



Contributing to the better
society, communities,
and the environment



CSR

Corporate Social Responsibility
Report 2010



EGAT

Power for Thai Happiness

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How to read this report

EGAT Corporate Social Responsibility Report 2010 was published with an aim to present to all readers our economic, social, and environmental performance and achievements during the 2010 reporting year period. For information related to EGAT's operational and financial performance, please find in our EGAT Annual Report 2010.





Vision

To be a world-class organization in electricity and related businesses

Core Purpose

To create and improve the quality of life and strengthen the country's competitiveness through reliable and affordable energy and services while giving due care to society, and the environment



By promoting conservation
of forest resources



By promoting clean energy


Contributing to the sustainable environment



EGAT's "Plook Tonmai Rob Baan Phor" (Tree Planting Around Our Beloved King's Residence) project, launched in Prachuab Kirikhan province, in commemoration of the 60th anniversary of His Majesty the King's ascension to the throne, demonstrated our efforts to raise awareness on the sustainable conservation of forest resources among the Thai public in general.

EGAT involved in the installation of a 50 kW solar power generating system at the royally-initiated Chang Hua Mun project located at Tha Yang district in Petchburi province, with the aim at developing an environmentally friendly energy source. This solar power system can help curb CO₂ emissions by 35 tons annually.





By promoting energy conservation
among young schoolchildren



By promoting green commuting route

Contributing to the sustainable society and community



EGAT upgraded the green learning room project to the green school project with the aim at building energy conservation network among young schoolchildren and schools countrywide.

EGAT provided financial support for the construction of Bang Kruai - EGAT elevated railway station to promote greener public transportation system for nearby communities and to combat global warming issues. The project was developed by the State Railway of Thailand under the suburban railway system project.



Message from the Governor

On behalf of the Electricity Generating Authority of Thailand (EGAT), it is my pleasure to introduce to all stakeholders EGAT's Corporate Social Responsibility Report 2010, which has been prepared separately from EGAT Annual Report 2010r. The topics of this report cover our economic, social and environmental performance following the Global Reporting Initiative Guidelines on Sustainability Reporting. The report's purpose is to disclose our commitments towards the goal of sustainable development.

The year 2010 coincided with the 60th anniversary of His Majesty the King's ascension to the throne. To celebrate this auspicious occasion, EGAT and over 214,000 people from all walks of life across the country participated in planting a total of 984,000 trees in areas around Klai Kangwon Palace in Prachuab Kirikhan province. The project has an aim at fulfilling His Majesty the King's royal initiatives related to reforestation in Thailand and combating global warming issues. In addition to the tree planting campaign, the year also saw the progress of EGAT's small hydropower plant project development downstream of existing Chao Phraya dam in Chainat province, and the installation of a solar power generating system in the compound of the royally-initiated Chang Hua Mun project in Petchburi province.

During 2010, we at EGAT actively continued our commitments to fulfill our vision and core purpose in becoming a world-class organization in electricity and related businesses while improving the quality of life and strengthening the country's competitiveness through reliable and affordable energy and services. The relief of fluctuations of global energy consumption and the decline of domestic unrests, resulted in the surge of the country's electricity demand at an average rate of 10.2 percent and the ten times of record-breaking peak electricity demand. The situation reflected EGAT's capability to continuously secure the operation's growth index while coping with the increasing demand for reliable electricity services.

In addition, EGAT has established guidelines for social responsibility implementation by placing greater importance to the needs and expectations of all stakeholders in efforts to build trust and understanding among them. EGAT has also encouraged and supported our employees to be volunteers for community service by launching the 'EGAT Volunteer' campaign. More importantly, EGAT's CSR

Master Plan has been implemented in parallel with our core business operating plans. Greater emphasis has been placed upon the implementation of in-process CSR activities, which are in consistence with the Government's Statement of Direction (SOD) as well as the International Standard ISO 26000 - Guidance on Social Responsibility. Our ultimate goal is to become an organization of National Pride.

Throughout 2010, EGAT was proud to receive awards in recognition of our outstanding performance in social project implementation, organizational management and leadership, and environmental practices from both national and international institutes. Some of these awards included: the ASEAN outstanding engineering achievement project award and the outstanding engineer award from the ASEAN Federation of Engineering Organization (AFEO) presented to EGAT Governor during the 28th Conference of ASEAN Federation of Engineering Organizations (CAFEO 28) held in Vietnam, the green mine award and the corporate social responsibility award from Department of Primary Industries and Mines, or CSR-DPIM award, which were granted to entrepreneurs which co-exist sustainably with communities and the environment, and the excellent plaque of honor from the Office of the National Anti-Corruption Commission (NACC) for commendable performance in corruption prevention and suppression.

The Thai society is currently undergoing rapid changes. EGAT has recognized the necessity of an organizational restructuring focusing on participatory development, and the integration of our social responsibility throughout the organization as well as contributing to the society by working with the social community network. Our ultimate goal is to become a model organization for the Thai society and communities as in our statement, '**Power for Thai happiness**'.



(Mr. Sutat Patmasiriwat)
Governor

Electricity Generating Authority of Thailand

EGAT has placed greater importance to the needs and expectations of our stakeholders while encouraging our employees to be volunteers for community service through 'EGAT Volunteer' campaign.



Organizational Profile






Name of the organization	Electricity Generating Authority of Thailand (EGAT)
Location of organization's headquarters	53 Charan Sanit Wong Road, Bang Kruai, Nonthaburi 11130
Nature of ownership and legal form	<ul style="list-style-type: none"> • A state enterprise engaged in power generation and transmission, and operated as both a system operator and Thailand's largest power producer under the Ministry of Energy (MOE) and the Ministry of Finance (MOF). • Business operations include the generating, acquiring, and transmitting of electric power under the promulgation of the Electricity Generating Authority of Thailand Act B.E. 2511 (1968), amended in B.E. 2535 (1992).
Primary brands, products, and/or services	<ul style="list-style-type: none"> • Electricity • Other businesses related to electric energy and natural energy resources • Production and sale of lignite, chemical materials from lignite, and lignite-by-products
Principal customers	<ul style="list-style-type: none"> • Metropolitan Electricity Authority (MEA) • Provincial Electricity Authority (PEA) • Electricity users as stated by the laws • Neighboring countries
Operational Structure	
Number of power generating facilities (Locations)	39 power plants comprising 3 thermal plants, 6 combined cycle plants, 21 hydropower plants, 8 renewable power plants and 1 diesel plant.
Installed capacity (MW)	14,998.13
Number of substations	209
Voltage levels (kV)	69, 115, 132, 230, 300 and 500
Length of transmission lines (circuit-kilometers)	30,639
Power dispatching centers (Locations)	One national control center Five regional control centers
Coal mining	Mae Moh lignite mine located in Lampang province, with 15 plots of concession permits

Investment in Electricity
Supply Industry

EGAT is currently making investment in two subsidiaries,
one associated company, and two joint ventures.



Electricity Generating Authority of Thailand

	Ratchaburi Electricity Generating Holding Public Company Limited (RATCH)	Subsidiary 45%
	EGAT International Company Limited (EGAT Inter)	Subsidiary 99.99%
	Electricity Generating Public Company Limited (EGCO)	Associated company 25.41%
	District Cooling System and Power Plant Company Limited (DCAP)	Joint venture 35%
	EGAT Diamond Service Company Limited	Joint venture 45%

Scale of Organization

Number of employees	23,293
Net revenues (Million Baht)	383,583
Operating expenses (Million Baht)	354,342
Remittance to the Ministry of Finance (Million Baht)	14,650

Markets Served

Electric energy generation and purchase in 2010 Gross energy generation and purchase (Million kWh)	160,113.01
EGAT's own generation (Million kWh)	71,205.47
Energy purchased from private power producers and neighboring countries (Million kWh)	88,907.54
Peak power demand (MW)	24,009.90

Significant changes during the reporting period
(January–December 2010)

None

CSR Vision and Strategies

Corporate social responsibility or CSR practices have increasingly played a key role in driving organizations of all types and sizes to achieve their operating goals. The practices of CSR will bring about acceptance of the organization from the public in general and the communities in particular. In pursuit of being a role model organization in social responsibility, which will further sustain good relationship between EGAT and the surrounding communities and the society at large, EGAT has developed a vision on CSR practices and implementation as follows.

“To manage and operate our business activities by giving importance to social, community, and environmental responsibilities in pursuit of becoming a role model organization, a national pride for the Thai people”.

To achieve the goal of the stated CSR vision, EGAT has, in 2010, revised all directions and guidelines for implementation of CSR activities. The revised guidelines will be in consistent with EGAT’s ultimate vision and will effectively drive the CSR activities. Ongoing CSR activities carried out during the past year included the organization restructuring by which a new command line under the Deputy Governor - Corporate Social Responsibility (CSR), was established to be responsible for undertaking all of EGAT’s CSR initiatives and functions. EGAT’s CSR Master Plan 2009-2014 which was formulated with an aim at integrating and implementing social responsibility throughout the organization, were actively implemented in parallel with EGAT’s core business operations master plan.

During 2010, EGAT incorporated the goals of CSR implementation in the organization’s key strategic frameworks. EGAT also established our urgent policy with an ultimate goal to drive the organization to become an organization with enduring excellence.

CSR Strategic Themes

EGAT incorporated the ultimate goal of CSR practices into our four key CSR strategic themes developed with an aim at being responsible for society, communities, and the environment with accountability and integrity. The other objectives included are to promote energy efficiency and conservation and to support the development of renewable energy. EGAT’s key strategic themes are developed to:

- Strengthen core businesses,
- Seek opportunity to grow for related businesses,
- Become an organization which pursues good corporate governance with due care to the society, community and environment, and
- Be a high performance organization (HPO) which can swiftly adapt to changes.

An Urgent Policy for CSR Implementation

In 2010, EGAT has developed an urgent policy which encompasses all dimensions of business management and operation. The policy was also established to drive the corporate social responsibility practices running along the lines of core business operations by:

1. Pursuing public acceptance for the organization,
2. Strengthening the security and reliability of power system,
3. Building good understanding related to new power projects development among the communities and the society at large,
4. Seeking to increase revenue from the management of existing assets and collaborate with our subsidiaries and affiliates for the development of core and related businesses,
5. Developing the organizational administration and management system, and
6. Promoting the energy conservation and the development of prototype renewable power plants as well as community power plants.



Adoption of SEPA for Performance Evaluation

EGAT has adopted the state enterprise performance appraisal (SEPA) for the organization's performance evaluation as in response to a policy of the State Enterprise Policy Office (SEPO). SEPA was developed with an aim at improving the state-owned enterprises' organizational management system and raising their operational efficiency to the international standards, so that the Thai state enterprises are prepared for global competition and dynamic changes.

In 2009, EGAT was selected as one among the pilot state enterprises to launch the implementation of SEPA system as a model for the other enterprises to follow suits. The adoption of SEPA system for implementation will take four years, separating into two years for the system preparation and another two years for full-scale implementation.

During 2010, EGAT had set up a committee and a working group, with explicit duties and responsibilities to support the SEPA system implementation. As for the results of EGAT self-evaluation according to SEPA's core sections and topics, EGAT could earn in 2010 a score of 496 out of 1,000 of the total score of the criteria. The better score earned was an improvement from the mere 187 score out of a total of 1,000 score EGAT earned in 2009.

From 2011 onward, EGAT has been expecting all employees to improve their working efficiency to meet the criteria of SEPA system. EGAT employees will join forces to put the system into actual practice when working. The successful implementation of SEPA system will eventually drive EGAT to become a high performance organization (HPO) which can swiftly adapt to changes.

EGAT's CSR Policy

In 2010, EGAT's corporate social responsibility or CSR policy was revised and updated in efforts to make it more relevant to the principles and practices relating to social responsibility in the International Standard ISO 26000 - Guidance on Social Responsibility. EGAT's CSR policy was established with aims at:

1. Promoting the practices of in-process CSR along EGAT's core business processes with a focus on the generation and transmission of electricity with good quality, reliability, and at reasonable prices, and the conduct of efficient environmental operations and management,
2. Conducting the organizational management based on good corporate governance, good moral and ethical responsibilities, and with respect for and response to the interests of our stakeholders in all sectors, while placing emphasis on the efficiency and sustainable growth of our core and related businesses,
3. Giving importance to the respect of human rights, labor practices, and fair operating practices,
4. Being a caring organization for society and communities, particularly the communities living around existing power plants and facilities, and in areas to be developed as new power plants' sites, and the adoption of approaches focusing on the interests, needs and expectations of community members,
5. Building a network of CSR partnership between EGAT and public and private agencies, aiming at contributing to the country's sustainable development,
6. Establishing a corporate culture on CSR which can actually put into practices to promote the volunteer spirits among employees organization-wide, and
7. Promoting the conduct of CSR management practices across EGAT's command lines, for the benefits of the society at large.



Significant Impacts, Risks and Opportunities

During 2010, EGAT has analyzed some significant impacts and risks when undertaking business activities including the opportunities to launch our CSR initiatives. Some important events and key issues of risk were as follows.

1. Economic recovery

The Thai economy which expanded by 7.8 percent in 2010 resulted in the rise of the country's GDP and demand for electricity consumption. The economic recovery, coupled with the hot weather prevailing over the year at an average temperature of 39 degree Celsius, pushed the peak electricity demand soar to 24,009.9 MW. The demand was higher than the peak demand recorded in the previous year by 8.9 percent and exceeded the peak demand of 23,249 MW projected in Thailand's Power Development Plan 2010-2030 or PDP 2010. The exceeding demand of 700 MW, equivalent to a capacity of an entire large-scale power plant, prompted EGAT to extend the service life of some old power plants to another 1-2 years, while speeding up the construction of new power plant projects.

