

to be...

CARBON NEUTRAL COMPANY

The Bangchak Petroleum Public Company Limited

Sustainability Report 2010



Bangchak
RENEWABLE ENERGY LEADER

to be...

CARBON NEUTRAL **COMPANY**

On our mark ... Poised to move from one leadership to another, from being Asia's leader in alternative energy to a carbon-neutral company. Bangchak's ambition is to emit zero carbon dioxide net. We're at work to ease global warming while stepping up our development, production and sale of clean energy for the benefit of our surroundings. Clear sky, clean air for Thais and others for years and decades to come.



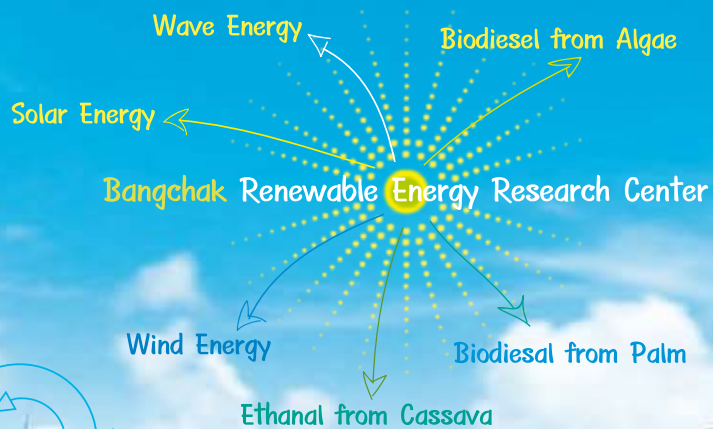
We are one family



"Working towards sustainable business development in harmony with the environment and society" is our corporate culture from day one of business. This and the employee culture of "To be virtuous, knowledgeable and contributive to society" make up our business heart. For, we know, sustainable business growth must accompany community prosperity. By treating our community as our own family member, we zero in on clean processing technologies with due regard for natural resources. By paying attention to waste treatment from each step of our process to obtain excellent, environmentally friendly products, we leave the quality of life for communities and society intact.

Content

09	Message from the President
10	Vision and Strategy
14	Corporate Governance
17	Organizational Structure
20	Clarification and Scope of Report
21	Performance
21	Economic
22	Environmental
22	• Production, Social Responsibility and Carbon Footprint
33	• Environmental Expense Account
35	• Eco-Efficiency
36	Social
36	• Labor Practices and Human Rights
42	• Employees Engagement
46	• Safety and Health
53	• Community Participation and Social Development
65	• Product and Service Development
69	Awards of 2010
70	GRI Content Index





Message from the President

In 2010, the world faced increasingly ravaging natural catastrophes in the forms of earthquakes, floods, heavy rains, frigid cold, drought and so on, and this threat to mankind has spared no country.

What we have been facing clearly shows environmental woes besetting the economy, society and our way of living. It is commonly accepted that rapid, unpredictable climate change has resulted from global warming-an awakening for all to how our destruction of the environment and careless use of natural resources can wreak havoc on others. Without earnest efforts from all quarters of society, our world is unlikely to return to what it used to be and it could even be too late to overcome problems.

As a Thai company, Bangchak Petroleum Public Company Limited is charged with the stewardship of national energy security and the upgrading of the quality of life for Thais. The Company's policy and guidelines for social and environmental responsibility is clear: to become a carbon-neutral company by 2014, meaning that its net emission of carbon must be zero.

The Company gives communities around its facilities opportunities to take part in monitoring its proactive environmental management by installing monitors showing the quality of air and effluents at its refinery entrance, nearby school and department store-to show parameters up front for its communities and stakeholders to see and compare with the standards set by law.

In 2010, the Company reiterated its commitment to executing its business in a sustainable way in tandem with environmental and social development by introducing new businesses with a format and process that enriches society and the environment. This so-called "CSR In-process" includes a project to set up a learning and development center for turning an abandoned orange orchard in Thung Rangsit, north of Bangkok, into an oil palm grove, which will yield alternative energy, a viable fuel option. This idea solves farmers' debt burdens, gives them additional income, shortens oil-palm transport distances versus other regions and above all-restores soil humidity by raising the groundwater table, eases land subsidence and at the same time absorbs water from inner Bangkok and perimeters.

Simultaneously, this project will yield economic, social and environmental benefit while easing global warming since the planned palm tree planting in the Rangsit area helps cut carbon dioxide emission by about 500,000 tons per year equivalent. Meanwhile, the Company remains committed to building on its "CSR After-process", meaning social and environmental activities for public service (local communities around the refinery and at the national level), with these factors taken into accountsensibility, fortifying and developing economic, social, environmental and energy immunity for Thais in a sustainable way.

(Signed) Anusorn Sangnimnuan
(Dr.Anusorn Sangnimnuan)
President

Vision and Strategies



Vision

“Greenergy Excellence”

Creating an energy business that is environmentally friendly for sustainable development

Business Culture

Develop sustainable business, while safeguarding environment and society

Mission

Shareholders/business partners/customers/creditors	:	Conduct business to steadily grow its returns in a fair manner
Society/Community/Environment	:	Promote a business culture that is responsible to the environment and society
Employees	:	Grow employees into professionals

For the last 25 years since the start of its energy business in 1985, the Company has always been committed to the corporate culture of “sustainable business development in harmony with the environment and society.” It will continue to do so with an aim to strike a balance between business values and those of the environment and society through the consistent application of a self-sufficient economy, good governance and social responsibility to its operations and goal achievement.

Besides managing its business to generate steady and continuous value through good governance principles and strict risk management for its business, the Company has applied the concept of sustainable management as an essential

Employee Culture

To Be respectable, knowledgeable, and helpful to others

Value Statement

B-Beyond Expectation

C-Continuing Development

P-Pursuing Sustainability

element of its strategic planning. To illustrate, it has included a social and environmental indicator among its performance indicators in addition to other indicators, namely financial, customer, process and personnel. This would enable the Company to properly cascade social and environmental goals down to the operation levels (departments and sections). This way, action plans are interconnected or at least do not contradict the social and environmental indicator. At the operating level, besides the above-mentioned cascading of goals, all employees who observed the employee culture of “Be virtuous, be knowledgeable and contributive to society” also contribute to the driving of various action plans, which will be directly and indirectly beneficial and lead to true success.



The core strategies for social and environmental sustainability

1. Open, Transparent and Verifiable

The Company adheres to an open, transparent and verifiable policy in its operations. Operational data are transparently disclosed under good corporate governance and SET rules. Applying proactive environmental management, it discloses the actual data on quality of air and effluents around the refinery by posting such information at the entrance to the refinery and in surrounding communities.



2. Socially and Environmentally Friendly Business Models (In-process)

Aware that business operations that lack social and environmental activities are unsustainable, the Company is determined to do business in such a way that not only can it sustain continuous growth, but also simultaneously generate positive impacts on society and the environment. Such a model that the Company has been operating successfully is the cooperation of retail stations and agricultural cooperatives. The Company buys agricultural products from cooperatives in different communities and uses them for retail stations' sales promotion to create jobs and revenue in support of the economic and social development of the communities. In the future, the Company, in cooperation with the Ministry of Agriculture and Cooperatives, the Ministry of Energy and the Bank for Agriculture and Agricultural Cooperatives, will initiate a conversion of abandoned orange farms to palm plantations for orange farmers in Rangsit. The palm produce will be their new source of income and

promote the use of alternative energy, which has been a the Company initiative for more than a decade as in gasohol and biodiesel promotion. In all, this business model benefits the environment and provides higher income to support social development in agricultural communities.



3. Carbon Neutral Company

Aware that the refining business consumes a large amount of energy and emits considerable carbon dioxide, the Company has set a target to become a carbon neutral company. To illustrate, its carbon dioxide emission will be reduced by more than 50% of the business-as-usual baseline within 2014 as a result of its continuous efforts on clean energy business development, be it a 120-megawatt solar-cell power generation plant, palm oil biodiesel plants, tapioca-based ethanol production plants, diesel production from weeds, energy efficiency improvement or the use of clean fuels in the refinery.

Such balanced business management goals backed by determined and ethical staff—committed to the employee culture and values—will enable the Company to add value to business as well as society and the environment and become an organization of sustainable growth.

Risk Management

The Company has a continual enterprisewide risk management system (ERMS) in place to ensure goal achievement with greater success in corporate governance practices in the face of current dynamic, highly competitive business circumstances. It also anticipates public concerns and potentially negative events to its public image and seeks to address risks arising from its products, services, and operation. The Enterprisewide Risk Management Committee (ERMC), consisting of Board directors and senior management, defines the management approach, develops an efficient ERMS, drives cooperation from all across the Company, and ensures manageable overall risk management covering strategic, operating, financial management, compliance, and other key risks dealing with the Company's business.

ERMS aligns with the strategic planning process, beginning with goal definition of events with negative effects based on root-cause identification, and assessment of the likelihood and impacts (present and future) of each. This is done through workshops of all executives and employees to identify proactive action plans (including preventive and mitigation plans). Assessment is then systematically reported under

ERMS, as seen in the diagram. Every year, the Company improves its business practices based on ERMS assessment, certified by TRIS (an independent regulating agency). The Company scored high in this year's assessment.

In 2010, the Company managed the risks affecting its key corporate strategic objectives by organizing workshops among all employees and analyzing petroleum business overviews and trends, and the global as well as domestic economy. It defined an ERMS plan to ensure that any remaining impact is acceptable to the Company. In managing each risk factor, the Company developed a portfolio view of risks and continued to value the cost-benefit analysis of each measure as a decision-making tool for systematic choice of risk reduction measures. This year's 27 key risks included volatility in the oil price and exchange rates, operating risks for the refining unit, and risks of investment in new business ventures. These risks having been defined, annual action plans were implemented. For each given risk profile, the risk managers and risk coordinators for each department monitored outcomes from each responsible person. In addition, the Company has linked ERMS practices to employees' annual performance appraisals-a device to align employees' application of risk management principles and tools





to their jobs and turn it into a corporate culture. To ensure that risk management stays up to date, the Company promotes new knowledge while publicizing and launching activities to promote risk management knowledge and understanding among executives and employees-and drum up risk management-through assorted means, including training, intra-company broadcast, the intranet, and exhibition boards.

Since ours is the only refinery operating right in the heart of a Bangkok Metropolis community, it could create environmental and safety hazards unless properly controlled. The Company therefore continually values sound environmental and safety management while stressing strict compliance with relevant laws and regulations, as well as TIS 18001, OHSAS 18001, and ISO 14001. Meanwhile, its community relations activities in promotion of safety and good living standards have continued in full force. Since the Company also recognizes the need for vigilant measures for assorted safety and environmental impacts on communities and the residents of new condominiums around the refinery, it has set up a refinery environmental quality information center at the Piyarom Sports Club Department Store, containing environmental quality parameter as shown on several monitors installed around the refinery's surrounding community.



In addition, the Company monitors, revises, and conducts drills under its crisis management plans and emergency plans to control potential emergencies and ensure the fastest revival of post-emergency business. One of these plans is to mitigate losses to properties, people, and the environment. Then there is a business continuity management plan and a media management plan to ward off or lower impacts on the

Company's reputation. Staff and resources are prepared for sales emergency drills, oil or chemical spill drills, and so on. Finally, measures have been amended to prevent and address severe flood conditions, as have additional security measures for political unrest. By participating in the energy crisis drills sponsored by the Ministry of Energy, the Company joins in the analysis and recommendation of solutions, together with the formulation of preparedness plans for fuel shortages, which form civil prevention plans under the national preparedness plan.



To institute development and promotion of expertise of risk management processes, both in and outside the Company, the Company joined the executive committee of Thailand's state enterprise risk management club and the risk management task force of Petrochemical and Refining Group of PTT Plc. to share experiences and views, apart from continually developing risk management personnel. See more details in the 2011 annual report.



Corporate Governance

In 2010, the Company aligned with the corporate governance development plan, also deliberate revisions to the corporate governance policy, detailing the good practice of directors, executives and employees in order to develop the Company's corporate governance. The major issues are summarized as follow:

1. Rights of Shareholders

- Publicized information concerning the Annual General Meeting of the Shareholders (AGM) on the Company website 32 days ahead of the meeting and mailed the documents to the shareholders 22 days ahead of the meeting.
- Added registration points at the AGM for faster processing.

2. Equitable Treatment of Shareholders

- Allowed the shareholders to propose AGM agenda items and nominate directors between October 1 and December 31 of the previous year.



- Proposed all seven independent directors to whom the shareholders could assign proxies for the AGM.

3. Role of Stakeholders

- Staged one offsite CG meeting for the corporate governance committee to inspect Bangchak service stations in the Central and Northern Regions and meet service station operators and cooperative groups.
- Added channels for comments and complaints through community relations officers and at the Piyarom Sports Club Department Store.

- Monitored information reports or complaints through the Internal Control Office, 13 cases of which arose in 2010. Investigation by the in-charge units, however, showed no irregularity.

Moreover, various channels are available for tipping or making complaints against misconduct or unethical behavior in financial practices or internal control. There are mechanisms for protecting the whistleblower and appropriate mechanisms for action after information is



received by the internal control office, beginning with check and compilation, appointment of investigation committee and reporting conclusion to the board of directors. This ensures that the stakeholders play an active part in protecting the Company's interest.

4. Disclosure and Transparency

- Installed an online board to show environmental and safety parameters of the refinery inside the Piyarom Sports Club Department Store, besides the refinery's gate.
- Installed an LCD monitor to publicize data on the Company's community relations, news, CSR activities, and marketing activities for residents around the refinery.



- Installed smart bulletin boards at office buildings for employees' greater information efficiency, aimed at reducing paper consumption.
- Was chosen to present the Company data under a project on transparency awards, sponsored by the Office of National Anti-Corruption Commission.

5. Responsibilities of the Board

- At Board meeting No. 4/2010, Mr. Krairit Nilkuha was appointed chairman (a different post from the President).
- Defined a policy for meetings among independent directors and non-executive ones at least two times a year, for instance, in March and October 2010.

- Organized a lecture on 'Tangible Corporate Governance' by Prof. Dr. Warapatr Todhanakasem.
- Organized a study tour on technological progress and innovations, including carbon caption storage.



6. Corporate Governance Policy

- Amended the policy for the seventh edition on Board meetings, scope, roles and responsibility of the Audit Committee, rights and equality of the shareholders, the company's role toward stakeholders, and employees' practical guidelines with anti-corruption issue as follows:

"Acceptance of benefits and payments

Refrain from requesting, accepting, agreeing to accept, undue extra benefits or improper payment with customers, business partners, contractors, agents, and sellers of products and services to the Company, or from any parties engaging in businesses with it; refrain from giving special treatment with any dealer that others could mistake for displays of unfairness and therefore avoid doing business with the Company – negatively affecting the Company's image."

- Included employees' policy response mechanism in the Knowledge Management process in favor of hard copies.

- Had an assessment test form prepared for employees' understanding of the policy.

7. Publicity of Corporate Governance

Directors and the management were invited speakers on the policy and experience of corporate governance, including

- A talk on 'Corporate Governance of Listed Companies', organized by the Thai Investors Association.
- A seminar on 'Organizational Enrichment towards Sustainability: a new challenge' at Asia Pacific HR Congress 2010, organized by PMAT (Personnel Management Association of Thailand).
- A seminar on 'Deciphering Sustainable Growth' at PTT Group CG Day 2010 'The Code to Growth', organized by PTT Group.



- A seminar on 'Collective Action Coalition: a new anti-corruption option for the Thai private sector', where the Company along with 26 companies declared their intention to form a private-sector coalition at a national meeting on creating collective action among the Thai private sector, sponsored by IOD, Thai Chamber of Commerce, Thai Bankers' Association, Foreign Chambers of Commerce, and Thai Listed Companies Association.

The Company also welcomed visiting public and private agencies, as well as educational institutions, to its premises to share experiences and observe its corporate governance practices.

8. Public Relations to Promote The Corporate Governance Culture



- Included corporate governance training in the orientation for new Directors and employees.



- Participated in poster sessions and staged an employee show on corporate governance at PTT Group CG Day 2010 'The Code to Growth', organized by PTT Group.
- Organized 'CG Day 2010: Anti-corruption', featuring exhibition and an employee show at a seminar to reiterate and cultivate employees' understanding of practical guidelines about improper payment involving those doing business with the Company under the seventh edition of the corporate governance policy.



