories: Human Rights, Labor Standards, Environment, and Anti-Corruption. Corporations endorsing the GC engage in voluntary efforts to advance these 10 principles, with the goal of achieving a society capable of sustainable growth. We are working to enhance our image as an honest company by promoting the 10 principles of the GC in tandem with our DNP Group Code of Conduct.

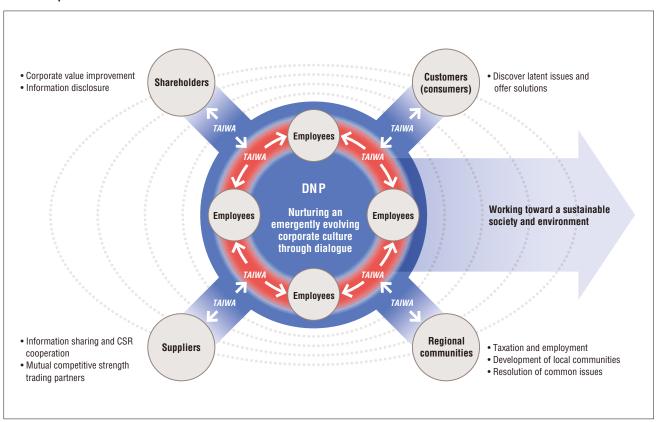
## DNP Group CSR

#### **For Corporate Transparency**

DNP celebrates its 135th anniversary in 2011. DNP could not have achieved so many years of steady growth without establishing a relationship of trust with our shareholders, customers, employees, suppliers, regional communities, and other stakeholders. We emphasize that our employees must learn the opinions of stakeholders by engaging

in real *TAIWA*, and that they take the initiative in providing accurate information in daily interactions with our stakeholders. By doing so they fulfill our duty of accountability and improve the transparency of DNP activities, which helps us achieve our goal of remaining a trusted company.

#### **DNP Group Stakeholders**



#### **Corporate Governance**

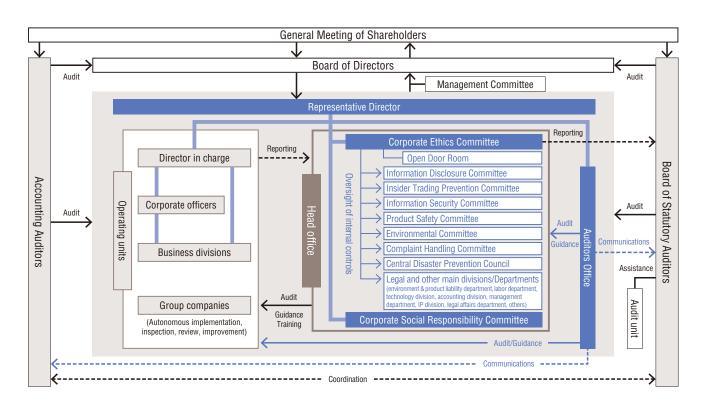
#### The Corporate Governance System

The DNP Group believes that strengthening our corporate governance, including our internal control system, is a management issue of major importance.

DNP has established a system whereby its directors, who each have a wealth of specialized knowledge and experience, participate in management decisions across a broad array of business areas, execute their work duties,

and in addition oversee the work of other directors. This enables our company to respond swiftly to changes in the management environment. Another way we shore up our corporate governance is by raising the compliance awareness of individuals by means of thorough training and education.

#### Diagram of the Corporate Governance and Internal Control Systems



#### \* Board of Directors Meeting

The Board of Directors is composed of 20 directors, including one outside (independent) director. It is normally convened monthly, with directors reciprocally overseeing the execution of each others' work duties, which ensures that proper supervisory functions are maintained. The Officers selected at the Board of Directors meeting execute the business concerning the items determined at the meeting, and maintain close dialogue with the Directors via Executive Committee Meetings, which are held three times a month, so that the opinions of those closer to the actual worksites are reflected in management.

In addition, a Management Committee made up of directors of the rank of Senior Managing Director and above was formed so as to improve management speed and efficiency. This Committee examines and deliberates important management policies, strategies, and proposals. The directors also attend the thrice-monthly Executive Committee Meetings to exchange information so that management decisions can be made efficiently.

#### \* Board of Statutory Auditors

DNP is a company with a Board of Statutory Auditors. The Board of Statutory Auditors is composed of five auditors, including three from outside the company (two of whom are independent), who possess the appropriate level of finance and accounting expertise. Each auditor audits the business executed by the directors, according to the auditing standards and duties determined by the Board of Statutory Auditors. The auditors maintain close ties, with the accounting auditor explaining the auditing plan to the Board at the beginning of each term, hearings concerning the auditing situation conducted as needed during the course of the term, and audit results reported at term-end.

The Audit Unit has been established to provide assistance to the auditors in their duties, with a special support staff working according the auditors' in-

Neither the outside director nor the outside statutory auditors have personal, financial or business relationships or other interests with DNP.

#### **Chart: FY2010 Targets and Results**

Theme	FY2010 Targets	Evaluation
	Promote measures such as training to improve employee understanding and awareness of the DNP Group 21st Century Vision, and cultivate personnel who will contribute to the development of the emergently evolving society.	0
Contributing to the development of society	Make full use of the functions of the Gotanda Building, the entirety of which we consider our company "showroom," and gain the cooperation of all in-house units and our valued customers so as to provide "venues for <i>TAIWA</i> " where new P&I Solutions possibilities can be derived, so we can contribute to the emergently evolving society through our business.	0
	Analyze and ascertain current needs and issues by executing the 5th Emergent Evolution Questionnaire (survey for monitoring employees and customers), and use the results in examining various future measures.	0
	Maximize use of the Printing Technologies (PT) and Information Technology (IT) cultivated by DNP to develop and expand business in various fields, especially energy and bio-materials, so as to contribute to the realization of a low-carbon society and improved quality of life.	0
A disaster-resilient DNP Group structure	Work to strengthen prevention and emergency measures to shore up anti-disaster plans at each workplace, and establish measures for Business Continuity Plans (BCP).	0
Compliance with the law and social ethics	Revise and thoroughly improve management content so as to increase the effectiveness of internal controls and risk management.	0
	Strengthen programs for ensuring a greater degree of adherence to and thorough understanding of corporate ethics at related companies in Japan and overseas.	0
	Maintain and renew Privacy Mark personal information protection certification and strengthen DNP Group Information security control systems.	0
Ensuring information security	Improve the Information security level by fully implementing the PDCA cycle for information security.	0
	Enhance Information security training for all employees.	0
	Implement and standardize physical security measures at all Group sites.	0
	In addition to including our materials suppliers, expand coverage to include our manufacturing contractor partner companies.	0
Promoting social responsibility through the supply chain	Conduct the 4th Regular DNP Group CSR Procurement Criteria Compliance Survey in autumn 2010, and send out the evaluation sheets containing the analysis of the survey replies in spring 2011.	0
	Conduct on-site CSR inspection, focusing on our main suppliers. Convene CSR Activity Promotion Explanatory Meetings so that CSR can take hold at small and medium-size suppliers.	Δ
		0

Evaluation Targets ( ): Target achieved or making steady progress toward target :Making active efforts but target not achieved x :Efforts insufficient

#### FY2010 Results

We conducted new employee training, Step Up Seminars, and new executive training so as to cultivate personnel who can contribute to the development of the emergently evolving society. Also, we trained personnel in Solution Business Practical Training so they can realize P&I Solutions in business.

We discussed issues with customers at Solutions Workshops at the Next Generation Communications Fair directed at people outside the company, and engaged in collaboration for social development by providing solutions to customer issues.

We conducted the 5th Emergent Evolution Survey aimed at confirming the actual state of employee awareness and behavior, as well as to look into the needs and expectations of our client companies regarding DNP. The results of the analysis are provided to the relevant divisions as feedback, where they are used in devising real measures for contributing to the development of the emergently evolving society.

- In our energy segment we strengthened our production capacity for materials used in lithium ion batteries, which are components of electric cars, smart phones, and other equipment, as well as for solar cell materials, which are of high interest for use in clean energy production. This contributed to expanding the market.
- In our life science segment, we used our proprietary surface treatment technology to develop SEGTOP plates for highly sensitive identification of proteins, etc. We are continuing with our research into creating practical applications for use of this technology in basic equipment for cancer and infectious disease diagnosis and new drug development.
- We newly established the DNP Group Basic Disaster Measure Regulations so as to strengthen our overall disaster measures, and created the DNP Group Basic Disaster Response Plan outlining our fundamental procedures for the Group's disaster pre-
- All operations and Group companies have established Disaster Response Work Plans based on the above, and are proceeding with preparations for rapid operational recovery after a large-scale disaster by establishing Business Continuity Plans (BCP).
- \* The Corporate Ethics Committee meets once a month at our head offices without fail, but in 2010 we made biannual meetings (once every six months) for each business division a requirement because some had not been convening regular meetings. Our goal is to strengthen our corporate ethics promotion structure.
- We seek annual revisions of our Self-Checking System, which is one of the pillars of our risk management, but in 2010 we aimed to revise self-checking as it relates to legal matters, making the content more effective in terms of the actual situation.
- \* As part of our overall overseas affiliate risk management enhancement program, we have been setting up structures for risk management at our newly-established affiliates in China, and are guiding the building of systems to that end.
- \* We are developing a number of case study-based programs with the goal of enhancing training effectiveness.

DNP has changed its corporate privacy mark certification. Inspection and guidance systems have been enhanced, and Information Security Training Standards have been established along with other related regulations.

Enhanced inspection and guidance, as well as evaluation and checking, at DNP Group sites, with new risk responses, etc.

Created and distributed an information security-related brochure, and implemented instruction and specialized information security training for all 41,000 company

We newly installed physical entry and exit security equipment using employee Smart ID cards at seven business locations (for a total of 128 locations).

At some of our business locations we conducted explanatory sessions for improved understanding of DNP's CSR Procurement Criteria on the part of the collaborating companies which we contract for work. The production then proceeded based upon those criteria.

We conducted a fourth CSR Procurement Criteria Compliance Survey in February 2011. Evaluation sheets were sent out in March 2011.

We conducted CSR Activity Promotion Explanatory Meetings for small to medium suppliers, but onsite surveys at our main suppliers were not conducted.

The CSR Procurement Criteria have been revised in accordance with social norms.

#### FY2011 Targets

- Reexamine the DNP Group Global Vision in response to the changes due to the Lehmann Shock and the Tohoku-Pacific Ocean Earthquake (anticipated). Continue to provide solutions to the issues facing society and to cultivate human resources who can contribute to the development of the emergently evolving society.
- Continuously conduct Solutions Workshops, share issues in the course of TAIWA (dialogue) with customers, and contribute to the development of society by providing solutions to customer issues.
- Use DNP's printing technologies (PT) and information technologies (IT) to develop and expand businesses in every segment, including energy, life sciences and digital media, so as to help achieve a low-carbon society and improve quality of life.
- Examine our world from a social perspective, and seek out significant issues, to which we will propose business-based solutions that exceed the limits of our current operations.
- \* Proceed deliberately at all operations and Group companies with response measures based on Disaster Response Work Plans and Business Continuity Plans (BCP). Each conducts self-checking, and is enhancing the PDCA Cycle.
- \* Examine issues concerning the DNP Group response to the Tohoku-Pacific Ocean Earthquake, and revise planning as well as engage in actual enhancement mea-
- We believe in the importance of the accumulated effects of study, along with daily efforts for adherence to and thorough understanding of corporate ethics. Therefore, encourage activities in which all Group employees return again to our fundamental principles and consider the meaning of the "integrity in conduct" to which we aspire. Part of this effort is to include the revision of training methods and materials.
- Strengthen programs for creating internal control systems and structures for the adherence to and thorough understanding of corporate ethics at all domestic and overseas affiliates, for thorough acceptance of the DNP Group's corporate ethics.
- Revise and improve management content so as to enhance internal controls and risk management effectiveness.
- Enhance the activities of the Corporate Ethics Committees in each of our business operations
- \* Engage in goal-sharing and repeated TA/WA in the course of maintaining our personal information protection systems and information security control systems, as well as in executing the PDCA Cycle.
- \* Revise and maintain autonomous checking and improvement structures at all Group operational bases so as to respond to new risks stemming from new business or new technologies.
- \* Implement education and training so as to improve the security awareness of all employees, and enhance the content of training for overseas operations.
- Implement physical security measures employing our own solutions and knowhow at all Group operations.
- \* In regard to our application of the CSR Procurement Criteria to contractors as planned to begin in 2010, expand the coverage and continue with the program.
- In conjunction with the revision of the CSR Procurement Criteria, after reconsidering the content of the CSR Procurement Criteria Compliance Survey, conduct continuous, regular surveys.
- Broadly expand the number of suppliers subject to the explanatory meetings for small and medium-size suppliers, and conduct a number of CSR Activity Promotion Explanatory Meetings.
- Get the results of the 4th DNP Group CSR Procurement Criteria Compliance Survey, and conduct an on-site inspection of the main suppliers.
- With the goal of maintaining the supply chain, request that suppliers draw up business continuity plans (BCP), and confirm that they are in place.

#### **Chart: FY2010 Targets and Results**

Theme	FY2010 Targets		Evaluation	
	Promote understanding of l books, shareholder notificat to describe DNP's business topic-oriented study meeting to create even more opportu companies, and communitie	0		
Proper disclosure of information	Prevent insider trading not only by redoubling controls on important internal information, but also on important information received from clients.			
	Gain an understanding of the relationship with stakeholders from the perspective of the consumer, and deepen communications both within the company and externally as well as promoting a transformation in the corporate culture.			
		Develop versatile UD evaluation standards in conformity with DNP's business domain	Δ	
Realization of a 'universal society'	Contribute to realizing the Universal Society through development of our business throughout	Share knowledge that goes beyond the realm of business, and cultivate the next generation of personnel	0	
	the company.	Actively provide information about our company's efforts both within and outside the company	Δ	
Ensuring the safety and quality of	Implement on-site inspecti processes.	ons with the goal of preventing product accidents that occur in manufacturing	0	
our products and services	Continue to execute thoroug	h employee education and strengthen the control system for product safety.	0	
Respect for human dignity and diversity		Continue with the Female Employee Active Support Meetings. Focus on the 500 employees (female employees and their superiors) in the DNP Group who have not yet taken the course.	0	
	promotion enorts	DNP is expanding mentoring activities as a measure for increasing the rate of retention of young female employees in the sales units, and will create measures aimed at increasing the retention rate for female employees in the technical units.	Δ	
	Promote creation of an environment that enables work-life balance support	We held explanatory meetings introductions to the details of work-life balance systems for the persons in charge of promoting them in April 2010, with the goal of promoting the penetration of work-life balance measures and an increase in the number of employees making use of them.	0	
	measures and systems to be effective.	Introduce "Family Friendly Day" when children can visit the workplace at 5 or more worksites so as to gain 2012 Next-Generation Childrearing Support Action Plan certification.	0	
	In accordance with the DNP Group Productive Time Resource Project Stage 1 Plan, promote activities for the firm establishment of a "transformation of workstyle" in the corporate culture.		0	
Realization of a safe and vibrant workplace		vities aimed at achieving the DNP Group 1st Industrial Accident Prevention Basic lents accompanied by a lost worktime target of 0.35 or less (71% of that for 2008).	Δ	
		nent plan that brings the number of employees receiving regular health exams to under observation to 2.2% in accordance with the goals of the DNP Group 1st ement Basic Plan.	Δ	
Social contribution as a good corporate citizen	* Nurture a spirit of social contribution among employees  1. Introduce the efforts of all organizations  2. Post information for the information of employees concerning social contribution efforts  - Invite persons such as experts and NPOs to give talks		Δ	
oorporato otilzen	- Develop and execute empl	ion activity menu for the DNP Group and enhance information provision oyee programs using management resources opment within the Group of programs executed by each organization	0	

Evaluation Targets : Target achieved or making steady progress toward target :Making active efforts but target not achieved x :Efforts insufficient

#### FY2010 Results

- In addition to publishing 123 news releases during the course of the year (120 in fiscal 2009), we submitted 213 separate information releases to the mass media.
- In addition to holding 209 IR Meetings over the course of the year (233 held in FY2009), a number of topic-oriented study meetings, such as concerning digital publishing and display products, were held for investors.

We conducted group training and network learning to enhance our insider trading prevention, and also revised the regulations. We sought to enforce timely disclosure through checks and approvals conducted by the Information Disclosure Committee.

We enhanced our website so as to increase its update rate and make it more user-friendly. In addition to using the company intranet, we enhanced a in-house communications through a variety of means, including company publications, pamphlets introducing DNP products and services, and digital signage.

The development of evaluation methods proceeded from the Lifestyle and Industrial Supplies segment to include Information Communications.

- We conducted UD seminars to enhance general employee awareness of UD. About 300 employees participated.
- We established an in-house study group called the UD Workshop, which shares information with human resources development.

We participated in a number of external events, including the Third International Universal Design Conference. We also took a the central role in International Association for Universal Design (IAUD) projects.

We continued onsite inspections (Product Safety Practices Committee) in fiscal 2010 as

We executed employee education for product safety through group learning and network learning conducted by our head office, and practical training at our operations and Group

The total number of course attendees was 640 (management 302, female employees 338) for the DNP Group overall.