2. The suspension of industrial projects in Map Ta Phut industrial estate over pollution concerns

In September 2009, the Supreme Administrative Court resolved to order 76 industrial projects in Map Ta Phut industrial estate in the eastern province of Rayong to be temporarily suspended. In response, the Thai Cabinet

gave approval to a notification issued by the Ministry of Natural Resources and Environment of Thailand with respect to the prescription of the criteria, procedures, regulations and guidelines for 11 industrial projects or activities which may cause severe impact on the environment, natural resources, and community health. These projects were obliged to observe Article 67(2) of the Constitution B.E. 2550 (2007) by preparing the environmental impact assessment (EIA) and health impact assessment (HIA) reports, and conducting the stakeholder hearings prior to securing approval from related non-governmental organizations.

Among these 11 industrial projects to undergo the environmental and health impact assessments include the power plants of different types, namely the 100 MW and over coal-fired power plants, 150 MW and over biomass power plants, 3,000 MW and over combined-cycle power plants, and nuclear power plants of all types and sizes. The implementation of power projects which encompass the overall infrastructure of power plants, dams and reservoirs, will demand EGAT to incorporate more preparatory stages in the future power projects.

3. Opposition to new power plant projects and existing power plants

The opposition among communities to new power projects and existing power plants has affected the schedules of power projects developed by both EGAT and private power producers. In 2010, the construction of a natural gas-fired 1,600 MW Bang Kla power plant by Siam Energy Co., Ltd., an independent power producer of which Gulf J.P. Co., Ltd. is a major shareholder, was halted following the protest from local communities. Such opposition prevented the project to complete its EIA report in 2010. Moreover, a coal-fired power plant of 540 MW capacity owned by the National Power Supply Co., Ltd. (NPS) also met with protest from nearby communities. The company had to subsequently request a two-year extension for project construction and the supplying of electricity to national power grid.

As for EGAT, a survey for the potential site of the nuclear power plant project, developed under Thailand's PDP 2010, had been conducted despite opposition from certain groups of local people. EGAT regularly organized meetings for community hearings, while promoting two-way communication to create better understanding about project development. The survey results were included in the nuclear power plant project's feasibility study report to be submitted for approval from the Cabinet at later date.

In 2010, EGAT had conducted a risk analysis focusing on some major risk factors as follows.



1. A decline of EGAT's share in generating capacity

The risk was partly attributed to the fact that EGAT has been unable to complete the new power projects developed under Thailand's PDP 2010 due to the lack of public trust in clean coal technologies and advantages of nuclear power plants. EGAT accordingly modified the power development plans as well as the risk management which may result in the risk to have smaller share of generating capacity. EGAT also engaged with the regulators and related public agencies to provide accurate information about the security of the power system and took proactive communication measures to disseminate accurate and transparent information to the general public.

2. Reliability of power system

Aging transmission system and facilities

EGAT's existing transmission system and high-voltage substations located across the country have been in service for over 40 and 25 years, respectively. A survey conducted in 2010 found out that 101 substations, out of the total of 209 substations, have been in operation for over 25 years. Aging electrical equipment and control building infrastructure could possibly cause negative results to the reliability of EGAT's power system.

Accident-related damages to existing power plants and transmission lines

As a utility engaging in electricity generation and transmission, EGAT has at present many power plants of different types and sizes, including transmission lines and substations located across the country. Many of these power plants and facilities have been in service for many years. Any accidents occurring to these plants and facilities likely caused impacts on the security of the power supply system.

Insufficient transmission lines to support power purchase from SPP

The National Energy Policy Office (NEPO) has developed a plan for the power purchase of 2,000 MW from small power producers (SPP) during 2015-2021. An additional 1,500 MW of power purchase from SPP are to be implemented in efforts to promote the cogeneration power system. However, the existing transmission system is capable to support the power purchase of only 1,080 MW, which will further attribute to the decline of power system security.

Domestic unrests

The on-going political unrests in the southern provinces of Thailand and in other regions had caused impacts on EGAT's properties, both the power plants and transmission lines. For example, two sabotage attempts on 230 kV Wang Noi - Rangsit transmission line could affect the power system stability.



CSR Action Plans Implementation

During 2010, EGAT actively implemented 44 CSR action plans which were formulated to support EGAT CSR Master Plan 2010-2014 with the aim at contributing to the well-being of the Thai society, local communities, and the environment. These action plans, carried out along 8 command lines of operating processes, consisted of 37 action plans to support the in-process CSR implementation and 7 action plans to support the after-process CSR activities. All of these action plans were carefully and continuously developed to cope with the needs and expectations of all groups of stakeholders.

Among these 44 CSR action plans, the outstanding one was an ongoing action plan for the adoption of outcome mapping principles as tools to reformulate three CSR action plans in efforts to make them more relevant to the needs and expectations of stakeholders. These pilot action plans included the followings.

- The leverage of green learning rooms to green schools to build energy conservation network,
- The cooperation between EGAT, the Ministry of Energy (MOE), and the Office of the Vocational Education Commission (OVEC) to build the biological way of life for sustainable development network, and
- The building of environmental quality monitoring by community members network.

The adoption of outcome mapping principles as tools to reformulate these pilot CSR action plans was EGAT's new approach to enhance CSR action plans implementation to better fulfill their objectives, which would further drive EGAT to become an organization with due care to the society, communities, and the environment. More importantly, this new approach would create greater awareness on CSR activities among EGAT employees in which would further increase their participation.

Examples of EGAT's CSR Action Plans in 2010

	Name of action plan	In Process CSR	After Process CSR	Key objectives	Target groups of stakeholder	Completed as scheduled
1	Renewable Energy Development (Follow-up of Research Projects)	✓		To promote the development of new renewable energy sources and facilities.	Independent agencies well known for their knowledge on and expertise in renewable energy development.	✓
2	Invention and/or novelty contest.	✓		To develop EGAT into a learning organization and an organization of quality.	Employees	✓
3	Promoting and supporting the practices of ethical behaviors in workplace to become a high performance organization (HPO).	✓		To promote suitable ethics, code of conduct and corporate culture	Employees	✓
4	Promoting the No. 5 energy efficiency label for new products.	✓		To promote the efficient energy consumption to address global warming issues and CO ₂ emissions.	Electricity users in general and the society at large	✓
5	Leveraging the green learning rooms to the green learning schools to build the energy conservation network.	✓		To promote the efficient energy consumption to address global warming issues and CO ₂ emissions.	Schoolchildren, schools, and academic institutes.	✓

	Name of action plan	In Process CSR	After Process CSR	Key objectives	Target groups of stakeholder	Completed as scheduled
6	Launching campaigns to promote high energy efficient electrical appliances	✓		To promote the efficient energy consumption to address global warming issues and CO ₂ emissions.	All groups of stakeholders	✓
7	Promoting two-way communication with local communities on energy issues and environmental conservation in the reserved and public use areas.		✓	To support and participate in the conservation of natural forest resources and the environment.	Communities living in the vicinity of the reserved and public use areas.	✓
8	Participating and involving in the sustainable development of quality of life in local communities.		✓	To support and involve in the development of occupation in local communities, including local tradition and cultures, and to organize the youth camp on energy in schools.	Communities living around EGAT power plants and facilities and along the transmission lines.	✓
9	Participating and involving in the green areas development around EGAT power plants and facilities.		✓	To participate with local communities and involve in the growing of economic plants on waste land areas to increase added value.	Communities in the vicinities of EGAT power plants and facilities.	✓
10	Building the environmental quality monitoring by community members network.		✓	To encourage participation and involvement among the communities in environmental quality monitoring activities in their localities.	Young students in schools and academic institutes.	✓
11	Hydropower plants downstream of irrigation dams development project.	✓		To promote and support the development of renewable energy	All groups of stakeholder	✓
12	Knowledge management for alternative energy and community power plants development in the southern region	✓		To develop in and involve with local community and the electricity user networks and to empower them to participate in EGAT's electric power development activities and energy conservation.	Scholars, academic institutes, and local communities in southern provinces	✓
13	Adopting the outcome mapping principles as tool for the reformulation of CSR action plans in 2010. (Ongoing action plan)		✓	To support the reformulation of EGAT CSR action plans by adopting the outcome mapping principles-the steps 8-12-as tools.	Employees responsible for implementing the following action plans: - The leveraging of green learning rooms to green schools to build energy conservation network, - The cooperation between, EGAT, Ministry of Energy (MOE) and the Office of Vocational Education Commission (OVEC) to build the biological way of life for sustainable development network, and, - The building of environmental quality monitoring by community members network.	✓
14	Public communication on power generation	✓		To raise the level of relationships between EGAT power plants/dams and reservoirs and the local communities living in the vicinity, and to create good attitude among communities towards power generating processes, and to train EGAT personnel to be capable of taking actions independently on community concerns while building networks to forge bonds of trust to foster greater understanding among the communities and the society at large.	- Employees responsible for action plan implementation - Local communities living in the vicinity.	✓

CSR Highlights and Activities in 2010

During 2010, EGAT's CSR highlights and activities were as follows.



Her Majesty Queen Sirikit graciously praised EGAT's reforestation project in commemoration of His Majesty the King

Her Majesty the Queen graciously praised many government agencies which involved in activities which are beneficial to the country, including EGAT's reforestation project in commemoration of His Majesty the King, in her speech given at Dusidalai pavillion on the ground of Chitralada palace during Her Majesty the Queen's birthday anniversary celebration on August 12, 2010. The following is an excerpt from the Queen's speech:

"I have consistently mentioned the topic of forest and I will relentlessly continue to call upon the Thai people to protect our forests. Do not cut down trees or destroy the forests because it will trigger drought. Forests are the source of water, the origin of all streams and rivers in Thailand. Trees absorb and retain underground water while acting as barriers to flash flood. Forests are the source of herbal medicine and forest products. They are habitats of wild animals and contribute to global warming reduction. The fact that all of you have assisted in this countrywide reforestation project is highly beneficial to our country".

EGAT's reforestation project which was launched in 1994 in commemoration of the 50th anniversary of His Majesty the King's ascension to the throne has been actively implemented during 1994-2009. The project helped restore and revitalize the degraded forestlands into fertile forest resources covering an area of 384,418 rais in 49 provinces countrywide. The young trees restored under the project are capable of absorbing CO₂ emissions by 872,499 tons annually. In addition to reforestation effort, EGAT has actively raised awareness on the conservation of natural forest resources among young people and local communities.

Plook Tonmai Rob Baan Phor Project (Tree Planting around Our Beloved King's Residence)

The project was launched as part of the global warming reduction campaign project (Lod Loke Ron Tawai Phor), developed and implemented by the Ministry of Energy (MOE) to commemorate the 60th anniversary of His Majesty the King's ascension to the throne. The public were invited to pledge their contribution to tree planting campaign via online registering on EGAT's website. A total of 984,000 trees were registered to be planted on the area of 4,500 rais, in the districts of Hua Hin, Pranburi, and Kuiburi in Prachuab Khirikhan province. After the campaign completion in July 2010, EGAT took responsibility in the maintenance works of these trees which took another four years with a budget of 23.4 million baht.



Support for Construction of Bang Kruai-EGAT Elevated Railway Station

EGAT signed a memorandum of understanding (MOU) with the State Railway of Thailand and provided a financial support of 17.85 million baht for the construction of Bang Kruai-EGAT elevated railway station, located on the Bang Sue-Taling Chan Section of the Red Line Commuter Train. This project is expected to relieve traffic congestion and improve the quality of life for communities living in Bang Kruai district, Nonthaburi province as well as commuters passing Charansanitwong road.



Thai scholarship students engaging in social contribution project

EGAT signed a memorandum of understanding (MOU) with the Office of the Civil Service Commission (OCSC) and the Tourism Authority of Thailand (TAT) to support a youth camp project in which grantees of the Royal Thai Scholarship to study in the United Kingdom, have opportunities to share their experiences, learning techniques and knowledge in English, mathematics, and science with young students from secondary schools around Mae Moh power plant in Lampang province. The project aimed to improve quality of education and provide opportunities for young people residing around EGAT's power plants.



Disaster Relief Activities

Toward the end of October 2010, many provinces across the country suffered from extreme flooding. EGAT's employees in conjunction with our subsidiaries participated in the relief activities. Ad hoc centers were set up to promptly provide assistance to flood victims. EGAT spent approximately 11 million baht for the preparation of bags of survival kits, drinking water, medicines, including post-flood house repair.





EGAT's Youth Weightlifting Championship Project

The project was launched under the Thai government's campaign-"One Association, One State Enterprise". EGAT has provided a financial support to the Thai Amateur Weightlifting Association (TAWA) and sponsored the event "EGAT Thailand's Youth Weightlifting Championship", organized annually to promote the weightlifting sporting game in Thailand to enable Thai athletes to bring fame to the country.



2010 Outstanding State Enterprise Awards

In 2010, EGAT was awarded the outstanding state enterprise awards in the categories of outstanding organizational management and outstanding social and environmental performance. EGAT received the former award category for the fifth time and the latter for five consecutive years.



ASEAN Outstanding Engineering Achievement Project Award and ASEAN Outstanding Engineer Award

EGAT governor Sutat Patmasiriwat represented EGAT in receiving the ASEAN outstanding engineering achievement project and outstanding engineer awards from the ASEAN Federation of Engineering Organization (AFEO) during the 28th Conference of ASEAN Federation of Engineering Organizations or CAFEO 28 held in Vietnam.