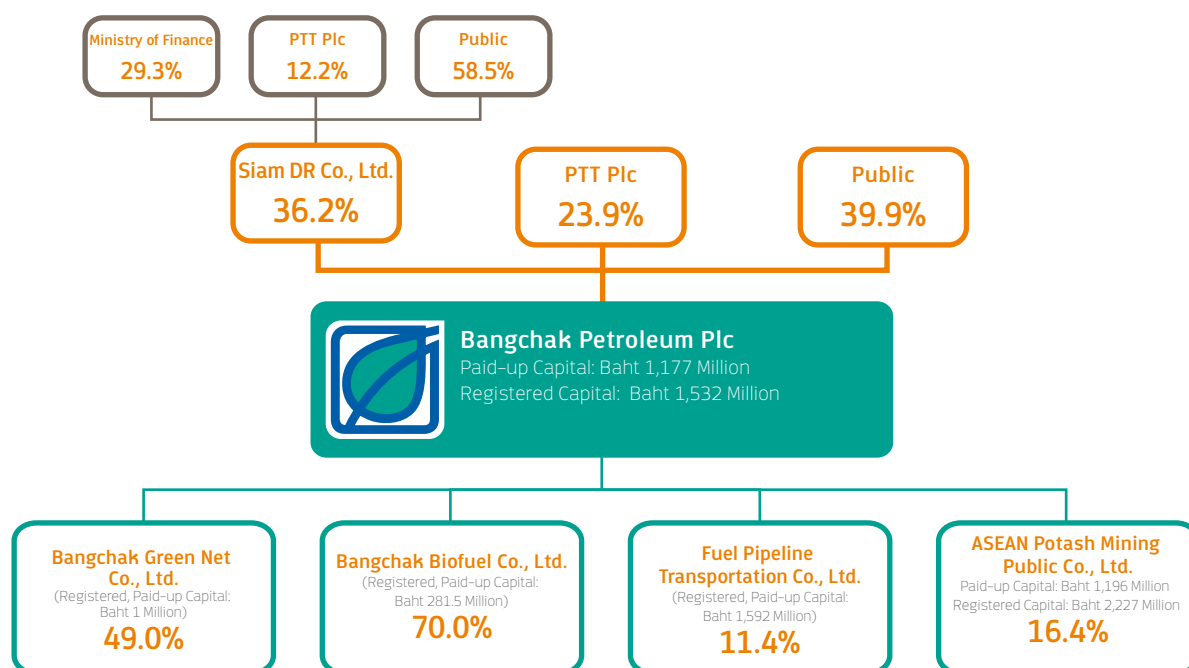


Organizational Structure



The Bangchak Petroleum Plc is a leading Thai petroleum company that imports crude oil from the Middle East, the Far East and indigenous sources and refining it into products with a maximum crude-processing capacity of 120,000 barrels per day from a 'complex refinery' on Sukhumvit 64 Road. Its Bangchak Terminal serves the greater Bangkok metropolitan area BCP also has a terminal in Tambon Bang Krasan, Amphoe Bang Pa-in, Ayutthaya, serving the North and the Northeast, as well as regional business offices in the North, Northeast, and the South.

The Company has two subsidiaries, namely Bangchak Green Net Co., Ltd., and Bangchak Biofuel Co., Ltd., and also invests in two companies, namely Fuel Pipeline Transportation Co., Ltd., and ASEAN Potash Mining Public Co., Ltd., as detailed in the equity chart below:



Note: As of December 31, 2010

Bangchak Green Net Co., Ltd. (BGN)

The subsidiary was set up to manage service stations and inthanin coffee shop, including sell consumer products in Lemon Green and Bai Chak convenience stores to support the continued expansion of its retail business.

Bangchak Biofuel Co., Ltd. (BBF)

Located in Amphoe Bang Pa-in, Ayutthaya, the subsidiary was set up to develop and produce domestic alternative fuels, starting with a 300,000-liter/day biodiesel plant running mainly on crude palm oil. Its management philosophy is centered on environmental considerations, as seen in the design and construction of an artificial water-management pond system relying on nature’s help in water treatment from the country’s first biodiesel plant with zero-discharge water management.

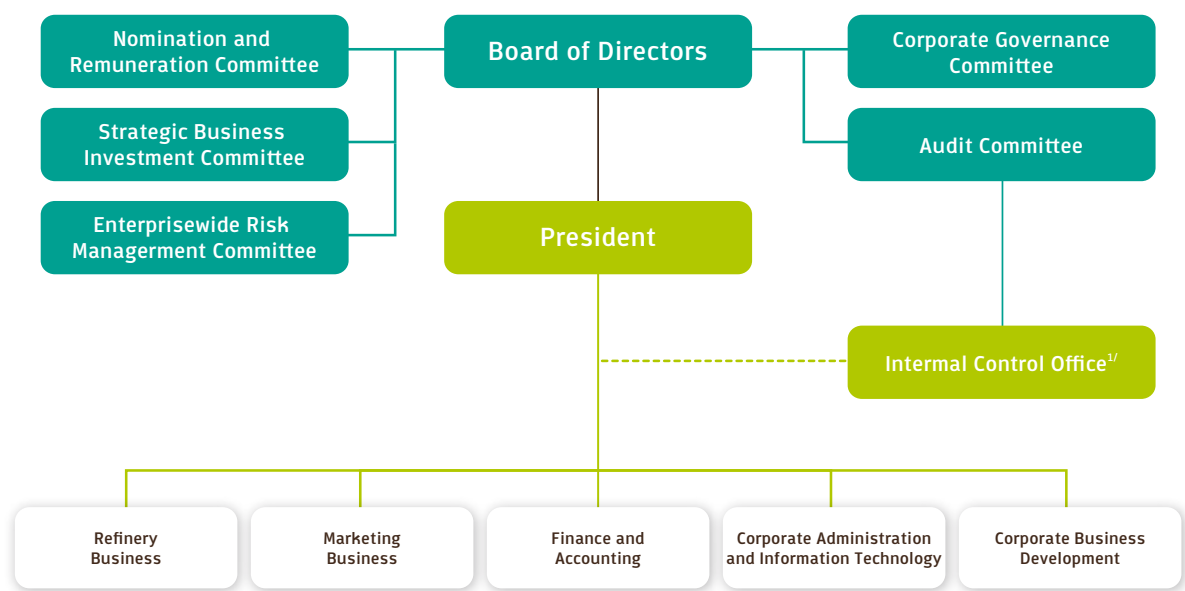
Fuel Pipeline Transportation Co., Ltd. (FPT)

This company was set up to manage fuel transportation through a network of underground, multi-product pipelines starting from Bangchak Refinery in parallel with the railway leading to the Chongnonsri and Don Muang depots, and finally to the Company’s Bang Pa-in Depot and FPT. This route was extended near the Makkasan area to Suvarnabhumi Airport to transport aviation fuel by JP-One Asset Co., Ltd.

ASEAN Potash Mining Public Co., Ltd. (APMC)

This company was set up to explore for and produce potash around Amphoe Bamnet Narong, Chaiyaphum, for manufacturing and sales as potassium chloride fertilizers. This project arose from collaboration among ASEAN member countries to capitalize on natural resources of member countries.

Management Structure



Note : 1/ The Audit Committee determines and evaluates the Internal Control Office's annual performance to ensure corporate governance and the independence of the Internal Control Office.



In terms of corporate management, the Company has a Board of Directors and five committees appointed by the Board to investigate and screen the Company's business matters, namely:

Audit Committee is entrusted mainly with corporate governance to foster the confidence of stakeholders, in line with regulations, ensuring that the Company's operations comply with the proper code of conduct, and that the Company maintains a proper, transparent, and efficient internal control system free of conflicts of interest and frauds.

Nomination and Remuneration Committee defines the procedures for nominating company directors, the President, and the Executive Vice Presidents and deliberates succession planning for the President and the Executive Vice Presidents. The defining of criteria or procedures to determine the compensation for directors and senior management team members, the committee takes into account the suitability of their responsibilities in comparison with those of listed companies on the Stock Exchange of Thailand (SET) to table to the Board for its endorsement and ultimately for approval at the annual general meeting of shareholders.

Strategic Business Investment Committee is responsible for defining the direction and goals for business development that supplements value and strength to the Company under the Board's policy. It also screen assorted investment projects and opportunities in line with the Company's business goals for the Board's consideration.

Corporate Governance Committee is responsible for proposing practical guidelines and comprehensively supervising the Company – whether the Board, the management, or employees – for compliance with good corporate governance, and for deliberating revisions to the Company's corporate governance principles in line with international standards.

Enterprisewide Risk Management Committee defines the enterprisewide risk management policy, strategy, and goals; evolves risk management processes for consistent efficiency; and induces across-the-board collaboration in risk management.





Clarification and Scope of Report

Clarification Report

This sustainability report illustrates Bangchak Petroleum Plc's performance related to social, economic and environmental development. The Company first prepared this annual report for distribution in 2005, so this is the sixth issue, containing its performance from January 1 to December 31, 2010, based on the approach suggested by Global Reporting Initiatives (GRI G3). In essence, it illustrates continuous development in executing work with economic, social, and environmental responsibility on a path toward being Thailand's CSR role model with comprehensive identification of key issues, namely corporate governance and economic, environmental and social performance.

In 2010, the contents are similar to those in past years, except for a clarification and review meeting to determine the issues for this report to incorporate stakeholders' interests in a more thoroughly and transparent way.



Scope of report

This report presents data on the performance in 2010 of the Company, with comparisons of certain indices going back three years for analytical and development purposes. The data encompass the activities of all its business lines (departments), but not its subsidiaries and associated companies. As for environmental cost accounting, only the data of process-related departments and the oil distribution centers (Bangchak and Bang Pa-in) are shown.

For any questions or recommendations, please e-mail chongprode@bangchak.co.th.



Performance

Economic Performance

BCP's revenue from sales and services (excluding those from lube products and subsidiaries) totaled Baht 134,638 million, an increase of Baht 26,781 million (25.2%) as a result of the 4% higher sales volumes and the 20.5% rise in the average oil sales price along with the average world oil price in 2010. The refining capacity averaged 86,000 barrels per day, against 79,200 barrels per day in 2009 because the complex refining process was enabled by the PQI Unit, which began commercial operation on December 7, 2009. However, the low refining margin resulted in a decrease in net profit from last year.

Unit : Baht Million

Item	2006	2007	2008	2009	2010
Revenue from sales and services	93,539	94,134	128,053	107,678	134,638
Net profit (loss)	248	1,691	689	7,475	2,649
Dividend paid	206	190	336	1,729	1,521
Interest paid	733	665	1,163	760	838
Income tax paid (received)	616	228	1,768	1,552	1,830
Employee benefit expenses	576	664	762	977	1,049



Environmental Performance

Environmental Management

The Company was the first company in Southeast Asia to adopt the ISO 14001 management system as a primary tool for its environmental management, resulting in continual improvement since 1997. Currently, the Senior Executive Vice President, Refinery Business, chairs the Occupational Health, Safety, Environmental and Energy Committee, the highest authority in the Company's environmental management. The Company has maintained the ISO 14001 standard for the last 13 years, thanks to cooperation from employees and contractors working on behalf of the Company to comply with the policy on occupational health, safety, environmental and energy management as well as the ISO 14001 requirements, maintained in 2010. For two consecutive years since 2009, it has had no Corrective Action Request from the auditors of the Anglo Japanese American Registrars. Moreover, in 2010, the Company implemented the ISO 14001 standard on Distillation Unit 4 and the Bang Pa-In Oil Distribution Center in addition to the Bangchak Center which was certified for the first time in 2009.

In 2011, the Company plans to link application software to its database to enhance the efficiency of its environmental management.



Production, Social Responsibility and Carbon Footprint

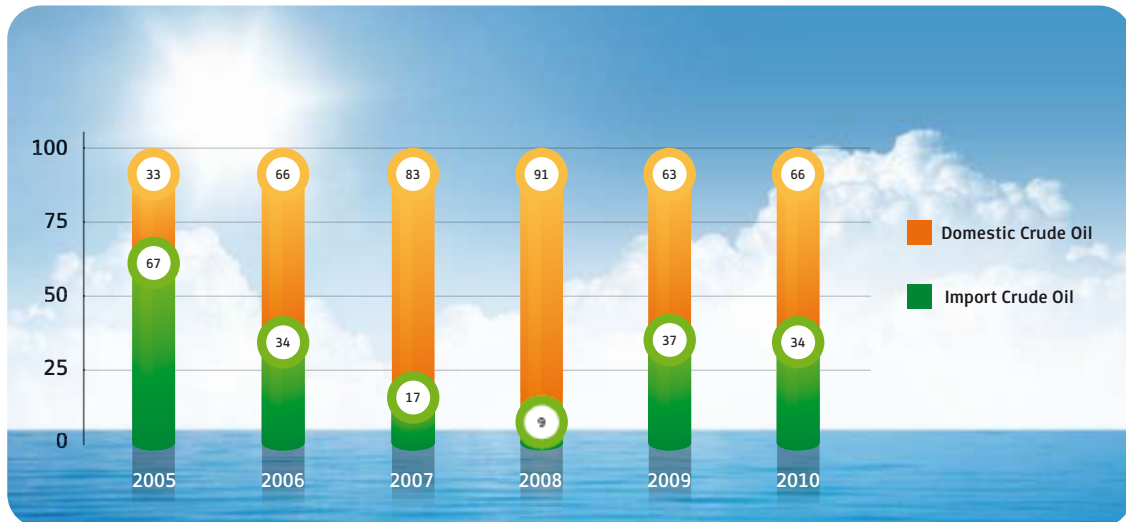
Raw Materials

The Company refines imported and domestic crude oil with modern and environmentally friendly technology. In 2010, domestic crude oil amounted to nearly 3.2 million liters, accounting for 66% of total crude run, while imported oil went down to 1.6 million liters. This helped lessen the currency outflow and the emission of greenhouse gases due to crude oil transportation.

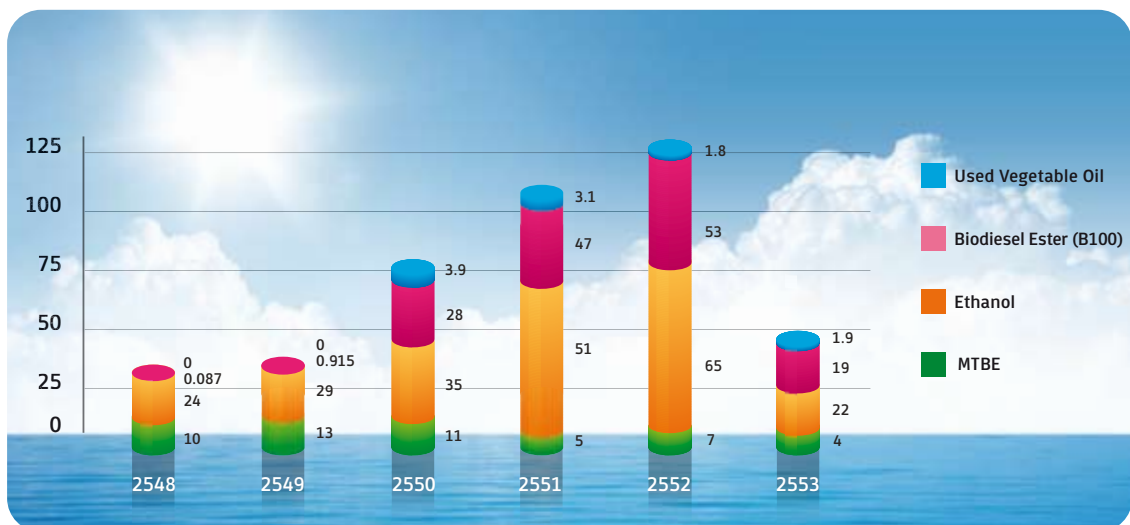
To minimize losses, slop oils and oils separated and physically recovered from treatment system, which account for 3% of the total crude run, are stored in slop tanks, waiting to be recycled, representing a way to prevent oil losses.



Raw Material (%)



Other Raw Materials (Million Lites)



Product

The Company's products consist of fuel gas, LPG, gasoline octane 91, Gasohol octane 91, Gasohol octane 95, jet fuel, diesel PowerD B2 and B5 and fuel oil. Throughout 2010, the Company operated Product Quality Improvement Project (PQI), while started its commercial operation in 2009. Thus, the fuel oil was reduced by 10% in 2010, which inversed with gasoline products. In 2010, the Company produced oil in accordance with the customers' needs with proportions of fuel oil similar to diesel Power D B2 and B5.



Product (%)



* Year 2008-2010, Gasoline octane 95 was not produced.

** Year 2007-2010, Kerosene was not produced.

Energy

Primary energy for the refinery comprises fuel gas, LPG, natural gas and fuel oil. However, natural gas was replacing fuel oil due to its cleanliness. Natural gas consumption in 2010 increased by 7% from that in 2009. Accordingly, the use of LPG and fuel gas combined slightly rose by 3% over that in 2009 to 150 million liters, while that of fuel oil dropped significantly by 16%.

The Company also uses electricity received from the Metropolitan Electricity Authority and combined-cycle power plants as secondary energy. Electricity consumption in 2010 was equivalent to 26 million liters of fuel oil, an increase of 16 million liters from that of 2009 due to the start of the new Distillation Unit 4, completed in 2009, in addition to the existing Units 2 and 3.