The mentoring program at sales units at DNP begun in 2009 continued. At the technical units the program is still in the discussion stages, with issues involving participation improvement being sorted out.

Meetings for explaining the system were held in April 2010, and notification was made through in-house publications.

Held at 10 operations sites with 107 families participating.

Definite results were achieved for time resource creation through our "transformation of workstyle" efforts, by making work more efficient and diversifying skills, as well as through our active revision of the labor system.

(Working hours outside scheduled working hours: -39% compared to 2008 (benchmark year))

While we conducted assessments every six months and aimed to hit our targets as called for in the Industrial Accident Prevention Basic Plan, our industrial accident occurrence rate (accidents accompanied by lost worktime) was 0.49, which was above our target due to a rise in accidents due to falls.

We continued to advance the Health Maintenance Promotion Basic Plan, based upon the DNP Group Health Maintenance Guideline. The regular physical checkup rate for employees 99.6% was slightly under our target, along with the slight increase in those found to have health issues.

- \* In-house intrasite: By posting articles on an approximately once a week basis and making announcements at the top of the intranet page, it ranked 8th in in-house access (15th in the first half). Averaged 16,000 hits/month.
- 1. While the number of operations and Group companies introduced on the Intranet was expanded, it does not yet cover all organizations.
- 2. Information from NPOs and other external organizations is posted.
- \* Started "Out of the House Cooking Lessons" at four public elementary schools in Chiba.
- Developed as an employee participation program.
- Information provided through the intrasite, in-house publications, and the public homepage

#### FY2011 Targets

- \* 2010, in addition to marking the 135th anniversary of DNP, is the 60th year since we began expanding business through the "expansion printing" concept, and the 10th year since we established our 21st Century Vision. Over the course of the year we will establish important themes, increase our supply of information to the mass media, hold theme-based study meetings for institutional investors, and develop a variety of communications tools.
- Engage in deeper communication with stakeholders, collecting their expectations and opinions and reflecting them in conducting business.
- Enhance the information we provide both within the company and externally about DNP's efforts overseas.
- Conduct more thorough controls over important information both inside and outside the company, and enhance our efforts for timely disclosure and insider trading prevention.
- \* Contribute to realizing the Universal Society through development of our business throughout the company.
- \* Offer society more products and services based on the UD concept.
- Develop generally applicable UD evaluation methods that are suited to DNP's business domains.
- Share knowledge across business segment boundaries.
- Actively provide information both within and outside DNP about our efforts.
- Cultivate next-generation human resources.
- \* Execute onsite inspections and monitoring of quality indicators for prevention of product accidents stemming from the manufacturing process.
- Continue to implement thorough employee education concerning product safety.
- \* Strengthen diversity promotion efforts
- Continue with the Female Employee Active Support Meetings. Focus on employees (female employees and their superiors) in the DNP Group who have not yet taken the course.
- Continue with concrete measures concerning matters related to diversity promotion at each DNP Group company. Continue with the mentoring program for female employees in the sales units, and implement measures aimed at increasing the retention rate for female employees in the technical units.
- \* Promote creation of an environment that enables work-life balance support measures and systems to be effective.
- Look into measures for promoting use by male and female employees of the childcare leave system, implement such measures, and increase the use of the system by
- Continue to hold "Family Friendly Day" when children can visit the workplace at five or more worksites so as to gain 2012 Next-Generation Childrearing Support Action Plan certification.
- \* During what will be the final year of the DNP Group Productive Time Resource Project 1st Basic Plan, make "reform of work habits," which are at the heart of these efforts in each operation and Group company, part of the corporate culture, so that each employee makes effective use of time resources.
- Continue to aim for the DNP Group 1st Work Accident Prevention Basic Plan Work Accident Occurrence Rate target of 0.30 or less (68% of 2008) by promoting risk reduction.
- Reach the targets of the DNP Group 1st Health Maintenance Promotion Basic Plan target rate for regular physical checkup rate for employees of 100%, and implement a health improvement plan to reduce the percentage of those found to have health issues to 2.2%
- Continuously discuss the DNP Group 21st Century Vision and Code of Conduct during training and at meetings, so that each employee understands the goals and the meaning of both, and is able to contribute autonomously to society.
- Cultivate creative human resources who can plan and develop new services, such as digital publishing and SNS (social networking services).
- \* Foster employee consciousness of good corporate citizenship
- Hold a meeting announcing the 2011 CSR Report
- Introduce the social contribution efforts of all DNP Group organizations on the in-house intrasite.
- Also on the intrasite, introduce external social contribution organizations whose activities can serve as a reference for in-house activities (6 organizations).
- Hold lectures by experts, NPOs, etc.
- Develop the DNP Group's own social contribution programs and conduct them horizontally across the Group

#### FY2010 Awards & Evaluations

Date		Awards & Evaluations	Sponsor
2010	April	49th 2010 JAPAN PACKAGING COMPETITION (JPC) Minister of Economy, Trade and Industry Award, etc. Awards received for 10 products (awards presented to the customers in each case)	The Japan Federation of Printing Industries
2010	May	35th Kinoshita Prize New Creation Award (Development of new form of gum, "Fit's") (Award shared with Lotte Co.)	Japan Packaging Institute
		The May Day CBF Model Partnership Awards (received by Tien Wah Press)	National Trade Union Congress
2010	June	The Kanto-Koshinetsu Region Federation of Associations for the Safety of Hazardous Materials Chairman's Commendation (received by DNP IMS Odawara)	Kanto-Koshinetsu Region Federation of Associations for the Safety of Hazardous Materials
		The Kanto-Koshinetsu Region Federation of Associations for the Safety of Hazardous Materials Chairman's Commendation (In recognition of facility enhancement and safety controls) (received by DNP Ellio)	Kanto-Koshinetsu Region Federation of Associations for the Safety of Hazardous Materials
		Superior Workplace (Daily efforts to prevent pollution and preserve the environment) (received by DNP Technopack)	Gifu Prefecture Environmental Association
2010	July	The Premier Print's Certificate of Merit for Modern & Contemporary Art at Dartmouth (received by Tien Wah Press)	Printing Industry of America
		Letter of thanks (for contributions to medicine)	Tokyo Medical and Dental University
		22nd Annual Labor Bureau Chief's Commendation for Health and Safety (Okayama Labor Bureau Incentive Award) (Award received by DNP Opto-Materials Okayama Plant)	Okayama Labor Bureau
2010	August	The Pewter for Gold Ink Awards for SVA (received by Tien Wah Press)	Printing Impressions, Executive and Book Business Magazines (co-sponsors
2010	September	2010 "Great Place to Work" ranking/Overall ranking: 13th	Nikkei Inc.
		55th Kanagawa Architecture Competition (Superiority Award) (DNP Hakone Training Center No.2)	Kanagawa Prefecture
		40th Japan Promotional Marketing Institute Exhibition (awards presented to the customers in each case) 8th JPM Planning Award/New Client Acquisition Planning Incentive Award, 40th Creative Design Show/Economy, Trade and Industry Minister's Prize, JPM Gold, Silver Awards (awards presented to the customers in each case)	Japan Promotional Marketing Institute Inc.
		12th Automatic Identification Systems Award (Superiority Award) (Shared with IFCO Japan) (Realization of consolidated control of rental containers and their contents in the fresh food distribution supply chain through the introduction of RF tags in rental containers)	Japan Automatic Identification Systems Association
2010	October	6th Quality Management Survey Ranking/Overall ranking: 5th	Union of Japanese Scientists and Engineers
		2010 "Cho" Monodzukuri Innovative Parts and Components (Incentive Award) (Wiring sheets used in ultra-thin 0.16 mm. thickness LGA and metal interposer-equipped QFP)	Conference for the Promotion of Monodzukuri
		52nd All-Japan Catalog/Poster Fair 24 pieces received awards (awards presented to the customers in each case)	The Japan Federation of Printing Industries
		2010 Kanagawa Prefecture Environmental Conservation (Air-Water-Soil) Assistance Commendation (received by DNP IMS Odawara)	Governor, Kanagawa Prefecture
		Good Design Frontier Design Award 2010 (Station guidance systems using floor signs, smart phones, etc.) Jointly received with East Japan Railway Company, Softbank Telecom, and Book Mark.	Japan Industrial of Design Promotion
		Medal with Dark Blue Ribbon(for donations to the Sapporo Maruyama Zoological Park) (received by Hokkaido Coca-Cola Bottling)	Cabinet Office
2010	November	6th Quality Management Survey Ranking/Superiority Award	Union of Japanese Scientists and Engineers
		2010 Panasonic Excellent Partners Meeting SCM Contribution/Monetary award (For building a vibrant structure for the production of 8th generation color filters used in LCD televisions)	Panasonic Corporation
		Letter of thanks (for contributing to improvement and elimination of trouble built-in crossovers using EB coat technology)	PanaHome Corporation
2010	December	62nd Annual All-Japan Calendar Competition 24 pieces received awards (awards presented to the customers in each case)	The Japan Federation of Printing Industries Japan Printing News Co., Ltd.
2011	January	7th Industrial Ability Ranking of Truly Able Companies/Overall ranking: 7th	Nikkan Kogyo Shimbun, Ltd.
	-	14th Japan Environmental Management Ranking Survey/Overall ranking: 21th	Nikkei Inc.
		Image d'OR Tirage Category (Gold medal) (Fotolusio Print Center) (award received by DNP Photoimaging Europe)	Le Monde l'image
		Traffic Safety Assistance Award (for assistance in traffic safety awareness campaigns) (received by Hokkaido Coca-Cola Bottling)	Hokkaido Prefectural Police Headquarters
2011	March	10th Annual Integrex Survey: "Survey of Corporate Honesty and Transparency (Ethical and Social)"Overall ranking: 8th	Integrex Inc.
		Japan Industrial CSR Management Trend Survey 2010 (Company which made progress in socially responsible management efforts)	The Japan Research Institute, Ltd.
		Elite-Smiley (for being the best of 400 Greve-region companies in fire prevention and safety) (received by DNP Denmark)	Greve Fire Brigade

#### SRI indices in which DNP is included

SRI (Socially Responsible Investment): This is investing that includes a company's CSR efforts along with financial analysis among investment criteria.

SRI index	Homepage
Dow Jones Sustainability Indexes	http://www.sustainability-indexes.com/
FTSE4Good Index Series	http://www.ftse.com/Indices/FTSE4Good_Index_Series/index.jsp
Ethibel PIONEER Register & Ethibel EXCELLENCE Register	http://www.ethibel.org/subs_e/4_index/main.html
Morningstar Socially Responsible Investment Index	http://www.morningstar.co.jp/sri/index.htm
Sustainable Asset Management	http://www.sam-group.com/htmle/main.cfm









<sup>\*</sup> The Morningstar Socially Responsible Investment Index, developed by Morningstar Japan K.K., tracks the share performance of 150 selected Japanese companies based on their commitment to CSR.

#### The DNP Group's CSR Efforts

- Social Responsibility Report -



Entry in the Information Media Supplies Operation Group Photo Contest

#### [RELAY TEAM SWIMMING, SMILES]

Photo: Children of Tu A. Bui, DNP IMS America Corporation

# DNP Technologies, Leading the Way in Supporting Tomorrow's Lifestyles

DNP was founded as the first full-scale printing company in Japan in 1876.

Since that time, DNP has applied and developed Printing Technologies (PT) and Information Technologies (IT) to produce products and services that people cannot do without. Now they are things that are used as a matter of course, and support convenient and comfortable lifestyles.







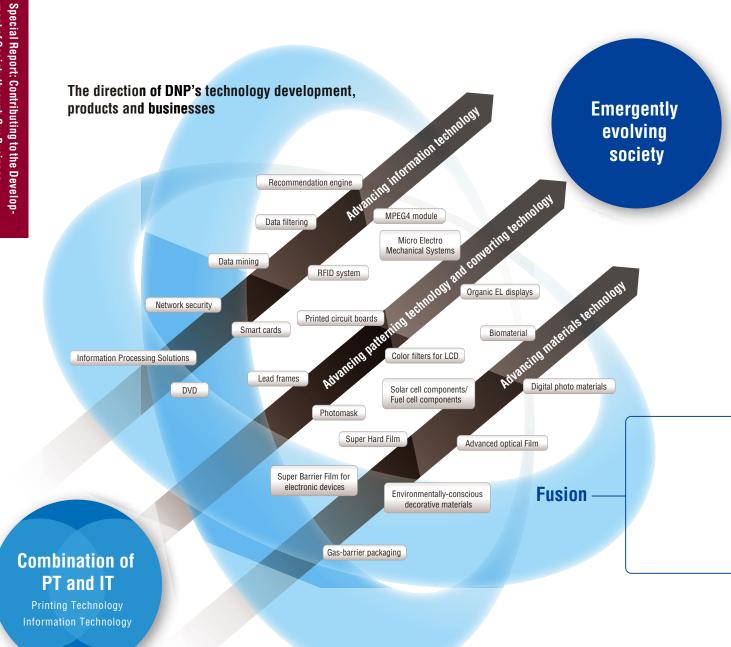
#### **Convenient and Comfortable Lifestyles Supported by Printing Technology**

DNP has continued to expand our fields of business with technology at their core in developing our "expansion printing" concept. This began in the 1950's, when we moved into packaging and decorative materials. Printing applications expanded from paper to plastic film, cloth, and metals, and we came to produce a variety of products that are indispensible to today's lifestyles, such as laminated tubing, retort pouches, and PET bottles. Printed materials also came to be used in home and automobile interiors, not to mention digital camera and photographic seal print materials.

We also developed the first color TV-use shadow mask in Japan in 1958, marking our move into the electronics field. At present, color filters for LCD displays and materials for semiconductors are among our main products. Such products, which were born of printing technology, have themselves spurred innovative new products, and support the rich lifestyles we lead today.

#### **Rich Communications Created by Information** Technology

In the area of information technology as well, we have since our founding sought to sharpen technologies for displaying letters and illustrations as precisely as possible. We have spurred broad development of this technology, from the creation of "Shueitai" during the Meiji Period through color management and design, as well as the first efforts toward digitalization in the 1970's. In 1985 we developed the world's first CD-ROM dictionary, opening the way toward the development of single-source multimedia. Afterward, the digital content business technology and know-how of today was cultivated through the response to the Internet and digital broadcasting. In making the change from paper to digital media and networking, DNP is deepening the field information technology and contributing to ever richer communications among people.



#### **Printing Technology**

#### Materials technology:

Composition of new materials, dispersion and mixing techniques. Indicates design and manufacturing technologies for ink and adhesives, photosensitive materials, coating materials, etc.

#### Patterning technology:

Techniques for forming letters, images, patterns, etc. in base material. Indicates non-printing technologies such as press techniques, offset/gravure printing, lithography, inkjet technology, etc.

#### Converting technology:

Processing techniques for converting or combining forms of material. Indicates processing techniques for film forming, coating, laminating, excipient, transfer, cutting, polishing, bag manufacturing/forming, and book technologies, etc.

#### Information Technology

#### Information processing technologies:

Data input/output, conversion, synthesis, compilation, and transmission technologies. Indicates text processing, color separation and editing texts & images, raster vector conversion and digital-to-analog conversion technologies, as well as database design, server management and network technologies.

#### HMI (Human Media Interaction) technologies:

Technologies related to the interaction of humans and information, including expressive technologies such as font design, color matching, tone reproduction, industrial design planning, photo-realistic CG as well as interface design technologies such as screen design, natural language processing and cognitive engineering, etc.

#### Information security technologies:

Technologies for ensuring that information is accurately transmitted to the correct destination, properly stored, while preventing improper use of information, including technologies for encrypting, personal data processing & management, copyright management technologies and biometrics, as well as information technologies related to IC cards.

#### New Worlds Opened through the Fusion of Technologies

New products born of the fusion of DNP's technologies have played a valuable role in the arrival on the market of equipment and services that nowadays are indispensible. One example is the smart phone. These cellular devices that are rapidly becoming so popular contain DNP's color filters for LCD displays, touch panel sensors, and softpacks for use in lithium ion batteries. DNP has also developed a recommendation system for providing recommendations in line with users tastes and preferences, as well as an agent application called "Machireco" for its use, and offers a data transmission service for smartphones.

We will continue to pursue the possibilities of printing technologies and information technologies so as to usher in the rich lifestyles of tomorrow.

**New product creation** 

#### New business creation

- \* Energy business
- \* Life science business
- \* Environmental business
- \* Other new business

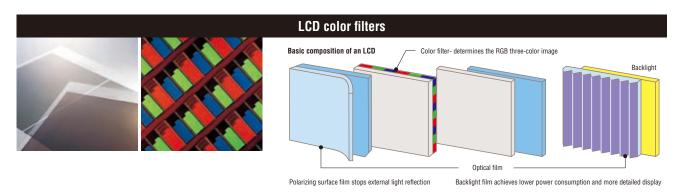
#### **Advancing and Fusing Our Core Technologies**

PT and IT are DNP's fundamental, core technologies for bringing about new products and services, and we focus on pursuit of these technologies as our most important technical theme.

the core technologies of PT, which are materials, patterning, and converting, as well as those of IT, which are information processing, HMI, and information security, and by combining these in a coordinated way come up with innovative products and services that society has not seen before. In recent years DNP's fundamentally technological efforts have spanned every field, from energy, with items such as component materials for solar cells, through life sciences, with technologies such as capillary patterning and cell sheet engineering.