Plaque of Excellent Recognition from the Office of the National Anti-corruption Commission (NACC)

In 2010, EGAT received a plaque of excellent recognition from the Office of the National Anti-corruption Commission (NACC) for our commendable involvement in the prevention and suppression of corruption.

EGAT's Volunteer Project - "Feeding the Ban Nok Khamin Children"

EGAT volunteers participated in the "Feeding the Ban Nok Khamin Children" (Term Im Dae Nong Ban Nok Khamin) project by organizing lunch party, including daily essentials, for children under the parental care and nurture of Ban Nok Khamin Foundation.



A Plaque of Honor for EGAT's Foster Parents Project

EGAT's foster parents project received a plaque of honor presented by Chiang Mai Education Service Area Office 3 and the Ministry of Education, in recognition of a model organization promoting and providing support to Ban Biang Luang school. EGAT also granted scholarships on a continuous basis to the disadvantaged young students in Wiang Haeng district to enable them to complete bachelor degree education. In 2010, more than 150 young students were selected to participate the project.



Energy efficient No. 5 Label for three new appliances project and Standby Power 1 Watt measure

EGAT signed a memorandum of understanding (MOU) to promote the energy efficient label (Number 5 Label) on three new electrical appliances, namely the electric thermo pot, energy efficient lamp and ventilation fan. EGAT also provided the Standby Power 1 Watt labels for two new appliances including computer monitors and television sets during the 15th anniversary celebration of the No. 5 label program held at EGAT's headquarters. The event was presided over by the Minister of Energy.



EGAT's Boat Procession to Celebrate His Majesty the King's Birthday Anniversary on December 5th, 2010

EGAT and Nonthaburi Province provided an illuminated boat to join the mass candle-lit ceremony to celebrate His Majesty the King's birthday on December 5, 2010. EGAT employees and people in Nonthaburi province boarded the boat to join the illuminated boat procession which moved along the Chao Phraya River passing Siriraj Hospital where the King was staying for treatment, to light candles and to sing the royal anthem. The highlight of night time event also included the release of 8,400 airborne lanterns and the firing 999 sets of fireworks.



Ethics, Code of Conduct, and Corporate Culture

EGAT has recognized the importance of the promotion of ethical practices with emphasis on integrity, transparency and fairness of operations among our employees. Accordingly, activities to promote the organization's ethics, code of conduct, and corporate culture was developed and implemented under EGAT's Ethics, Code of Conduct, and Corporate Culture Master Plan 2009-2013. This master plan was formulated in accordance with the ethical standards for political office holders, civil servants and government officials under the Constitution of the Kingdom of Thailand B.E. 2550. The plan was also in line with EGAT's strategic theme to become a high performance organization (HPO) which can swiftly adapt to changes. During 2010, the activities undertaken under the initiatives of this master plan comprised the development of ethical behaviors enhancing system, the collection of model leaders in ethical behavior practices, the development of ethics and code of conduct training system, and the preparation of a handbook on ethical practice monitoring processes.

EGAT has established codes of conduct for the management, employees, and the implementation of corporate social responsibility, as well as the corporate culture. The statements of these codes of conduct and corporate culture are as the followings.

Code of Conduct for EGAT Management

EGAT management has been entrusted by EGAT Board of Directors and top executive to oversee the operation of EGAT with efficiency and effectiveness. EGAT expects the management to observe the code of conduct and to act as the followings:

1. Oversee the operation of EGAT with respect to the determined policies with efficiency and effectiveness,
2. Raise the level of awareness among EGAT employees about the importance of ethics and compliance in workplaces, and monitor the real application of such ethics and compliance,
3. Encourage the confidence in working among employees by providing remunerations, work promotion, appropriate rewards and fair punishment, while establishing safe and sound working environment to ensure the safety of life and property,
4. Be a model leader who embraces integrity, sincerity, due diligence, perseverance, and disciplines in working,
5. Pay attention to any issues regarding the conflict of interests to protect the organization
6. Oversee the financial operations, the conduct of reporting regarding financial performance, and the operating practices according to regulatory requirements,
7. Recognize the rights and duties of all stakeholders, including EGAT's responsibility towards the society and the environment,
8. Pay respect to the human dignity of all parties concerned and avoid all acts that may lead to sexual harassment, and
9. Manage and utilize EGAT's resources for optimum benefits.



Code of Conduct for EGAT Employees

EGAT employees are required to behave in an ethically responsible manner and to avoid acting in such a way that may damage or impair the reputation of EGAT. EGAT expects all employees at all levels and all times, to comply with their legal and ethical obligations by:

1. Performing one's duties with a focus on efficiency and effectiveness to drive EGAT to fulfill the objectives and goals as determined in all key policies,
2. Recognizing the merits of practices in adherence to morality and the organization's high ethical standards, code of conduct, and corporate culture,
3. Embracing integrity, sincerity, due diligence, perseverance and disciplines when performing duties,
4. Avoiding any business, financial or other relationship where personal interests actually conflict with the interests of the organization,
5. Recognizing the rights and duties of others, particularly of all groups of stakeholder, including their social and environmental responsibilities,
6. Performing one's own duties with prime concerns on the benefits of EGAT, and the society at large, including the efficiency of all resources' utilization, the generation and delivery of services, and the sustainable conservation of natural resources,
7. Respecting others as individual, treating others and all related parties the way one wants to be treated, regardless of position, and avoiding at all costs the acts that may lead to sexual harassment, and
8. Treating one's superior and colleagues with respect and politeness, and valuing each person's talents, perspectives and experiences.



Code of Conduct for Corporate Social Responsibility Implementation

EGAT has been well aware of our responsibilities to improve the well-being of life in society and the environment, by placing prime concern on the conservation of natural resources and the environment and the promotion of efficient energy consumption. In order to achieve the goals, we are committed to:

1. Utilizing the natural resources with a focus on the reduction of any possible impacts on the communities and the environment,
2. Participating and involving, on a regular basis, in the communities' social and environmental activities,
3. Raising awareness and increasing the engagement in social and environmental responsibilities among our employees at all levels,
4. Promoting a healthy business relationship with suppliers who conduct their business activities in a socially and environmentally responsible manner,
5. Becoming a leader in the promotion of efficient energy consumption and conservation,
6. Strictly observing and complying with all relevant laws and regulations, and
7. Paying respects to the traditions and cultures practiced in all locals.



Corporate Culture “Loyalty, Striving for Excellence, and Embracing Good Ethics”

Loyalty means that we at EGAT all share EGAT's ownership and are committed to our duties of good faith, loyalty, skill and diligence, to drive organizational growth and protect the interest of EGAT and our country as a whole.

Striving for Excellence also means that EGAT strives for greater efficiency and excellence in our businesses with accountability and transparency. Our Board of Directors and senior management must be leaders with vision and strong principles to plan and direct the organization for the best interest of the nation. EGAT people are always encouraged to be initiative and resourceful, and to continuously develop ourselves for improved competence and performance. The culture of work excellence has earned EGAT an established reputation for our quality electricity service.

Embracing Good Ethics is demonstrated in our efforts to always value and support EGAT employees with integrity and ethical behaviors. EGAT is determined to prevent abuse of power and misconduct in the organization, and is also committed to equitable treatment to all employees and all groups of stakeholder.

Good Corporate Governance

Throughout 40 years of operations, EGAT has been keenly aware of the importance of good corporate governance. We have continuously conducted our business operations based on the organizational governance which focuses on the principles of social responsibility, namely accountability, transparency, ethical behavior, respect for stakeholder interests, respect for the rule of law, and respect for human rights.

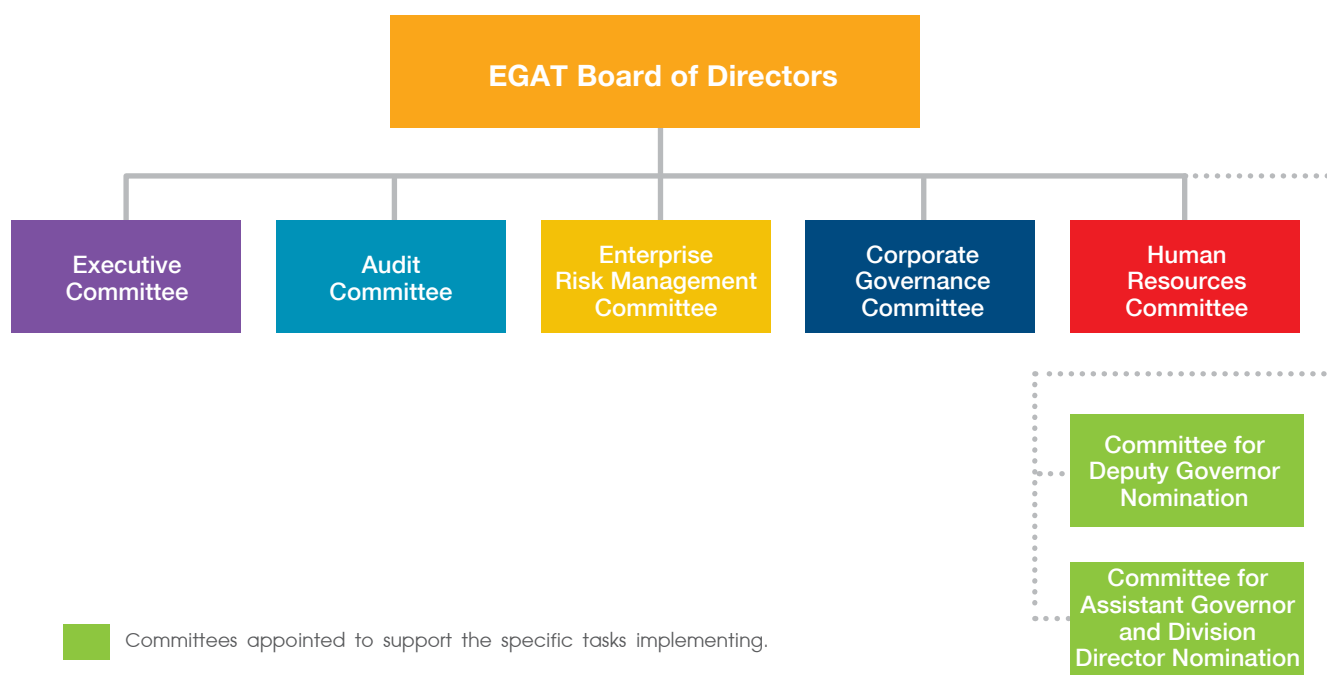
EGAT's good corporate governance was defined as the establishment of organizational structure and the management mechanism between the Board of Directors and EGAT management to drive the organization to fulfill the mission in operations which encompasses the generation, acquisition, transmission and selling of electric energy. The operations have been conducted in a fair, transparent, and responsible manner, with respect to the interest of all stakeholders. By adopting good corporate governance, EGAT will be able to achieve our ultimate goals with effectiveness and efficiency, to gain public trust and acceptance, and to become more competitive at the international level. Good corporate governance also

increases EGAT's overall economic value and can be used as a tool to monitor different aspects of EGAT's operations and to prevent the occurring of possible conflicts of interest.

Organizational Governance Structure

The structure of EGAT Board of Directors comprised the Board of Directors and seven other sub-committees which were appointed to support the implementation of any specific tasks related to the scales and missions of EGAT's operations. These sub-committees are responsible for the screening of issues prior to submission for the consideration by EGAT Board of Directors. They include the:

- Executive Committee,
- Audit Committee,
- Enterprise Risk Management Committee,
- Corporate Governance Committee,
- Human Resources Committee,
- Committee for Deputy Governor Nomination, and
- Committee for Assistant Governor and Division Director Nomination.



Authority and Responsibilities

The chairman of EGAT's highest governance body is not EGAT's top executive officer. This is to keep the authority and responsibilities of EGAT's supervising body entirely separated from those performed by EGAT's executive officers. EGAT Board of Directors has primary responsibilities as follows: establish EGAT's vision and policies and be responsible for overall operations, review and approve significant policies and strategies including financial objectives, corporate social responsibility (CSR) and the organization's initiatives as well as monitor performance of the management regularly, oversee and address conflicts of interest issues that may occur with an employee, management, or Director as well as monitor the misuse of EGAT's property and investigate misconduct of illegal or unethical behavior, and ensure that the structure and practices of EGAT Board of Directors comply with the principles of good corporate governance and high ethical standards.

EGAT's Corporate Governance Committee has been responsible for the following activities.

1. Establish policy, strategies and goals, and practical guidelines for good corporate governance;
2. Give policy recommendations on social and environmental implementation;
3. Promote and encourage involvement of Directors, management, and employees in good corporate governance activities as well as social and environmental responsibility activities;
4. Oversee and ensure the observance of the defined plans and practices;
5. Monitor and report operational outcomes to the Board of Directors every six months; and
6. Perform any other organizational governance and social and environmental responsibilities as assigned by the Board of Directors.



The Board of Directors' Independence

The Board of Directors' independence is a key factor for the promotion of operation accountability. Independent Directors can exercise free from influence or control of others, their judgment for any change, modification and suspension of operations whenever they deem necessary without undue dominance whatsoever.