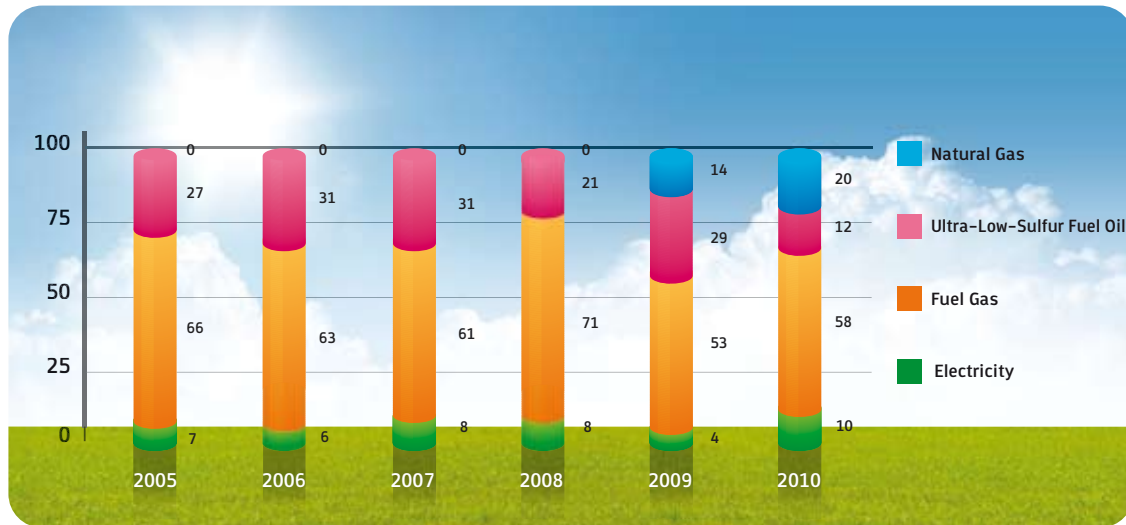
For better efficiency and energy conservation, the Company abandoned its low-sulfur-fuel-oil-fired boilers and bought electricity and steam from more efficient combined-cycle power plants (EN5), and employed other means to conserve energy, such as using the new T5 linear fluorescent lamps and Compact Fluorescent Light (CFL) bulbs. (EN7) For energy management, the Company set up an energy management committee responsible for the management of efficient energy consumption. In 2010, the Company reduced its energy consumption through:

Enhanced energy efficiency by repairing and replacing insulators of heat exchangers and steam pipes.





Energy (%)



Water

The Company uses water supply from the Metropolitan Waterworks Authority for the refinery and sources fire water from Chao Phraya River. Water consumption in 2010 amounted to 2,130,739 cubic meters, an increase by 531,769 cubic meters from that of the previous year (1,598,970 cubic meters) because the PQI units were on line all year. However, the Company values water resources and constantly looks for ways to conserve water while implementing the following water-saving measures in offices and refining processes:

1. Installing sensors on toilet sinks to reduce water loss.
2. Using treated water for plants on the premises, thereby saving water supply by 4,800 cubic meters or 0.23% of total water consumption.
3. Using stripped water from the Sour-Water Stripping Unit as Boiler Feed Water (BFW) of Distillation Unit 4, reducing consumption by 40,800 cubic meters of BFW per year – an annual saving of Baht 1,509,600.
4. Using stripped water from the Sour-Water Stripping Unit of Units 2 and 3 to dissolve salts in crude oil, thus lowering water consumption by 57,120 cubic meters per year, or Baht 971,040 per year.
5. Using a reverse osmosis system to pre-treat water fed to the Demineralization System, preserving 38,000 cubic meters of treated water per year, or Baht 646,000.

Ground water is used for consumption in the Bang Pa-in Oil Distribution Center in Ayutthaya province. Water from Bang Khian canal is used as fire water.

Biodiversity

Bangchak refinery and Bangchak Oil Distribution Center, a former refinery, located in Bangchak Sub-District, Phra Khanong District, Bangkok, are now surrounded by urban communities and industrial plants including Thai Plywoods Co., Ltd. and battery manufacturing plants. Bordering the west perimeter is the lower Chao Phraya River. Therefore, there are no risks of extinction for plants and animals living in the area.

Bang Pa-in Oil Distribution Center, located in Bang Krasan Sub-District, Bang Pa-In District, Ayutthaya province, is surrounded by rice fields and has 20% in green area with little biodiversity. That distribution system was converted to automatic in the third quarter of 2010 and there are Vapor Recovery Units to

prevent oil vapor dispersion and reduce the risk of extinction for plants and animals in the surrounding areas.

Valuing biodiversity, the Company's employees through the Bangchak Loves Community Club helped promote biodiversity by building a weir at Ban Mai Rom Yen in Ban Rai District of Uthai Thani Province, a village in the valley with no water supply and not enough water in the dry season. The Club's effort is a good way to preserve soils and water, which helps nourish water-source forests and increase soil moisture, thus promoting biodiversity in the forest. Moreover, a reservoir created by the weir is a habitat of marine animals, usable for human consumption as well as a water source for irrigation.





Emission, Effluent and Waste

As for environmental monitoring, the Company regularly measures air quality from its stacks to ensure that the particulates, nitrogen oxides (NOx) and sulfur dioxide are better than those allowed by the Ministry of Industry.

Due to its close proximity to urban communities, the Company realizes how important close monitoring and control of pollution is. Continuous Emission Monitoring (CEM) equipment was installed at the refinery's emission stacks to continuously monitor environment quality and pollutants in the exhausts. Furthermore, the Company set up the first air-quality monitoring station at a checkpoint at Somthawil School. Readings here are transmitted to monitors in the Company's Process Control Room and displayed together with those from the CEM on an automatic environment-quality signboard installed at the entrance to the refinery for the public to be able to monitor them at all times as well as for the comfort of the surrounding communities.

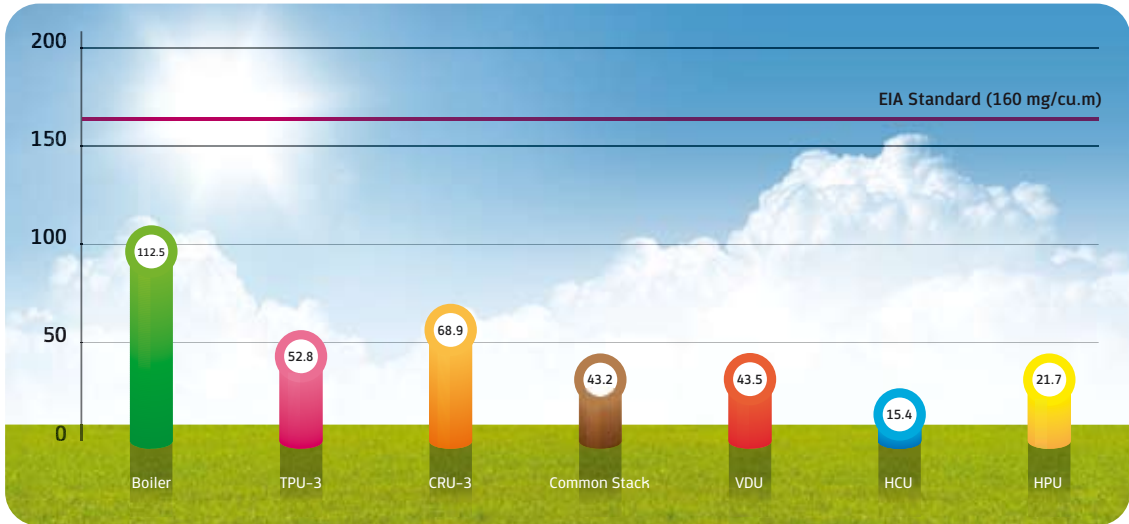
In 2010, the Company emitted 634,579 tons in carbon dioxide equivalent of greenhouse gases from its refining processes, and indirectly caused emission of 101,391 and 735,970 tons of carbon dioxide equivalent with the purchase of electricity and steam, respectively. This was higher than those in 2009 because Distillation Unit 4 had been run only for a part of the year in 2009 after it was commissioned, while it was run all year in 2010. In 2009.

In addition, the Company values ozone layer protection by using non-ozone-depleting chemicals. It set up a task force for ozone-depleting Volatile Organic Compound (VOC) accounting. Its measurement of VOC emissions started in 2010 and is expected to be completed in 2011. The results will be used to define measures for their reduction.

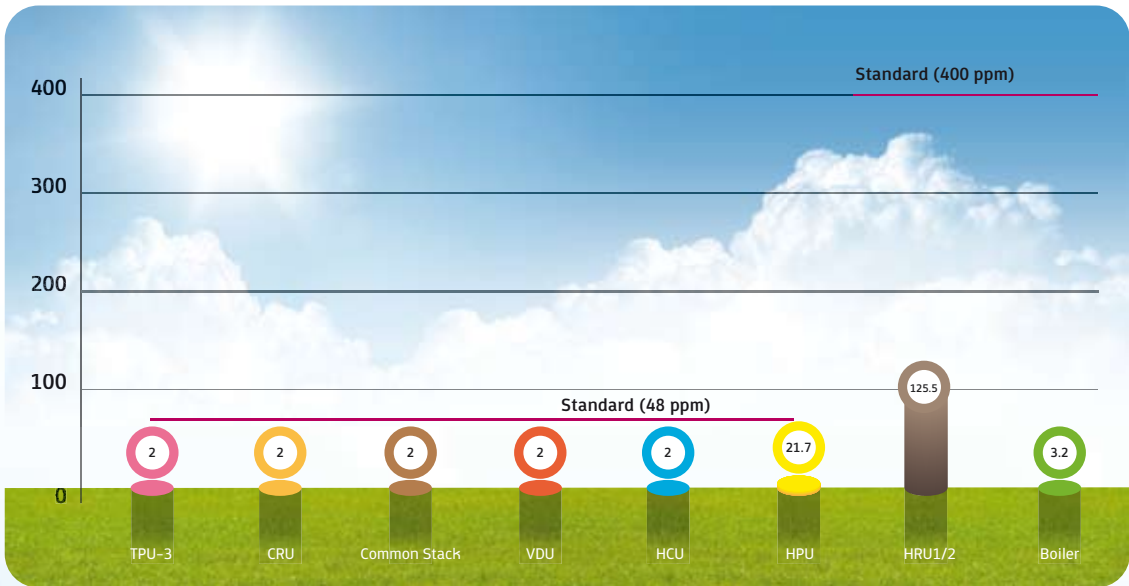
Particulates from common stack (mg/cu.m)



Nitrogen Oxides (ppm)



Sulfur Dioxide (ppm)

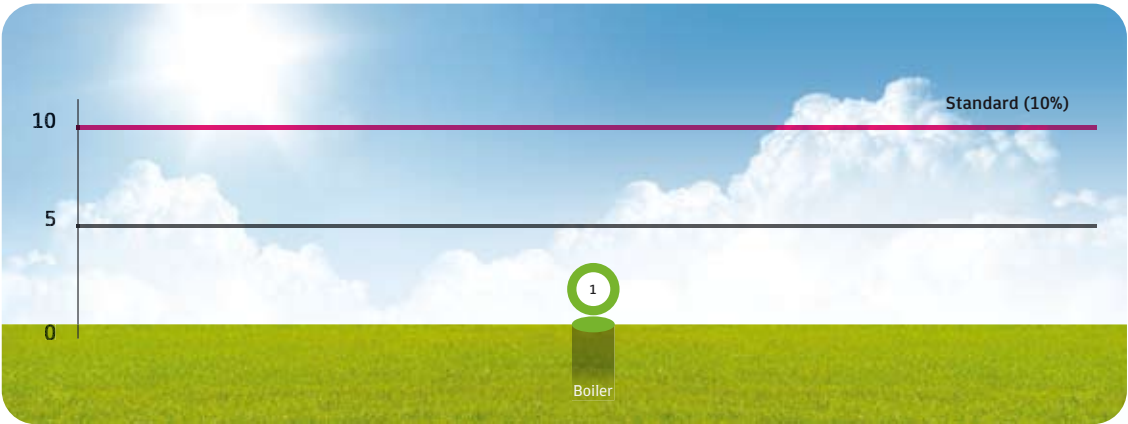




Hydrogen Sulfide (ppm)



Opacity (%)



The Company has three discharge systems (two for rain water and the other for treated process water). Process water is treated physically, chemically and biologically until the quality is

within the required standards before discharge through Bang Aw canal to the Chao Phraya River. In 2010, the Company discharged effluents to the environment by 78 cubic meters.

Parameter	Unit	Standard	2005	2006	2007	2008	2009	2010
pH		5.5-9.0	7.7	7.6	7.7	7.7	7.5	7.6
Oil and Fat	ppm	5.0 Max	1.2	0.9	1.4	1.8	2.0	1.0
Suspended Solids	ppm	50 Max	11	15	19	19	16	9
Soluble Solids	ppm	5,000 Max	2,935	1,590	1,541	1,423	1,303	1,833
B.O.D.	ppm	20 Max	6	6	6	8	9	6
C.O.D.	ppm	120 Max	61	60	80	61	56	54
Sulfides	ppm	1.0 Max	0.3	0.5	0.4	0.6	0.2	0.2
Mercury	ppm	0.005 Max	0.002	0.002	0.002	0.002	0.001	0.000

* The average standards for soluble solids for 2006 and 2008 are < 8,715 ppm and < 6,500 ppm

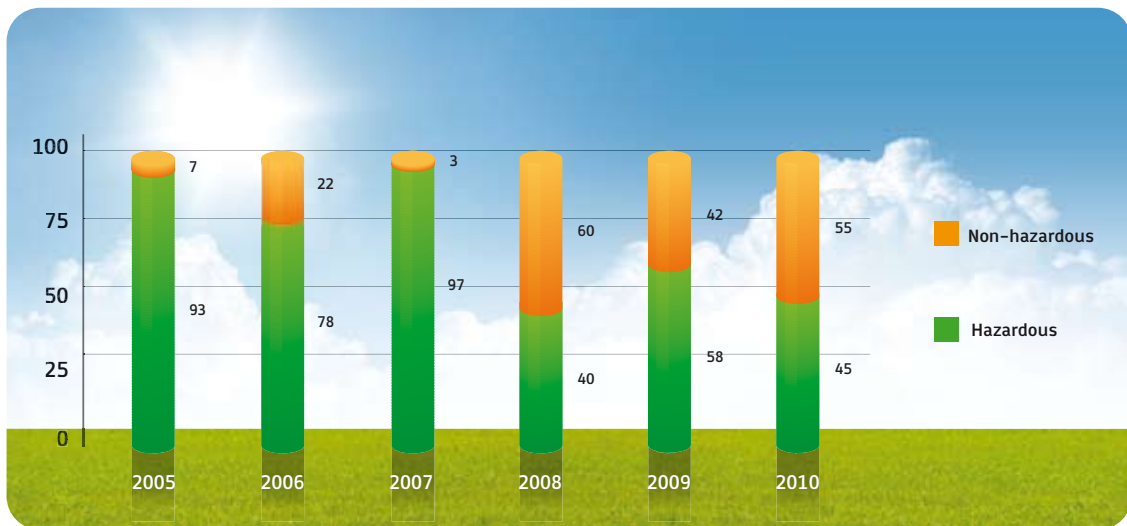
Wastes from the refinery and the distribution center that cannot be treated internally are sent for disposal by domestic transporters and disposers approved by the Ministry of Industry. No wastes are exported. In 2010, the Company sent out 2,706 tons of wastes, of which 1,230 tons, or 45 %, are hazardous wastes, namely tank-bottom sludge, wastes from desalter, contaminated materials, sulfur-containing waste, sludge from wastewater treating units, expired chemicals, spent caustics, spent adsorbents, spent catalysts and ceramic balls, contaminated stones and copper slag. Non-hazardous

wastes of 1,476 tons, or 55%, comprise wastewater from biodiesel plants, insulation, bitumen, steel, aluminum and plastic scrap. These wastes are treated and disposed of by prudent technical methods suitable for their properties. Seventy-two percent of the wastes have high enough heating values to be transformed to alternative fuels for burners. Another 3% with less heating values or non-combustible wastes are buried. The remaining 25% are recycled for other uses.

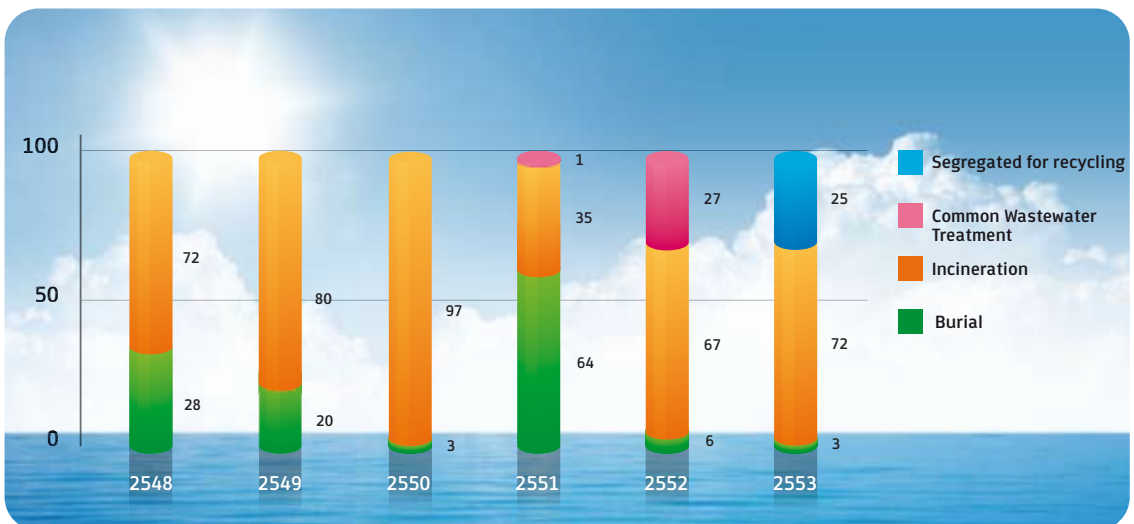




Industrial Waste Category (%)



Industrial Waste Disposal (%)



The Company set an environmental objective to monitor and report oil leaks every month. In 2010, oil leaks from refining processes and oil distribution centers were insignificant, being within the objective's limits. (EN 23) However, there were two spills under the criteria of being greater than 150 litres at Bang Pa-in Oil Distribution Center. The first spill of 300 litres occurred during strainer-cleaning operation, and the second one of 1,000 litres was a spill of biodiesel. The incidents were investigated to find the causes, and prevention measures were set. The environmental objective was not only a tool for monitoring and control, but also led to measures to prevent leaked oil to contaminate the environment, such as spill walls in areas with the risks of oil or chemical leak, double-layered plastic underneath oil storage tanks to prevent soil or groundwater contamination.