#### **Driving the Evolution of Displays through Printing Technology**

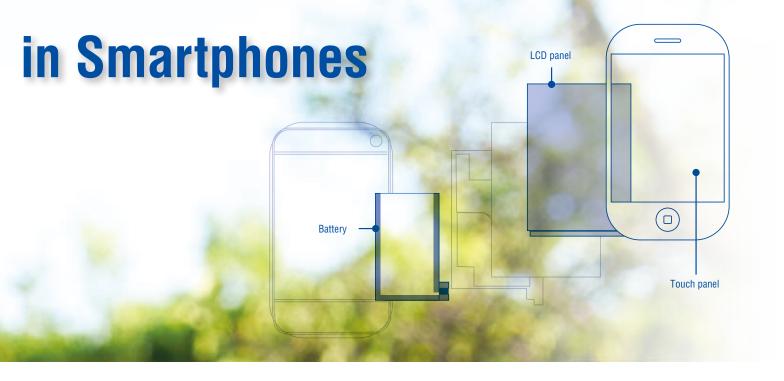


#### Color filters, a necessary component for colorization

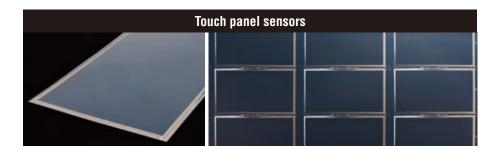
Liquid crystal displays (LCDs) are used in a variety of equipment, such as PC monitors, notebook PCs, TVs, and digital cameras. The component of the LCD that makes the image appear in color is the color filter (CF). A color filter has colorization layers consisting of pigmented ink in the three primary colors—red, green, and blue (RGB)—arrayed in particular patterns on glass substrates. Colored images can be seen when light from the backlight passes through the color filter.

DNP began manufacturing color filters in 1989 by applying the photolithography technologies that make fine patterning possible, as well as the materials technologies that go into pigmented ink. We have now taken the lead-

ing position in this product field. Later, in 2006, in addition to CF manufacturing using photolithography, we also succeeded in mass-producing CFs for televisions using the world's first inkjet (IJ) process. The inkjet process utilizes new technologies, such as the high-speed, even application of ink to millions of image pixels. We currently supply a variety of high quality, leading-edge color filters used in products from big screen TVs to fine, high luminance smartphone screens.



#### **Achieving Light, Thin, High-Function Touch Panels**



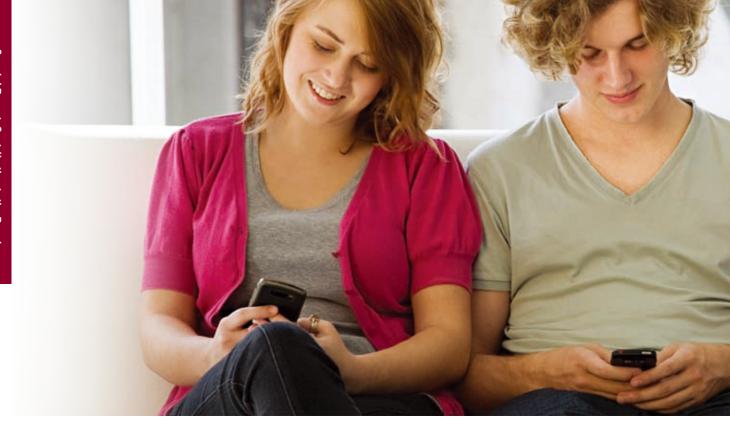
#### Components supporting multi-touch function

In recent years touch panels have come to be found in car navigation systems, portable terminals, digital cameras, and are rapidly spreading to other applications. Of these, smartphones and PCs use CAP (capacitive) touch panels. The capacitive system uses sensors to detect the touch of fingertips, and the display can be expanded or shrunk by opening or closing two fingers for superior multi-touch direct operability.

While DNP was already involved in mass producing color sensors, in 2009 we launched newly developed clear conductive membrane film sensors, which contribute to expanding the touch panel market.

#### New film sensors for the CAP system

Some CAP touch panel sensors are made by layering two sheets of film or patterned with clear conductive membrane in a bi-directional X-Y configuration. Nonetheless, in order to maintain the sensitivity of the sensors and visibility, the two layers must be aligned with a high degree of precision. DNP resolved this issue by developing CT Film, which can be formed simultaneously while aligning the clear conductive membrane patterns on the front and back of the substrate. By supplying a new component made up of clear conductive membrane on just a single layer of substrate, we make possible the manufacture of thin, light, high quality touch panels.



#### The Leader in Softpacks for Lithium Ion Rechargeable Battery



#### Achieving light, thin, portable batteries

Lithium ion rechargeable batteries are found everywhere in daily life, from notebook PCs to mobile phones, because they store and output significant amounts of power. Up until recently they were mainly packaged in metal. In response, DNP developed a softpack that uses multiple layers of film. Softpacks are flexible and easily formed, as well as being safe because they are manufactured in a clean environment, and contain no contaminants. Moreover, they are tough, strong, and in comparison to metal easy to shape. They can also be made thin, and their use has spread from smartphones to thin mobile equipment. They have recently also started being used in electric cars, which require a high degree of safety, and their use is expected to spread to a number of fields.

#### Global top share in support technologies

DNP began research into plastic film battery packs in 1993. This was around the time when lithium ion rechargeable batteries had just hit the market. Later, in 1999 we developed our multi-layer plastic film softpack. By now we have captured a 65% share of that market, and are the leader in the lithium ion rechargeable battery market. The converting technologies cultivated at DNP made this rapid advance possible, and we are also using them in



solar cell components. DNP is taking on the field of next generation energy, and is contributing to its widespread application.



#### "Midtown" Information Provision Service "Machireco"



#### Smartphone concierge service

Machireco is a information provision service that takes location and time data from a smartphone and, after analyzing it according to pre-set preferences and viewing history, makes predictions about behavior that the smartphone user is likely to select in the location he is in, such as "Eat," "Shop," "Play," or "Watch." Acting as a virtual concierge, Machireco sends data to the smartphone or other terminal about shops or things to do that match up to the user's situation and tastes. We first developed this individualized information provision system in 2007, and began pre-marketing trials in 2008. It is currently under development as a beta version for iPhone or Android smartphones.

#### Creating information technologies for developing in-demand services

The technology that supports Machireco is the recommendation system for mobile communications developed by DNP. DNP predicted that high-function mobile communications terminals would soon become widespread as part of the information society infrastructure. Therefore, we set about developing interface settings, language processing, data base settings, server controls, and other information technologies for use in a mobile recommendation system prototype. In a society in which smartphones are widely used it is important to be able to select situation-appropriate information from among the enormous amount of information available, because the smartphone user has increasing opportunities to gather data on the spot. DNP is developing the information technologies necessary to developing new, in-demand services.

# Deliberate, Sustained Efforts for Adherence to and Thorough Understanding of Corporate Ethics

We believe that the continuous demonstration of sincere behavior by each of our employees is the most important factor in earning the trust of society. We are enhancing the structures and corporate culture that encourage observance of corporate ethics, and are training human resources to maintain a strong ethical perspective. We consider this vital to the sustained growth of the DNP Group.

Full picture of the corporate ethics programs that drive the PDCA cycle

# Making sure the company and the employees share a common purpose

#### The foundation of our position and actions

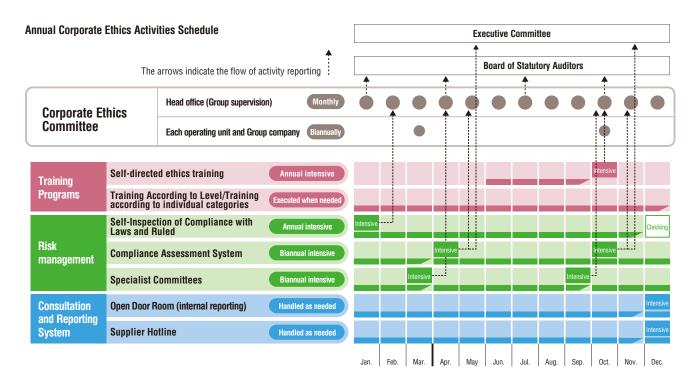
Corporate ethics is not something that is practiced temporarily, but rather must be firmly rooted in a company's business through deliberate, sustained activities. The DNP Group weaves ethical practices into our daily management work, repeatedly conducting the PDCA cycle over the course of the year for continuous improvements.

The Corporate Ethics Committee is composed of the directors and corporate officers in charge at each Headquarters division, and is the Group's umbrella internal control organization for supporting our compliance structure. The Committee meets on a monthly basis, and functions as the foundation of our sustained corporate

ethics activities through tasks such as establishing an annual plan, guiding and following up on various activities for ensuring employee observance and adherence to corporate ethics, and revising policies and action plans.

#### Working for employee autonomy

One important aspect of organized effort is for each employee to be aware of the importance of corporate ethics, and to work for common recognition of that importance throughout the Group. Our efforts are oriented toward the evaluation categories in the Management by Objective System, which establishes employees' own objectives and evaluates the results. These are reflected in the employee's Personal Results Assessments. Also, we cultivate human resources with a stronger sense of corporate ethics through training, and by encouraging each to think for themselves in the course of their behavior we believe that we gain better observation and adherence to corporate ethics.





We conduct a variety of training programs, such as Training According to Level, to ensure observance and adherence to corporate ethics.

One of these is self-directed ethics training, which was in its eighth year in fiscal 2010. In this training, which has taken hold within the Group, the top management in each operation explains the issues with which they grapple and their solutions to their subordinates in their own words, with the attitude that each operation should look after itself. The content of the training is also left to the top management, and each operation comes up with its own techniques, which must be implemented once a year. Initially some members of top management found it difficult to explain things in their own words, but by speaking to subordinates directly they were able to improve understanding as well as morale.

Also, in recent years our overseas affiliates also have been developing self-directed ethics training according to their local circumstances, with the goal of instilling an approach to corporate ethics on a par with that in Japan.

#### **Self-directed Ethics Training**

#### We want to broaden the scope of training to cultivate trustworthy people

Most of the customers of the Ichigaya Publication Printing Operations are publishing houses, so on their behalf we are making products that go directly to consumers. That in itself means that we must develop a strong relationship of trust with our customers.

Self-directed ethics training, which began in 2003, is conducted in conjunction with the Head Office Corporate Ethics Committee Secretariat, but my thinking on this subject basically covers three themes. First, "creating a pleasant work environment." Rather than individuals dealing with worries or problems on their own, we try to create an environment in which everyone works together to find a solution. Next, "awareness of working at a top company." We must constantly remain aware of the importance of the social responsibilities incumbent upon a top company. Third, "trustworthiness," which nurtures the relationship of trust with customers. Were one to sum up the aim of self-directed ethics training, I would say it lies in cultivating trustworthy human resources. A pleasant work environment gives people space to breathe, while cultivating a sense of ethics through encouraging awareness of working a top company engenders trustworthiness. Currently this training

tends to focus on management level employees, so I am hoping that its scope will be expanded.



Senior Corporate Officer Ichigaya Publication Printing Operations

think and act for themselves.



VOICE

### Naoki Wakabayashi

General Manager Sales Division Ichigaya Publication Printing Operations, DNP

I feel that the respect for the law and social ethics of DNP Group employees goes beyond business, and permeates our personal lives and consciousness.

In particular, we always explain our stance toward legal compliance to our customers, even to the point where some say we are too strict. Nonetheless, we take this as a compliment, and in fact in many cases it is because we are so strict that we are chosen for the

The self-directed ethics training conducted by our Operations General Managers imparts consciousness of the importance of legal and ethical compliance on a daily basis. As DNP Group employees our behavior is always conducted in this awareness.



I would assert that for each person to look at themselves and work voluntarily and self-directedly is the most important factor in creating adherence to corporate ethics. I give the DNP Group high marks in the area of corporate ethics for its deliberate and continuous efforts to encourage each employee to take the initiative, and for creating an environment in which employees can

The occurrence of the Tohoku-Pacific Ocean Earthquake represents an important chance for corporations to increase their role as members of society. From the standpoint of "Ichien-yugo" (as espoused by Sontoku Ninomiya) "everything works interconnectedly, so results are obtained by working as one." Therefore, unity in action is important not only to legal and social ethics, but also to risk management. Companies can expect even better results from their efforts when they work in harmony with people and with society.

# Protection of Information Assets Gets Top Priority in Our Provision of Safe and Secure Services

We view our duty to guard information assets, such as the personal information and the information entrusted to us by customers in conducting business, as a matter of course. Information security and personal information protection are among the most important management issues facing the DNP Group, and we maintain strict, continuous controls through strong management systems and employee training programs.

#### **DNP Group Internet Services**

# Leading the way in information distribution, so as to connect society, businesses, and people

#### The responsibilities of companies connected to a huge volume of information

The DNP Group maintains a thorough system for protection of information assets and strives to maintain strict, continuous controls on them. Our know-how and technologies in this field are put to use in our DNP security solutions.

DNP Digitalcom is constantly introducing new technologies in providing ICT solutions, whether it's mobile phone campaigns, Web promotions, Internet commerce, or data center management. By combining these with the BPO services, in which we have developed expertise in a broad

variety of work in doing business with the DNP Group's more than 30,000 client companies, we provide total support for our clients' Internet business. We store important information assets, such as personal information, by means of our thoroughly secure information security infrastructure, and offer solutions that make use of it.

#### Offering the security that is the basis of trust

We give top priority to protecting the information assets of our client companies, including not only personal information such as addresses, names, and e-mail addresses, but also corporate secrets associated with new product information and survey tallies. We do so via a total security system encompassing every aspect of security, including human, organizational, physical, and technical measures. By ensuring that each of these measures functions correctly, and by exercising strict management and controls, we ensure a high level of security.

<sup>\*2</sup> BPO (Business Process Outsourcing): The DNP Group handles the outsourcing of the work processes of one company to other companies, offering a variety of business agency services.



Masahiro Inooka
Manager
Quality Assurance Division
DNP Digitalcom



Kimio Ogura
Assistant Manager
Service Planning Division
KDDI Corporation

DNP Digitalcom acquired the Privacy Mark

very early, in 2000, and we have continued to strive for personal information protection. As the social environment evolves, the potential threats increase and security becomes more complex, and we are faced with difficult issues such as how to build security measures while also improving convenience. Nonetheless, many of our customers encourage us by saying "If you ensure the current high level of security we will feel secure." This makes us even more confident that we have achieved a level of security that gets high marks from the public.

We will continue to build safety measures that correspond to changes in the environment, so as to provide safety and security to our corporate and individual customers.

KDDI is in the business of offering safe, stable

telecommunications services, which demand structures and skills that maintain a very high level of information asset protection and data control.

The DNP Group continues to meet our demands by implementing measures for strict security at the structural, equipment, and systems level, and we view them as a trusted partner in the provision of our company's services.

KDDI conducts regular security audits, and we are satisfied with the measures that are currently being taken. We hope that even more thorough security measures will be maintained and sustained as ICT technologies continue to develop.

<sup>\*1</sup> ICT (Information and Communications Technology): Adding "Communications" to "IT" emphasizes the technologies used to transmit information properly to others, rather than the computer equipment or technologies.

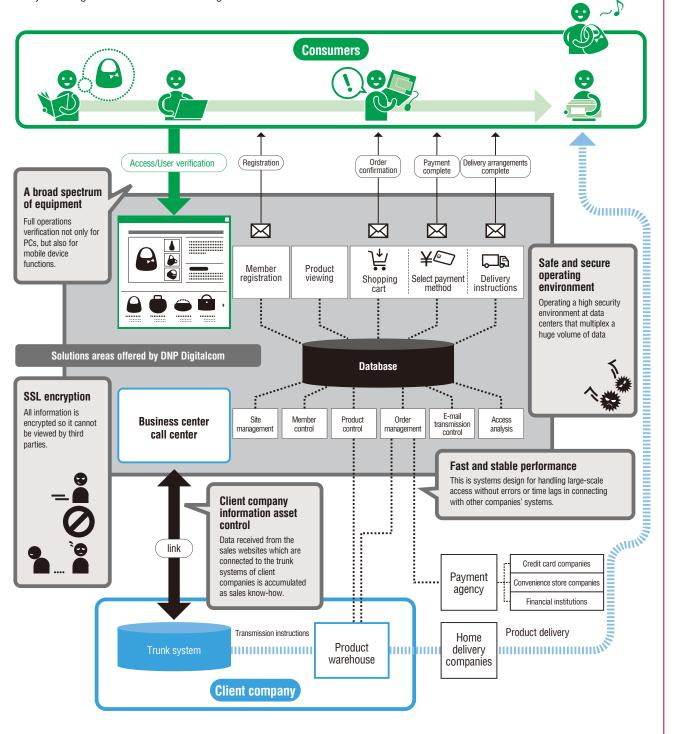
#### F C S 0 U

#### Offering safe and stable services for website construction

One of the services provided by DNP Digitalcom that is familiar to consumers can be seen at Internet shopping sites. DNP Digitalcom offers a full spectrum of the work involved in direct contact between our corporate clients and consumers, from website construction and operation through business center and call center agency outsourcing, the handling of orders, data entry, processing, and classification, as well as product shipping and responding to queries. At the same time, every stage of the data handling process, including the collection of information, its processing, tabulation, and recording, requires that total security and a high level of information management be ensured.