At present, the number of EGAT's independent Directors is higher than defined standards. All independent members are selected from the name list of independent committee members prepared by the Ministry of Finance (MOF). The standards require that one out of three of the total members of the Board of Directors must come from the outsiders, and at least one independent Director must be appointed from the name list prepared by the MOF. At present, EGAT Board of Directors consists of the following members:

Composition of Members	Number
Official from the Ministry of Energy (MOE)	1
Official from the Ministry of Finance (MOF)	1
Independent committee member	7
EGAT Governor (EX Officio member)	1
Total	10

Mechanism for major shareholder to provide recommendations and directions to the highest governance body

EGAT's major shareholder is the Ministry of Finance (MOF). The mechanism which MOF adopted in providing opinions and recommendations regarding good corporate governance is through the Statement of Direction (SOD) policy stipulated by the State Enterprise Policy Committee, the Ministry of Finance. EGAT has adopted the SOD as guidelines to formulate the Corporate Plan. The other mechanism includes the appointment of representatives from the Ministry of Finance (MOF) and the Ministry of Energy (MOE), which are EGAT's regulatory bodies and of independent directors from the MOF's name list as committee members of EGAT Board of Directors. These committee directors have duties to provide suggestions on corporate governance. As for EGAT employees, EGAT has put in place the State Enterprise Labour Relations Committee to open for advice and suggestions. The committee was chaired by a committee director with representatives from the management and EGAT's labor union as committee members.

Remunerations

EGAT appointed a committee to determine remunerations for the governor, deputy governor, and division directors to ensure the remunerations are fair and appropriate in accordance with their roles and responsibilities.

- Committee for the deliberation of remuneration for the Governor
- Committee for the deliberation of remuneration for the Deputy Governors
- Committee for the deliberation of remuneration for the Assistant Governors and Division Directors



Procedure for Conflict of Interest Prevention

EGAT has prepared and included a conflict of interest disclosure form in the Good Corporate Governance Handbook for EGAT's management at the deputy governor level or equivalent and at higher levels. Each of EGAT management has a duty to disclose such information upon taking up a new office and when a conflict of interest takes place during the year. Procurement committee members must disclose such information when a conflict of interest is discovered while they are in office.

Process for determining the qualifications and expertise of the highest governance body

EGAT has appointed a special committee for the nomination of Deputy Governor, Assistant Governor and Director of Division to deliberate the appointment and rotation for positions.

Revision of statements of mission or value, and codes of conduct

In 2010, EGAT's policy, code of conduct and ethical regulations were revised and submitted for approval from the Good Corporate Governance Committee. The revisions included the followings: EGAT's good corporate governance policy and regulations for good corporate governance practices, the codes of conduct for the Boards of Directors, EGAT management and employees, and EGAT good corporate governance handbook.

Risk Management

EGAT adopted the principles of the Committee of Sponsoring Organizations of the Treadway Commission (COSO) to improve our enterprise risk management system and practices. Our risk management has been developed to identify and define all organization-wide exposures, risk appetites, and risk strategies associated with EGAT's four strategic themes. Risk residuals are included in the analysis of the organization's strength, weakness, opportunity and threats or SWOT for the preparation of EGAT Corporate Plan. EGAT's four strategic themes and objectives are maintained and modified to keep with the situations in the format of balanced scorecard.



Evaluation of Chief Executive in Economic, Social and Environmental Performance

EGAT has established the following indicators for the economic, social and environmental performance of our chief executive (EGAT Governor).

- Indicator 1 [Leadership](#) - consisting of the adoption of management strategies to gain recognition and acceptance from relevant parties, and the upholding of the organization's reputation.
- Indicator 2 [Vision and decision-making](#)
- Indicator 3 [Change management](#)
- Indicator 4 [Risk management](#)
- Indicator 5 [Observance of the Board of Directors' policies](#)
- Indicator 6 [Satisfaction of EGAT stakeholders](#)

Precautionary Measures and Principles

EGAT has adopted risk management principles to prevent any risks that may occur and affect the organization's operations. It has also linked such risk management to its internal control system. The identified risk factors were used to formulate internal control plans and measures, including the preparation of Corporate Plan.

Stakeholders Engagement

[Stakeholder Selection Criteria](#)

The selection criteria of EGAT's stakeholders are determined by the extent of impacts that EGAT's operations have on certain individuals, groups of individuals, outside agencies and suppliers.

[Groups of Stakeholders](#)

EGAT's stakeholders consist of the following groups.

- Government and regulators
- Financial institutions
- Employees and Labour Unions
- Trading partners and business alliances
- Primary customers/general users and society at large
- Academicians/non-government organizations (NGO)/civil society sector
- Communities living around power plants and along transmission lines
- Media and journalists



EGAT's Stakeholder Engagement and their Expectations

Group of stakeholders	Engagement and involvement activities	Stakeholders' expectations and key issues
Government and regulators	<ul style="list-style-type: none"> Engaged with the government agencies and regulators in organizing relations building activities by; <ul style="list-style-type: none"> participating with Nonthaburi province to provide a boat for the illuminated boats procession to celebrate His Majesty the King's birthday anniversary in front of Siriraj Hospital on December 5, 2010, involving with the Ministry of Energy (MOE)'s "Global Warming Reduction Campaign" developed to commemorate the 60th anniversary of His Majesty the King's ascension to the throne, by implementing six additional projects, and supporting social activities on a regular basis including participating in various state events, and expressing good will and appreciations in numerous occasions. 	<ul style="list-style-type: none"> Revenue generation Give response to government policy Stimulate economic development Implement power projects with minimum impacts on communities and the society Be the pillar of Thailand's electricity industry Serve as the mechanism of the government on the electricity prices (cheap electricity) Develop alternative energy sources Participate in global warming reduction.
Employees and Labour Union	<ul style="list-style-type: none"> EGAT's Governor gave special lectures to employees on the modification of thinking and working methods by including social and environmental responsibilities into all operating processes. A seminar on EGAT Newly Promoted Executive Orientation Program (ENOP) was organized to promote the knowledge and competency of new executives. The performance and competency-based management system program (PMSP), a combination of new performance management and the existing human resource evaluation program, was implemented for the first year in 2010. 	<ul style="list-style-type: none"> Pride in being employed by an organization engaging in power generation and transmission while giving importance to social and environmental responsibility. Security of employment, salary and welfare. Unity of employees, management and the Labour Union. Leadership of top executive to achieve sustainable growth of the organization. Transparency and fair practices in personnel management. Encourage employees to give opinions and suggestions.
Primary customers/ general customers and the society at large	<ul style="list-style-type: none"> Organized a meeting for a committee for reliability of power system, comprising EGAT, MEA, and PEA. Organized seminars for private power producers (IPP). Organized seminars for sugar-cane entrepreneurs. Organized a campaign on "Transmission lines for the Thai Happiness; Thai people help protect transmission lines" to raise public awareness on the importance of power transmission lines and facilities. Conducted surveys on the stakeholders' satisfaction related to EGAT's operations and performance. 	<ul style="list-style-type: none"> Business operations with efficiency and with reasonable electricity prices. Quality of electricity with no power interruption or blackouts. Timely response to solve power quality troubleshooting. Fair sharing of profits among major customers (MEA, PEA). Endorsement of clean energy power generation for global warming reduction.

Group of stakeholders	Engagement and involvement activities	Stakeholders' expectations and key issues
Academicians/ NGOs/ Civil Society	<ul style="list-style-type: none"> • A committee for complaints addressing with respect to the impacts from EGAT's operations and directions for mitigation measures was appointed. • Organized seminars for the exchange of knowledge and ideas among public agencies and NGOs. • Organized study tours at dams and power plants for opinion leaders in local communities. • Supported a wide range of social, community and environmental activities organized by government agencies, foundations, and networks. 	<ul style="list-style-type: none"> • Expect opportunities to involve in EGAT's operating practices to monitor and keep in balance EGAT's performance and activities. • Diversity of alternatives for project development with a focus on reduction of environmental impacts. • Expect to receive more accurate, timely, transparent, and in-depth information than the general public. • Expect EGAT to understand the public needs and expectations and takes responsibility while providing assistance to communities and the society. • EGAT to organize more campaigns on renewable energy and energy saving benefits. • EGAT has to pay respect to human rights.
Communities living close to power plants and transmission lines	<ul style="list-style-type: none"> • Visited local scholars and community leaders for the exchange of ideas and opinions and good relationships. • Organized meetings for the affected landowners along the transmission line routes for information providing and discussion. • Supported the construction of the biological way of life for sustainable development learning centre. • Participated in the construction of community weirs to restore water. 	<ul style="list-style-type: none"> • EGAT to become part of the community, and involve in the promoting of community quality of life and environmental care. • Build community confidence regarding EGAT's operating processes without pollution and negative impacts on the environment. • To regularly keep informed on EGAT operations and progress including reasons and necessity. • To involve in EGAT's operating process • Fair and appropriate sum of compensation • EGAT's response to complaints and grievance.
Media and journalists	<ul style="list-style-type: none"> • Communicated on EGAT's responsibility toward society and environment via both the media and EGAT internal media on a continuous basis, through participating in media activities, such as the "Global Warming Reduction for Our Beloved King" campaign, the inauguration ceremony of EGAT reforestation project, EGAT's afternoon tea with the media", the 9th International Mountain Bike contest, and the campaign on new No.5 label energy-saving compact fluorescent lamp. • Raised awareness on EGAT's mission via commercial spots such as the "Tree planting around our Beloved King's residence" and the "Grandfather's trees" advertisement series. • Broadcasted the "Black Start" commercial spots on EGAT's power restoration mission which won the second prize SorkhorBor (The Office of the Consumer Protection) award for outstanding television spots in the category of consumer service. • Publicized EGAT's good public image through the design of modern energy-saving EGAT headquarters building with special consideration to environmental care on the Biz Twiz television program of ASTV (English) network. 	<ul style="list-style-type: none"> • Transparency and efficiency of operations with due care to the society and communities. • Open, in-depth, quick and timely information disclosures. • Inclusive sources of information. • EGAT to provide support and sponsorship to various activities organized by certain groups of media. • Facilitate or participate in the activities organized by the media.

Stakeholder Issues and Approaches In response

Through numerous engagement with different groups of stakeholders, EGAT had summarized the following stakeholders' key issues of concerns: EGAT engaged with the general public and the civil society sector at the superficial level; EGAT allowed stakeholder participation and involvement in only some certain activities; the participation was limited to groups of stakeholder selected by EGAT's own will; EGAT's information disclosures and dissemination largely aimed at publicizing the positively operational outcome and performance.

The public and stakeholders expected EGAT to improve organizational governance in term of public participation and allow them to be accurately aware of EGAT's missions and operations. Urgent measures that should be implemented include to:

1. Hold an open house session at least once a year for the public and stakeholders. The open house will greatly ease doubts about EGAT's operations and allow the public as well as the stakeholders to have correct understanding in a more wide range of aspects related to EGAT's operations,

2. Establish regulations or criteria for public participation in the monitoring of EGAT's operations, particularly in dubious operations and processes including the procurement and the environment, social, and community operations,

3. Publicize EGAT's operations and performance through a variety of accessible media, and

4. Transparent disclosure about EGAT's operating plans to the public, especially the controversial project like nuclear power plants which requires close monitoring by the public and communities. The public should be allowed to play a key role in the decision-making process since they are those who will be affected by both positive and negative impacts from the project.



Economic Performance

In 2010 the Thai economy expanded by 7.8 percent. The supporting factors were the global economic recovery and strong domestic demand, particularly the private investment, household consumption, higher export, and expansion in the sector such as hotels and restaurants. However, during 2010, the country's agricultural sector suffered from natural disasters including the draughts in the beginning and the heavy floods towards year end, thus resulting in a contract of the sector by 2.2 percent.

The country's electricity consumption increased accordingly at a much higher rate than anticipated by 10.2 percent, which was the highest growth rate ever in the past 15 years. The contributing factors for such growth rate included the strong economic rebound and the earlier arrival of the hot weather and the later than usual coming of monsoons. The country saw the 10 times record-breaking of the gross peak demand and the 12 times of record-breaking for the gross daily electricity consumption. Overall, the surge in demand resulted in the higher electricity consumption up to 10.2 percent.

Economic value generated and distributed

During 2010, EGAT's power plants provided 99,768 million kWh of electrical power to cope with the higher demand which was also in response to the country's leapfrog economic expansion despite the prolonged political unrests. In addition to providing a reliable and affordable electricity to drive the economy, EGAT also contributed to the economic value by sending remittance to the government, allocating financial supports and budgets for the Clean Energy Fund and EGAT's R&D projects and initiatives for the society and the environment, and providing support for numerous social activities. EGAT's economic value has also been generated in the form of the sale and purchase taxes collected by the Revenue Department.

At the end of 2010 accounting year, EGAT's revenues from electric energy sales and from the sales of other goods and services accounted for 383,583 million baht. EGAT's operating expenses totaled 354,342 million baht with the net income of 29,241 million baht. EGAT sent the remittance totaling 14,650 million baht to the Ministry of Finance. EGAT's donations and allocation of funding to the Clean Energy Fund totaled 562 million baht and 1,428 million baht, respectively.

Coverage of benefit plan obligations

EGAT is obliged to provide welfare and benefits to both employees working for EGAT and those due for retiring. The commitment has reflected another form of our contribution to the well-being of local economy and the society at large. EGAT's welfare covers the salaries, remuneration, and benefits as required by laws and in accordance with the notification of the State Enterprise Worker Relations Committee. EGAT also provides additional payment or extra payment as incentives, for employees according to the characteristics of their work. As for employees due for retirement, EGAT provides them remuneration and benefits according to criteria determined by the Ministry of Finance.

Policy of spending on locally-based suppliers at locations of operation

EGAT contributed to the well-being of local economy by promoting the purchase of materials, equipment, supplies, and services from the locally-based producers and suppliers. This is to create wealth and income at the local level and promote a balance distribution of the economic benefits among community members. EGAT's policy on procurement was established with the following policy aims.