Transportation

The Company decreased the numbers of trips in product transportation to reduce pollutants and fuel consumption by replacing 16,000-litre trucks with 20,000-litre ones. This amounted to an annual fuel saving of 1,565,231 litres. The proportion of 20,000-litre from 2008 to 2010 was 41%, 55%, and 67%, respectively.



Furthermore, the Company's trucks use the less polluting biodiesel B5 instead of normal diesel. This helps alleviate currency outflow and support Thai farmers. All the Company oil trucks are GPS-monitored to control the speed and reduce the risk of accidents causing adverse environmental impacts. Every driver must undergo defensive driving training and all trucks

must be in good operating conditions. Emergency teams are required to be on alert, ready to move in to terminate or control the incidents that may involve oil leaks.

Compliance

Compliance represents an occupational health, safety, environment and energy policy element to which all employees and contractors working on behalf of the Company must pay attention and strictly adhere in their operations. Besides having a person to follow and summarize new laws on occupational health, safety and environment, there are at least two occupational health, safety and environmental compliance audits every year conducted by an audit committee on the occupational health, safety and environmental management system. The Company also has a legal office responsible for educating and creating awareness of different rules and regulations to ensure compliance. The Company has never been fined or punished as a result of non-conformance to environmental laws.



Environmental Expense Account

The Company was the first company to implement the environmental management accounting in its production processes and report the results to the public in 2005 and has been doing so since. Moreover, it has transferred this expertise to students and interested organizations and introduced an electronic accounting system to enhance the accuracy and timeliness of environmental management accounting. Now, it has moved a step forward to implement the accounting practice at Bangchak and Bang Pa-in Oil Distribution Centers, of which details are as follows:

Environmental costs in 2010 exceed those in 2009 by Baht 19,919 million, or 31 %. More than 99% of the increase are material costs because crude oil prices increased by an average of Baht 3.01 per liter, or 23.79% compared to those of 2009 at Baht 12.66 per liter, while the Company's output grew slightly by 5.86% from that of 2009, which also affected the costs of chemicals, water and energy.

Material costs of non-product outputs or wastes resulting from production processes, increased by Baht 36.71 million or 38.33% over those in 2009. They are mainly slop oils because the re-run cost rose by more than 200%. In 2010, there was an additional cost arising from low-quality sulfur because the sulfur production units had been shut down for maintenance and change of catalysts.

Waste and emission control costs, comprising those for the maintenance of environmental management equipment and those for waste management, were Baht 136.55 million, or 158.8% more than those of the previous year, due to more depreciation of pollution controlling equipment. For prevention and other environmental management costs, there was a rise of Baht 2.73 million, or 51.90%, due to more monitoring and measurement of environment quality.

Other than revenue from product sale, the Company generated more environmental revenue from liquid sulfur, a by-product of the PQI process extracting sulfur from the final products. Sulfur sale generated much more revenue in 2010 than it did in 2009 because the feed had higher sulfur content as well as sulfur price went up by more than 70 %. The same goes for metal scrap sales because the unit price decreased from that of 2009 by Baht 5.36 per kilogram as a result of many metal recyclers going out of business. Paper sales revenue increased from 2009 due to 5S activities across the Company.



Unit : Thousand Baht

Item	2005	2006	2007	2008	2009	2010
Material Costs of Product Outputs						
Crude Oil	49,769,773	51,610,896	59,805,028	86,796,916	59,057,127	77,393,936
Ethanol	436,016	665,415	607,622	1,029,655	1,450,198	1,728,850
Biodiesel (B100)	2,680	15,535	743,896	1,745,659	1,310,013	1,728,554
Used Vegetable Oil	-	3,105	67,571	62,790	23,719	33,033
Chemicals	15,713	17,993	27,598	27,250	34,611	84,008
Process Water	6,429	7,275	8,433	14,782	14,980	29,033
Energy	1,177,739	1,293,318	1,499,759	1,887,008	2,250,021	3,093,926
Material Costs of Non-Product Outputs						
Slop Oil	18,201	6,452	5,946	11,228	83,209	120,270
Bottom-Tank Sludge / Fuel Oil	0	1,072	766	1,250	2,044	446
Effluent	6,731	5,418	5,648	6,173	10,216	10,919
Excess Chemicals in Water from Stabilizing Pits	241	80	33	49	304	830
Poor-Quality Sulfur	101	75	21	98	0	16
Waste and Emission Control Costs						
Environmental Equipment Maintenance	34,079	29,567	27,979	20,364	8,347	10,654
Depreciation of Pollution Control Equipment	50,894	51,839	62,938	54,034	57,171	200,088
Effluent Treatment	1,623	1,754	1,716	1,930	6,392	6,684
Waste Disposal	1,704	2,705	6,427	10,341	7,091	5,235
Environmental Fees and Taxes	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Fines	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Prevention and Other Environmental Management Costs						
Monitoring	1,498	1,671	2,876	2,109	3,856	7,013
Depreciation of Waste Storage Area	30	35	28	11	41	58
Management Operation Cost	0	80	96	1,120	1,247	913
Environmental Equipment Maintenance Cost	291	251	122	1,109	118	10
Benefit from by-product and waste recycling						
Liquid Sulfur	7,896	7,389	6,534	6,508	476	3,551
Glycerin			976	2,549	307	297
Steel-Aluminum Scrap	2,595	4,099	5,806	6,075	1,933	8,516
Paper	17	17	10	25	16	27



Eco-Efficiency

A sustainable business not only seeks business returns, but also cares for environmental impacts. BCP therefore implemented an indicator which is a combination of both economic and environmental performances, called “eco-efficiency,” in which an adjusted EBITDA (earnings before interest and depreciation excluding gain/loss from oil stock) reflects economic performance, while a carbon dioxide

equivalent quantity reflects environmental performance. Eco-efficiency is higher when the economic indicator increases or the environmental indicator decreases. In 2010, BCP’s refinery emitted 735,970 tons of carbon dioxide equivalent, a “carbon footprint” decline from 2009 because it switched from fuel oil to cleaner natural gas. However, EBITDA also dropped this year, resulting in a lower eco-efficiency

$$\text{Eco-Efficiency} = \frac{\text{Adjusted EBITDA* (Baht million)}}{\text{Carbon Dioxide Equivalent Quantity (tons)}}$$

Eco-Efficiency (Baht million per ton of carbon dioxide equivalent)

2006	2007	2008	2009	2010
0.008	0.007	0.017	0.012	0.007

* Data based on Separate Financial Statement
- not including profit (loss) from oil inventory



Social



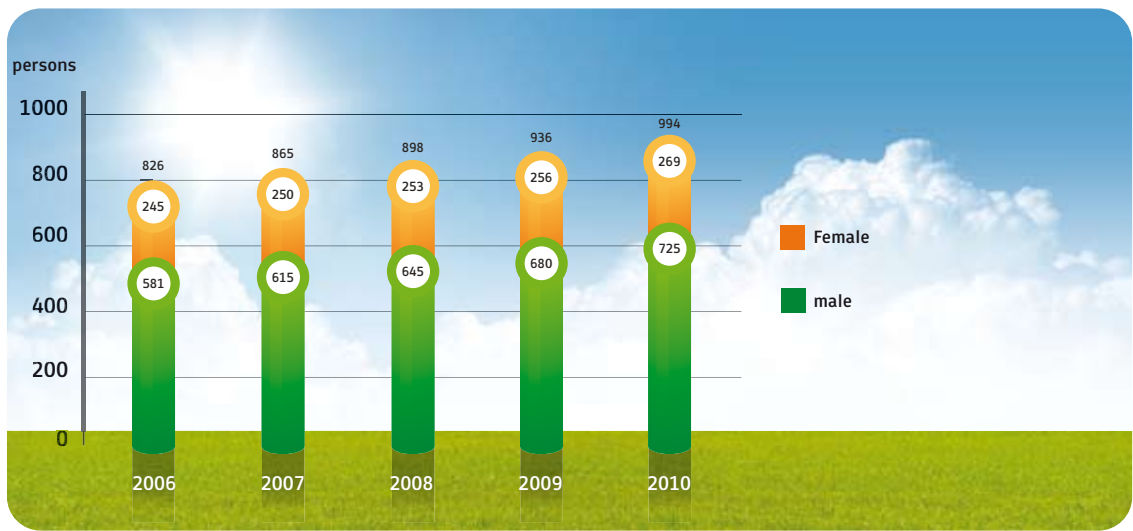
Labor practices and human rights

Employment

The Company has 994 employees, all of whom are Thai nationals (as of December 2010) with an average age of 35 and average years with the Company of nine. There is a diversity of age, gender, educational background and work

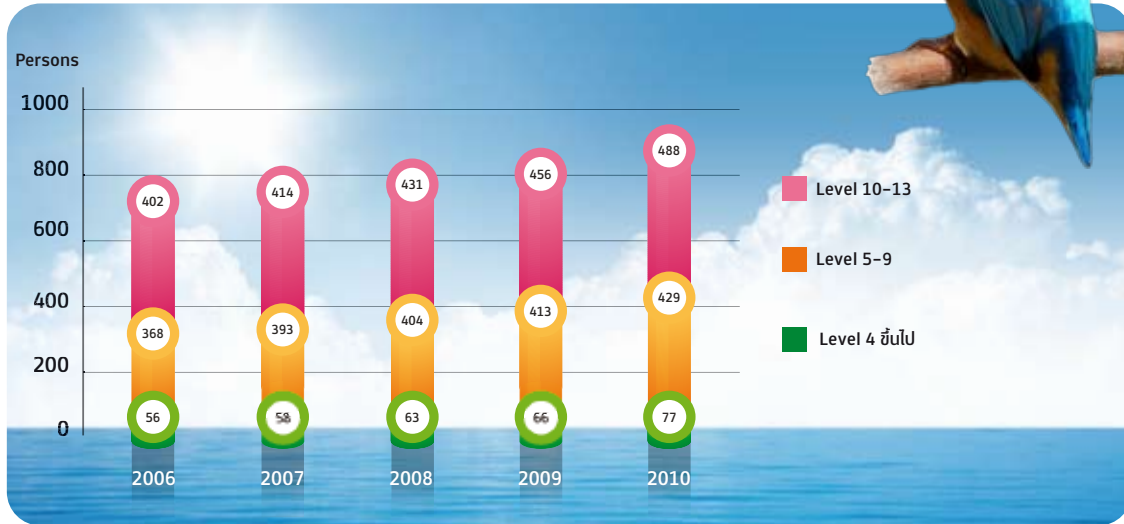
specifications, as well as the equality of gender, race, religion and culture. As the Company’s energy business operates 24 hours, the number of male employees exceeds that of female ones, as in Figure

Employees by Gender





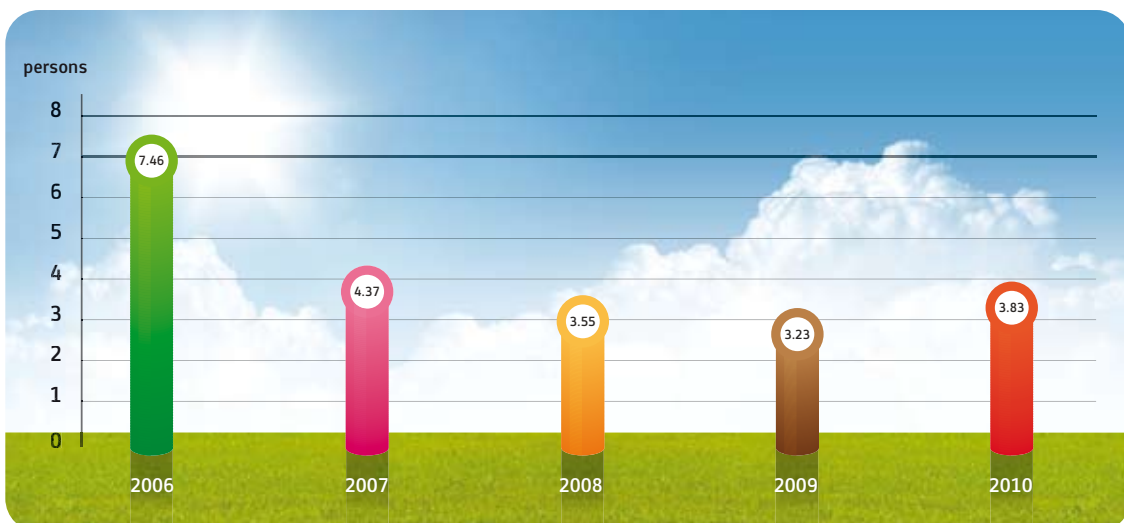
Employees by Level



In 2010, in order to meet the requirements posed by the Product Quality Improvement (PQI) project and increase efficiency in the operation of various units, the Company recruited more employees based on recruitment standards of written tests, interviews and physical examinations. Therefore, the number of employees exceeded that of last year. The Company groups the employees into levels, from operating to

division-manager levels (levels 5-13) and from middle to senior executive levels (levels 4 upward). Due to the continuous improvement of welfare and compensation, the employee turnover rate plummeted last year from that of 2006 but slightly increased compared to the previous year.

Turnover



Not : not including retired and unqualified probationary employee

Human rights

The Company respects human rights and abides by labor laws. Its employees and contract employees must be at least 20 years old. It has no policy of hiring child labor or practicing forced labor or gender discrimination. As for contract employees, it requires that contractors treat their workers as required by labor laws, social security, compensation laws and others related to labor protection. Otherwise, contractors will be regarded as violating their contracts, for which the Company can revoke their contracts without prior notice.

The Company has set up a labor union under the law. About 20% of its employees are union members. The union works closely with the Company to improve employees' welfare, with regular consultations with senior executives. Moreover, the Company provides another main communication channel between the employees and the Company through an employee committee, consisting of members appointed by the labor union and those elected by employees. The committee works with senior executives to ensure employees' proper welfare and incentives. To date, such collaboration has gone smoothly, with problems, issues, and recommendations receiving due attention and the employees being informed, resulting in employees' great satisfaction. In case of any change in the Company, the President informs employees through quarterly meetings.

The Company's compensation management is administered with fairness, suitability to the employees' responsibilities and competence. The Company has also adjusted its compensation

to compete with peer companies and attract competent people to work with it and stimulate current employees to improve their performances. The Company's performance appraisal system has clear criteria according to KPIs so that both superiors and subordinates may share understanding, leading to both job and employee improvement.

In line with the changing social, economic and business circumstances, the Company has provided more extensive welfare for employees and their families than that required by the law. It has initiated an Employee Joint Investment Program (EJIP) to compensate for the employees' commitment to their work and also to stimulate other employees to dedicate themselves to efficient work.

Besides the normal welfare, during the spread of epidemics such as the 2009 flu, the Company provided vaccination to all employees. It also provided hand-gel in buildings, distributed masks and campaigned for the prevention. Those diagnosed with potential 2009 flu infection could be excused from work with pay.

The Company promotes an employee club to encourage those with similar interests to form various clubs to promote their sense of sharing or learning such as through exercise, relaxation and public service. Club activities include various sports, bird watching, Thai sea conservation, community development, photography, music and volunteering community work. These activities allow employees to independently initiate





activities which benefit themselves and, at the same time, are in line with the Company's culture.



Moreover, in view of food shortages and malnutrition facing children, especially those in the community surrounding the refinery, the Company promotes a lunch project for needy children. The project arises from the awareness to contribute to society. To this end, the employees donate monthly contributions deducted from their salaries. Some regularly donate for special occasions to fill funding gaps since 1988. Today, there are 16 schools and one foundation under the project.

Human resource development

The Company is firmly committed to promoting career growth for its employees. It sets up a development system through the analysis of its goals that is translated into action plans and focuses on potential employees who are competitive at the international level and valuable society members. Its culture is based on the concept of “being virtuous, knowledgeable and



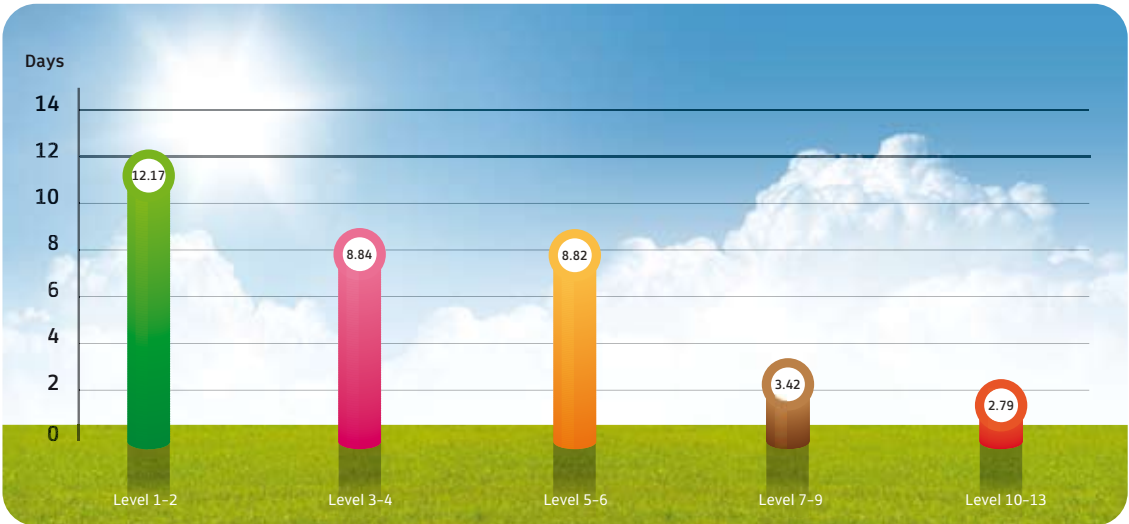
contributive to the society”, leading to a company of excellence. In addition, the Company regards it as everyone's responsibility to develop and promote knowledge sharing among its personnel.