The creation of websites that allow consumers to shop with confidence requires more than just the visible aspects, such as designing webpages that introduce products.

Such websites must be supported by a variety of systems that allow a stable and rapid response. The building of a solid system makes it possible for both the consumer, who is actually using the website, and the corporate client, who manages it, to enjoy a convenient site environment.



# For Achieving Continuous Growth with Our Partners

We believe we can the trust of society by responding to society's expectations through sincere behavior, starting with social responsibilities such as legal compliance and environmental conservation. We take this approach not only in our own activities, but across the entire value chain, including with our suppliers.

#### Fulfilling CSR across the entire supply chain

# We respond to the issues and questions of our partners

The DNP Group established the DNP Group CSR Procurement Criteria in March 2006, and has been holding explanatory meetings for suppliers throughout Japan. The Procurement Criteria were amended in March 2011, and we continue to review them with respect to social changes, with the goal of greater acceptance of CSR procurement.

Superior goods and services are pointless if their production or materials procurement processes create problems by failing to meet social standards. We are constantly working with suppliers to achieve high quality efforts corresponding to the demands of society so as to attain a high standard of value creation in tandem with compliance across the entire supply chain.

#### TAIWA with all of our suppliers

The first thing that is necessary to driving CSR procurement is to get all of our suppliers to understand DNP's CSR efforts. In January 2011 we began holding explanatory meetings for our medium and small-scale suppliers, who

require more detailed support, in addition to the ones we had already been holding for our large suppliers.

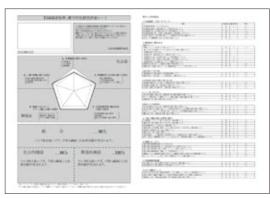
For the most part these meetings provide an explanation of CSR, as well as reporting on the activities of the DNP Group and the thinking behind our CSR Procurement Criteria, and participants have commented that "It was easy to understand because everything, from the basics to actual examples, was explained," and "We will refer to this in the actual efforts to made from now on." We plan to continue to conduct these meetings regularly, using them as an opportunity to spur CSR activities on the part of our suppliers, and referring to opinions voiced in surveys conducted after the meetings.

#### For continuous, active improvements

The DNP Group has since 2006 conducted DNP Group CSR Procurement Criteria Compliance Surveys of our suppliers. We did so again in February 2011, in the form of a questionnaire. One month later we provided feedback in the form an "Evaluation Sheet," consisting of analysis of the progress made in each category. Based upon the results, we conducted on-site examinations and interviews to encourage improvements in support of promoting CSR activities on the part of suppliers.



CSR explanatory meetings for small to medium suppliers



Evaluation Sheet used as feedback for suppliers Created exclusively by DNP based upon the DNP Group CSR Procurement Criteria

#### F

In recent years people have begun to question how CSR must be practiced across the entire supply chain. With this development as a backdrop, the DNP Group expanded CSR procurement to include not only suppliers of materials and equipment, but also work contractors. We have moved forward with activities to deepen understanding of the CSR Procurement Criteria, and to request production activities in compliance with them.

IPS Operations, which handles smart cards and ledgers, has been the leader at DNP in holding briefings for work contractors 11. First, we conducted thorough training for employees directly in touch with the contractor, such as the Ordering Coordinator. Next, the contractor was given information about the main points of our CSR Procurement Criteria, including basic items such as fundamental human rights and legal compliance, as well as efforts in areas such as the work environment, safety and health, and environmental conservation. Compliance was then requested of the contractor.

By cooperating with contractors in moving forward with CSR efforts we can create greater value and mutually enhance competitiveness.

#### Visits to contractor companies and on-site inspections

Evaluation sheets have been drawn up based on the CSR Procurement Criteria Compliance Survey Tables. In conducting the Contractor Quality Patrols, IPS Operations employees visit contractor worksites and explain the evaluation sheets, as well as conducting on-site inspections 2 3 concerning issues uncovered and improvement activities.

#### **Expanding the CSR activity chain (IPS Operations)**







VOICE

Hideki Tsukada General Manager IPS Operations, DNP

Two things come to mind when I think about

when we started developing CSR Procurement at contractors. First of all, are we ourselves handling CSR properly? This meant that first we had to engage the Ordering Coordinator in preliminary CSR training. Next, are there big differences in enthusiasm among contractors concerning their thinking and efforts for CSR? This was something we handled straight on from the perspective of what could be accomplished by each. The most important aspect of these activities is continuity. Therefore, we made CSR activities something that should be a part of everyday work, rather than a separate form of work. Through TAIWA between ourselves and the contractors, who were making forward-looking efforts, we were able to increase attention to CSR. I believe this is the starting point for fulfilling our social responsibilities throughout the supply chain.



Uematsu specializes in printing and process-

ing. We are coming up on our 50th year in business, and during our history the DNP Group has been our top client. We are aware that as a joint worksite our responsibility is not only to deliver good quality merchandise, but also to support our part of the DNP supply chain. This makes us work even harder to manufacture and supply top quality products. We had already been engaged in our own CSR efforts, such as obtaining information security certification, but by executing our programs in line with the CSR Procurement Criteria we have enhanced them. The advice that DNP has given us concerning CSR encourages us to supply even more valuable products to society.

# Forging Good Relationships with Stakeholders through *TAIWA*

The DNP Group's continuous development relies on building a relationship of trust with all of our stakeholders. We fulfill our social responsibilities by conducting timely and accurate disclosure of all information that must be shared, and engaging in meaningful *TAIWA* with our stakeholders.

#### **DNP Group information management**

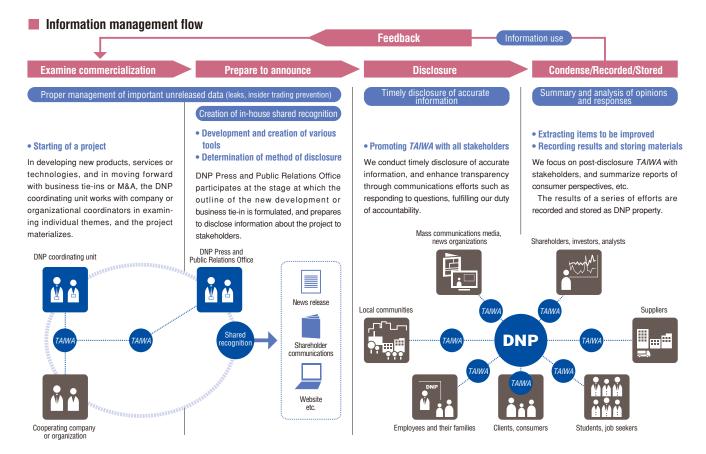
# Information management and communications measures for sharing values

The DNP Group engages in active *TAIWA* with a broad array of stakeholders so as to analyze and ascertain whether our business is understood by society, and how society views us. As we disclose information properly in fulfilling our duty of accountability, we also gather stakeholder opinion and desires, which is used as feedback as we evolve our corporate culture and seek to improve the goods and services we offer.

#### We closely observe social changes, and respond to diversity

We seek to expand opportunities for communication by providing material and press releases to the mass communication outlets as well as by enhancing a variety of communications tools, such as the design and operation of our company showroom for corporate clients, and strengthening our IR efforts. We are also making progress with using new tools to eliminate information disparities caused by the availability of an Internet environment.

DNP is celebrating 135 years since our founding. We shall properly manage the information assets developed through our corporate activities and social contribution. Not only do we store our materials with strong cultural value, when appropriate we present it at our showroom and in other venues.



F U



Joint press conference held on January 11, 2011 by DNP, NTT Docomo, and 2Dfacto

Announcing the establishment of the 2Dfacto E-bookstore

#### Information management in a new business (e-book business)

Against a backdrop of growing interest in e-books, NTT Docomo launched its e-book store for smartphones, 2Dfacto, which uses DNP's "honto" e-book service, on January 11, 2011. Society is showing gathering interest in our suite of e-book businesses, and more strict information management is required because some of the projects include tie-ins with other companies or the establishment of Group company structures.

During the study phase, the coordinating operation that is driving the business and the Press and Public Relations Office worked together for thorough controls to ensure that unreleased information was not leaked outside the company. When the announcement was made we actively developed content for press conferences, news releases, publications, websites and other communications tools, so as to notify and communicate with all stakeholders, including news organizations and investors.

Also, we used digital signage and the company intranet to provide complete information within the company, strengthening ties within the DNP Group.

#### News releases

As the commercialization of ebook services takes form, the progress is described in news releases.



July 8, 2010	DNP CHI Group High-level Japanese e-bookstore opening this autumn
August 4, 2010	NTT Docomo DNP Tie-in for e-book publishing business
December 7, 2010	DNP NTT Docomo CHI Group Agreement to establish a hybrid bookstore as a joint enterprise
January 11, 2011	Beginning of e-book service through 2Dfacto
May 17, 2011	Yama-Kei Publishers, DNP Creation of digital magazine with illustrations and

#### **Getting information to employees**

The e-book business is discussed in the employee pamphlet, "Discover DNP." This is intended to promote understanding of new businesses by employees.



Yoshinori Kato Deputy General Manager Advanced Media Research Center, DNP

DNP is developing e-book business so as to

VOICE

Takeshi Hosaka TSE Compliance Learning Center (TSE COMLEC) DNP has held two insider trading pre-

provide consumers with new experiences and convenience, and to create a circulating environment that produces high-quality content. Building this environment required tie-ins with leading companies with special characteristics in a variety of fields. The establishment of 2Dfacto, a joint venture between NTT Docomo and Maruzen CHI Holdings, is a real example of a cooperative business effort that produces strength. Throughout the process of establishing this new framework it was necessary to keep stakeholders accurately informed about the intentions of each company. We conducted uncompromising TAIWA consisting of news releases and even word of mouth, and established understanding about the corporate cultures and approaches to business of each company that went beyond publicity. The e-book market has only just begun to be established. We will continue to put our hearts into proper information provision and offer new experiences to consumers.

vention seminar series conducted by TSE employees for DNP directors and managers, as well the top management of Group companies and other employees who have many opportunities for exposure to internal information that could affect stock prices, because insider trading can have a huge impact on a company. Also, as the managing directors in charge pointed out in Commercial Law Center Journal No. 1928 (2011.4.5), information management and insider trading are two sides of the same coin, so a variety of intense efforts must be carried out, such as education for thorough management not only of one's own company's information, but also that of other companies (clients). In particular, when the shares of a company are listed, the majority of that company's trading partners will also be listed companies, so awareness training to prevent insider training is both important and meaningful, and we at the TSE are taking a proactive approach to assisting in such efforts.

# Responding to the Diverse Needs of Consumers for Safe, Comfortable Living

The need for universal design (UD), which enables use by people in a variety of environments, is increasing as society embraces diversity. The DNP Group is using UD to make the products and services we offer easy to use for as many people as possible, with the goal of realizing a "Universal Society" that embraces diversity.

#### Universal design in the information society

# Products and services incorporating UD, to provide needed information to everyone

The upgrading and improvement of products and services from a consumer perspective is essential to realizing a universal society that is safe and convenient for all. To that end, DNP has established universal design (UD) as a fundamental principle, to be shared throughout our Group. For more details, please refer to the DNP Universal Design Website: http://www.dnp.co.jp/ud/.

#### Connecting with many people, and providing needed information

The DNP Group offers a broad variety of products and services, and UD is incorporated in the development and design executed by all of our operations. In May 2010, we began offering next-generation digital signage that enables touch operation while seated in a wheelchair. This DNP original product, called "ActiVision  $^{\text{TM}}$ ," is another of our products and services offered to meet the needs of the information society.

In the area of office UD, we joined with Konica Minolta Business Technologies in developing the world's first "Universal Design High-Security MFP with Body Area Network Smart Card." This MFP, which handles multiple functions such as copying, FAX, scanning, etc., in a single unit, is equipped with "body area network identification," which requires nothing more than the human touch to complete identity verification to allow operation. In addition to enhanced convenience, this product is designed so that anyone can use it.



#### ActiVision™

In addition to enable searches and perusal by touching the screen, this also enables storage of needed information, coupons, etc., by holding a mobile phone over the reader/writer, as well as coupon output. We offer a total service package that includes display coupon creation, transmission, and placement location space design.



#### Universal Design High-Security MFP with Body Area Network Smart Card

When the user has a transmitter (body area network unit) smart card in his or her possession, upon stepping upon the receiver-equipped mat or touching the touch panel the user's ID is verified.

This system was selected as a finalist for the "2010 SESAMES Awards" presented for products and services recognized as groundbreaking at "CARTES & Identification," the world's largest smart card technology exhibition.

#### F U

#### Universal design in e-books

E-books can be read on the displays of digital devices. 2010 can properly be referred to as the first year of the e-book era. The DNP Group has continued to contribute to the creation of a rich society by providing the information people need in the easy-touse-formats that they demand. We are approaching e-books, with their qualities of accessibility, usability, and universal design, in a variety of ways.

#### This is UD **Accessibility**

E-book services provide great convenience, because they make it easy to get a book to read right away. The philosophy of universal design calls for

accessibility by a diversity of users. DNP started Japan's largest e-book service, "honto," in 2010. We have developed this service further to include portable telecommunications devices through a business tie-in with NTT Docomo. The service can be used with a variety of devices.



"honto" is a "hybrid bookstore" offering both e-books and bound books. The reader can choose a format based upon his or her feelings or environment. DNP will continue to strengthen ties with real-world bookstores such as Maruzen, Junkudo, and Bunkyodo. By fusing e-book sales, online bookstores, and real-world bookstores, we can offer society a new reading environment in which consumers can be sure to find the books they are looking for and can enjoy them in the format they want.

#### This is UD Usability

E-book qualities such as "freedom of display format" and "portability" make them easy to handle and use according to the user's circumstances. Such qualities are in line with the UD philosophy. The DNP Group is engaged in creating content for e-books with these benefits of UD in mind.

#### Easy to expand or contract text size

The user can adjust the text size easily as needed.



#### Choice of preferred display style

Text can be arrayed horizontally or vertically, and can be changed according to user tastes.





Horizontal text A

#### Can read even while walking

If the terminal memory is sufficient one's entire library can be made portable.

VOICE





#### Motohiro Oka General Manager

Advanced Media Research Center, DNP

What form would a "bookstore aiming to pro-

vide convenience to consumers" take? We believe the answer is a "hybrid bookstore." Our hybrid bookstore, "honto," offers services matching every scenario, such as "search and select" and "read and add to collection," according to the form of book the consumer wants and matching his or her desires and environment. "honto" takes an active approach toward incorporating UD, and we believe it will contribute to realizing a "universal society."



E-book publishing is expanding the opportuni-

ties for all readers to read, touch, and enjoy books in and of themselves. E-book functions increase accessibility to books, with older readers able to expand text, while younger readers and the physically-challenged can use auxiliary audio functions. The Impress Group's publishing arm, Yama-kei Publishers, have joined with DNP to develop and publish a digital edition of the woman's magazine "HUTTE" simultaneously with the print edition, with additional content applications that are the first of their kind in Japan. Much effort was put into creating rich content, reflecting printing company concepts, and we are hopeful for even greater usability that will deepen communications with readers.

## Innovative Technologies for Valuable Hoods and Services

At the DNP Group we base our quality and safety efforts on imagining the location where a product or service will be used, and considering from a consumer's perspective how it can be used safely and what is required of it. We then make improvements accordingly.

Our entire Group is united in working to satisfy consumers with our products and services and solve the issues faced by society.

#### Basic technologies in support of creating comfortable living spaces

## Challenging new fields to resolve social issues and support safe and secure living

## Realizing comfortable living spaces through technologies with origins in printing

DNP uses the variety of technologies developed through printing to open up new fields of business for healthier and more comfortable living spaces.

We offer a wide variety of solutions for every kind of living space, from home interior and exterior furnishings, including entryway doors, wallpaper, flooring, interior doors, and furniture, as well living space design for offices, hospitals and hotels, not to mention automobile and train car interiors.

In addition to offering materials and parts, we also provide goods and services that are closely linked to the lives of end-users. We look at the needs of a broad range of users, in fields such as construction and distribution, and offer real, proactive proposals for creating comfortable living spaces.

#### Offering greater safety for health and the environment

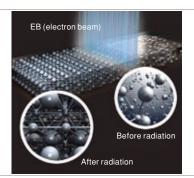
Lifestyle materials must do more than provide fashionable dressing up of living spaces; they must also perform a variety of safety and comfort functions concerning the environment, health, and durability. DNP is sufficiently aware of both the issues confronted by society and the needs of consumers, and at every product stage, from design through manufacture and sale, we take a thorough approach toward compliance with all regulations, the health of our employees, and most of all, product safety. All of our products are designed to be environmentally-friendly, with the majority also developed as healthy products free of substances known to cause "sick house" syndrome, such as formaldehyde, toluene, xylene, or any other of the 13 substances for which the Ministry of Health, Labor and Welfare has prescribed concentration limits. We also seek to use recycled materials or wood from tree plantations so as to contribute to forest conservation.