1. Promote the purchase of products made in Thailand and by local suppliers.
2. Conduct the procurement processes with transparency and with respect to fair operating practices by giving priority to qualifications and performance of bidders.
3. Focus on the value for money by purchasing the products of good quality for utilization benefits.
4. Conduct the purchasing with integrity and efficiency, while setting a systematic tracking on the work performance.
5. Implement the purchasing processes for the interests of EGAT and based on fairness for the benefits of local suppliers in efforts to protect EGAT's reputation.
6. Treat all bidders, potential suppliers and subcontract partners with equality and fairness by providing transparent information to prevent unfair treatment between individuals or juristic persons.
7. Prohibit the use of one's position to secure benefits for oneself or for those of other person.

Opportunities to launch activities to address climate change

Thailand's greenhouse gas (GHG) emissions accounted for over 200 million tons of carbon dioxide per year (Figures in 2000). Over 69 percent of these GHG emissions derived from the energy sector. As Thailand's largest power producer, EGAT has recognized our key roles and contribution to the mitigation of impacts upon the global climate changes. In our efforts to effectively reduce GHG emissions from our operations, EGAT has promoted the development of the Clean Development Mechanism (CDM) projects. At present, a total of 10 CDM projects have been developed under the supervision of EGAT CDM Project Working Committee.

During 2010, EGAT's five CDM projects were certified and received the Letter of Approval (LOA) from the Thailand Greenhouse Gas Management Organization (TGO). In 2009, EGAT's two CDM projects, namely the Sirindhorn solar cell power project and Mae Moh lignite-fired power plant units 10-11 steam turbine efficiency improvement project, also received LOA from TGO. These projects are capable of curbing GHG emissions by 200,000 tons annually.

Management approach to ensure electricity availability and reliability

Throughout over 40 years of operation, EGAT has been committed to the development of effective management approaches to ensure the short and long-term electricity availability and reliability. At present, electricity management in Thailand was classified into two aspects consisting of the supply-side and the demand-side management. The supply-side management involves the planning, construction and provision of power generation to meet the customers' demand. The demand-side management includes the measures to adjust the volume and characteristics of electricity consumption. The purposes of EGAT's electricity management are to balance the demand side with the supply one by adopting efficient technologies or by the load pattern adjustment for optimal peak demand and to strengthen and promote energy conservation.



Demand Side Management Implementation

For over 17 years, EGAT has implemented the demand-side management or DSM, which is one among our two management approaches to ensure electricity availability and reliability. Our DSM program, which has been continuously implemented since 1993, has achieved the cumulative savings of 2,060 MW peak demand and 12,210 million kilowatt-hours (kWh) of energy. The program also contributed to over 7.7 million tons of avoided carbon dioxide emissions.

In 2010, EGAT's ongoing DSM initiatives launched under EGAT's 5-year DSM master plan (2010-2014) highlighted the extension of our energy efficient programs to cover more types of electrical appliances and the increasing of energy efficiency standards for electrical appliances. EGAT, the Ministry of Energy (MOE), and electrical appliance entrepreneurs, signed an MOU for the launching of programs and initiatives, namely the energy efficient No. 5 label program for three new appliances including electric thermo pot, ventilation fan, and energy efficient lamp, the raising of energy efficiency standards for electrical appliances, and the implementation of standby power 1-watt measures in response to MOE's policy by awarding the standby power 1-watt label for television set and computer monitor. In 2010, EGAT granted the energy efficiency standard and the standby power 1-watt labels for a total of 15 electrical appliances and products.

Moreover, EGAT has been successful in launching campaigns to phase out the use of incandescent lamps and promote the use of compact fluorescent lamps (CFL) with energy efficient No. 5 label instead. During 2007-2010, a total of 20 million CFL with energy efficient No. 5 label had been purchased countrywide, which was higher than the target projected of 15.8 million CFL. The evaluation found out that EGAT's energy efficient CFL initiative received great acceptance from the general public. The acceptance related to EGAT's CFL campaigns reflected from the overall consumers' satisfaction towards CFL which was 80 percent and was higher than the campaign's achievement indicator which was determined between 60-70 percent in 2010.

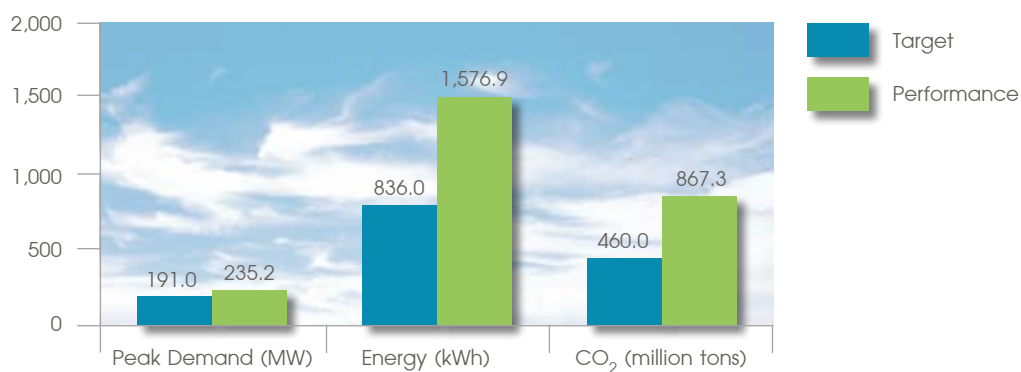
EGAT has inspired to raise the nation's awareness of energy consumption and conservation, particularly among the young Thais. EGAT's green learning room project has been initiated to encourage and promote young schoolchildren to be greater aware of energy and environmental conservation. A green learning room equipped with teaching and learning facilities and equipment have been installed at over 426 schools nationwide. EGAT has planned to raise up the project scale to transform the whole schools into green schools with a learning environment and greater awareness on energy conservation. In 2010, there were 20 schools under the green learning room project which were upgraded to green school project. EGAT also encouraged and supported another 224 schools which participated in the green learning room project to serve as a model school for their neighboring schools with an aim at expanding the network of energy conservation among schools across the country.

Electricity Savings from DSM initiatives in 2010

Program	MW	GWh	CO ₂ (Ton)
Lighting	619.81	3,357.32	2,165,761
Refrigerator	436.53	3,129.60	2,114,015
Air conditioner	954.28	5,396.55	3,208,023
Fan	33.87	298.99	145,826
Rice cooker	12.16	16.24	7,888
Motor	0.21	1.23	909
Business sector	2.63	10.26	7,583
Total	2,059.50	12,210.20	7,650,005

Comparison of DSM performance in 2010 and 2009

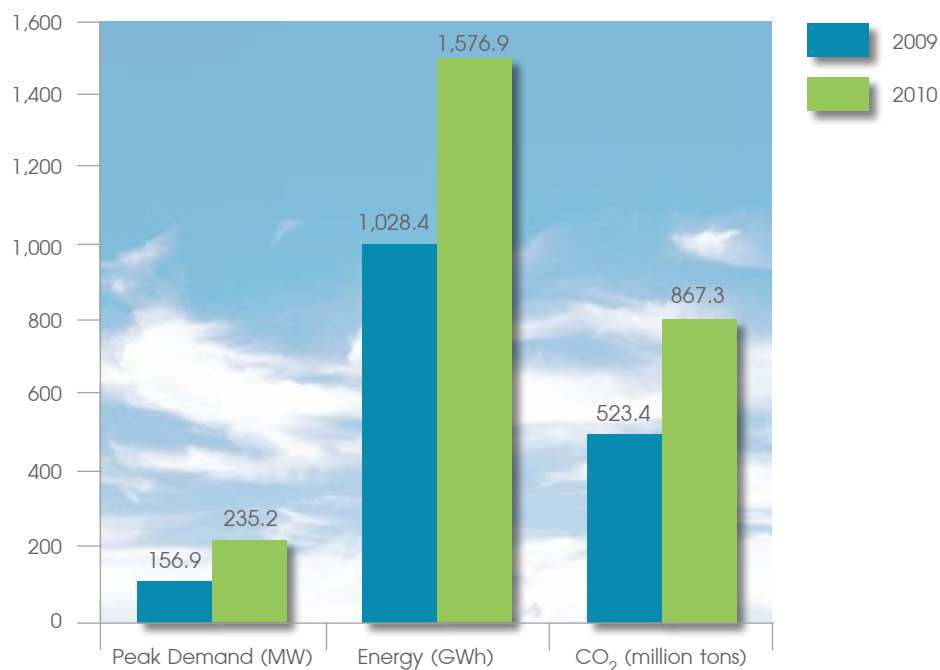
Power Consumption Reduction during January - December 2010



Energy saving performance	Project Commencement - December 2010	2010		
		Target	Jan-Dec 2010	% of target achieved
• Peak Demand (MW)	2,040.1	191	235.2	123.2%
• Energy (GWh)	12,086.7	836	1,576.9	188.5%
• CO ₂ Reduction (mil. Tons)	7,580.4	460	867.3	188.5%

DSM Performance in 2010

Comparison of Power Consumption Reduction in 2009 and 2010



Innovation and R&D for Sustainable Development

EGAT has generated economic value for the society and communities by contributing to the development of innovative technologies which can solve social and environmental issues in local communities. Our contribution included the promotion of efficient energy consumption, the development of environmentally friendly energy sources, and the conduct of social research for the improvement of quality of life of local communities living close to EGAT's power plants and along transmission line routes. EGAT also encouraged and supported our personnel to conduct R&D projects and initiatives and to engage in partnerships with universities and research institutes to expand scientific and technological development network.

Since 2006 EGAT has provided an expenditure of over 755 million baht for the conduct of 103 R&D projects and initiatives while engaging in partnerships with 24 universities and research institutes across the country. The following included the R&D projects on renewable energy EGAT expected to develop as prototypes in power generation and to extend for public involvement and development practices.

- Small and large-scale wind turbines for power generation, such as the 2.5 MW wind turbine power plant at Lam Takhlung dam in Nakhon Ratchasima province, and the design and installation of small wind turbines with capacity ranging between 1-50 kW for electricity generation in local communities.
- The 1 MW solar cell power system at Sirindhorn dam in Ubon Ratchathani province to be developed into a large-scale solar power plant with higher efficiency and which is environmentally-friendly.
- Four small hydropower plant projects to optimize the utilization of water resources for power generation.
- A prototype power generating unit from wave energy.
- R&D in hydrogen production from bacteria to be used as fuel for power generation.
- A prototype solar power plant with water weight-based solar tracking system.

EGAT has also recognized the benefits of social and environmental researches which help improve the quality of life in local communities. In 2010, EGAT provided grants and support for the following researches; the community waste and garbage management by community members and the evaluation of carbon footprint (CF) in power generation. The latter has a purpose to assess the volume of CO₂ emissions from each fuel type utilized in power generation throughout its life cycle, while promoting and raising awareness about energy and environmental conservation among consumers.

Planned capacity against projected electricity demand over the long term

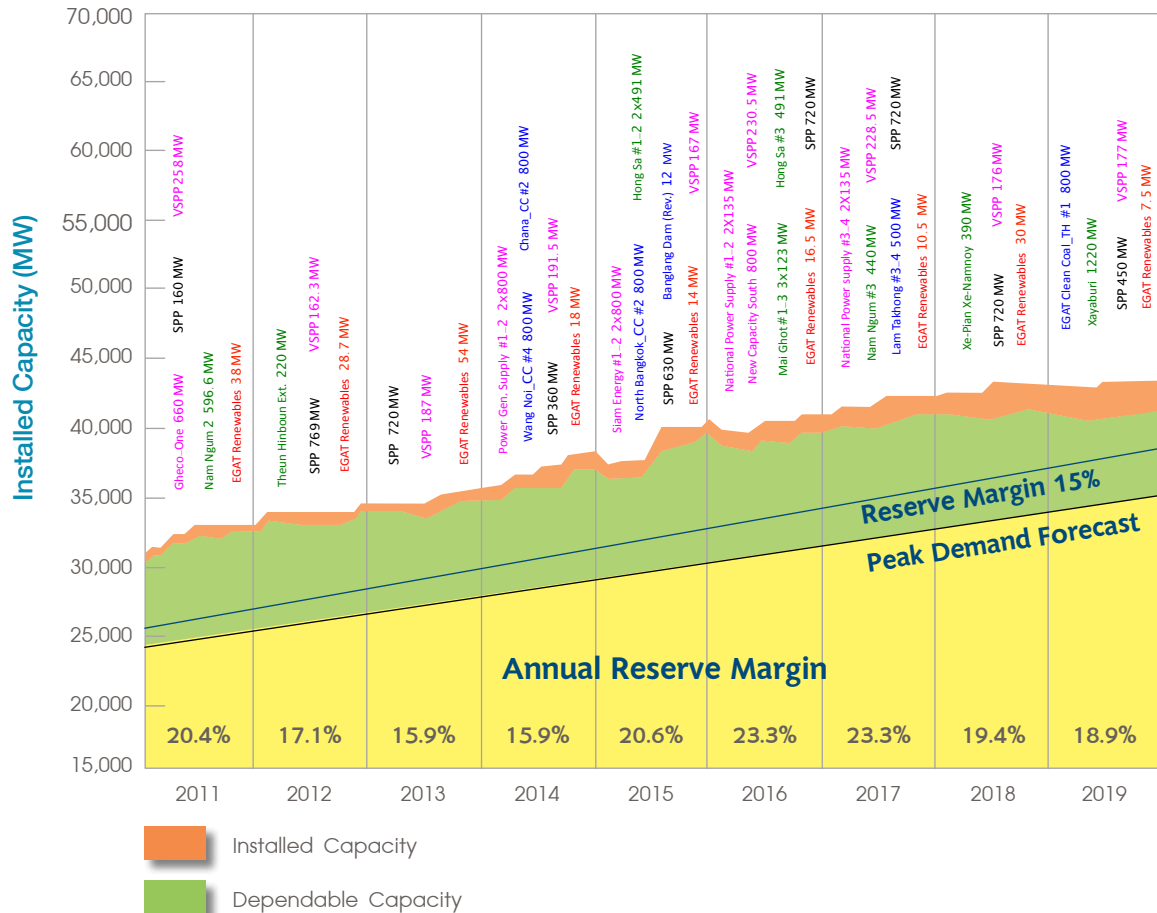
EGAT has continuously formulated and revised the country's power development plan to cope with the increasing electricity demand over the long term. At present, Thailand Power Development Plan 2010-2030 (PDP 2010) was designated as the 'Green GDP' which highlights the following: the strengthening of power system reliability, the reduction of greenhouse gas emissions, the promotion of energy utilization, and the production of electricity from cogeneration system. EGAT's PDP 2010 also put emphasis on the promising power development projects including the power purchase from cogeneration SPPs and the neighboring countries.