The Company applies competency management to assess the potential of its employees. Competency gaps are jointly assessed by superiors and subordinates. Individual development plans are consistently defined, with various development methods such as training, on-the-job training, self learning through e-learning, cross functional or functional projects, QCC, KAIZEN and especially the Community of Practices (CoPs)—a venue for the sharing of knowledge among those in similar professions or with similar interests. It is part of knowledge management, leading to lifelong learning.

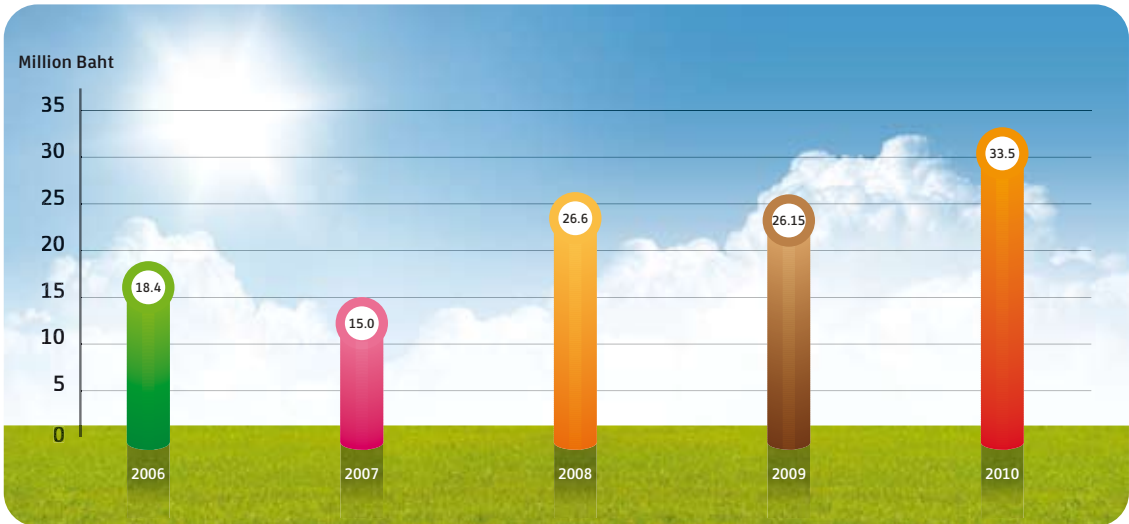
Moreover, the Company has developed training curricula to meet its short-term and long-term goals and directions. The curricula have been continuously improved to allow employees to close competency gaps and upgrade themselves with specialized knowledge, skills and experience, including technical expertise, management skills and knowledge to meet future business requirements. This year the average training time was 10.40 days.



Training Days per Person by Level



Training Expenses per Person



The training curricula include seven topics, namely executive development, business development, successor & talent, company policy, competency development, e-Learning, and special technical request. Specific curricula include Executive Development Program, Public Management and Public Law,

Seven Habits, Project Management, The Front Line Manager, Work Safety in Closed Space, CSR Academy, ISO 26000CSR standard, Risk Management and the Employees' Orientation Session.



Skill development and lifelong learning

The Company has set an objective of being a learning organization, defining the direction by searching for and setting the structure and scope, managing, collecting and transferring knowledge, as well as promoting knowledge sharing among employees. The acquired knowledge is applied as Best Practices, resulting in innovation and benefit to the Company's operation and work. Creation of the KM Web allows employees to learn, whether basic knowledge for work, knowledge derived from experience, specialty knowledge, knowledge derived from training, news and information or the transfer of knowledge from those who are resigning or retiring.

Moreover, the Company has set up a the Company Excellent Trainer Project, under which the development of an employee is undertaken by another employee. The coaching project allows employee specializing in given fields to transfer tacit to explicit knowledge. This way, the knowledge remains in the company and employees can fill in for others. It is also an opportunity for employees to regularly exercise and review their own knowledge and experience.



Career development

Career development is a process which derives from a plan for manpower, capability and competence in line with the Company's strategies, directions and objectives. The process consists of the following:

- **Career Path**

The Company looks after and defines career-path criteria for all employees, grouping them into management and specialists. All employees have opportunities to progress in the lines and professions of their choice.

- **Talent Management**

Under the Talent Management Project, the Company selects, from the leadership & personality assessment, groups of employees with high capability, qualifications and behavior conducive to business success. Special development plans are individually developed for them to increase their competitiveness and employee engagement with the Company in order that they may become a valued force in the efficient and sustainable operation of the Company's business.

- **Succession Plan**

To ensure smooth business transition, the Company has set up and continuously updated its succession plans for key positions. Management and Personnel jointly define key work specifications in the middle and senior executive groups which are the core groups in propelling the Company toward success, using Leadership & Personality Trait Modeling for Successor.



Employee Engagement

To make its workplace a peaceful one filled with contented people that forge great collaboration, Bangchak has consistently promoted rapport among employees as well as between employees and the Company. Its assorted activities have one common goal: to cultivate virtues and keen awareness of fellow employees, the organization and society at large.

In 2010, the Company elevated such relations into employee engagement. Based on universally accepted thinking, interviews with executives and the rank and file in small groups randomly chosen from the workforce and members of the labor union and the employee committee, the Company defined factors promoting employee engagement of the following aspects:

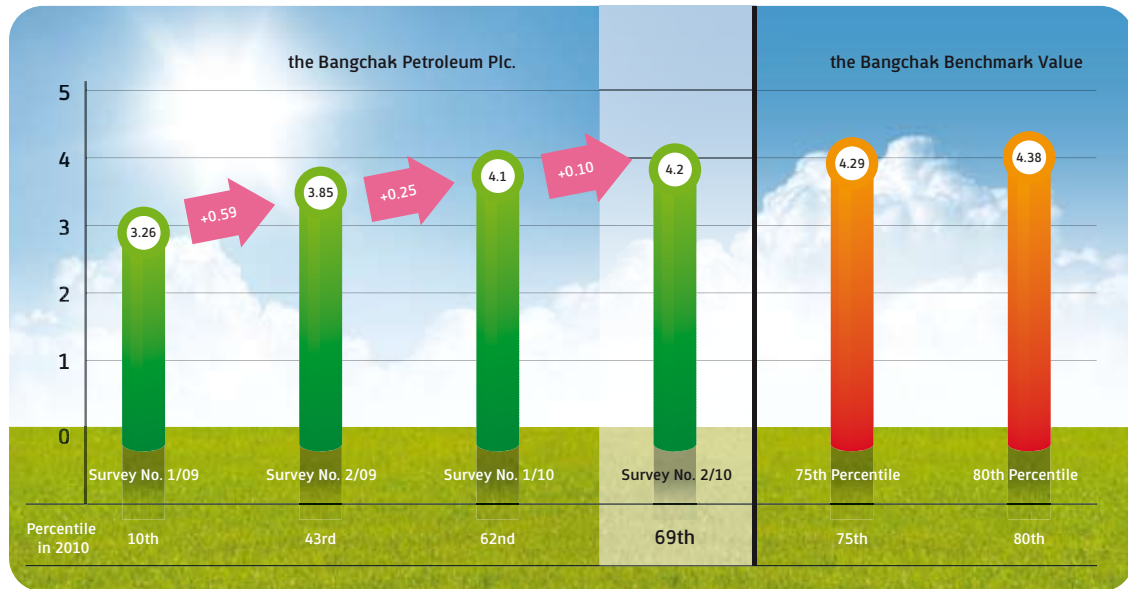


Twice a year, the Company conducted employee engagement surveys to learn employees' perspectives for career growth, the Company's prospects of security and sustainability of growth, key factors favoring workplace atmosphere and surroundings (both strong points and shortcomings) and benchmarking with other companies around the world). Based on its findings, all units are asked to come up with plans for their own relations improvement to foster rapport, relations and attitudes among them.





Employee Engagement



Based on employee engagement survey outcomes, the Company has developed the following activities:

Training Roadmap

This informs employees of their own capabilities so as to continually develop them over the long term in line with the direction and vision of the Company.

Executive Development on Staff Management

All executives—from section heads to the President—are to be developed to manage people so that they may appreciate different needs among people and nurture surroundings that favor employee engagement, such as Engaging Today's Professionals and Frontline Management Development Program courses.

Employee Welfare Improvement

To ease employees' healthcare burdens, the Company raised medical care and dental care allowances to include employees' family members by raising the limit on dental care charges for employees and their family members, extending medical care charges to family members; the Company also expanded the list of hospitals under its welfare program for employees' greater convenience.

In addition, the Company retained these core employee relations activities:

Employees' Birthdays Employees with birthdays of the same given month together conducted Buddhist ceremonies, dined and undertake public services together at different locations, including visits communities around the refinery, cleaning community spots, painting bridges and planting trees.

Sightseeing Excursions tend to strengthen employee relations. In 2010, the Company took them to a seaside seminar in Prachuap Khiri Khan, where employees together built elephants' salt licks to bring a natural balance to wildlife.



Songkran Well-wishing So that employees may preserve fine Thai customs during the traditional Thai New Year, the Company staged a palm-bathing ceremony to seek blessings from the Chairman of the Board and Company executives.

Bangchak Family Day Executives, employees and their family members socialized and joined fun and relations activities.



Company Founding Day On Bangchak's founding day, executives and employees offered alms to 59 monks together to commemorate this auspicious occasion.



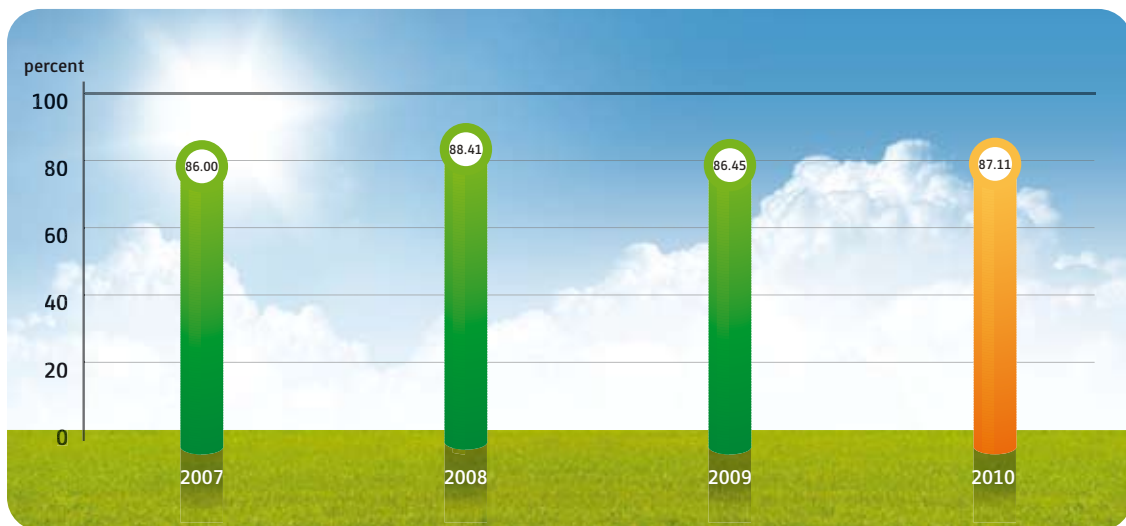
Bangchak Plc Labor Union

All BCP employees are treated fairly and enjoy equal rights under Company regulations, whether they belong to the labor union or not. Set up under the law with 20% of the workforce as its members, Bangchak Plc Labor Union cooperates with the Company in looking after employees' well-being through regular consultations with top management while getting feedback from employees about their needs to develop the Company's labor aspects.

The Company also instituted an Employee Committee, consisting of employee representatives forming a 13-man committee appointed by the labor union and coming from employee elections. The committee is engaged in consultations with representatives from top management on matters of welfare and benefits to ensure their suitability. To date, the consultation sessions went well, with all concerns or queries properly addressed, thus resulting in high employee satisfaction.



Overall Employee Satisfaction



Employees' clubs

The Company encourages the establishment of employees' clubs to enable those with similar interests to form clubs focusing on their interests to support employees' learning to responsibly engage in work processes together through different club activities for physical exercise, recreation and public services, including various sports clubs, Ornithologist (bird study) Club, Bangchak Thai Marine Conservation Club, Bangchak Loves Community Club, Photography Club, Music Club, and Volunteer & Social Development Club. Employees can freely initiate activities for their own benefit in line with the Company culture.

Lunch project for needy children

This project arose from employees' conscience and culture of "contributive to society". In view of food shortages and malnutrition among society's children (particularly those in the refinery neighborhood), employees regularly donate their spare money from their monthly pays. Others contribute on special occasions to help schools that still need help. Since 1988 the project has consistently sponsored lunches at schools, with 16 schools and one foundation under its support.

Safety and Health

Bangchak Petroleum Public Company Limited earnestly values safety, health, environmental and energy management to ensure that its operations do not affect the safety, occupational health and environment of employees, its properties, as well as those of its contractors, communities and the public and to ensure cost-effective use of energy. The Board and the management therefore defined a policy and framework for safety, occupational health, environmental and energy management as follows.



Health, Safety, environment, and energy (SHEE) policy The Bangchak Petroleum Public Company Limited

The Bangchak Petroleum Plc (BCP), a Thai company, with an integrated energy business, ranging from supply sourcing, oil refining, to marketing under a business culture that requires it to 'working towards sustainable business development in harmony with the environment and society'.

Therefore, it considers its SHEE management system, covering all activities, products, and services, the key to business success, and it is the direct responsibility of all executives and employees, as well as that of contractors working on behalf the Company, to:

- Work safely, creating no undue impact on themselves, related parties, the community, and the environment
- Observe all occupational safety, health, environmental, and energy-related laws
- Prevent oil pollution, spills, and losses
- Prevent all accidents and illnesses
- Use resources, that is, energy, water, and chemicals to their best value and according to goals.

The Company executives are to provide adequate resources which operationally suitable to achieve goals and targets, and train all employee adequately to ably perform their duties and fulfill their responsibilities while encouraging staff participation in sharing views and revising policies and management systems.



(Signed) Anusorn Sangnimnuan
(Mr. Anusorn Sangnimnuan)
President



In addition to the safety, health, environmental and energy policy to ensure safe operation with no effect on the environment and communities, the Company has instituted a management structure for safety, health, environmental and energy management comprising the management and all units covering policy-making, facility design, safe work practices and self protection, and promotion of efficiency and effectiveness of the safety, health, environmental and energy management, including crisis management such as emergency plans for fires, flash floods, or earthquakes.



Safety, Health, Environment and Energy Management Team (SHEEM)

level management from all business lines, having the responsibility to define management system policies and guidelines, and regularly reviews the management processes while supplying resources for continual process development as well as setting up task forces for efficient and effective safety, health, environmental and energy management.

Safety, Health and Environment Committee (SHEC)

Having 50% of its membership from employee representatives from the first year of law enforcement on safety committees, it is responsible for compliance with the laws and works with operational-level safety subcommittees for greater work safety.

Safe Operation Team (SOT)

reviews operation procedural designs and past performances screened by the JSA&QCA, HAZOP and EQT teams to conform to safety standards while reviewing incident reports and define protection approaches. Apart from the relevant managers, SOT members consist of managers of the operations, technical and engineering lines of the refinery.

Safety, Health, Environment and Energy Promotion Team (SHEEP)

through open participation, promotes awareness of safety, health, environment and energy in employees' performance.

Job Safety Analysis & Quality Control Analysis Team (JSA & QCA)

reviews work processes for safety and detailed quality control.

Hazard Operability Team (HAZOP)

through the HAZOP technique, revises designs and modifications to refinery pipelines, instruments and equipment to meet the Company's technical principles and engineering standards for safe applications.

EQT Team

executes designs and controls quality to meet design standards.

The Company continues to maintain the 2007 version of BS OHSAS/TIS 18001 standard for occupational health and safety management systems for its refinery, Bangchak Depot and Bang Pa-in Depot, in addition to its certification under ISO 14001, ISO 17025 (for laboratory quality) and ISO 9000 (for lube products) as well as improvement of the following systems:

1. Engineering and Maintenance

- Increase instrument reliability by using Safety Integrity Level (SIL).
- Enhance inspection efficiency through Risk-Based Inspection (RBI).
- Implement Reliability-Centered Maintenance (RCM).
- Revise tank repair standards to exceed those required internationally.
- Develop capability and reliability of the refinery firefighting system.
- Enhance security system by using access control and CCTV.

2. Work Procedure Improvement

- Apply e-safety management system for access permission and use RFID (Radio Frequency Identification) in combination with a finger scan system to increase access control efficiency.
- Check up on employees based on an analysis of risk factors from inside and outside their workplaces and inspect the conditions of work areas to define appropriate preventive and remedial measures.