## Our responsibility to maintain true quality as we broaden our product lines

The ability to analyze products according to international standards is necessary to ensuring product safety and reliability, and to presenting details about that safety and reliability in a way that is easy to understand. In 2002, we established the Living-Space Analytical Evaluation Center as our facility dedicated to measuring VOCs and other substances emitted by lifestyle materials. Our highly reliable measuring system, which is based on international standards, is used not only to check our own company products, but also in the provision of high quality measuring services for non-DNP products such as auto interior materials, books, and digital devices.

### The innovative power of EB coating technology

EB (electron beam) coating technology is a surface processing technique for irradiating substances to improve performance and add functionality.



DNP lead the industry in developing EB (electron beam) coating technology in the 1980's. Afterwards, as the demand for environmental products increased and a market base was formed, it came to be used in a variety of products, and is now a core technology of our lifestyle materials operations. Compared with the technologies that preceded it, EB improves every product aspect, including resistance to abrasion, soil, and weathering. It is used in making flooring, cases and furniture, and kitchen materials, and has also come to be used in making entryway doors and exterior materials. By continuing to find ways to use EB coating technology to improve functionality we anticipate the development of even more applications.

F U

EB cloth is a new form of wallpaper made of different components than conventional vinyl cloth, and was created through the application of DNP's EB coating technology.

EB coating technology is used to make scratch and soilresistant flooring and interior/exterior lifestyle materials that are easy to repair and get high marks in the construction industry and market. These materials and their manufacturing processes contribute to reduced CO2 emissions and energy conservation. There are great expectations for this "sustainable" wallpaper, which is friendly both to human health and the environment.

#### New wallpaper - EB cloth



#### Product manufacturing based on safety



#### Consideration of the environment and health

Our product design takes health and the environment into consideration at the usage stage as well as the manufacturing stage.



#### Easy to use, no emissions

- EB Cloth is free of substances known to cause "sick house" syndrome, such as formaldehyde, toluene, xylene, and all of the other 13 substances for which the Ministry of Health. Labor and Welfare has prescribed concentration limits.
- Use of our new compounding technologies results in reduced use of fossil fuels because we use smaller amounts of component materials.
- CO<sub>2</sub> emissions in the materials production process have been reduced 56% (compared to previous DNP vinyl cloth products; according to DNP's own measurements)



#### Offering safety and security

- Compared to conventional vinyl cloth, virtually no TVOC residue can be detected. This makes it safer because it causes no indoor air pollution.
- It has received a fire resistance rating of "certified quasinon-combustible" (non-combustible substrate/noncombustible sheetrock/quasi-non-combustible substrate)
- It has cleared the "SV standards" and "JIS standards (JIS A6921)," which are the safety standards for wallpaper established by the SV Conference.

#### Functions for safe and comfortable living spaces

#### Surprisingly lightweight

We have made the product lighter by reducing the amount of component material. This makes transportation costs lower, and also makes it easier to handle in every scenario.

#### Superior workability

The material is resistant to scratching and soiling during installation, and it is easier to lift because it is lightweight. This vastly improves onsite workability.

#### Soil resistant

The material resists staining, and marks from soy- or waterbased ink wipe right off.

Before wiping	After wiping		
12,512,513,572			
Committee of the last			
	TAX POST DAY		

Lines drawn with water-based ink; 24 hours later wiped with synthetic detergent and water.

#### Strong during earthquakes

It doesn't crack easily during earthquakes because it is flexible and not easily damaged in the corners. This allows it to keep its appearance over the long term.



Post-testing EB cloth						
		Sept.				i
TERE	583					

Scratches not noticeable



Kazuhisa Kobayashi General Manager, DK Project Team

Lifestyle Materials Operations, DNP

DNP's Lifestyle Materials Operations produc-

es and sells a wide variety of products corresponding to a variety of living spaces. Of these, the greatest amount of surface area in a living space is that of the walls, which along with the floors are very important components of a living space. The EB Cloth sold by Sangetsu Co., Ltd. not only takes environmental, health, and safety into consideration by dramatically reducing residual TVOCs, but also meets customer demands for improved durability. Furthermore, EB Cloth offers solutions that meet not only the needs of the end-user, but also those of the entire distribution chain. We will continue to seek to deliver products that satisfy consumers.



#### Atsushi Kumazawa

Manager Marketing Division, Sangetsu Co., Ltd.



The main product offered by our company is wallpaper. The fusion of DNP's EB coating technologies with Sangetsu's product design know-how has resulted in a new product, a hybrid wallpaper made of new materials called "EB Cloth." EB Cloth is now sold through a 65-item product lineup.

Since the February 1 product launch, EB Cloth has become our No. 3-selling wallpaper, and we are continuing with active marketing efforts for it. Homebuilders rate this product highly for its base conformance. Also, there is currently a new concern about asset value in homes, and this product is significant in that it meets that market demand.

## All Employees Practice a Workstyle that Brings Out the Full Potential of Each

The DNP Group places great importance on the individuality of employees.

We are confident that a workforce composed of a diverse group of individuals can enable the continuous development of our Group through each properly fulfilling his or her role through an individualized workstyle, creating a lively corporate culture.

#### Proposing workstyles that make each day fulfilling

## Realizing fuller lives through workstyle innovation

The business environment surrounding Japanese companies has in recent years seen greater changes than ever before. In order to build a corporate structure that is sufficiently flexible and resilient to respond to such severe changes, each DNP Group employee must practice a highly independent, productive, and efficient workstyle as they fulfill their expected role, thereby producing results.

The first step in this effort is an innovative workstyle. Everyone must consider how to use their equally allotted time resources effectively so as to maximize the value of their work. This means starting off by considering previous workstyles as the starting point, and challenging new kinds of work and creating new value by generating new time resources. This in turn requires that each employee realize an individualized work-life balance.

#### **DNP Group Productive Time Resource Project**

We are developing the DNP Group Productive Time Resource Project as a Labor-Management effort. We established a three-year plan for the Project beginning in fiscal 2009, so as to realize "workstyle innovation" by reconsidering work organization and flow so as to generate time resources and make work more efficient.

#### Conceptual diagram of the Project



#### Work-life balance gains interest

Achieving a good "work-life balance" means creating a way of working corresponding to one's life stage, whereby one is motivated to focus on work and to create higher value than before, while at the same time leading a fuller life outside of work.

The DNP Group believes that by each employee conducting a satisfying career and rich personal life their accumulated experience will provide the foundation for a strong corporate structure for the Group. Therefore, we engage in a number of programs aimed at creating a lively work environment.

#### DNP Group work-life balance support measures







- 1 DNP Family Friendly Day are bring your child to work days. This program promotes interest in work among children as well as better parent-child (family) communication for our employees.
- **"Volunteer activities"** were added as grounds for **life support leave**. Employees develop their individuality through volunteer activities, and also cultivate social sensitivity.
- 3 The DNP Group Philharmonic Ensemble, which is composed of DNP Group employees and their family members, is a gathering of people who wish to enjoy their leisure hours through music. The DNP Group supports this program by providing instruments and a place to practice.

#### U

#### **Workstyle Innovation Project** (DNP Electronics Device Operations)

In addition to individual employees engaging in efforts to re-examine their own workstyle, each of our Operations is launching projects to optimize productivity and make overall work functions more efficient according to the kind of work and product flow. One such project is the Workstyle Innovation Project of DNP Electronics Device Operations, which is engaged in the manufacture of electronics products, including IC and LSI. This project is aimed at streamlining all the work of the Electronics Devices Group, including Group companies.

We will follow up on the fiscal 2010 efforts by taking them to the next level, seeking to eliminate waste and improve efficiency, and using the time resources generated to improve work quality and enhance the specialization of each product.



#### Sales unit efforts

Employees start by gaining the cooperation of customers in finding all issues that must be resolved. Issues are separated into three categories: Automation, Standardization, and 24-Hour Customer Response, and work is made more efficient by conducting review or improvement in response to keywords supplied by the customer, such as "speed," "flexibility," "cost performance."



- Get customer cooperation in automating the ordering system
- · Automatic sending of order reports and progress reports
- · Increase processing speeds through change to "thin client" PCs



- Create templates for email inquiry
- . Consolidate business forms used by the unit
- · Create a shared database within the unit

#### Issue 3

24-hour customer response through globalization

· Work assignment with plants by overhauling workflow

#### **Technical unit efforts**

The biggest issue is that by forming separate product teams the technicians with the highest level of specialization are assigned to the respective teams, resulting in individual and team bias concerning use of working hours. Therefore, the goal is to change the consciousness on the part of the technicians and level out the teams by changing their composition, etc. One long-term effort involves assigning multiple research themes to the technicians, gradually broadening their range of specialties to achieve versatility.

#### Issue 1

Lack of time awareness



- Raise awareness through posters ( 4 )
- Regular progress reports at General Manager meetings and Group meetings

#### Issue 2

Team-based working hour bias



- · Regularly organize technology development themes and revise priorities
- · Improve technician versatility

#### Issue 3

Individual worktime bias



VOICE

- · Create work process charts and analysis
- . Send e-mail alarms to staff who are working too many hours

#### Takao Ikezawa Manufacturing Division Electronics Device Operations, DNP

### Atsushi Edakubo Manufacturing Division



**DNP Fine Electronics** 

When we started the project for workstyle innovation everyone began to always think about how to perform

work more efficiently with fewer staff and in less time. Right now, because we can rely on new staff members and leave things up to them, we have evened out the work and improved efficiency. I am able to use the time resources that have been generated to attend seminars, spend time with my wife, and plan for my personal life and future.

Our daughter was born in December 2010. Workstyle innovation allowed me reduce over-

time and take more days off, so the matters I had to attend to both before and after my daughter was born went smoothly. I also am able to have dinner with the family and spend more time getting close to them, which motivates me in my personal and family life as well as at work.

### Kunihiro Hosono

General Manager Technology Development Division Renesas Electronics Co.

The semiconductor industry spans a diverse supply chain, dealing with items such as automobiles, home electronics, and mobile phones, so photomask manufacturers such as DNP are required to meet strict delivery deadlines. We are grateful to DNP for meeting our tough demands with speed and flexibility at all times, working weekends and evenings. I also believe their ability to do so is a result of improvements in work efficiency. Our company is grateful for the improved sales quality and specialization that stems from workstyle innovation efforts, and have great expectations for our future relationship.

# Cultivating Personnel with Greater Workplace Vitality through *TAIWA* and Cooperative Efforts both within and Outside the Company

The DNP Group engages in human resources development for individual employees, which are the source of our vitality. We believe that the strength generated through a variety of efforts both within and outside the company spreads throughout the entire workplace.

We offer a variety of systems, structures, and training programs so that all of our employees can maximize their roles as self-starting individuals, and experience personal growth and self-realization.

#### Human resources development emphasizing TAIWA

## 40,000 Group employees experiencing growth through *TAIWA*

The Training Department, which handles DNP's human resources development, is an independent unit, because it is our desire that growth through career design for our approximately 40,000 DNP Group employees be carefully managed. The Training Department works together with our Operations in planning training programs that match up with our management goals and needs, focusing on the company vision and Code of Conduct. Also, the Training Department and Operations handle different roles according to the programs that are developed, so that the training can be conducted more efficiently.

#### Nurturing the DNP spirit through TAIWA

The main thrust of the training is through seminars on topics such as the DNP Group's 21st Century Vision (Management Concept/Business Vision/Guiding Principles), Code of Conduct, CSR, and diversity. The top managers at each business division serve as the trainers, and by connecting actual work with philosophies and policies the DNP spirit

is nurtured and permeates employee consciousness. Also, we create a learning environment for relaying these basic themes equally to all DNP Group employees by making the educational materials created by Training Department available through network learning.

#### Emphasizing group work and discussion to deepen TAIWA

DNP Group training actively incorporates group work, because the process of active discussion is very important to the team's efforts to resolve issues. Groups are formed according to a variety of criteria depending upon the goals, but the plans and proposals raised by the teams within the training are connected with examples of actual work improvement and new system introduction, and actively discussed. Training locations are chosen so as to create networking connections with units or personnel in lines of work normally not encountered by the trainees, so as to create opportunities to broaden horizons. This is intended to cultivate more personnel who can put the DNP Group's collective strength to use.

In addition, in recent years we have also created a training organization that allows for participation by employees at worksites throughout Japan by expanding the reach of our teleconferencing system. 15 worksites were connected this way in 2010, proving a means for broader participation in discussions.







- Mentoring: Conducted as series of activities over a 6-month period in support of female sales staff, culminating with a final meeting at which proposals are made concerning future efforts in their own department.
- 2 Sign Language Seminars: These were started in Osaka as well in 2010 due to demand from our Kansai employees.
- 3 Teleconferencing: We began live broadcasts to regional worksites of the Ginza gallery talks using our teleconferencing system, so as to create opportunities to nurture the TAIWA culture.







#### **DNP Emergent Evolution Forest:** The Hakone Training Center

The DNP Group maintains study centers for specialized technical training. Two such centers, the Ichigaya Training Hall and the Hakone Training Center, are places where courses can be taken in environments separated from the workplace.

We call the Hakone Training Center the "Emergent Evolution Forest." It is an environment in which training participants can have deep discussions, where thoughts bounce off of each other to result in the creation of new value. The DNP Group offers a number of locations for TAIWA with a variety of stakeholders, including in-house study camps (photos 4 and 5), cross-industry exchange study, medium to long-term target-setting camps for each unit, planning and examination study camps conducted jointly with client companies, and other such training that includes not only our employees but also people from outside the company.

Use of the Hakone Training Center (January-December 2010)

Use	Number of times	Participants
Training	20	600
Cross-industry exchange training	3	90
Operations/Unit Camp	83	2,700
Camp with Client Companies	2	30
Total usage	108	3,420

The Hakone Training Center (Photo 6), which was completed in June 2009, is composed of a variety of spaces conducive to TAIWA, such as the expansive Training Zone, the Collaboration Zone, which can be partitioned, and a row of lounges adjacent to hot spring foot baths (Photo 7).

#### **International Green Key certification**

Hakone Training Center Building 2, which is aimed at coexistence with nature and is surrounded by untended woods and fields, was the first corporate training facility to be granted certification by Green Key, an international eco-label for tourism facilities. We



The Green Key

provide information about energy and water use, waste reduction, and other environmental efforts, which improves the understanding about environmental conservation among training participants.

Green Key Website: http://www.feejapan.org/greenkey\_en/

Satoru Inoue General Manager Technology Development Center, DNP

For over two years there has been a meeting of

three parties, the Technology Division, DNK (the DNP Group's equipment manufacturer), and the Technology Development Center every three months at the Emergent Evolution Forest.

At these events participants from the Managing Director level through younger employees in their second year at the company gather together for discussions in a location surrounded by a splendid natural environment. Lively discussions ensue, and new ideas emerge. Outside directors also participate in the discussions, and exchange meaningful opinions. Also, the female participants rate the food and hot spring facilities highly.

Employees from a variety of departments engage in heart-toheart conversations, and the white hot debates stretch well into the night as the drink flows.



VOICE

Daisuke Ozaki Human Resources Department Osaka Gas Co. Ltd.

We have been participating in exchange studies for middle managers with DNP since 2005. Managers of the same generation have conversations about business issues and management, engaging in lively debate from differing perspectives that our company finds meaningful.

The Emergent Evolution Forest where these events take place has a number of features making it conducive to dialogue among the participants, and I think it embodies the DNP Management Concept of "Generating New Ideas Through TAIWA." Exchange studies with DNP, a creative and lively company, in such spaces provides extremely effective stimuli, and we also gain from exposure to other perspectives.

## What the DNP Group Wants to Pass on to the Children who Comprise the Next Generation

The DNP Group engages in social contribution based on five activity themes in a way that is "Just Like DNP," with the goal of contributing to the realization of a rich society and its sustainable growth.











**Arts and culture** 

**Humanitarian aid** 

#### The DNP Group's Next Generation Cultivation Contribution Efforts

## Science classes that use our own technologies and products, "Just Like DNP"

Children are taking less and less interest in science, and there are concerns about the future quality and number of researchers and technicians in the science and technology sectors. This is a particularly acute problem in a country such as Japan which has few natural resources. The DNP Group bases an important part of our social contribution efforts on the theme of "Next Generation Cultivation," and is actively involved in the education and development of the next generation, which will provide the human resources of the future.

In 2010 we dispatched science lecturers to give lessons at four elementary schools in Chiba, where our headquarters research labs are located. This was conducted under the auspices of the Ministry of the Economy, Trade and Industry's Industry Professional Education Support Project. DNP has created and offers a lesson program for making it easy to understand how school science classes relate to socially valuable printing technologies, so as to increase the interest and awareness of pupils in science and technology.