According to this latest PDP 2010, Thailand at present has an aggregate installed generating capacity of 30,920 MW, comprising 14,998 MW or 48.51 percent from EGAT power plants and 15,921.89 MW or 51.49 percent from private power producers. In the next 20 years, or in 2030, many power plants both owned by EGAT and by private producers, and with a combined capacity of 17,000 MW, will be due for retirement from the power system when the demand for electricity increases to 65,000 MW. Accordingly, it is imperative for EGAT to develop new power generating capacity to meet the increasing demand by 52,000 MW. EGAT's power projects over the long term consist of 13 natural gas-fired power plants with a total capacity of 10,400 MW, 5 nuclear power plants with a combined capacity of 5,000 MW, and 9 coal-fired power plants with aggregate capacity of 7,200 MW. The remaining generating capacity of 29,400 MW will derive from the peak power generating sources comprising wind energy, solar energy, hydropower, and biomass, as well as the power purchase from neighboring countries.

In November 2010, EGAT formulated a short term power development plan during 2011-2019 to cope with the increasing electricity demand. The plan was developed in response to the National Energy Policy Council (NEPC)'s urgent resolution proposed to seek approval from the Cabinet on November 25, 2010, with a purpose to control some significant risks occurring to the power system's reserve margin, due to the delay of some private power producers' projects construction and the higher than anticipated actual peak demand in 2010. EGAT's short term plan included the implementation to secure the power system by;

- speeding up the development of North Bangkok combined cycle block 2 (800 MW), Wang Noi combined cycle block 4 (800 MW), and Chana combined cycle block 2 (800 MW), and
- extending the purchase capacity from cogeneration SPPs under firm contract by 1,500 MW, thus increasing a total purchase capacity from cogeneration SPPs to 3,500 MW.

Power Development Plan (2011-2019)



Power System Performance Indices in 2010

- System average interruption frequency index (SAIFI) (number of occurrence /delivery point) 0.23038
- System average interruption duration index (SAIDI) (minute/delivery point) 10.06110
- System interruption severity - System-minutes (MW-minutes/MW) 2.88514
- Availability of power system (percent) 99.9981
- Availability of transmission lines (percent) 99.53087
- Availability of transformers (percent) 99.05045
- System loss (percent) 1.85
- Total transmission lines length (circuit-km) 30,639.743
- Number of substation (location) 209
- Transformer capacity (MVA) 75,505.19
- The country's electricity generation and purchase accounted for 160,113.01 million kWh, consisting of 71,205.47 million kWh from EGAT's power plants or 44.47 percent of the total generation and 88,907 million kWh from private power producers and neighboring countries, accounting for 55.53 percent of the total electricity generation.
- Peak power demand of 2010 was 24,009.90 MW, occurring on May 10, 2010 at 2.00 p.m.

Environmental Performance

During 2010, EGAT continued our commitment to business operation in an environmentally sustainable manner which has been anchored in our environmental policy. Greater emphasis on innovative technologies and environmental processes have been undertaken to reduce sulfur dioxide (SO₂) and nitrogen oxide (NO_x) emissions to ensure legal compliance and to promote greater environmental responsibility.

Project Environmental Study

EGAT continued to actively conduct the project environmental studies by preparing the environmental impact assessment (EIA) reports focusing on health impact assessment (HIA). In 2010, EIA approval has been granted by the National Environmental Board (NEB) for three EIA reports; (1) EIA report of Wang Noi Combined Cycle Block 4 was approved on September 27, 2010; (2) EIA report of Lime Stone Mining for Chemical Industries Project (concession No. 9/2008) and Mining Project (concession No. 27486/1418) was approved on October 27, 2010; and (3) EIA report of Chana Power Plant Block 2 was approved on November 25, 2010.



Pollution Control and Management

Air pollution prevention and control

In 2010 EGAT adopted state-of-the-art technologies and new operating practices for the prevention and control of pollution from power plant operations. New cost effective technologies and operating practices included the installation of the low NO_x burner to reduce emissions of nitrogen oxide, the electrostatic precipitators (ESP) for particulates control, and the flue gas desulfurization (FGD) to lower the level of sulfur dioxide (SO_2). To monitor and control the air quality, EGAT installed the continuous emission monitoring systems (CEMS) which further transferred the data via EGAT's communication system to the Department of Industrial Works, the Pollution Control Department, and the other related agencies.

Power Plant Emissions

In 2010, emissions of sulfur dioxide (SO_2), nitrogen oxide (NO_x) and particulates from EGAT power plant operations were within the standard as stipulated under the notification of the Ministry of Industry regarding emissions standard from power plants B.E. 2547 (2004). Aggregated volumes of emissions from power plant operations in 2010 consisted of 25, 127 tons of SO_2 , 83,182 tons of NO_x , and 1,935 tons of particulates, respectively.


During 2010, emissions of greenhouse gases from EGAT's power generating system totaled 41.57 million tons. The CO_2 emissions classified by fuel types comprised 24.49 million tons from natural gas, 0.43 million tons from fuel oil, 0.03 million tons from diesel, and 16.62 million tons from lignite. EGAT's power plants emitted 0.56 kilograms of CO_2 per kilowatt hour into the ambient air (0.56 kg of CO_2/kWh).

As Thailand's largest utility engaging in electric power generation and transmission, EGAT monitors and disseminates data on CO_2 emission volume from our electricity generating activities to ensure operational transparency under the good governance principles. EGAT has also addressed global warming problems by participating in the reforestation project to honor His Majesty the King and the Clean Development Mechanism (CDM) Project.



Air Quality Monitoring at Stacks of EGAT Power Plants in 2010

Power Plant	Fuel	Generating Unit	Particulates (mg/m ³)	SO ₂ (ppm)	NO _x (ppm)
Mae Moh	Lignite	Thermal Power Units 4-13	4—13	73—240	239—440
		Standard ^{*/}	180	320	500
Bang Pakong	Natural gas/fuel oil	Thermal Power Units 1-4	2—5	<1—1.8	98—157
		Standard ^{*/}	120	320	200
	Natural gas	Combined Cycle Blocks 1-2		Idle Plant	
		Standard ^{*/}	60	60	450
		Combined Cycle Blocks 3-4		<1—1.5	206—226
		Standard ^{*/}	60	60	230
		Combined Cycle Block 5	1—5	<1	48—55
		Standard ^{*/}	60	20	120
Krabi	Fuel oil	Thermal Power Unit 1	48—50	148—178	127—130
		Standard	120	450	180
Southern Bangkok	Natural gas/fuel oil	Thermal Power Units 4-5	5—7	<1	75—84
		Standard	120	320	180
	Natural gas	Combined Cycle Block 1	5—12	<1	242—246
		Standard ^{*/}	60	60	250
		Combined Cycle Block 2	3—9	<1	152—172
		Standard ^{*/}	60	60	250
		Combined Cycle Block 3	3—12	<1	74—77
		Standard ^{*/}	60	20	120
Wang Noi	Natural gas	Combined Cycle Blocks 1-3	2—12	<1—1.6	101—167
		Standard ^{*/}	60	60	175
Nam Pong	Natural gas	Combined Cycle Blocks 1-2	10—16	7	246—249
		Standard ^{*/}	60	60	250
Chana	Natural gas	Combined Cycle Block 1	4—7	<1	32—34
		Standard ^{*/}	60	20	120
Lan Krabue	Natural gas	Gas Turbines 1-9		<1	122—244
		Standard ^{*/}	60	60	250
Surat Thani	Diesel	Gas Turbines 1-2	18—35	<1	177—208
		Standard ^{*/}	60	60	230

Remarks: ^{*/} Standards as issued in the Notification of the Ministry of Industry B.E. 2547 (2004) regarding emissions standard of power plants.
 Refers to no monitoring

CO₂ Emissions from EGAT's Power Plants in 2010

2010	CO ₂ Emissions (tons)				Ton CO ₂	kg CO ₂ /kWh
	Diesel oil	Fuel oil	Lignite	Natural gas		
January	2,155	12,479	1,415,541	1,698,881	3,129,055	0.56
February	2,705	2,174	1,206,268	1,768,646	2,979,792	0.53
March	4,820	118,791	1,422,801	2,320,339	3,866,751	0.54
April	2,412	14,199	1,482,037	1,965,546	3,465,617	0.57
May	2,238	38,831	1,539,218	2,102,594	3,682,881	0.56
June	2,030	18,587	1,305,769	2,063,733	3,390,121	0.56
July	6,450	124,765	1,327,130	1,984,560	3,442,906	0.57
August	1,317	41,757	1,423,336	2,101,867	3,568,277	0.57
September	1,880	29,270	1,266,586	2,102,670	3,400,407	0.56
October	1,843	6,132	1,392,125	2,179,173	3,579,273	0.56
November	2,015	—	1,409,367	2,111,434	3,522,817	0.55
December	2,700	18,303	1,428,579	2,089,719	3,539,300	0.58
Total	32,566	425,288	16,618,757	24,489,163	41,567,198	0.56

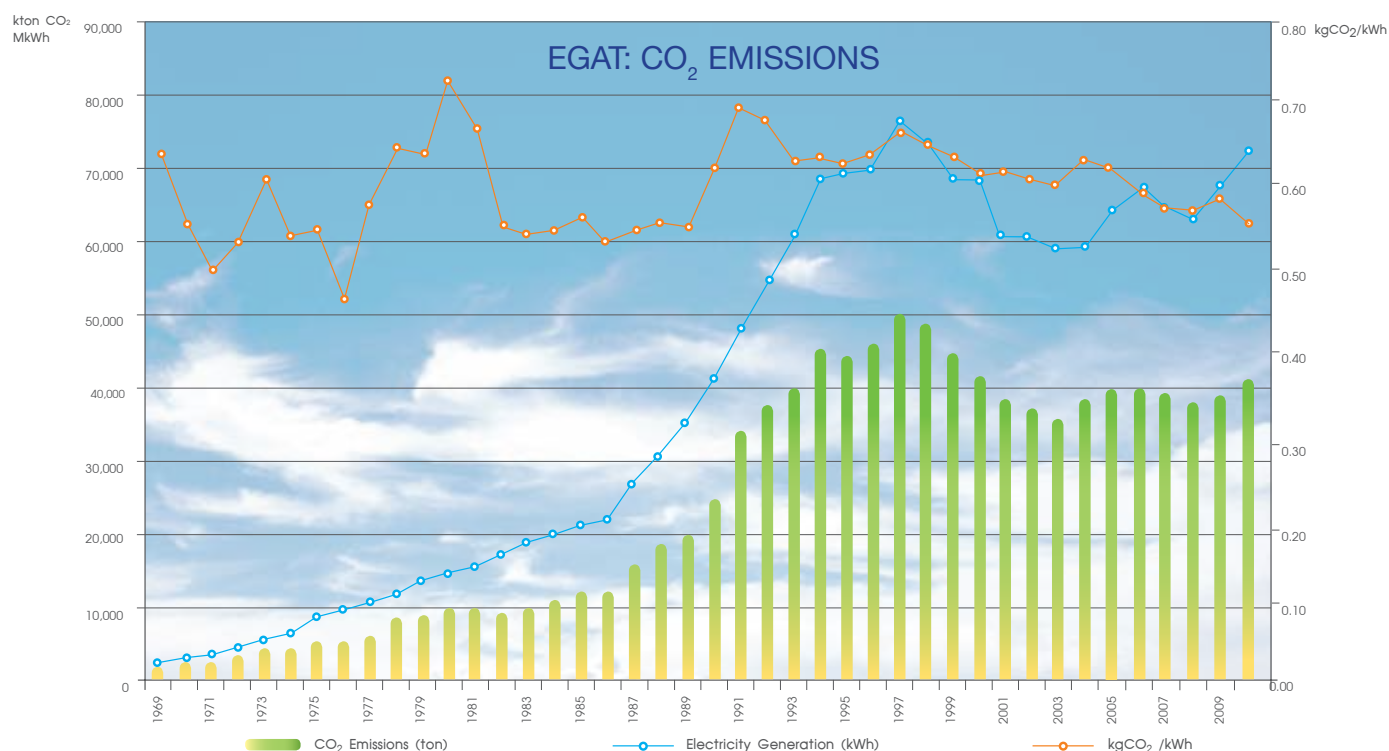
Sources: 1. Environmental Division, EGAT. (February 2011)

2. EGAT Fuel Consumption Monthly Report prepared by System Control and Operation Division, EGAT. (February 2011)

Remarks: 1. Calculation of CO₂ emissions is based on the followings.