3. Raising of awareness of society, safety, occupational health, environment and energy

- Organize safety training, for example, safety in confined space and first aid.
 - Provide safety training for contract employees working on the refinery's premises such as that relating to the Company's policy, and safety, occupational health and environmental rules.
 - Run Behavior-Based Safety training.
 - Organize basic firefighting training for employees in general and advanced firefighting training for employees in the operation line.
 - Use toolbox meetings as another communication channel for shift operations.
 - Educate all employees through in-house Social & SHEE Channel radio programs:
- 5 S The Big Cleaning Day
 - Good Health Daily Employees can exercise to music rhythms from 15:00 to 15:05 hours every day.
 - Learn and Share Project The Company distributes news and information on safety to all employees through e-mails and internal bulletin boards. A SHEE talk is conducted before daily operation meetings.
 - Safe Community Project The Company's Environment and Community Relations Section gives basic firefighting training to the surrounding communities, schools and government units.
 - Knowledge and experience sharing at the 24th National Safety Week Exhibition.

Sick Leave Rate



The above figure shows very low employees' sick leave rates, i.e. the average rates for in-patients are 0.9 days/person and for out-patients, 1.3 days/person.

Goals and Indicators

This year, to make employees aware and become more active in safeguarding their own safety as well as their colleagues', the Company set (besides accident statistics) the following defensive safety indicators:

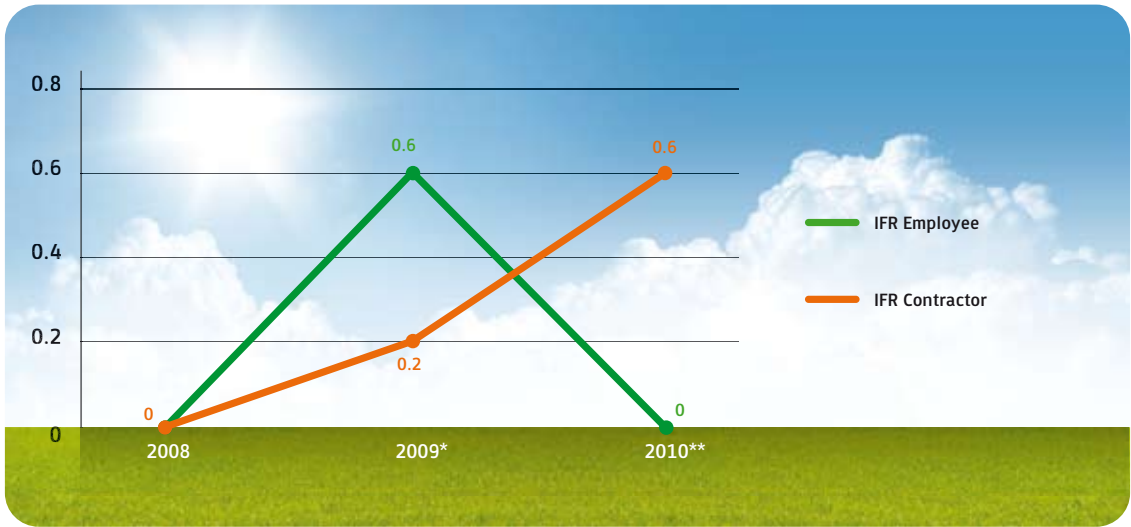
1. Serious accidents causing a lost time injury or Company's property damages worth more than Baht 1,000,000.

No. of serious accidents



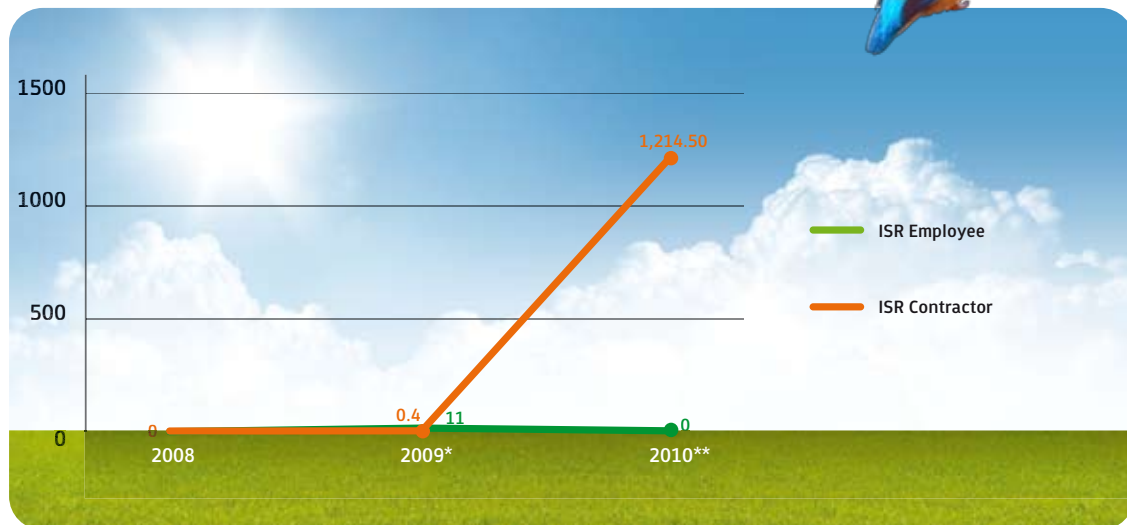
2. Injury Frequency Rate (IFR) and Injury Severity Rate (ISR) for employees and contractors started in 2008 to record the numbers of those who suffered lost-time injuries and the numbers of lost working days compared with total work hours in a year. This is another way to raise awareness and cooperation among them to prevent occupational injuries.

Injury Frequency Rate (IFR)





Injury Frequency Rate (ISR)

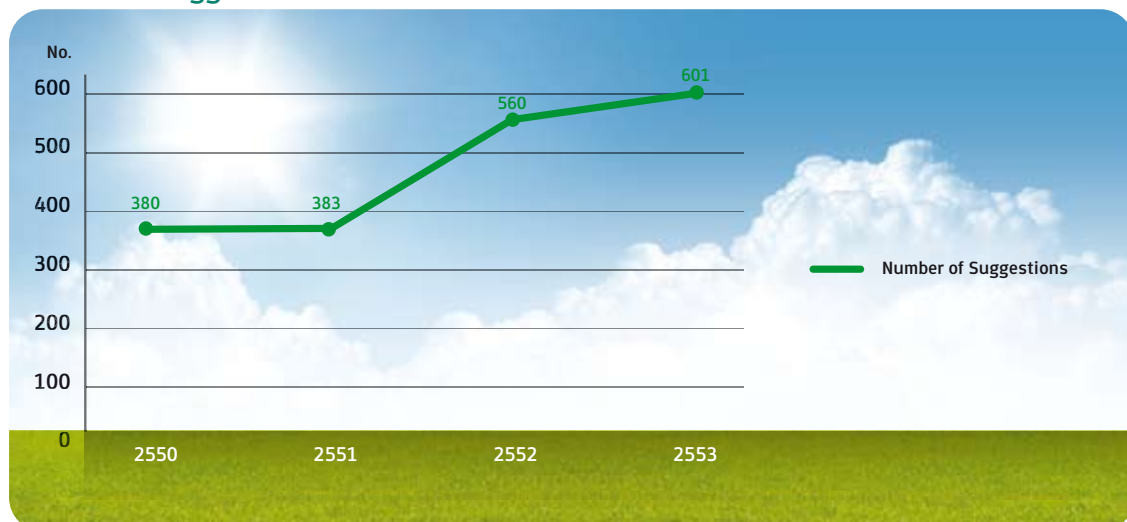


* One employee's lost-time injury and one contractor's lost-time injury

** Three contractors' lost-time injuries (one of them later died)

3. Number of Suggestions on Safety Improvement from Employees

Number of Suggestions

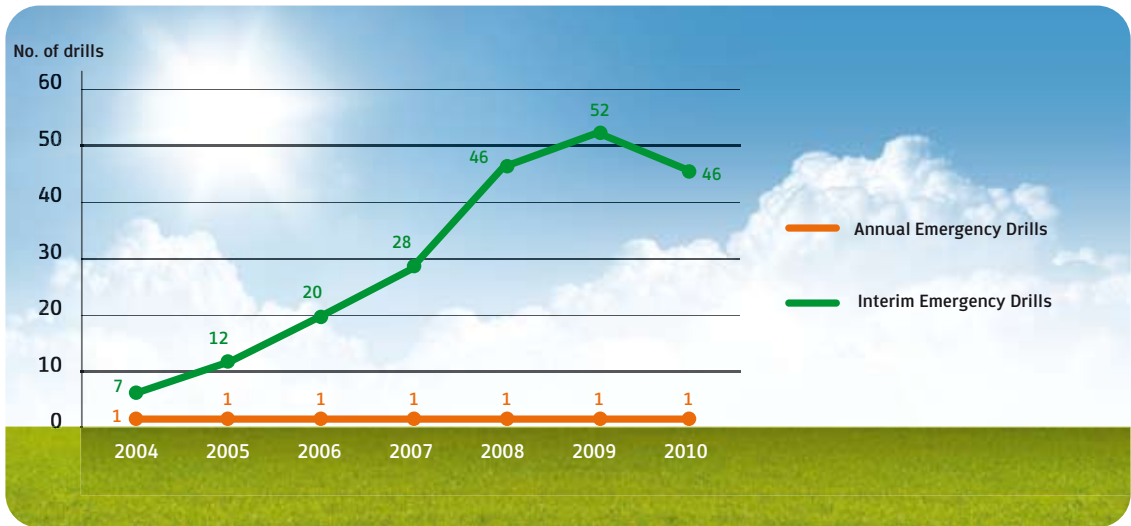


In 2010, more safety improvement suggestions were submitted through a suggestion card system covering work area safety improvement and risky or unsafe behavior. Moreover, there were 45 suggestions submitted through the Safety, Health and Environment Committee on workplace environment, for example, an improvement on uniform design and fabric properties, design of a new firefighting building, and six suggestions from QCC (Quality Control Circle) such as the provision of equipment to lift and transport pipes safely.

4. Emergency Drills

The Company emphasizes the preparedness and effective response to emergencies and therefore defines guidelines and procedures to terminate incidents, mitigate impacts, and coordinate with external parties under the Emergency Plan and Crisis Management Plan for the Refinery Operation Units and Bangkok Oil Distribution Center to define their interim and annual emergency drills.

Performance Indicators (Emergency Drills)



Environmental and Safety Training Center

Other than employee training, the Company has established an environmental and safety training center at Bang Pa-in Oil Distribution Center in Ayutthaya province to continually provide integrated safety training-basic and advanced firefighting, fire extinguishing techniques, emergency incident commands, and annual fire escape drills-to employees, government agencies, communities and the public free of charge. Last year, 10,589 delegates learned and practiced in 95 safety training organized by the Company.





Community Participation and Social Development

The Company's activities for the community and society in the past year embraced sustainable development in line with His Majesty the King's Sufficiency Economy Philosophy. The Company's vision of "Greenery Excellence" has led to honest business conduct that prioritizes benefit to the community and society, as well as allowing for their maximum participation. All staff members follow this guidance in their work and combine knowledge with values to do their work, which has led to excellent corporate social responsibility and responsibility to the environment.



The Company's projects for social and community development combine theoretical knowledge and the local community's participation. This leads to integrated analysis and the formation of a project plan which is directly in line with the target groups' needs. In 2010 there were at least 32,300 people, students and other stakeholders who benefited from the Company's social activities, which can be divided into four main groups:

- 1) **The community** Back in the old days, the Company was located far from communities, surrounded by paddy fields, with only a few landholders living next to each other next to Chao Phraya River. The main means of travel was an old rail line. After the city expanded, leading to migration of labor, the surrounding fields were built on and became residential buildings rented out on a yearly basis. Currently the population around the refinery are registered with Phra Khanong District Office and are made up of six communities (1,028 households : 4,710 people) living in slum-like conditions with many migrant workers living there too.
- 2) **Families** that live in detached houses and townhouses in Phra Khanong and Bang Na areas.
- 3) **Schools** There are 11 schools at the secondary and high-school levels under the Bangkok Metropolitan Authority and the Department of General Education in the area.
- 4) **Condominiums** Condominium dwellers are a new group that has appeared since the BTS line was extended. It is expected that in 2012, 17 new condominium projects, or around 8,300 condominium units, will be completed. The Company has prepared a community relations program to cope with this new target group. At year-end 2010, a survey was conducted to determine the behavior and lifestyles of this new group to create appropriate activities to strengthen future relations. The survey also determined the group's expectations of the Company's conduct and business procedures.

As a member of Phra Khanong District, the Company has taken care not to harm the community's environment. The Company has also continuously carried out the following projects to develop the community and society:

• Community Participation

The community's participation in the Company's community development and community relations projects in the past has been a back-and-forth process of consultation and cooperation. The Company gathers information from the community, listens directly to its opinions and incorporates them, treating the benefit to society as an important factor in the Company's decision-making.

Therefore, many new projects started at the suggestion of the target groups, for instance, the Community Health Promotion project and The Volunteer English Teacher project for Wat Bang Nam Phueng Nok School. Other projects also developed and strengthened the original target groups, such as the Ban Dontri Thai Music Teacher Project and Bangchak Young Blood Dance Project.

• Education and Culture

The Company has continuously provided support for youth education and many of the Company's projects develop their academics, environmental conscience and physical health. The Company is committed to developing future citizens who will be the driving force of Thailand's development.

• Employment and Income Creation

The Company has given opportunities for the local community to apply or take placement tests for suitable positions in the Company or its service stations. It has also encouraged its contractors to hire people from the local community. As well as this, the Company has promoted the local communities' economy by hiring them to cater for food, sweets and drinks at various company activities.

• Technology Development and Access

The Company has applied suitable technology to develop technological access in schools. It built a computer center for youth learning and has developed a better communication system between itself and the local community, for instance installing an LCD screen to display environmental parameters to raise awareness and encourage the community to monitor their own environment. A loudspeaker has also been installed to allow the Company to directly communicate with the community in an emergency.

• Social Capital Development

The Company encouraged and organized activities to develop social capital or increase the community's potential in matters that are also of interest to the organization, for example, organizing training on safety, preparedness for emergencies and handling fires. The Company provides fire extinguishers every year for local communities and schools, as well as investing in other public utilities to increase the quality of life for the local communities.

Even with the diversity of its target groups, there are several overlapping key areas that demonstrate the Company's CSR to the local community and society. In 2010 the Company continued projects that were still useful and in line with target groups' needs and initiated 30 suitable new ones. Here are the details:





1. Education

1.1 Thailand Go Green alternative-energy youth contest, Year 4

“Thailand Go Green” was part of a continued project to discover the best of the best alternative-energy youths to win a trophy bestowed by HRH Princess Maha Chakri Sirindhorn along with over Baht 2 million in scholarships and a study trip to the People’s Republic of China. Teachers and secondary-school students from across the country were invited to put their brains together and conceptualize a clean energy innovation program. The intention was for students to recognize ways to build on expertise and promote the renewable energy development, for example, bio-energy, solar energy, wind energy in order to lower greenhouse gas emission-a source of global warming-and promote youth networks in campaigning for the application of assorted alternative energy forms. Over the past three years, no fewer than 1.8 million students all over Thailand had learned about alternative energy; this number grew to 2.5 million in over 2,500 schools by the year-end.



1.2 My School Project (Pee Bangchak Son Nong)

The Company’s staff volunteers teach homework and provide useful activities to school children around the refinery. The contents focus on mathematics, English and Thai language, social studies, art and moral values. The staff takes one to 1.5 hours before the end of Monday to Thursday to teach local children from four local communities. There are about 20 students in each class and this project has been running for eight years.



1.3 Non-formal Education for Communities Project

Realizing the importance of education as a tool to enhance the quality of life, the Company has worked with the Department of Non-Formal Education Offices of Phra Khanong and the Bang Na District to bring volunteers to teach high-school English and mathematics to youths in non-formal education at Wat Bang Na Nok learning center, Sahapanich Center and NIDA Business Administration School Center. This promotes the volunteer spirit by the Company staff and encourages them to use their knowledge for the benefit of others.

1.4 English for Kids at Bang Nam Phueng Nok School Project

The Company has joined the Continuing Education Center of Chulalongkorn University to encourage students in Wat Bang Phueng Nok School to learn English in fun ways with skilled native speakers. Here, youths correct pronunciations with songs, games and fun equipment appropriate for their age. Furthermore, they can apply this knowledge to generate extra income since their community is a tourist attraction.





1.5 Open up the World of Knowledge Project

The project gives an opportunity to students from the end of primary school to the end of high-school level to attend an informative talk sessions from engineers experienced in refinery processes, alternative energy, the environment, transportation and safety. Between January and December, the Company welcomed 1,500 students from various schools.



1.6 Project Citizen

The Company values “Public Consciousness” and has worked with King Prajadhipok’s Institute and schools around the refinery to put on a program for children between elementary and secondary school ages from 16 classrooms from nine Bangchak high schools. The programs increased public awareness and social responsibility, whether it is in schools, communities or society. The children must go through six important processes and are presented with problems in the community for them to solve. Example youth policies include how to strengthen their community; how to prevent youths from skipping classes; how to make households more green and improve the quality of the community’s water to solve the problem of dirty canals in Bang Na



1.7 Teaching Capability Development for Science, Math and English Teachers Project

For continuous and sustained improvement in youth education, the Company has joined hands with The Institute for the Promotion of Teaching Science and Technology, the National Science and Technology Development Agency and the Continuing Education Center of Chulalongkorn University in organizing activities to develop the teaching capabilities and techniques of science, math and English teachers from local schools around the refinery. This encourages new academic activities and gives opportunities for teachers to learn about techniques and use easy-to-find objects as a medium for teaching, as well as analytical and practical skills. In turn, this allows them to teach their students new skills and foster a positive attitude toward analysis, data collection, hypothesis testing and problem-solving. These are useful skills for the daily routines of youths today and in the future.