#### Voices of amazement about the mysteries of color all around us!



### Elementary schools where science lessons were held

- Funabashi Minami Honcho Elementary
- Mobara Toyooka Elementary
- Minami Boso Tomiura Elementary
- Nagareyama Koyama Elementary

The lessons take the theme of "Color," which is a topic deeply connected to printing. The lecturers use DNP's businesses as a way to teach topics such as "People and animals using color to send information," "The relationship between how the human eye is constructed and moves and the color reproduction principles of printing," and "How printing technology is used in many aspects of human

life," using observation and experimentation. Children learn how the broad spectrum of colors can be expressed by using the three primary colors and dots, which amazes the children.

The students and teachers at all four of the schools where the lessons were conducted gave the lessons very high marks. We plan to expand this science lecturer dispatch program by linking up with local communities so as to offer "Just Like DNP" social contribution by providing knowledge through our core business.

#### The Industry Professional Education Support Project

The Ministry of the Economy, Trade and Industry has been conducting this nationwide as a model program for three years since 2008. The aim of the program is to increase interest in science and the effectiveness of lessons by demonstrating to children how the lessons learned in science classes are used in daily life. The program uses industry professionals (technicians or OBs from local industries) to give science lectures at elementary schools.

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#### Dispatch lecturer science lesson: The Mysteries of Color



#### Take a look at printed matter through a loupe!

If color printed matter is looked at through a high-power loupe one can see that the colors are expressed through three primary colors. Children learn the way the printing industry expresses the spectrum of colors by combining dots from the three primary colors-cyan, magenta, and yellow.

#### Child's opinion

This is easy to understand, and the lesson was very interesting. I would like to research this myself.





#### Use clay in the three primary colors to make a variety of other colors!

#### Is it really possible to make so many colors from just three?

Children experiment with combining clay in the three primary colors to actually create other colors.

VOICE

#### Child's opinion

I was surprised to learn that printed photographs are made by using the three primary colors. What we learned today was very interesting. I can't wait to tell my mom and the rest of the family.

Experience new printing technologies!

Children learn how evolving printing technologies make their lives richer by experimenting with dyesublimation thermal transfer and 3D printing.





Dye-sublimation thermal transfer technology is used in items such as photo decals and endoscopy. It also uses the three primary colors for color expression. In the process of hearing an explanation of the structure of "PrintRush" do-it-yourself printing systems, children experience their high-resolution and fast output. The children also receive photos of the lesson as presents.



Printing technologies are also applied to 3D images which provide real depth and three-dimensions to images viewed with the naked eye. The children were eager to use DNP's latest DynaCube 3Dtm printing technology, which provides realistic 3D images.

#### Nobuho Mori

Product Planning Department Information Media Supplies Operations



I was able to participate in this project with people I don't normally work with, giving me a good chance to review my own work, which I think also enabled me to grow. What I was able to convey was not the only thing that was important, it was also what I learned.

#### Ryuichiro Minamihara

Ichigaya Group Manufacturing 21 Promotion Division Ichigava Publication Printing Operations, DNP



The kids were amazed and lively when they took part in the observations and experiments we thought up. Their expressions were varied and they were enthusiastic. This was also another way to introduce more people to the DNP Group's technologies and products.

#### Yoshihisa Maruyama

Funabashi Minami Honcho Elementary

I believe that the children gained



valuable experience through these special lessons, in which they were able to experience color composition and observed color prints through a loupe. Also, they got a real feeling for the many printing technologies used in daily living. After the lesson, we heard many students saying that "The experiments were fun" and "Color printing (dye-sublimation thermal transfer printing) is amazing." I believe the children became even more interested in and aware of science through these lessons. We are grateful to everyone at DNP for the lesson preparation and guidance that went into these lessons.

### Joint efforts with local communities focusing on education

#### **Tien Wah Press**

Tien Wah Press of Singapore is a manufacturer of hardcover and pop-up books. Tien Wah Press works with local communities to resolve social issues, focusing on the deep ties between education and the company's core business.

#### **Recycling and Charity Efforts**

Tien Wah Press has been participating as a private sector company in recycling and charity efforts in Southwest Singapore since 2007, with the proceeds from the recycling efforts directed toward scholarships for underprivileged local children. In addition to donating the proceeds from in-house charity drives and recycling efforts continuously every year, Tien Wah Press also requests that its business partners join in, expanding the range of the efforts.

In fiscal 2010, Tien Wah Press began offering original greeting cards and dummy books for the Chinese New Year. Local children draw pictures based on environmental themes on the front covers of the dummy books, and they are marketed as sketch books. By selling these goods the company was able to raise S\$17,500, which combined with matching donations from the Southwest Singapore Region amounted to S\$35,000 in scholarship funds for 282 children.

#### Donations from employees for the underprivileged

In fiscal 2010, Tien Wah Press employees gathered books, toys, shoes, school bags, and writing materials for delivery to underprivileged children in Malaysia's Sabah state and other areas through the NPO Go Educate, which promotes education among the poor of Southeast Asia. Tien Wah Press will continue to work outside its home region of Singapore by including Southeast Asian communities as recipients of its efforts.

#### Distributing Mid-Autumn Festival mooncakes

The Singapore Chinese community celebrates the Mid-Autumn Festival with grand celebrations that include the eating of mooncakes. Tien Wah Press works with local partners to distribute mooncakes to 80 households who cannot afford them, so they can join in the celebration.











To tie up their recycling and charity efforts, on March 31, Tien Wah Press employees joined with the mayor of the Southwest Singapore Region, local children and others for a charity run, in which about 250 people participated at the company's site.



Raiiv Singh Manager Tien Wah Press



Knowledge is power, and what better way than, to empower students from lower in-

come families to get quality education. I am very proud of our company's partnership with the local community centre to raise money for the neighbourhood school scholarship and endowment funds. A simple act of charity means a yearlong supply of books and education for the children who benefit from this program. My colleagues and I look forward each year for the charity run and donation collection for these kids in our company's neighbourhood. The kids who benefit from this program also contribute towards their own funds by painting drawings that are then covered as cover/jackets of stationary products done by TWP that are sold for charity. This way the children also feel proud and contribute to the society. It is a very humbling experience for all of us who are involved.

## Multi-faceted support for strong health management awareness

#### **DNP Denmark**

DNP Denmark is the worldwide rear-projection and front-projection screen center of DNP. With a more than 70% market share, we are involved in the business of developing, manufacturing, and selling large screens.

#### Efforts for employee health management

In principle health services are free of cost in Denmark, and are paid for out of taxes. Keeping the future tax burden for these services low depends on individuals making efforts to stay healthy, so companies are being asked to provide active employee health support.

Both the national government and companies are very aware of the importance of health management

against such a backdrop, and DNP Denmark is also actively engaged in a variety of support measures for employees. These include improving the nutritional value of meals in the company dining hall, as well as health consultation, weight loss contests, exercise events, and activities for improving blood pressure and cholesterol. These have produced results.

Our employees also volunteer as instructors at sports clubs and as coaches for local soccer teams, and participate in the EccoWalkathon, which raises donations for orphans according to the distance walked. We continue to expand participation in such activities, which are a "Win-Win" for society and our employees.













In fiscal 2009 the Danish Ministry of Health presented DNP Denmark with the Award for Superior Company Health Efforts (Sjælland Island regional prize for excellence). This prize is

awarded to companies that make actual efforts to improve the health improvement motivation of employees, and which view health improvement as a strategic effort for the organization. This represents a high evaluation of DNP Denmark's continuous health management efforts.



Kristoffer From SundhedsDoktor



DNP Denmark's efforts to improve employ-

ee health have produced great results in the short term, not only by having a beneficial influence on employee health and disease prevention, but also by improving motivation, concentration, and their sense of satisfaction. The reason these results have been forthcoming so soon is due to the preparation, through input from outside experts, of optimal programs for employees that are devised to encourage employee initiative in making progress voluntarily. In 2009, these efforts were recognized by DNP Denmark's selection as "the healthiest company" on Sjælland Island.

These employee health promotion activities are also very important to ensuring a stable future for DNP Denmark. I believe there is no question that they will help to create a livelier, happier, and more attractive workplace.

## Ensuring Hokkaido will remain beautiful

#### Hokkaido Coca-Cola Bottling

Since the founding of Hokkaido Coca-Cola Bottling in 1963 the company has been delivering "refreshing and delicious" soft drinks to the people of Hokkaido.

Hokkaido Coca-Cola Bottling produces and markets a variety of soft drinks at its plant, which are made with water, sugar, milk and other products originating in broad expanses of Hokkaido. As a company born and raised in Hokkaido, we are making serious, continuous efforts to create a sustainable society that will preserve the beauty of Hokkaido for future generations.

0 S





Together with Hokkaido Prefecture and the Hokkaido Environmental Foundation, we have been promoting the Hokkaido e-Water Project since 2010, with the goal of preserving Hokkaido's pure water resources for the future. We promote and support the efforts of groups seeking to preserve Hokkaido's aquatic environments.

Hokkaido Coca-Cola Bottling depos-

its a portion of sales of its Georgia Santos Premium Hokkaido-only label coffee as "customer demand for the protection of Hokkaido's environment," and uses those to fund the project.

Groups engaged in activities for biotope creation and the preservation of lake and river water quality, as well as to eliminate invasive species, were selected in fiscal 2010, and a report was issued on the course of these activities over the year, their results and issues to be handled next year. About ¥12 million (equal to the sale of about 24 million bottles) in activity funding is planned for fiscal 2011. 30 groups have applied for funds, and after a careful selection process seven were chosen. (Photos 1 and 2)

We will continue to elicit applications for funding so as maintain our support of the conservation of Hokkaido's environment.

#### The Hokkaido e-Water Project





Location	Name and main efforts
Otaru	Group for Crayfish and Our Waterways Provides information about the Japanese crayfish and invasive crayfish species
Muroran In Shiomikouen	NPO- Biotope Itanki in Muroran Building a biotope, tree planting, nature watching group hands-on nature study
Assabucho Assabucho River Basin	Assabucho River Resource Protection Society Raising and stocking of ayu and lamprey, animal watching group, river running
Shihorochou Otofukegawa River Basin	Pan-Pan Pumpkin Salmon fry release, raft building, tree planting, nature conservation and restoration, and protection of aquatic plants and animals
Shiraoicho Lake Kuttara Region	Shiraoicho Environment Townspeople's Society Water quality testing, aquatic life inspection, "Lake Semi- nar" environmental classes for elementary and middle school pupils, seminars on aquatic environments
Shimukappumura Mukawa River Basin	NPO- Shimukappumura Tourism Association Raising and stocking of selma, river experience programs the Cherry Salmon Forum, making of maps of the Mu
Kuriyamacho	Kuriyamacho Hasanbetsu Woodland Planning

and Execution Committee

life, nature experience programs for children

Raising and stocking of salmon, examination of aquatic

Tatsuichi Tsujii VOICE Chairman Hokkaido Environmental Foundation



The natural environment of Hokkaido has great potential, and I believe that awareness

of that will grow in importance. One the most precious treasures of Hokkaido's environment is its water. Through the Hokkaido e-Water Project a number of new forms of good water have been rediscovered, and we are looking into ways both to cherish these and to use them as resources.

We can say that water is both a resource and an asset. Coming to us in the form of rain and snow, it is a blessing from heaven, and through its prudent use humans can produce many great things. The role of industry when it comes to water is from this perspective very important, and the benefits of informing citizens about the importance of water and its value through corporate social responsibility activities are incalculable.

Kuriyamacho

Yubarigawa River Basin

## The DNP Group's CSR Efforts **Environmental Report**



Entry in the KIDS division, in-house photo contest sponsored by the Information Media Supplies Operations

### [Safflower Village]

Photo: Child of Fujio Shoji, DNP Tohoku

### **Environmental Management Structure**

As a manufacturer, the DNP Group is constantly considering how we can coexist with the global environment. We value the gifts of nature, and strive for coexistence with it so we can pass those gifts on to the next generation. Our efforts to do so are of primary importance to us now in the 21st Century, which is called the "Environmental Century."

We do our best for the planet, as required by our DNP Group Code of Conduct, which states that "We shall strive to use resources effectively without destroying or polluting the global environment, so as to pass on a beautiful planet to the generations that follow."

The DNP Group emphasizes environmental conservation, global warming prevention, and the efficient use of resources throughout the entire company.

Our environmental management system consists of the DNP Group Environmental Committee, which is in

charge of the management of the entire Group, and Operations Group Environmental Committees for each area of business. Each committee has its own promotional office.

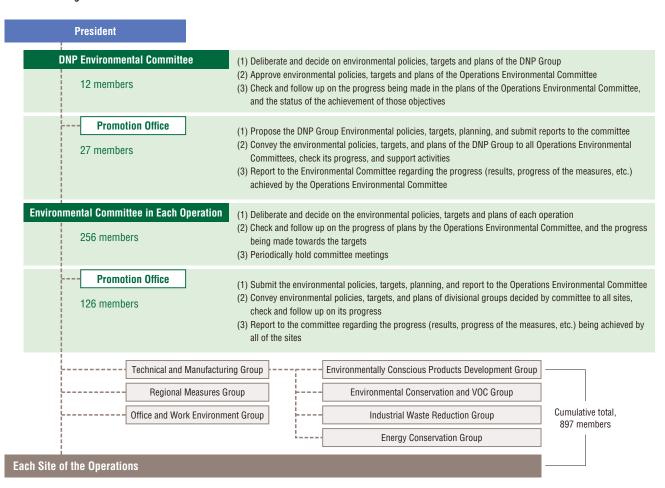
#### DNP Group Environmental Committee

This is made up of the directors of the basic organizations at company headquarters, who are responsible for the environment. The Committee deliberates and makes decisions concerning the environmental policies, objectives and plans of the entire Group, and monitors the progress of the plans and the status of the achievement of those objectives.

#### • Operations Group Environmental Committees

The decisions made by the DNP Group Environmental Committee are developed by the Operations Group Environmental Committees after considering the special characteristics of the particular sphere of business.

#### Structural diagram



### **DNP Group Environmental Management System**

The DNP Group created our own EMS (environmental management system) in 1993, prior to the publication of ISO14001. Our EMS uses the twin tools of eco-reports and site eco-reports, and executes the "Plan-Do-Check-Action" cycle every six months, setting the pace for the DNP Group environmental management efforts.

#### **Eco-Audits**

We began implementing "Eco-Audits" in 1996, so as to make our EMS more effective. When items are indicated in audit, a Correction Measures Performed Sheet is issued to the site involved, and the DNP Group Environmental Committee confirms that remedies have been implemented.

Items cited in an Eco-Audit are analyzed and reflected in the following year's audit plan.

#### Status of Legal Compliance

While we make all efforts to comply with environmental laws and regulations, over the past three years we have experienced five incidents in which water quality standards for wastewater were exceeded. There are no ongoing legal disputes involving environmental issues. We have unfortunately had some complaints from areas neighboring our plants concerning noise and odors. Whenever we receive such complaints, we respond promptly by launching a thorough investigation into the cause of the problem and working to make improvements, and attempt to prevent recurrence.

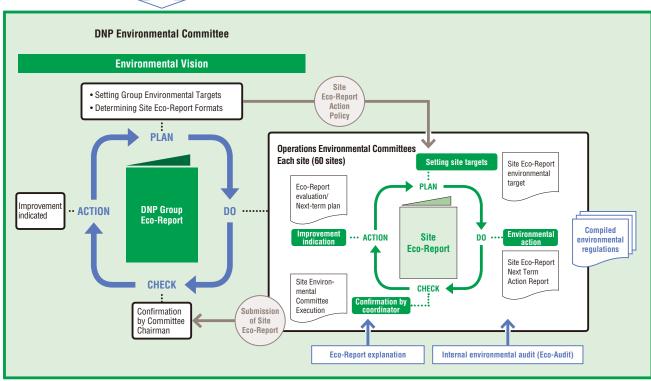
A piece of concrete scrap was discovered through a voluntary inspection to have caused rainwater to drain out of our industrial site at levels in excess of regulations. We removed the concrete scrap under instruction of the authorities, and have confirmed through continuous monitoring that runoff is within the levels established by regulation.

#### 2010 Eco-Audit Performance

Number of sites audited	63 sites
Number of attendees at sites	479 persons
Cumulative auditor numbers	127 persons
Cumulative auditing hours	286 hours

#### Conceptual diagram





### **Current Status of Environmental Impact**

The DNP Group manufactures a variety of different products closely related to the everyday lives of consumers, with main materials such as paper, film, plastic, metal (iron, aluminum, etc.) and ink, as well as electronics.

#### **a** Information Communications Segment

Mainly manufactures magazines and other printed material through offset printing, uses a great amount of paper.

#### **1** Lifestyle and Industrial Supplies Segment

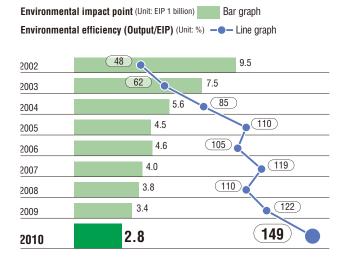
One of the biggest users of solvents in the DNP Group as it manufactures packaging, construction and other industrial materials and uses solvents for its gravure printing, coating and lamination.