- IPCC Guidelines for National Greenhouse Gas Inventories Revised 1996
- IPCC Guidelines for National Greenhouse Gas Inventories Volume 2 Energy 2006

2. kgCO₂/kWh refers to the volume of CO₂ emissions (kilograms) per kilowatt-hour calculated from EGAT's energy generation in 2010 (71,205.47 million kWh), including fossil fuels, hydropower, and renewable energy.
(Data from EGAT Fuel Consumption Monthly Report by System Control and Operation Division.)



Source : Environmental Division, EGAT (February, 2010)



Noise Prevention and Control

In 2010, EGAT continued adopting the noise level control measures for all power plants. Despite installing of silencers on the machinery or equipment that might have caused high noise levels, monitoring of noise levels were undertaken within the power plant boundaries and in the nearby communities. The results of noise monitoring in 2010 were in compliance with the standard levels as required by the NEB and the Ministry of Industry.

Water Quality Management

Water quality management and control has been implemented in accordance with power plant types. For hydro power plants, the emphasis is on office and residential water management whereby waste water quality must meet the determined standard. Implementation of water saving campaigns is also endorsed. For thermal power plants, the emphasis is on water saving control and reuse of waste water in other systems. Waste water is treated before being released from power plants. In 2010, the quality of waste water from EGAT's power plants was found to be within the determined standard criteria.



Clean Development Mechanism (CDM) Project Implementation

EGAT continued implementing the development of existing power projects with potential for greenhouse gas reduction into EGAT's clean development mechanism (CDM) projects. EGAT's CDM projects have been developed under the supervision of EGAT Greenhouse Gas Reduction Committee. During 2010, EGAT's ongoing CDM projects consisted of six small hydropower power plants located downstream of existing irrigation dams, namely Pasak-Jolasid, Khun Dan Prakanchon, Chao Phraya, Naresuan, Mae Klong, and Quae Noi. Other ongoing projects included the solar power project, the wind turbine power project, the efficiency improvement project (retrofitting turbines) for Mae Moh power plant units 10 and 11, and the irrigation valve-based micro hydro project at Kaeng Krachan and Mae Ngat Somboon Chon dams. In 2010, there were three projects under consideration to be developed as EGAT's future CDM projects, comprising two hydropower projects downstream of irrigation dams, namely Kiew Khor Ma and Klong Tron, and Lam Takhong wind turbine project phase 2.



EGAT was awarded a Letter of Approval (LOA) from Thailand Greenhouse Gas Management Organization (TGO), Ministry of Natural Resources and Environment (MNRE), on April 8, 2010 for five more CDM projects comprising six small hydro power plants at the existing irrigation dams namely Pa-Sak Jolasid, Khun Dan Prakranchon, Chao Phraya, Naresuan, Mae Klong and Quae Noi.

Social and Environmental Aspects Management during Power Plant Construction

EGAT continued to give importance to the management of social and environmental aspects during power plant construction and development. During 2010, EGAT constructed North Bangkok combined cycle block 1 located within EGAT headquarters area at Bang Kruai district in Nonthaburi province. During the construction phase, emphasis had been placed upon the adoption of management approaches which were in compliance with regulations and environmental laws. The approaches included the adoption of environmental impacts prevention and mitigation measures, and the monitoring activities which covered all environmental aspects comprising the physical and biological resources, human use values, and the quality of life. Activities undertaken in focus included the social impact assessment (SIA) and the health impact assessment (HIA) which had been carried out in parallel with the activities related to community involvement and participation. Public hearings activities were also organized to educate and to create better understanding among community members in efforts to seek for their acceptance on the project.

As for the environmental impacts prevention and mitigation measures adopted during the construction of North Bangkok combined cycle block 1, EGAT coordinated with the community leaders, including schools and universities located around the power project to inform them about the measures to prevent and lower the level of noise generated from the steam blow out. Silencers and

sound barriers have been installed to lower the level of noise at its source. The building's noise passages were covered to lower the noise and measures were adopted to reduce paint fume and odor. EGAT also organized an emergency drills for the contractors and suppliers.

During 2010, the tri-party committee for project monitoring and the environmental development for communities at North Bangkok combined cycle block 1, organized three meetings for the review of progress of project implementation. The tri-party committee was chaired by Nonthaburi provincial governor and included representatives from the public and private sectors as members. Moreover, the working group for the environment, which was established under this tri-party committee, participated in the monitoring of the quality of air, noise, and water to ensure the environmental performance of the project. Activities to build an environmental quality monitoring network were undertaken for the five target schools located along the banks of Chao Phraya River, in efforts to educate the young students and to enable them to perform the basic water quality monitoring and to apply the methods and experience learned to school science projects. And also on June 4, 2010, EGAT's Environment Day 2010 was held at EGAT headquarters under the theme, *"Sustainable Development, Security of Electricity Supply, and Public Acceptance"* with an aim to promote the development of environmental quality for the communities living close to North Bangkok power plant.



Electricity Generation from Clean Energy

In 2010, EGAT's electricity generation from clean energy accounted for 74,328.02 million kWh. The sources of clean energy included solar power, wind energy, hydropower, and geothermal.

EGAT's gross electricity generation and purchase in 2010 (By type of power plant)	Million kWh
Solar power	2.27
Wind energy	3.38
Hydropower	5,345.58
Geothermal energy	1.64
Fossil-fuel based	68,975.15
Total	74,328.02

Solar Power

EGAT installed and commissioned the 1 MW solar power system with a water weight-based solar tracking system at Sirindhorn dam in Ubon Ratchathani province to the national power grid in November, 2009. With a development cost of 209 million baht, this solar power system is equipped with 2,500 solar cell panels with aggregated generating capacity of 1,014 kW. During 2010, Sirindhorn solar power system was operated to supply 1.7 million kWh of electricity to the power grid. The clean electricity produced could replace 423,000 liters of fuel oil consumption and avoid the CO₂ emissions of 972 tons.

EGAT has been a pioneer in solar power system development since 2003. EGAT's Pha Bong solar power plant in Mae Hong Son province with an installed capacity of 504 kW, has been developed and operated to secure the electricity supply to the city which has no access to the national power grid. Clean electricity from this solar power system contributed to the environmental conservation and helped maintain Mae Hong Son as one among the most attractive ecotourism destinations in northern Thailand.

EGAT has also adopted advanced solar cell power technologies to improve the efficiency of electricity consumption within office building. The amorphous silicon solar cell panels were installed at EGAT's new office building located at EGAT headquarters and has generated electricity for consumption since 2007. This building, EGAT's first of its kind energy efficient office building, won the ASEAN Energy Awards 2009 from ASEAN Center for Energy in the category of new and existing building for the adoption of the best practices in energy efficient building. The solar power system installed on the building's walls has a total capacity of 27.82 kW and generates an energy output of 50 kWh daily and 18,250 kWh annually, which can save 6,000 liters of diesel oil and reduce the CO₂ emissions by 13 tons per year.





Wind Energy

EGAT has also been a pioneer in the development of wind energy. Since 2009, EGAT has operated Thailand's biggest wind turbine power plant, featuring two 1.25 MW tri-blade wind turbines of 68 meter height, located in the compound of Lam Takhlung pumped storage power plant in Nakhon Ratchasima province. These wind turbines power generating units produce 4.6 million kWh of energy per year, the amount that replaces 1.10 million litres of oil consumption and reduces emissions of CO₂ by 2,300 tons annually. The Lam Takhlung wind turbines power system began operation to supply electricity to the Provincial Electricity Authority (PEA)'s distribution system in April, 2009. During 2010, EGAT started the development of the second phase of Lam Takhlung wind turbine power project consisting of 12 turbines with a total capacity of 18 MW. The project is expected to be completed and commissioned to the power system by 2012.



Hydropower

EGAT has regarded the development of hydropower as our top policy in efforts to increase the generating capacities from alternative energy sources. Currently, EGAT's hydropower plant projects installed downstream of existing irrigation dams have been actively developed with aims at optimizing the benefits from natural water resources. These hydropower plant projects with a combined capacity of 78.7 MW, include Pasak Jolasid, Khun Dan Prakan Chon, Chao Phraya, Naresuan, Quae Noi, and Mae Khlong. In 2010, EGAT's two 6 MW hydropower plants installed downstream of the Chao Phraya dam were completed for operation in December 2010. This small hydropower plant can generate 62 million kWh of electricity annually, capable of saving 15.1 million litres of fuel oil and cutting CO₂ emissions by 35,624 tons per year.



Geothermal

EGAT continuously operated a 300 kW geothermal power plant located at Fang district in Chiang Mai province. The energy output from this binary cycle demonstrating geothermal plant has been supplied to PEA's distribution system to serve electricity users in remote villages.

R&D for Society and the Environment

During 2010, EGAT continued our commitments to undertaking R&D activities to enhance the well-being of life in society, local communities and the environment. In 2010, EGAT granted a total of 77 million baht as financial support to the academic institutes and universities for the conduct of 14 research and development projects. These R&D projects are related to the prevention and mitigation of environmental impacts from electricity generation, the development and involvement of communities adjacent to EGAT power plants and facilities, and the development of environmentally friendly energy sources. Among the research and development schemes completely conducted in 2010, the most outstanding one was the evaluation of success and achievement of EGAT reforestation program, carried out by Thailand Environment Foundation. The research project concluded that the implementation of EGAT reforestation project which was launched in 1984 in commemoration of the Royal Golden Jubilee, and implemented during 1994-2007, has been successful in the restoration and revitalization of natural forest areas across the country. The project also achieved its goals in revitalizing the degraded forestland into the fertile forest covering an area of 384,418 rais across the country. The forestland abundant with natural flora and fauna diversities becomes the sources of income for local people who can make their living from trees planting activities and forest maintenance works. EGAT reforestation project also contributed to absorbing about 8.99 million tons of CO₂ emissions.

During 2010, EGAT's on-going R&D projects included the followings:

- The carbon footprint database development in EGAT's core business operations,
- The development of a prototype 1 kW electricity generation system from wave energy, and
- The study on social capital and community participation in waste management by Bang Krui municipality in Nonthaburi province for the sustainable development of local communities.



Stakeholder Participation and Public Hearings

EGAT has recognized the importance of encouraging participation and involvement from all groups of stakeholder. During 2010, EGAT carried out the following activities to open for advices and suggestions related to EGAT's operation from the local communities and the public.

- Organized meetings which involved the members from the communities around the projects under development during the project's environmental impact assessment (EIA) study.
- Organized tri-party committee meetings and focus group meetings to encourage the stakeholders in general to have opportunities for the exchanges of ideas and information regarding EGAT's operations.
- Organized activities carried out under the building of community network for environmental quality monitoring project.
- Implemented the knowledge corner on energy and the environment in school library project.
- Provided education and trainings for young students during the environmental quality monitoring activities. Site visits to EGAT's power plants were organized for the public, and the young students from schools in areas close to EGAT's power plants.

To encourage participation from all related sectors, EGAT has established a tri-party committee, chaired by the provincial governor, and consisting of representatives both from the public and the civil sectors. EGAT also set up many environmental working group committees which involve representatives from the public agencies and the general public to allow all sectors to participate in the monitoring on the measures as required in the environmental impact assessment or EIA's report. The tri-party committee and these environmental working groups were encouraged to provide advice and recommendations related to EGAT's power plants operation and the implementation of EGAT's power projects, which would further benefit both EGAT's power plants and the well being of local communities.

Social Performance

Occupational Health, Safety and Working Environment Performance

Throughout over 40 years of operation, EGAT has been striving to improve occupational health, safety and working environment performance and practices among employees organization-wide. A policy of occupational health and safety, based on the principle that strong safety and health standards and organizational performance are mutually supportive and reinforcing, has been developed. The policy's statement is as follows.

"To conduct our business activities by adopting the best practices to ensure that all incidents and hazardous events are prevented at all times in a proactive manner and with respect to all applicable laws and international standards."

EGAT has also adhered to the framework of national labor policy which expects both public and private sectors to regularly promote the recognition and awareness on occupational health and safety of workplaces among their employees.

During 2010, EGAT continued implementing the occupational health and safety operations according to the established policy and the determined action plans and procedures. EGAT's occupational health and safety activities had been undertaken under the following operational structure and management approaches.

Operational Structure

EGAT's occupational health, safety and working environment operation has been managed by the Quality and Safety Development Division, a key department responsible for the formulation of guidelines and the adoption of management approaches which comply with EGAT's policy on occupational health and safety. The department also takes responsibility in applying principles of health and safety management as well as the international safety management system standards for operation within EGAT.

EGAT's management approaches on occupational health and safety have also been conducted with respect to the national labor laws and the notification of the State Enterprise Industrial Relations Committee. Operation areas both at the headquarters office area and at regional office areas are separated into 51 operative units. Each operative unit is supervised by a manager appointed to be responsible for considering and selecting the management approaches and operative practices suitable for each location. The

approaches selected have to be in line with the Ministerial Regulations on the Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment, B.E. 2549 (2006). The manager at each operative unit appoints a bilateral joint committee for the development of policies including the objectives and action plans to manage the health and safety risks involved in operating activities.

Management Approaches

As a utility engaging in electric power generation and transmission, EGAT's operative units cover a wide range of areas with different types and scales of risks. Accordingly, it has been necessary for EGAT to establish the systematic approaches related to occupational health and safety to control the risks of safety involved in the activities carried out at each operating unit. Minimum levels of criteria and standards required by laws and the safety management system standards have been applied to ensure effective safety practices. These safety standards included;

- The loss control management (LCM) system,
- The occupational health and safety management system or TIS 18000, and
- EGAT's safety management system (EGAT SMS) which was developed from the integration of LCM system and TIS 18000.