1.8 Bangchak Youth Scholarship Project



The Company has been committed to supporting and giving new academic opportunities to Thai youths, especially those with good grades and good behavior but coming from poor families. The Company has provided academic scholarships for the sixth consecutive year to selected students in elementary, secondary and high school levels out of the 19 schools in the Company’s Lunch Program and from the communities around the refinery (decided by the communities’ committees). About 520 scholarships totaling Baht 1,899,000 have been awarded.



1.9 Bangchak Young Blood Dance Project

The Company supports creative expression of young people's interests. The Bangchak Young Blood Dance took birth to encourage physical, emotional, social and spiritual development through trained dance instructors. Over 60 students from schools around the Company's refinery acquired new dance skills and showed off their talents in the Bangchak Young Blood Dance: Step 1 Competition.



1.10 Ban Dontri Thai Music Teacher Project

The Company's staff, together with Thai musical instruments teachers, taught music to interested youths to lay a foundation for the love of Thai musical instruments and to encourage this traditional art to be carried forward by younger generations. The classes were held every Tuesday and Thursday between 16:00-18:00 hours.

1.11 Mobile School Project

This was organized to increase learning opportunities, experiences and imagination outside the classroom for children at Prathom 5 grade level in the refinery's nearby schools. In 2010, over 700 teachers and students took a field trip to broaden their experience at Siam Ocean World.

2. Safety

Bangchak Cares for Community/School Safety

The Company promotes community preparedness and safety, and has encouraged the communities to work together to make sure that their community's fire safety equipment is in working order all the time. It has also provided fire extinguishers and repaired old equipment to working order, including giving away fire nozzles, fire hoses, joints and fire extinguishers as well as installing fire hose cabinets in the communities. The Company also put on training sessions on

basic firefighting for youths in the communities at the Company's Environmental and Safety Training Center in Bang Pa-in, Ayutthaya.



In addition, the Company regularly organizes training and fire drills for schools around the refinery and has begun fire safety activities with the condominium groups at City Home Condominium, Sukhumvit Soi 101/1. The activities are made up of theoretical knowledge on safety, patient transfer, use of fire-extinguishing equipment and evacuation drills run by the Company safety personnel and approved by the Ministry of Labour.



3. Sports

3.1 The Sixth Bangchak Youth Futsal Tournament Project

The Company organizes Bangchak Youth Futsal Tournaments, which are in the sixth year. The event encourages youths to have a platform for developing their sporting skills; increases physical strength, discipline and sportsmanship; deters youths from using drugs; and allows an exchange of experiences when they go to compete in futsal with other schools. The Company also organized a team cheering competition to allow youths to creatively express themselves. This event was attended by 32 schools from various districts throughout Bangkok Metropolis.



4. Quality of Life

4.1 Waen Kaeo Project

The Company has cooperated with the Electricity Generating Authority of Thailand in providing the Waen Kaeo project unit to measure eyesight and fix eyeglasses for 600 residents of the local community, now running for the sixth consecutive year. This is part of the effort to improve the quality of life for those with poor vision.



3.2 Bangchak Youth Sports Camp

The Company, together with the Thai Navy's Department of Welfare, organized the Bangchak Youth Sports Camp to teach seven sports. This is to encourage youths around the refinery to spend their term breaks wisely, promoting better health and a deterrent from drugs as well as broadening non-classroom experience.



4.2 Lung Examination for Community Project

The Company strives to enhance and promote the well-being of the communities around its refinery and is fully aware of the importance of taking care of the health of the local community. The Company has joined forces with the Population and Community Development Association (PDA) in the "Lung Examination for Community" project, in which a mobile lung x-ray unit visits the community to encourage them to take care of their health and lungs.

3.3 Improvement of Futsal Pitches and Sports Ground, Bang Na Housing Authority

The Company has supported a project to improve the sports ground at Bang Na Housing Authority and has converted it into standard-size futsal pitches for exercise and competitions. It has also provided solar cells for the generation of electricity to light the ground as part of the effort to promote conservation of energy.





4.3 One Family Project, Year 17

The Company has encouraged neighbors to take care of their health by providing knowledge and understanding of physical and emotional well-being for the family. There is emphasis on hands-on learning, in which experts in the field and the Company's staff provide knowledge, such as Bangchak Yoga, Exercise for Left and Right brain, Dharma in the Garden and "Do It Yourself", which is made up of many smaller programs such as flower arranging, plastic bottle recycling, making clocks out of canvas frames and handmade books.



4.4 Bangchak Children's Day

Recognizing love and care for children, as well as children's significance as the future of the nation, BCP organized children's day events at both the refinery and the Bang Pa-in terminal, providing children with entertainment, knowledge, and assorted fun and game stations. An abundance of food and beverages abounded under the Green Kids Green Energy theme. Our neighbors, numbering 4,000, joined the Bangchak event, with about 1,500 joining the Bang Pa-in event.



5. The Environment

5.1 Sapling Planting, Phu Long Reforestation Project and Thot Pha Pa, Raksa Ton Nam (Monk Robe Offering, Keeping Water Source) Project

The Company values activities and work procedures that conserve nature and the environment. It cooperated with the Phu Long Reforestation Project of Sukhato Temple, Chaiyaphum province, in conserving the river source, conserve and reforest the area. In its sixth year, six schools from the refinery's communities and two local schools joined the program and produced 20,000 young saplings (covering roughly 50 rai). The aim was to teach children the importance of conserving forests. In addition, students joined the Company's staff to take the young saplings to Phu Long Forest and offered robes to monks to raise funds to monitor the Phu Long Forest area.





5.2 Bai Mai Family Saves Electricity through T5 Fluorescent Lamps Project

The Company has actively campaigned for the local communities and local schools to use T5 fluorescent lamps instead of normal neon lamps by installing a total of 8,600 T5 lamps in all households and schools in the refinery's surrounding area. This reduces energy consumption, reduces household costs and creates awareness of global warming.



5.3 Installation of LCD Signboards Showing Environmental Parameters to Community Project

The Company has observed a transparent business policy and initiated the installation of LCD signboards showing online environmental parameters around the refinery's stacks, effluent discharge and air quality in the community. This enables the residents to play an active part in monitoring the state of the environment in their communities 24 hours a day.



5.4 Mobile Families: Sapling Planting, Phu Long Reforestation, Chaiyaphum

The Company and its neighbors participated in the Mobile Families activity entitled "Sapling Planting, Phu Long Reforestation, Chaiyaphum" to conserve and restore life to the forest for wildlife and the nearby community. This time the project reforested 10 rai, adding to the Phu Long forest between July 9-11.

5.5 Mobile Families: Mangrove Reforestation at Khlong Khone, Samut Songkhram

Another mobile family activity between the Company and its neighbors was the Mangrove Reforestation at Klong Khone, Samut Songkhram, on December 18 to conserve and restore the mangrove area which was also a nursery for marine animals and a source of food for the community. In this activity the mobile families reforested one rai.



5.6 Purchase of Used Cooking Oil for Biodiesel Production Project

The Company is aware of the harm done to the health of consumers and the environment if used cooking oil is disposed of incorrectly. It has been campaigning to raise awareness of the problem with food vendors as well. The Company opened up a way for vendors to reduce their costs that doesn't involve reusing cooking oil by buying used cooking oil at Bangchak service stations. Used cooking oil is then turned into biodiesel, which also supports the Company's alternative-energy policy. The Company's staff with a volunteer spirit canvas fresh markets to give out information and buy used cooking oil on Saturdays and Sundays. This project is now in its fourth year.





6. Community Relations and Cultural Conservation

6.1 Mobile Communities Project

The Company organized the “Worship Buddha Statues, Visit Historic Treasures” under this project as a special activity for 80 elderly people living around the refinery. The participants gave alms, worshipped Buddhist relics and learned interesting history of important places in Ayutthaya province.

6.2 Bangchak Summer Camp Project

During the summer school break of every year, The Company has organized “Learning with Bangchak” for the fifth year for over 80 children who live close to the refinery. The children participate in fun activities that provide them with knowledge and useful skills such as arts and crafts, studying about the environment and global warming, cooking lessons, exploring the world of science and a field trip. They are taught by staff volunteers. The Company provides babysitters to take care of the children during the five days.



6.3 Community Calls Project

The Company values the local communities and Thai traditional values. During the Songkran period, the Company employees organize a ceremony to pour water on the palms of the elderly and receive their blessing. On Mother’s Day, The Company’s staff pay a visit to motherly figures in the communities and during other special days, they make community calls on community members.



6.4 School-break (KIDS) Project

The Company has a policy to promote and develop Thai youths to fulfill their potential so that they can be the future driving force behind Thailand’s development. It has renovated the Thammasala Child Development Center at Wat Thammongkhon, the largest child development center in Bangkok. Currently 440 small children are under the center’s care. The Company installed cooling fans in every room, leveled the ground in front of buildings to alleviate drainage problems and bought toys for the playground. In 2009 the Company had fitted the Child Development Center with bathroom ware, a kitchen, a library and repainted the buildings.



6.5 Khrop Khrua Bai Mai Bulletin and Rop Rua Bangchak Newsletter

The Company produces Khrop Khrua Bai Mai bulletins and Rop Rua Bangchak newsletters to pass along information about its business and activities to the local community. The community also shares information and opinions through the bulletins, which are published every two months.



6.6 Taking Kids to Movies

The Company supports non-academic learning for those around its refinery. It organized the “Taking Kids to Movies” activity for 200 parents and children from six neighboring communities. They attended a special screening of “Toy Story 3”, a movie about imagination and teamwork, shown in cutting-edge 3D technology.

6.7 Joint Volunteering between Bangchak and Its Neighbors

After carrying out the One Family Project through Khrop Khrua Bai Mai bulletins and organizing activities for the physical and mental well-being of the Company’s neighbors for many successive years, the Company commanded a network of volunteers. Members of this group have become teachers and shared knowledge with other members. This year, members of the One Family Project and members of The Company’s staff expanded their network to others to help society and provide support for organizations that take care of the less privileged in society. Volunteers read books which are recorded onto CDs for blind people at the National Library for the Blind and donated CDs to the Library for recording purposes as well. Another activity was knitting and presenting crochet caps for monks to combat the cold. They produced 1,000 caps which were presented to monks at the Priest Hospital, temples in northern provinces, Wat Pa Sukhato temple and Wat Pa Mahawan temple for forwarding to other temples in northeastern Thailand. This was an activity which brought joy to each giver and receiver.



7. Public Services

7.1 Installation of Lamp Posts in the Communities

The Company installed four 125-metre lamp posts for the walkways leading into nearby communities around the refinery to increase night-time safety for the local communities.

7.2 Renovation of the Thammasala Child Development Center at Wat Thammongkhon (a continued project)

The Company has a policy to promote and develop Thai youths to fulfill their potential so that they can be the future driving force behind Thailand’s development. It has renovated the Thammasala Child Development Center at Wat Thammongkhon, the largest child development center in Bangkok. Currently 440 small children are under the center’s care. The Company installed cooling fans in every room, leveled the ground in front of buildings to alleviate drainage problems and bought toys for the playground. In 2009 the Company had fitted the Child Development Center with bathroom ware, a kitchen, a library and repainted the buildings.



7.3 Upgrading of Computer Center, Amnuai Kanok Siri Anusorn School

Knowing computer programs to use in daily life and being able to look up information from the cyber world are very necessary for the development and education of today’s youths. The Company supplemented the potential of surrounding schools by supplying them with computer equipment, leads and cables. The Company also improved the classrooms in Amnuai Kanok Siri Anusorn school in Bang Na District.





8. Economy

To diversify income into community and promote community products for community's self dependence, the Company introduced community products at its service stations. The community products with good quality were selected and circulated to be promotional products through service stations, including luk yee preserved from 3 southern provinces (Pattanee, Yala and Naratiwas). In 2010, The Company introduced jackfruit crispy from Saraburi province. Moreover, the Company helps reduce global warming by giving 3 kinds of perennial plant seed, Songbadal, Ratchapruk, and Keelekban (Planting 780,000 Seeds of Good Project) in honor of Her Majesty the Queen on the 78th birthday.

The Company continued to provide income to the communities around its refinery by ordering food, sweets and drinks for its assorted activities and hires local people to deliver Khrop Khrua Bai Mai bulletins to the refinery's neighboring residents. In addition, the Company gave special hiring considerations to



those interested, qualified community members at both the company and Bangchak service stations.

To continuously improve its social development work, in 2010 the Company carried out a study on Social Assessment Impact and Friendship Assessment Impact with a research team from the Department of Forestry, Kasetsart University. The research





methods used included participatory community appraisal, questionnaires, interviews and focus groups to get quantitative and qualitative data about the community. It was found that 97.81% accepted the Company's social and community relations work and acknowledged that it made their community better and made their quality of life better¹. Most were very pleased with the Company's social and community relations activities.

In terms of relationship assessment and trust in the Company, 59.85% trusted The Company and likened The Company to an acquaintance who had always worked with the community. About 6.08% accepted and considered the Company a member of the family who was as close and familiar as a relative and were most satisfied with the Company community relations staff, especially their personality and honesty.

As well as these proactive measures, the Company has employed a defensive strategy in case of emergencies at the

refinery. The Company holds emergency drills and seeks to continuously improve work processes. It listens to the opinions of the community to integrate them with work plans and tries to respond to the needs of the local community as much as possible. Last year, the Company improved on the following defensive strategies:

Communication the Company improved the way information is given to the community and changed from telephoning the community leader to using a radio announcement directly sent from the Control Room of the refinery by the shift superintendent. Otherwise, a communications officer will be sent to the nearby communities to explain what has happened and guide them on what they should do during that time. Afterward, a team will go into the local communities to explain the situation that has happened or to put up posters to give information. The communities will be informed of measures to resolve the current situation and prevent it from happening in the future.

¹DR. Kitichai Ratana, "Research Investigation to Assess Bangchak Petroleum Plc.'s Community Relations Performance, 2009-2010"





Product and Service Development

The Company remains committed to developing environmentally friendly products and services while paying attention to the quality of retail stations, lubricant products, retail station promotional goods, as well as enhancing other services for more customer satisfaction under the concept of “sustainable business development in harmony with the environment.”



• Leader in Alternative Energy

Being the leader in production and sale of Gasohol 95 and Gasohol 91, the equivalents of gasoline fuels, the Company now offers E-20, which is compatible with gasoline-engine cars on sale since 2008, in more than 300 service stations to allow consumers more choices of alternative fuels, while reiterating its leadership in alternative energy with a proactive policy to develop Gasohol E85 for new cars designed to be more environmentally friendly. As a result, the Company had the highest market share in both Gasohol E20 and E85 markets in 2010.



Moreover, the Company produced and sold Euro IV fuels for diesel engines, “Super PowerD Euro IV” and “Super PowerD B5 Euro IV,” four years before the government’s enforcement in 2012. The fuels have one-seventh sulfur content of their normal counterparts and cause less combustion pollution such as carbon monoxide and hydrocarbons. This demonstrates the

Company’s leadership in alternative energy, which is a way to help reduce pollution and global warming.

• Never-Ending Retail Station Quality Improvement

The Company has re-branded more than 200 service stations and community stations with vibrant colors and modern looks, and will gradually rebrand all remaining stations. It also emphasizes nice and hygiene surroundings with baileys and toilets, including ones for the handicapped with ramps for wheelchairs.

Thanks to its determination to improve its retail stations, in 2010, the Company was voted the second brand of choice for the second year in a row from a third-party survey on customers’ attitudes conducted over 1,500 samples (not only the Company’s customers). In 2010, the satisfaction score increased with statistically significance from 4.02 to 4.20 (full score = 5, surveyed in 30 provinces from November 11 – December 1, 2010).

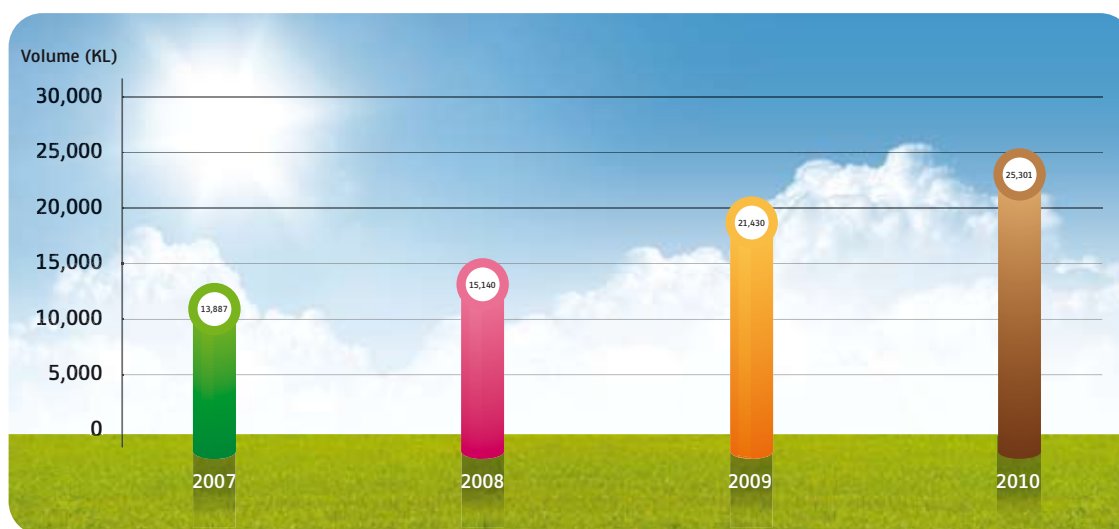
In addition, the Company received the “Reader’s Digest Trusted Brand 2010” Gold Award as a result of the magazine’s survey on customers’ satisfaction for service stations.