#### © Electronics Segment

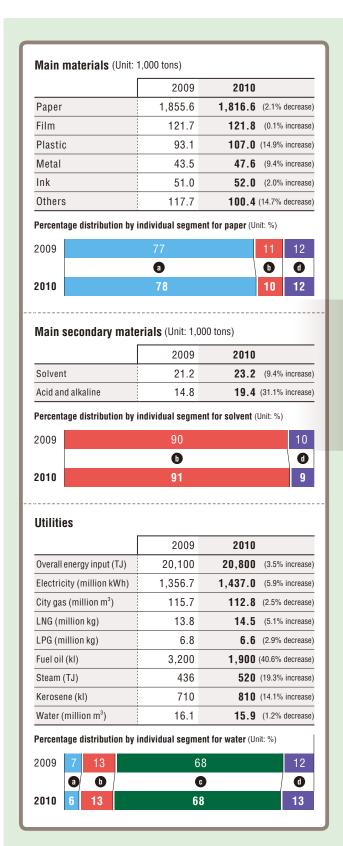
Uses and discharges a great amount of water in proportion to the rest of the Group in manufacturing LCD color filters and lead frames through its etching and photolithography technologies.

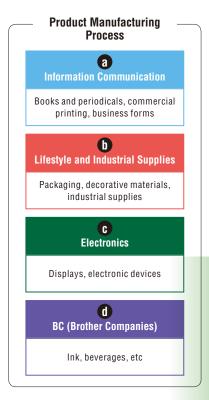
#### **DNP Group Environmental Efficiency**

The DNP Group has evaluated our environmental efficiency by using  $\underline{\mathsf{JEPIX}}_*$ . Although our greenhouse gas emissions increased, VOC emissions, and landfill waste were reduced, so our environmental efficiency improved.



JEPIX (Environmental Policy Priorities Index for Japan): This is a single-index environmental evaluation system developed in Japan, which measures general environmental impact levels according to a single "EIP" (environmental impact point) index. The JEPIX Forum, in which DNP participates, was established in 2003 for the implementation of JEPIX methods, as part of the MEXT 21st Century COE Program Committee (International Christian University).





#### **Current Status of Recycling in the DNP Group**

2009	2010
4.8	4.6
1.2	1.2
3.4	3.2
1.2	1.2
530.6	545.5
34.0	35.3
178,700	206,400
	4.8 1.2 3.4 1.2 530.6 34.0

- \*1 Usage Ratio: This is a calculation of (input+ recovery and recycling)/input. It does not include vapor or solvent in ink.
- \*2 GHG: Greenhouse Gases
- \*3 Water discharge channels to which the Water Pollution Control Act applies.

#### **Emissions into the air**

	2009	2010
GHG*2 emissions (1,000 tons-CO <sub>2</sub> )	896	<b>903</b> (0.8% increase)
NOx emissions (tons)	673	<b>697</b> (3.6% increase)
SOx emissions (tons)	12	<b>11</b> (8.3% decrease)
Atmospheric emissions of VOCs (tons)	9,011	<b>6,837</b> (24.1% decrease)
Of which, subject to PRTR (tons)	868	<b>654</b> (24.7% decrease)

Percentage distribution by individual segment for GHG emission amounts

2009	22	34	34	10
	<b>a</b>	<b>b</b>	•	0
2010	20	35	36	9

#### **Emissions into bodies of water**

	2009	2010
Water discharged (million m³)	13.6	<b>13.5</b> (0.7% decrease)
COD emissions (tons)	51.4	<b>48.9</b> (4.9% decrease)
Nitrogen emissions (tons) *3	16.2	<b>13.4</b> (17.3% decrease)
Phosphoric emissions (tons)	1.7	<b>0.4</b> (76.5% decrease)

Percentage distribution by each segment for water discharge (Unit: %)

2009	5	12	72	11
	<b>a</b>	<b>b</b>	•	•
2010	5	11	72	12

#### **Undesired materials generated** (Unit: 1,000 tons)

	2009	2010
Total amount of undesired materials	357.7	<b>355.0</b> (5.5% decrease)
Waste emissions	62.7	<b>57.5</b> (8.3% decrease)
Landfill waste amount	4.2	<b>3.2</b> (23.8% decrease)

Percentage distribution by individual segment for undesired materials (Unit: %)

2009	44	27	17	12
	<b>a</b>	0	G	0
2010	44	28	16	12

## **Chart: Targets and Results**

<b>Evaluation Targets</b>	Target broadly achieved
	Ocnducted activities but target not achieved
	$\triangle$ Achieved target or in steady progress toward targe
	× No sufficient activities

Topic	Targets through 2010	Evaluation	
Global warming prevention	To reduce GHG emissions by 10% from the 2005 level (fiscal 2020).	0	
	To reduce per unit $\mathrm{CO}_2$ emissions by 15% from the 1990 level (fiscal 2010).	Δ	
Reduction of environmental impact incurred during transport	To reduce per unit fuel use for transport (amount of fuel used/sales) at 1% per annum, and 4% by fiscal 2010 compared to fiscal 2006.	0	
VOC	To reduce emissions of VOCs by 70% compared to 2002 by fiscal 2010.	Δ	
	To reduce per unit waste emissions (waste emissions/production) by 50% from the 2000 level (fiscal 2010).	0	
Reduction of industrial waste	To reduce undesired material generation by ratio (undesired material generation/total material input) at all sites by more than 3%, 35% from the 2000 level (fiscal 2010).	Δ	
	To achieve a 98% recycling ratio (recycled amount/total amount of undesired material generation) in the disposing of main raw materials (fiscal 2010).	0	
	To achieve zero emissions for the entire DNP Group (fiscal 2010).	Δ	
Development and sales of environmentally conscious products	To increase the level each year by 10% (over the previous year), and achieve 300 billion yen (fiscal 2010).	0	
Green purchasing	To increase the rate of the products purchased according to the green purchasing standards of DNP, to 40% (fiscal 2010).	0	
	To increase the purchase rate of environmentally certified products, such as those labeled with the Eco-Mark, of the total supplies (office supplies and equipment) to 50% (fiscal 2010).	0	
	To keep the maximum concentration of air emissions subject to emissions regulations at 70% of the required standard or less.	0	
Environmental conservation	To keep the maximum concentration of wastewater discharges subject to wastewater regulations at 70% of the required standard or less.	0	
	To keep the maximum concentration of odors at our site perimeters at 70% of the required standard or less.	0	
	To keep the maximum level of noise at our site perimeters at 95% of the required standard or less.	$\triangle$	
	To keep the maximum level of vibration at our site perimeters at 95% of the required standard or less.	0	
Office environment	To increase the rate of the fractional recovery of waste paper to 70% of that for general waste.	0	
Environmental management system	To perform Eco-Audits at all sites.	0	

	2010 results			
Emissions in 2005: 1.066 million tons	15.3% decrease from that in 2005			
Emissions in 2010: 0.903 million tons				
Per unit in 1990: 252 tons/100 million yen	0.4% decrease from that in 1990			
Per unit in 2010: 251 tons/100 million yen				
Per unit in 2006: 2.15 kl/100 million yen	25.1% decrease from that in 2006			
Per unit in 2010: 1.61 kl/100 million yen				
Emissions in 2002: 21,312 tons	67.9% decrease from that in 2002			
Emissions in 2010: 6,837 tons				
Per unit in 2000: 0.312 tons/million yen	56.1% decrease			
Per unit in 2010: 0.137 tons/million yen	from that in 2000			
Generation rate of undesired materials in 2000: 17.7%	25.4% decrease from that in 2000			
Generation rate of undesired materials in 2010: 13.2%				
Recycling rate in 2009 Overall 99.2%				
Recycling rate in 2010 Overall 99.3%	paper 99.8%, plastic 96.4%, metal 99.3%, glass 61.6%  Recycling rate in 2010 Overall 99.3%			
paper 99.9%, plastic 97.2%, metal 99.0%, glass	paper 99.9%, plastic 97.2%, metal 99.0%, glass 60.6%			
Landfill waste rate in 2009: 1.1%	Landfill waste rate in 2009: 1.1%			
Landfill waste rate in 2010: 0.9%				
Sales of 312.1 billion yen in 2009	1.9% increase over that in 2009			
Sales of 318.0 billion yen in 2010				
41.5% green purchasing rate for materials in 200	9			
39.9% green purchasing rate for materials in 201	0			
51.2% green purchasing rate for materials in 200	9			
60.0% green purchasing rate for materials in 201	0			
95% achievement rate of targets for 2010 (volun	95% achievement rate of targets for 2010 (voluntary target)			
95% achievement rate of targets for 2010 (volun	95% achievement rate of targets for 2010 (voluntary target)			
94% achievement rate of targets for 2010 (volun	94% achievement rate of targets for 2010 (voluntary target)			
74% achievement rate of targets for 2010 (voluntary target)				
100% achievement rate of targets for 2010 (volu	100% achievement rate of targets for 2010 (voluntary target)			
83.5% rate wastepaper separation in 2010				
Eco-Audits conducted at all sites in 2010				

Targets through 2015
To reduce GHG emissions 10% from the 2005 levels by fiscal 2020.
To reduce per unit fuel use for transport (amount of fuel used/sales) at 1% per annum, and 10% by fiscal 2020 compared to fiscal 2010.
To reduce emissions of VOCs (except for methane) by 20% compared to 2010 by fiscal 2015.
To reduce per unit waste emissions (waste emissions/production) by 15% from the 2010 level by fiscal 2015.
To achieve zero emissions for the entire DNP Group by fiscal 2015.
To increase sales of environmentally-conscious products and services to ¥400 billion by fiscal 2015.
To increase the rate of the materials purchased according to the DNP green purchasing standards to 50% by fiscal 2015.
To increase the purchase rate of environmentally certified products, such as those labeled with the Eco-Mark, of the total supplies (office supplies and equipment) to 85% by fiscal 2015.
Maintain a level of 70% or less than the regulatory limit. Noise and vibration are converted to sound pressure or shaking speed and assessed.
To increase the rate of the fractional recovery of waste paper to 70% of that for general waste.
To perform Eco-Audits at all sites.

## **Cutting Greenhouse Gases Across Our Operations**

People throughout the world are using intelligence and effort in applying measures against global warming, so as to protect our irreplaceable Earth. Greenhouse gas emissions reduction is an important theme within the DNP Group, so we are making efforts in all aspects of our business, including planning, design, purchasing, production, and distribution, so as to reduce greenhouse gas emissions.

Progress in energy conservation throughout the DNP Group

### **Maximizing Energy Efficiency**

DNP Group measures to prevent global warming include our switch from LPG (liquid petroleum gas) to LNG (liquid natural gas), and the installation of solar equipment. Since 2008 the "energy conservation sub-committees" have driven the Group's overall energy conservation activities. We conduct mutual diagnostic committees for plants and develop energy conservation improvements evenly among our plants. In addition we are proceeding to switch to energy-saving equipment.

#### The key is energy use visibility

In seeking to reduce greenhouse gases and continuously conduct energy conservation measures, energy use visibility in every process and piece of equipment is indispensible, because loss of energy, such as the electricity and gas used in the production processes, decreases efficiency. Therefore we set about developing our own energy monitoring system. R&D into the production facilities and systems is focused on the Manufacturing Technology Integration Laboratory, while the Head Office Technology Unit, the Environmental Safety Department, and DNP Facility Services, which handles maintenance, also joined the project. The system went into operation in May 2009.

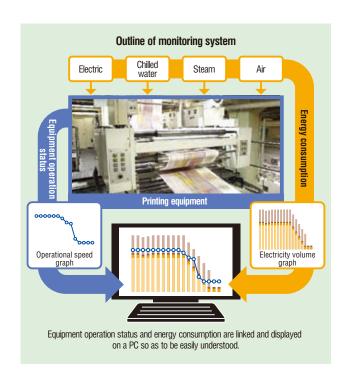
Our efforts toward realizing a low-carbon society follow three paths, namely, facilities responses (installing energy efficiency equipment, improving equipment), production efficiency, and operational responses. In moving forward with these activities, by making energy use visible we can expect even greater results. The monitoring system in use makes the amount of energy used and equipment operational status visible in real time, and that data becomes the basis for extracting energy

loss. By optimizing the manufacturing conditions we can achieve even greater reductions in  ${\rm CO_2}$  emissions from production.

#### Real CO, emissions reduction results

This system is in place at facilities at 17 plants, and we plan to have it installed at 30 plants during fiscal 2011. Compared with the situation prior to installation of the system, emissions have been cut 9% in gravure printing equipment used on soft packaging, and around 6% in offset printing equipment used for publishing printing.

Henceforth, by installing the latest energy conservation equipment, switching fuels, and improving equipment operation, the DNP Group aims to reduce overall greenhouse gas emissions 10% by 2020 (in comparison to fiscal 2005).

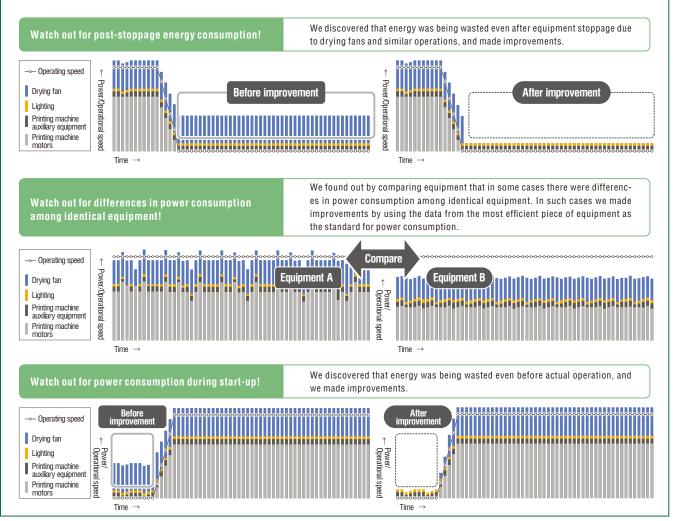


F 0 U S

#### **Energy monitoring system**

DNP's own-developed energy monitoring system went online in 2009. It monitors production facilities' operating data and energy data in real time, and displays that data on a PC. In addition to displaying energy-use data categorized as electricity, chilled water, steam, and air, it also allows the checking of energy costs and CO<sub>2</sub> emissions data. This makes it possible to view at a glance the amount of energy that is being consumed by which

facility where. The ability to put this information on the company intranet means not only the on-site operators, but managers as well can monitor energy consumption data via the LAN. Improvements can be made to the facilities or operations accordingly. We actively use these results to make improvement proposals to each site.



## The Kuki Plant, which is located in southwest

#### Takayuki Naito Manager, Technical Department Ichigaya Publication Printing Operations, DNP

VOICE

#### Kazutoshi Kichikawa Technology Development Center



Saitama, focuses on manufacturing magazines, such as weeklies

and monthlies, for the entire country. Our operations involve offset printing and saddle-stitch or adhesive binding. Ours is largest the publishing printing plant in Japan.

In August 2009 we worked with the Manufacturing Technology Integration Laboratory to construct model equipment, making "visible" the energy used by the offset printing equipment. We cut losses by ¥1.35 million/month in the first year. The waste from air leaks in particular can be discovered at a glance, and I really feel the system benefits are significant.

We will develop the benefits of this system so that the Kuki Plant can continue to work to prevent global warming.

I am in charge of software development for the energy monitoring system. While this system is already helping to save energy, trial and error has been continuous since development began. We find and make "visible" latent energy loss in production equipment that up to now we had not known about. In doing so the knowledge of the plant technical staff and operators, who are thoroughly versed in the equipment, is indispensible. Achieving that requires deep discussion as well as repeated trials and spec revision at the plant.

The benefits continue today, and we have built a broad network within the company that has helped to speed up development. Because this system is deeply rooted in DNP, development will proceed through continued deep discussion with people related to this project.

## Finding Value in Undesired Material, so as to Reduce Environmental Impact

At the DNP Group we seek to reduce undesired material output from our production processes, and to use those materials effectively because doing so reduces environmental impact.

#### Reducing undesired material output and using that material effectively

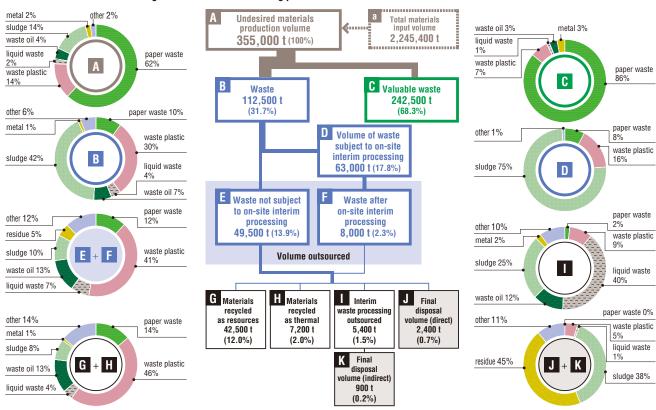
## Re-using undesired material generated in the manufacturing process

The DNP Group is working to "improve resource productivity" and "promote the reuse of undesired materials" so as to contribute to the building of a recycling society. These efforts require that the materials input in produc-

tion processes be used without waste, and that resources be used effectively by re-using to the greatest extent possible any undesired materials that are produced.

Undesired material generated from manufacturing processes is valuable if it can be separated into a single material. That which cannot is either reused (recycling, solid fuel, cement ingredients, etc.) or subjected to thermal recycling, which reduces both midstream and end processing volumes. We are taking steps to make progress in making undesired material valuable.

#### Breakdown of undesired material generated from manufacturing processes in FY2010



#### Targeting zero emissions for the entire DNP Group

We use the recycling rate as the indicator for undesired materials reuse promotion, with the goal being zero emissions. Zero emissions means efforts to bring the landfill waste amount/undesired materials production volume to 0.5% or less. The rate for the Group overall was 0.9%, an improvement over 1.1% in 2009, with 51 out of 60 sites achieving zero emissions. We have also achieved an overall recycling rate of 99.3%.

F 0 U

#### Promoting M Recycling (DNP Technopack)

DNP Technopack is engaged in the manufacture of a variety of packaging products, from ink, adhesive, film, resin and other packaging materials through food and medical packaging and laminated tubes. In addition to the measures it has always engaged in to reduce output of undesired materials, in 2007 DNP

Technopack began serious efforts to convert undesired materials to valuable materials.

DNP Technopack refers to this as M Recycling, taking the "M" from the word "materials." The subject of this recycling effort is undesirable plastic generated in the process of manufacturing packaging.



#### Made recyclable through separation

Packaging materials can made of various substances such as polyethylene and polypropylene depending on the use and required functions, and is usually manufactured through assembly into 2-8 layers. The more functionality the material has the more usable it is as a material, and the more difficult it is to recycle. Upon to now it was made into solid fuel or thermally recycled, but as the need for recycled pellets has increased efforts to separate it have become more thorough. M Recycling has made this material reusable as plastic by making it possible to sell it for recycling through pelletization.

#### Aiming for a high degree of separation at the manufacturing sites

Because the same line at two plants assembles and manufactures a variety of packaging, experienced operators who understand the materials composition perform the separating. Also, we have created our own Valuable Material Control Documentation corresponding to the manifest (legally stipulated management documentation) necessary in contract processing of regular industrial waste, which provides for thorough management. M Recycling has resulted in reduced costs by making possible petroleum resource reuse, waste processing cost reduction, and reduced waste volume due to promotion of high-level recycling. It also makes it possible to provide the market with a high-quality recycled product. We plan to install equipment that will make on-site recycling easier, and also to improve operator awareness.



Masanaka Havakawa Manager, General Affairs Department DNP Technopack

DNP Technopack has always recycled unde-

sired materials discarded in our manufacturing processes, and continues to strengthen M Recycling of plastic products, such as pallets. Because the soft packaging made by DNP Technopack is composed of a variety of different plastics, it is necessary to separate the different layers of plastic film. The separating process must be performed by an employee who understands the makeup of the film being handled, and must put that awareness into practice.

I believe we are able to make some contribution to preventing the depletion of petroleum resources, which is a global problem, by practicing M Recycling.



Hitoshi Shimizu President Taisei Plastics Co., Ltd.

DNP Technopack has made the recycling of laminated composite film, which previously had been discarded, possible through separation (into different resins).

In terms of manufacturing technology, this means the degree to which different fused resins melt, and controlling the gelling of the resin. Another significant hurdle to commercialization is application development of the resin produced. It has taken us around three years to get to this point.

We are currently in the process of creating a materials recycling synergistic effect through separation precision at DNP Technopack combined with our laminated composite film plant going online.

It is my hope that we will expand the scale of these activities.

## Seeking Business that Helps Preserve Biodiversity

Human beings rely on the blessings of an ecosystem that supports diverse life.

The DNP Group is aware that our business is premised upon our operating in a global environment that is rich and irreplaceable. Therefore, we seek to fulfill our responsibility to preserve ecosystems, and help create a sustainable society.

#### Development of packaging that considers biodiversity

## Providing consumers with products with reduced environmental impact

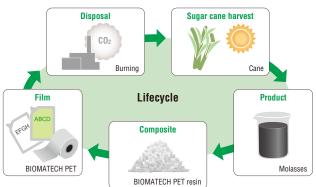
The DNP Group has been making serious efforts since the 1990's to develop technologies to reduce environmental impact through reducing packaging volume, using less packaging mater, and recycling. In addition to reducing our CO<sub>2</sub> and petroleum-derived products use, we also are engaged in product development that considers impact on biodiversity.

#### Need for materials with less environmental impact

In 2006 DNP research led to the development of biomass packaging materials partly composed of plant-derived polylactate plastics. The drawbacks of polylactate plastics are low heat resistance and strength, so they are used in combination with petroleum-based materials.

In 2009 we joined with Mitsubishi Resin and Sony to develop Smart Cards mainly composed of this plastic. In May 2011 we developed and initiated mass production of new BIOMATECH PET biomass-based plastic film that has made the switch from ethylene glycol, the raw material for PET film, taken from petroleum sources to bio-ethanol derived from sugar cane, and can be used in place of polylactate.

#### Lifecycle of BIOMATECH PET



Quantification of environmental impact requires monitoring of CO, emissions. In the case of biomass derived materials, only the CO, taken in by plants through photosynthesis as carbon will be returned to the atmosphere when it is burned. Therefore, on balance emissions can be considered zero, and CO<sub>2</sub> emissions are lower than when petroleum-derived materials are burned. Nonetheless, emissions over the entire lifecycle, including how much in resources and energy goes into the materials manufacturing process, and how much waste is produced, must also be quantified. Also, impact on the ecosystems where sugar cane is harvested cannot be overlooked, nor can the amount of water consumed. Therefore, we engaged in a research project with the cooperation of Professor Tokuhiro Itsubo of the Faculty of Environmental and Information Studies, Tokyo City University for a lifecycle assessment (LCA) of BIOMATECH PET. The study will assess environmental impact from a variety of perspectives, and will factor into future business development.

#### Quantitative Environmental Impact LCA

The LCA is a method for quantitatively evaluating the source investment and environmental impact, as well as effect on the planet or the ecosystem, that a certain product or service exerts over the course of its life cycle. "Life cycle" here encompasses everything that takes place during the existence of the product or service, from resource extraction through manufacture, transport, use, and the return of all waste to the Earth. The Packaging Division introduced LCA in 1996 because of its strong concerns about waste emissions, and it has been conducting LCA since 1997. The LCA is considered during product development.

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DNP is making progress with biomass plastic packaging materials that use plant-derived ingredients, so as to achieve packaging that takes biodiversity and global warming into consideration. BIOMATECH PET reduces dependence on petroleum by using renewable resources. Also, since the main ingredient is molasses that would normally have been discarded, there is no impact on the food supply balance. The new material performs in the same way as PET film.

BIOMATECH PET is manufactured at 2-3 times the cost of conventional film, and it has the same functions. By switching from ethylene glycol, which makes up about 30% raw material for PET film, taken from petroleum sources to bioethanol derived from sugar cane, the volume of petroleum consumed is reduced.

#### **BIOMATECH PET using materials derived** from sugar cane





#### Developing a variety of products

BIOMATECH PET has the same heat resistance, oxygen and water vapor barrier, and workability properties as conventional PET, and can be used in packaging such as pouches for sundries like shampoo or food products such as condiments, as well as retort food packaging. Also, it is possible to use deposition processing to improve the packaging barrier capabilities of PET film.



#### Working to expand applications

We intend to steadily begin switching to BIOMATECH PET for use in the PET film packaging products offered to food and beverage manufacturers, daily goods manufacturers, etc. We will work to lower the costs and expand the product applications.



Ayumi Shibata Development Division Packaging Operations, DNP

I believe that continuing make effective use of

renewables such as biomass plastics is our mission, so that the children of future generations can continue to use petroleum resources, which are limited. Nonetheless, it is important to assess and get accurate information about the entire lifecycle of such products to determine if the environmental impact is really small, the extent of impact on biodiversity and global warming, and water consumption. LCAs begin with a basic data investigation. Onsite inspections are carried out as much as possible, and we strive to improve the accuracy of data. Our goal is for the data to be valuable in developing and popularizing BIOMATECH PET.



VOICE

PhD (Engineering) Associate Professor Faculty of Environmental and Information Studies Tokyo City University



I support DNP's activities for biodiversity pres-

ervation. It is urgent that we use bio-resources effectively and stop relying on petroleum if we are to build a recycling society. The use of plastic materials made from molasses, a sugar cane byproduct, is getting a lot of attention as a recycling resource. Nonetheless, use of bio-resources does require land and water. Attention must be paid to social aspects in developing countries such as employment and stability. If water consumption can be optimized and impact on biodiversity kept to a minimum, we can make progress toward a use of bio-resources that contributes to regional development. I have expectations that this will lead the way to the further introduction and greater popularity of this technology.

#### **Independent Review Report Comments by an Independent Institution**

(Third-party review: Ernst & Young ShinNihon Sustainability Institute Co., Ltd.)

#### Translation

The following is an English translation of an independent assurance report prepared in Japanese and is for information and reference purposes only. In the event of a discrepancy between the Japanese and English versions, the Japanese version will prevail.

#### Independent assurance report

16 June 2011

Mr. Yoshitoshi Kitajima

President and Director Dai Nippon Printing Co.,Ltd

#### 1. Purpose and scope of our assurance engagement

We have performed certain assurance procedures, based on the engagement with Dai Nippon Printing Co.,Ltd (the "Company"), on the Company's key environmental performance indicators. These comprise the material environmental information of the Company and its major subsidiaries for the year ended 31 March 2011, that were reported in the DNP Group CSR Report 2011 (the "Report"). The assurance procedures are with respect to whether the key environmental performance indicators have been measured and calculated accurately and whether material information has been fully disclosed in accordance with the reporting standards for sustainability reports<sup>2</sup>.

The preparation of the Report is the responsibility of the Company's management. Our responsibility is to express an independent opinion on the Key Environmental Performance Indicators.

#### 2. Outline of the assurance procedures performed

We have performed limited assurance procedures<sup>3</sup> in accordance with the 2003 International Standard on Assurance Engagements (ISAE) 3000: Assurance Engagements other than Audits or Reviews of Historical Financial Information of the International Federation of Accountants (IFAC) and the 2009 Practical Guidelines for the Assurance of Sustainability Information of the J-SUS. Therefore, our assurance engagement provides relatively limited assurance compared to a reasonable assurance engagement.

#### 3. Conclusion

Based on the assurance procedures performed, nothing has come to our attention that causes us to believe that the Key Environmental Performance Indicators have not been measured and calculated accurately in accordance with the reporting standards of sustainability reports, or material information has not been disclosed in accordance with the 2011 Sustainability Reporting Assurance and Registration Criteria, in all material respects.

#### 4. Independence

Our assurance is compliant with the Ethics Regulations of J-SUS and there is no financial interest between the Company and us.

Akihiro Nakagome Representative Director Ernst & Young ShinNihon Sustainability Institute Co., Ltd.

Onsite audit











Chikugo Plant, DNP Nishinippon

Okayama Plant, DNP IMS

DNP Technopack Yokohama

Ichigaya Plant, Ichigaya Publication Printing Operations

Kurosaki Plant No.2 DNP Precision Devices

<sup>&</sup>lt;sup>1</sup> The scope of material environmental information is stipulated in the 2011 Sustainability Reporting Assurance and Registration Criteria of the Japanese Association of Assurance Organizations for Sustainability Information (J-SUS).

<sup>&</sup>lt;sup>2</sup> The reporting standards refer to the 2007 Environmental Reporting Guidelines of Japan's Ministry of the Environment, the 2011 Sustainability Reporting Guidelines of the Global Reporting Initiative, and the 2011 Sustainability Reporting Assurance and Registration Criteria of J-SUS in the context of specifying the material subject to disclosure.

<sup>&</sup>lt;sup>3</sup> We have mainly reviewed and assessed the Company's procedures for the collection and aggregation of data, performed analytical procedures, as well as recalculated and reconciled them with the corroborating evidence on the quantitative sustainability information on a test basis. In addition, we have mainly made inquiries and reviewed related records to verify the qualitative information.

#### **Third Party Opinion**



#### Saburo Kato

Chairman, Japan Association of Environment and Society for the 21st Century President, Research Institute for Environment and Society

Upon graduating from the Faculty of Engineering of the University of Tokyo in 1966, joins the Ministry of Health and Welfare. Takes charge of Pollution and Environmental Administration at the Environmental Agency after its establishment. Appointed as the first Head of the Global Environmental Department in 1990. After participating in the Global Summit and the creation of the Basic Environment Act, leaves office in 1993. Establishes the Research Institute for the Environment and Society in the same year, of which he is currently President. Serves concurrently as Chairman of the Japan Association of the Environment and Society for the 21st Century (formerly, Association for the Study of the Environment and Society in the 21st Century). Major published works include Thoughts About The Environment (2010, PRESIDENT Inc.); The Power of the Environment to Create Wealth (2005, Goma Shobo); The Power of the Environment (2003, Goma Shobo); The Environmental Century (2001, The Mainichi Newspapers); Conditions for Creating the Recycling Society (1998, Nikkan Kogyo Shimbun), The Environment and the Future of Culture (1996, PRESIDENT Inc.).

When I look at the CSR reports published this year, since the enormous disaster of March 11 and the subsequent nuclear power plant accident the focus is the same no matter what the business of the company issuing the report: How did the company handle the disaster? What have they learned? What measures are they taking for the future? Wondering about the DNP Group in this regard, I see in the President Yoshitoshi Kitajima's message at the beginning of this year's CSR report that he touches upon those very questions. Although operations at DNP's Tohoku manufacturing base were temporarily halted after the event, none of the employees were hurt, and in May they were operating again. This is the definite result of having for some time had a BCP in place that is suited to the conditions of the region. Nonetheless, instability in the supply chain for items such as paper, ink, and film have made it impossible to meet the demands of customers in some instances, and President Kitajima notes in regard to this that "We will draw upon the lessons of this disaster in building an even more resilient corporate constitution so as to ensure we fulfill our responsibility to maintain supplies to our customers." Moreover, as it says in the title of the Special Report at the beginning, the aim is to be "An even more resilient DNP Group." In addition to proving clear information about assistance to people in the stricken areas, DNP has revised its business plans, and reports, "We are taking a fresh look at items such as the supply chain, logistics, and an alternative production system, as well at the location of our production sites both within and outside Japan, so as to maintain secure and continuous supplies to our customers." The content of this year's report is convincing.

As I peruse the report itself I notice that some changes have been made to the layout and the focus of the report in comparison to 2010. Up to now the impression has always been of a report that focuses evenly and proportionately on the various topics, giving details about items that the average person might be interested in and taking a friendly approach to the reader that employs a "human touch." To put it simply, up to now the editorial policy seemed to be to focus the report on what the editors wanted people to read, but now they seem to have changed to an approach that is concerned with what is desired from the reader's perspective. I think the close-up photo of the director holding the smart phone in the Special Report entitled "Contributing to the Development of Society through our Business" is representative of this attitude. When I saw that I felt surprised and at the same time got a fresh sense of the editors' spirit. By simply catching the reader's attention in this way they subtly show the reader how DNP's technology is used in smart phones. It is a clever way

of expressing the true quality of the DNP Group's CSR in contributing to the development of society through their business.

After the Special Report, the editors address the Code of Conduct, which is an important part of the DNP Group's CSR. One by one they take up matters such as compliance with the law and social ethics, ensuring information security, promoting social responsibility through the supply chain, and the disclosure of information. These sections also provide explanations that use the "human touch" in showing what DNP does. From the reader's perspective this is much easier to read than just one "we do this, we do that" description after another.

The second half of the report goes on to describe the activities of three Group companies with special characteristics (Tien Wah Press, DNP Denmark, and Hokkaido Coca-Cola Bottling), focusing on their CSR efforts.

Environmental conservation takes up the major part of CSR. The DNP Group engages in lively production activities that use materials such as paper, film, resin, metals, and ink, with electric, gas, LNG, and oil as the power sources. Anyone can see that environmental impact is occurring, and DNP always lists input and output data in its reports and clearly explains its environmental efforts. The results for fiscal 2010 are good for the most part, reflecting continuous efforts on the part of the company. Nonetheless, the failure to meet the company's own targets for undesired material output and per-unit emissions of CO2 is noticeable.

Particularly in the area of CO<sub>2</sub> emissions, the company states a goal of "a 10% reduction from 2005 levels by 2020" for total emissions, but this target has already been reached at present. To put it bluntly, in comparison to more difficult targets established both within and outside Japan, this self-determined target is unsatisfactory. Taking into consideration the fact that since the March 11 nuclear accident every region of Japan is affected by nearly constant, broad-scale power shortages, not only those served by TEPCO or Tohoku Electric but also Kansai and other areas, I would expect the DNP Group to revise its CO2 emissions reduction targets for the sake of taking drastic measures to conserve electricity. It was understandable that this was difficult last year because of the increase in the number of worksites due to the expansion of business, but by the same token that also means they should take up the challenge of more difficult targets. Also, biodiversity measures represent a new and difficult challenge faced by all manufacturers. I will be paying close attention to the DNP Group's future progress with its sugar cane-derived BIOMATECH PET products.

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