• Lubricant Quality Development

The Company's lubricants were ISO 9001:2008-certified for the management of product development and sale, and were the first to be ISO/TS 16949:2009-certified for quality management system in the automotive industry. In 2010, the Company

launched the new GE Platinum product with superior technology and more environmental friendliness, conforming to all three standards, namely API SN, the current highest standard, ILSAC GF-5 and Dexos 1.

Lubricant sales values.



• Bangchak Gasohol Club Card



The Company offers privileges to more than 270,000 Bangchak Gasohol Club Card holders. Besides basic benefits of discounts on gasohol of 20 satang (Baht 0.20) per litre, discounts on lubricants, shops, movies, travel as well as donation for charity and the environment, there was a campaign in 2010 to double the points when buying Gasohol E20 or E25 to encourage cardholders to use more alternative fuels, thus reducing carbon dioxide emission. Moreover, due to the steady oil price increase in the fourth quarter of the year, the Company offered a campaign for cardholders to enjoy the same price on the day the price was increased. This past year, in every purchasing gasoline through the Bangchak Gasohol Club Card, the buyer

helped cut 19 million kilograms in carbon dioxide emission equivalent.

Furthermore, in 2010, the Company launched Bangchak Gasohol Youth Club Cards for young-generation customers to have alternative fuel choices and be aware of green products. The Company plans for more Bangchak Club cards on other products for more benefit to the customers in the future.

In 2010, the Company organized eco-tours in conjunction with reforestation at Muang Boran, Don Wan market, Damnoen Saduak floating market, and Suphan Buri.



In addition to the Bangchak Gasohol Club Card, BCP issued “Bangchak Thai Connection Cards” for community station customers whose records will be collected in a standard database enabling each such station to set its own suitable promotion or customer relations activities.

• Communication

Customers can inquire or search for information on products and marketing through the following channels:



Bangchak Customer service center Tel. 0-2745-2444

Trained operators provide general information and take suggestions.

Bangchak Gasohol Club Call Center Tel. 0-2576-5678

Privileges for Bangchak Gasohol Club cardholders.

www.bangchak.co.th

Customers can find corporate information and updates, together with information on products and services, Bangchak Gasohol Club Card and social and environmental activities as well as inquiring or providing suggestions by writing to the e-mail address of Bangchak Customer Service Center. Staff will reply by using the telephone numbers or e-mail addresses provided by customers.

[Facebook.com/Bangchak](https://www.facebook.com/Bangchak)

The Company values this social network and therefore in 2010 set another channel for customers to reach the Company at Facebook.com/Bangchak, which provides information such as updated oil prices, company activities and promotions.



• Health and Environment Safety

The Company gives due regard to the standard of health and environment safety. It installed a fuel vapor recovery system at the Sukhumvit 64 Oil Depot, the Bang Pa-in Oil Depot and at all retail stations in Bangkok Metropolis.

Bangchak retail stations are operated under SHEE standards with regular drills, ready for emergencies.

Also caring for the environment, the Company equips its retail stations with wastewater treatment systems for effluents before discharge to public waters and takes care of toilet cleanliness, lawns, plants, drains as well as waste separation and disposal.

When it comes to customer service, the Company never has any records of non-compliance with the law resulting in a significant monetary fine.



Awards of 2010

The year 2010 saw continual recognition of the Bangchak Petroleum Plc, by the public as well as various entities, as a company with transparent corporate governance and management with efficiency, social responsibility, and environmental awareness.

- **First prize at a contest of Sufficiency Economy practices for large corporations (for modern- management adaptation of the principle)**, presented at the second such event, organized by the Chaipattana Foundation, Office of the Royal Development Projects Boards, Ministry of Interior, Bureau of the Budget, Royal Thai Army, and the Sufficiency Economy National Research and Development Institute.
- **Thailand Quality Class (TQC) Award of 2010**, organized by the National Quality Award Office. This award honors entities with integrated organizational management systems under the National Quality Award guidelines, as well as world-standard quality.
- **SET Awards of Honor**, presented at the SET Awards 2010 event, organized by the Stock Exchange of Thailand (SET) and Finance and Banking Magazine:
 - **Top Corporate Governance Report**, in its fifth straight year. This award honors listed companies with outstanding reports on compliance with corporate governance
 - **Corporate Social Responsibilities** in its fourth straight year. This award honors listed companies with outstanding social responsibility practices.
- **Titanium Award (Corporate Governance)**, presented at The Asset Corporate Awards 2010, organized by The Asset Magazine. This award honors entities with outstanding Corporate Governance, which compared aspects of listed regional companies.
- **Award of Excellence (Community Development Program of the Year)**, presented at the Platts Global Energy Awards 2010 event. This award honors entities with outstanding aspects of management in Asia. the Company was the only Thai winner of the award.





- The assessment outcome of a survey on good corporate governance reports of listed companies of 2010, organized by IOD (Thai Institute of Directors), showed that the Company commanded 'excellent' ratings in all categories, with top average scores for all categories among the entrants.
- A plaque presented under a project on transparent organizations to those with promotional activities for corporate governance, righteousness, and transparency. the Company was among the ten private-sector finalists at this event, hosted by the Office of the National Anti-Corruption Commission.
- Honorary award as an entity engaged in environmental public service, presented on the World Environment Day 2010 by the Ministry of Natural Resources and Environment.
- A perfect score of 100 for its quality under the Annual General Meeting (AGM) for 2010 project, sponsored by the Office of the Securities and Exchange Commission (SEC) in conjunction with the Listed Companies Association and the Thai Investors Association.
- 'Quality and Safe Service Stations Awards', sponsored by the Department of Energy Business and designed to raise the quality of nationwide service stations. The Company was named for its 75 service stations, of which 16 were gold, 31 were silver, and 28 were bronze.
- Certificate for potable piped water given by the Provincial Waterworks Authority for the quality of the company's water, which passed the recommended standards of the World Health Organization of 2006.
- Trusted Brands Awards 2010 given by votes from Reader's Digest Magazine readers, as a Thai brand of excellence (gold level) in the service stations category.



GRI Content Index

Table indentifying the location of the Standard Disclosures in the report

PROFILE DISCLOSURES

Profile Disclosure	Description	SR Page Number
1. Strategy and Analysis		
1.1	Statement from the most senior decision-maker of the organization.	9
1.2	Description of key impacts, risks, and opportunities.	12-13
2. Organizational Profile		
2.1	Name of the organization.	17
2.2	Primary brands, products and/or services.	17
2.3	Operational Structure of the organization.	17-18
2.4	Location of organization's headquarters.	17
2.5	Number of countries where the organization operates, and Names of countries with either major operation or that are specifically relevant to the sustainability issues covered in the report.	17
2.6	Nature of ownership and legal form.	17
2.7	Markets served.	65-67
2.8	Scale of the reporting organization.	20
2.9	Significant changes during the reporting period regarding size, structure, or ownership.	10
2.10	Awards received in 2010.	68-69
3. Report Parameters		
<u>Report Profile</u>		
3.1	Reporting period.	20
3.2	Date of most recent previous report.	-
3.3	Reporting cycle.	20
3.4	Contact point for questions regarding the report or its contents.	20
<u>Report Scope and Boundary</u>		
3.5	Process for defining report content including.	20
3.6	Boundary of the report.	20
3.7	State any specific limitations on the scope or boundary of the report.	20
3.8	Basis for reporting on joint venture, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organizations.	-
3.9	Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the indicators and other information in the report.	20
3.10	Explanation of the effect of any re-statement (e.g., mergers/ acquisitions, change of base years/periods, nature of business, measurement methods).	-
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.	-
<u>GRI Content Index</u>		
3.12	Table identifying the location of the Standard Disclosures in the report.	70-74
<u>Assurance</u>		
3.13	Policy and current practice with regard to seeking external assurance for the report.	-
4. Governance, Commitments and Engagement		
<u>Governance</u>		
4.1	Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight.	18-19
4.2	Indicate whether the Chair of the highest governance body is also an executive officer (and, if so, their function within the organization's management and the reasons for this arrangement).	12, 14-16



Profile Disclosure	Description	SR Page Number
4.3	For organizations that have a unitary board structure, state the number of members of the highest governance body that are independent and/or non-executive members.	19
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body. senior manager and executives including departure arrangement	14-15
4.5	Linkage between compensation for members of the highest governance body, senior manager and executives (including departure arrangements)	-
4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided.	14
4.7	Process for determining the qualifications and expertise of the members of the highest governance body for guiding the organization's strategy on economic, environmental, and social topics.	-
4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation.	10, 14-16
4.9	Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles.	12-16, 19
4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance.	-
4.11	Commitments to External initiatives Explanation of whether and how the precautionary approach or principle is addressed by the organization.	12-13
4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses.	12-13
4.13	Memberships in associations (such as industry associations) and/or national/international advocacy organizations. <u>Stakeholder Engagement</u>	22, 64, 68-69
4.14	List of stakeholder groups engaged by the organization.	10
4.15	Basis for identification and selection of stakeholders with whom to engage.	10, 14, 20
4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.	14-16, 64, 67
4.17	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting.	14-15

Management Approach and Performance Indicators

Economic Disclosure

	Performance Indicator/Description	Not applicable	Not addressed	addressed	Page number
Economic Performance	EC1 Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investment, retained earnings and payments to capital providers and governments.			•	21
	EC2 Financial implications and other risks and opportunities for the organization's activities due to climate change.			•	9, 22
	EC3 Coverage of the organization's defined benefit plan obligations			•	21
	EC4 Significant financial assistance received from government.		•		
Market Presence	EC5 Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operation.		•		
	EC6 Policy, practices and proportion of spending on locally-based suppliers. At significant locations of operation.			•	22, 63
	EC7 Procedures for local hiring and proportion of senior management Hired from the local community at locations of significant operation.		•		
Indirect Economic Impacts	EC 8 Development and impact of infrastructure investments and services Provided primarily for public benefit through commercial, in-kind, Or pro bono engagement.			•	24-27, 48-49
	EC 9 Understanding and describing significant indirect economic impacts, Including the extent of impacts.			•	64-65

Performance Indicator/Description			Not applicable	Not addressed	addressed	Page number
Environment Disclosure						
Materials	EN1	Materials used by weight or volume.			•	22-25
	EN2	Percentage of materials used that are recycled input materials.			•	33-34
Energy	EN3	Direct energy consumption by primary energy source.			•	24
	EN4	Indirect energy consumption by primary source.			•	24
	EN5	Energy saved due to conservation and efficiency improvements.			•	24
	EN6	Initiatives to provide energy-efficient or renewable energy based Products and services, and reductions in energy requirements as a result of these initiatives.			•	9, 11, 24
	EN7	Initiatives to reduce indirect energy consumption and reductions Achieved.			•	24
Water	EN8	Total water withdrawal by source.			•	25
	EN9	Water sources significantly affected by withdrawal of water.			•	25
	EN10	Percentage and total volume of water recycled and reused.			•	25
Biodiversity	EN11	Location and size of land owned, leased, managed in, or adjacent to, Protected areas and areas of high biodiversity value outside protected areas.			•	26
	EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas and areas of high biodiversity value outside protected areas.			•	26-27
	EN13	Habitats protected or restored.			•	26, 59-60
	EN14	Strategies, current actions, and future plans for managing impacts on biodiversity.			•	9, 11, 26
	EN15	Number of IUCN Red List species and national conservation List species with habitats in areas affected by operations, by level of extinction risk.	•			
Emissions, Effluents, And Waste	EN16	Total direct and indirect greenhouse gas emission by weight.			•	27
	EN17	Other relevant indirect greenhouse gas emission by weight.			•	27
	EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved.			•	11, 24
	EN19	Emissions of ozone-depleting substances by weight.			•	27
	EN20	NO, SO, and other significant air emissions by type and weight.			•	27-29
	EN21	Total water discharge by quality and destination.			•	30
	EN22	Total weight of waste by type and disposal method.			•	31
	EN23	Total number and volume of significant spills.			•	32
	EN24	Weight of transported, imported, exported, or treated waste Deemed hazardous under the terms of Basel Convention Annex I, II, III, and VII, and percentage of transported waste shipped internationally.			•	32
	EN 25	Identity, size, protected status, and biodiversity value of water Bodies and related habitats significantly affected by the reporting Organization's discharges of water and runoff			•	30, 33-34
Products & Services	EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.			•	32, 65-67
	EN27	Percentage of products sold and their packaging materials that are reclaimed by category.			•	23
Compliance	EN28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations.			•	30, 32
Transport	EN 29	Significant environment impacts of transporting products and other goods and materials used for the organization's operations, and transporting member of the workforce.			•	32
Overall	EN30	Total environmental protection expenditures and investments by type.			•	33-35

Social Disclosure : Labor Practices and Decent Work

Employment	LA1	Total workforce by employment type, employment contract, and region.			•	36
	LA2	Total number and rate of employee turnover by age group, gender, and region.			•	36-37
	LA3	Benefits provided to full-time employees that are not provided to Temporary or part-time employees, by major operations.			•	38



		Performance Indicator/Description	Not applicable	Not addressed	addressed	Page number
Labor/Management Relations	LA4	Percentage of employees covered by collective bargaining agreements.			•	38
	LA5	Minimum notice period(s) regarding operational change, including whether it is specified in collective agreements.			•	38
Occupational Health and Safety	LA6	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs.			•	38-39, 42-43
	LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region.			•	50-51
	LA8	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community Member regarding serious diseases.			•	39-43
	LA9	Health and safety topics covered in formal agreements with trade unions.	•			
Training and Education	LA10	Average hours of training per year per employee by employee category.			•	40
	LA11	Programs for skills management and lifelong learning that support The continued employability of employees and assist them in managing career endings.			•	40-41, 43
	LA12	Percentage of employees receiving regular performance and career Development reviews.			•	39-43
Diversity and Equal Opportunity	LA 13	Composition of governance bodies and breakdown of employees Per category according to gender, age group, minority group Membership, and other indicators of diversity.		•		
	LA 14	Ratio of basic salary men to women by employee category.			•	38

Social Disclosure : Human Rights

Investment and Procurement Practices	HR1	Percentage and total number of significant investment agreements That include human right clauses or that have undergone human Rights screening.		•		
	HR2	Percentage of significant suppliers and contractors that have Undergone screening on human rights and actions taken.		•		
	HR3	Total hours of employee training on policies and procedures. Concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.			•	40
Non - Discrimination	HR4	Total number of incidents of discrimination and actions taken.			•	38
Freedom of Association And Collective Bargaining	HR5	Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and action taken to support these rights.			•	38
Child Labor	HR6	Operations identified as having significant risk for incidents of Child labor, and measures taken to contribute to the elimination of child labor.			•	38
Forced and Compulsory	HR7	Operations identified as having significant risk for incidents of Forced or compulsory labor, and measures to contribute to the elimination of forced or compulsory labor.			•	38
Security Practices	HR8	Percentage of security personnel trained in the organization' Policies or procedures concerning aspects of human rights that are relevant to operations.			•	40
Indigenous Rights	HR9	Total number of incidents of violations involving rights of indigenous People and actions taken.			•	50-51

Social Disclosure : Society

Community	SO1	Nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting.			•	53-64
Corruption	SO2	Percentage and total number of business units analyzed for risks related to corruption.		•		
	SO3	Percentage of employees trained in organization's anti-corruption Policies and procedures.		•		
	SO4	Actions taken in response to incidents of corruption.			•	15

		Performance Indicator/Description	Not applicable	Not addressed	addressed	Page number
Public Policy	SO5	Public policy positions and participation in public policy development And lobbying.			•	17, 65
	SO6	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.	•			
Anti-Competitive	SO7	Total number of legal actions for anti-competitive behavior, anti-trust, And monopoly practices and their outcomes.	•			
Compliance	SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations.			•	32, 67

Social Disclosure : Product Responsibility

Customer Health and Safety	PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant product and services categories subject to such procedures.			•	67
	PR2	Total number of incidents of non-compliance with regulations and Voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes.	•			
Product and Service Labeling	PR3	Type of product and service information required by procedures, And percentage of significant product and services subject to such Information requirements.			•	66-67
	PR4	Total number of incidents of non-compliance with regulations and Voluntary codes concerning product and service information and labeling, by type of outcomes.			•	67
	PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.			•	65
Marketing Communications	PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.			•	67
	PR7	Total number of incidents of non-compliance with regulations and Voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes.			•	67
Customer Privacy	PR8	Total number of substantiated complaints regarding breaches of vcustomer privacy and losses of customer data.			•	
Compliance	PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the products and services.			•	67



The Bangchak Petroleum Public Company Limited

Head Office : Energy Complex, Building A, 10 th Floor

555/1 Vibhavadi Rangsit Rd., Chatuchak, Bangkok 10900

Tel : 66 (0) 2140 8999

Fax : 66 (0) 2140 8900

www.bangchak.co.th