Safety Management Monitoring and Reporting

EGAT has set up a monitoring and reporting system to ensure that all possible hazardous incidents are prevented at all times. All departments across the organization are expected to conform to the occupational health and safety management standards. Internal safety audits have been conducted to monitor compliance to the system and to detect any deviations for modification.

EGAT also conducted the safety audits to pursue the system certification. The third party audits were conducted at each operative unit by the auditor team consisting of EGAT personnel from the other operative units to perform the auditing activities, and the safety management system and the environment of workplaces. EGAT has developed a central unit responsible for preparing and training skillful safety auditors, to be capable of auditing, setting up the register system for certificated auditors, and preparing annual auditing plans.

Annual Working Environment Audits and Inspections

The audits on the working environment have also been conducted to ensure that all necessary safety regulations and procedures are strictly followed. There are two types of auditing activities which were undertaken by the units in charge of auditing and inspecting on the working environment as required by laws.

- The physical inspection on the light, noise, heat and the hazardous chemicals in workplaces. The yearly auditing and inspection plan has been prepared for all operative units and departments across EGAT.

- The inspection on the working environment following the employee complaints. EGAT employees can report on the problems related to the environment in workplaces or make a complaint to the Committee on Safety, Occupational Health and Working Environment at each operative unit.

Training on Safety, Occupational Health and Working Environment

EGAT's operative units took responsibility in organizing the training courses for employees as appropriate to the nature of risks within their operating areas. The Quality and Safety Development Division is responsible for organizing the safety training courses in general. At present, EGAT is well equipped with capable and skillful personnel in safety training including facilities to support the training courses on fire fighting, disaster rescue and relief, and the safety of working in confined space area. EGAT has received permission from the Department of Welfare and Labor Protection to organize and provide training courses on safety for other public and private agencies.

During 2010, EGAT organized 46 training courses on the occupational health and safety for about 1,600 employees. The training courses comprised:

- The safety officer (S/O) at management level,
- The safety officer (S/O) at supervisor level,
- The safety of working in confined space area,
- The Committee on Safety, Occupational Health and Working Environment,
- The basic fire fighting.

Activities and Campaigns for Occupational Health and Safety Promotion

During 2010, EGAT had launched many campaigns and activities to raise awareness on occupational health and safety among EGAT employees. These included the campaign to reduce vehicle accidents, the establishment of safety performance as KPI and PA among departments, the adoption of the 5S activity as part of working activities, and the implementing of 5S policy to encourage employees at all levels to recognize that the 5S activities are fundamental for safety and occupational health performance, including an instrument to improve the quality of works performed, to enhance the quality of life, while reducing losses and improving safety in working. The achievement of the organization's safety and quality development performance has also been publicized during the exhibition on quality which is organized every year.



Emergency and Crisis Response Preparation

EGAT's Quality and Safety Development Division took responsibility in coordinating with all operative units to formulate the plans for fire-fighting/fire drill and training schedules during 2010. The department also prepared the manuals for all operative units to be used as guidelines for formulating action plans to support the operation in response to emergency as suitable for the specific risks at their locations. The manuals included:

- The fire emergency planning,
- The earthquake emergency planning,
- The flood emergency planning,
- The emergency planning for chemical spill,
- The emergency planning for terrorist acts, and
- EGAT crisis management planning.

Employee Work-related Injuries and Illness

During 2010, EGAT employees who experienced work-related injuries and illness, or personnel accidents, accounted for 169 cases, comprising 31 cases of disabling or severe injuries, 122 cases of non-disabling or minor injuries, and 16 cases pending for conclusion. EGAT's rate of work-related injuries and illness in 2010 rose by 6.96 percent from the 158 cases of those occurring in 2009. However, there was a decline by 16.22 percent for the disabling injury incidents and an increase by 6.09 percent for the non-disabling injury accidents. Comparing to 2009, there were 37 cases of employees who suffered from severe work-related accidents, 5 cases of those who lost their lives, and 115 cases of those from mild injury incidents. During 2010, no fatalities were experienced in any of EGAT's operation.

EGAT's disabling injury frequency rate (IFR) in 2010 was 0.78, a decline from the rate of 0.24 in 2009 which was 1.00. The incident rate of non-fatal occupational injuries and illness (IR) was 0.16 for 200,000 employee-hours worked. The rate was lower than the disabling injury frequency standard index which is 3.2 for 200,000 employee-hours worked according to the NAICS Code for electric power generation, transmission and distribution. (Injuries Facts 2010 Edition, the National Safety Council)

In 2010, EGAT's disabling injury severity rate (ISR) was 109.54, which was lower than the ISR's rate of 870.98 in 2009. The disabling injury index (DII) was 0.09, a decline when comparing to the DII's rate of 0.89 EGAT experienced in 2009.

In 2010, EGAT spent a total 577,841 baht as compensation for employees who encountered work-related injuries and illness, which was lower than a total of 17,555,371 baht spent in the previous year. However, in 2010 EGAT paid more for employees' medical expenses which totaled 5,673,975.64 baht, an increase from the medical expenses of 237,738.15 baht EGAT paid in 2009.

Overall, the number of EGAT employees who underwent work-related injuries in 2010 was lower than those in 2009. Moreover, EGAT's rates of disabling and non-disabling injuries and illness have continued to decline since 2003. In 2010, there was no work-related fatal injuries in any of EGAT's operation.

Property Damage Accidents

During 2009, EGAT encountered 387 cases of accidents which caused damages to EGAT's property, an increase by 15.18 percent from the 336 cases of accidents occurring in 2009. These included the 170 cases of accidents that caused damages to motor vehicles, (comparing to 152 cases in 2009), 72 cases of accidents that damaged heavy machines (an increase of 23.61 percent from 55 cases in 2009), 6 cases of accidents that caused damages to machinery and equipment (the same number as 2009), and one accident that caused damage to the building (the same as 2009). There were also 128 cases of accidents that caused damages to EGAT's other kinds of property. In 2010 the total value of property losses accounted for 4,793,242.90 baht, a decrease from 25,712,526.84 baht of the total property losses EGAT underwent in 2009.

The rate of vehicle accidents in 2010 was 0.28 case per 1,000,000 kilometers, which was lower than the 2009 rate of 3.10 cases per 1,000,000 kilometers. The 2010 cost of losses per accident was 11,933.91 baht (an increase from 10,475.05 baht per accident in 2009). The average loss per kilometer was 3.37 baht per 1,000 kilometer when comparing to the average loss of 32.43 baht per 1,000 kilometers in 2009.

Key Work-related Accidents and Injuries Statistics

During 2001-2010, EGAT has compiled and prepared the key statistics on work-related accidents and injuries in order to improve the operation of occupational health, safety, and working environment across the organization.

Employees' work-related injuries or illness

Fiscal Year	Disabling Injury Severity Rate (ISR)	Disabling Injury Frequency Rate (IFR)	Disabling Injury Index (DII)	Number of Cases	Number of Fatalities	Lost Workdays Cases	Cases without Lost Workdays
2001	1,388.30	2.09	2.90	598	11	91	496
2002	415.97	2.32	0.97	519	3	109	407
2003	276.85	1.49	0.41	408	2	68	338
2004	284.21	1.35	0.38	364	2	61	301
2005	1,623.02	1.91	3.10	365	11	70	284
2006	927.68	1.66	1.54	341	6	61	274
2007	476.12	1.18	0.56	220	3	46	171
2008	446.91	1.03	0.46	205	3	40	162
2009	870.98	1.02	0.89	158	5	37	115
2010	109.54	0.78	0.09	169	0	31	122

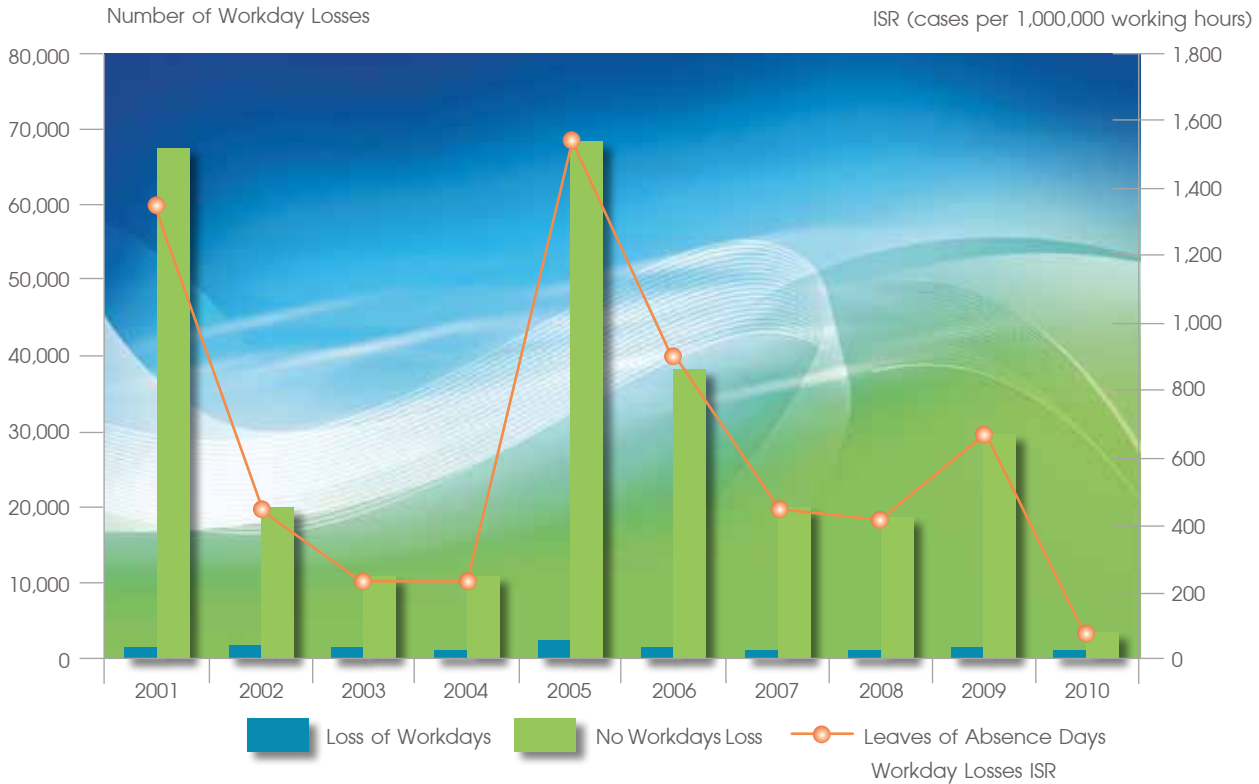
Lost workdays cases, cases without lost workdays and, injury frequency rate (IFR)



Number of workdays loss from work-related injury and illness

Fiscal Year	Workday Loss	Workday Loss (Statistic)	Disabling Injury Severity Rate (ISR)
2001	1,450	67,715	1388.30
2002	1,942	20,063	415.97
2003	1,395	13,035	276.85
2004	1,111	13,255	284.21
2005	2,001	68,851	1623.02
2006	1,368	37,417	927.68
2007	932	19,694	476.12
2008	650	18,720	446.91
2009	1,396	29,792	724.97
2010	746	4,328	109.54

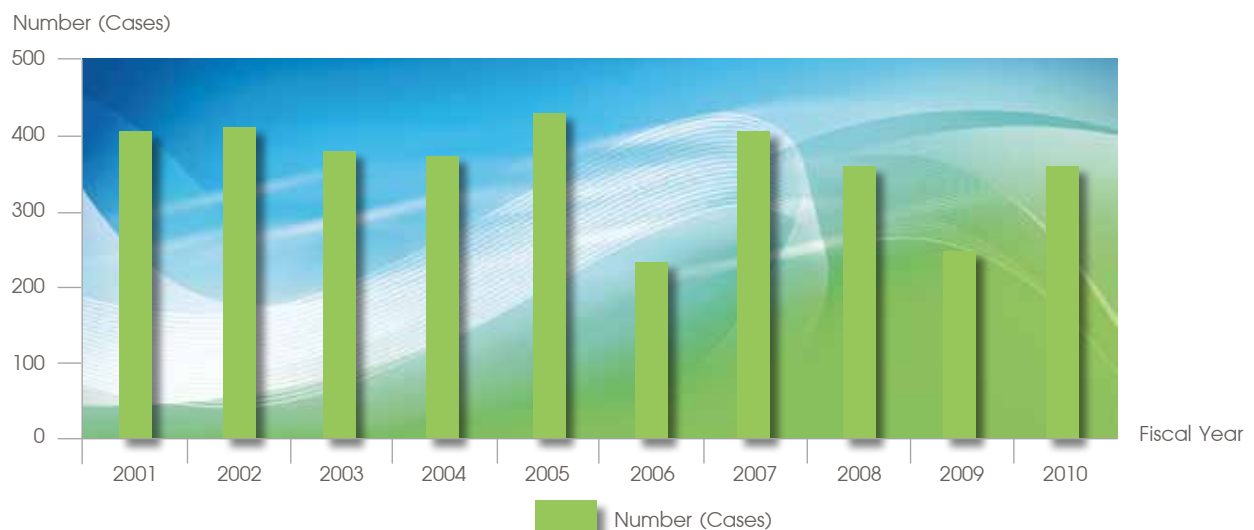
Number of workday losses, no workday losses in statistic, and injury severity rate (ISR)



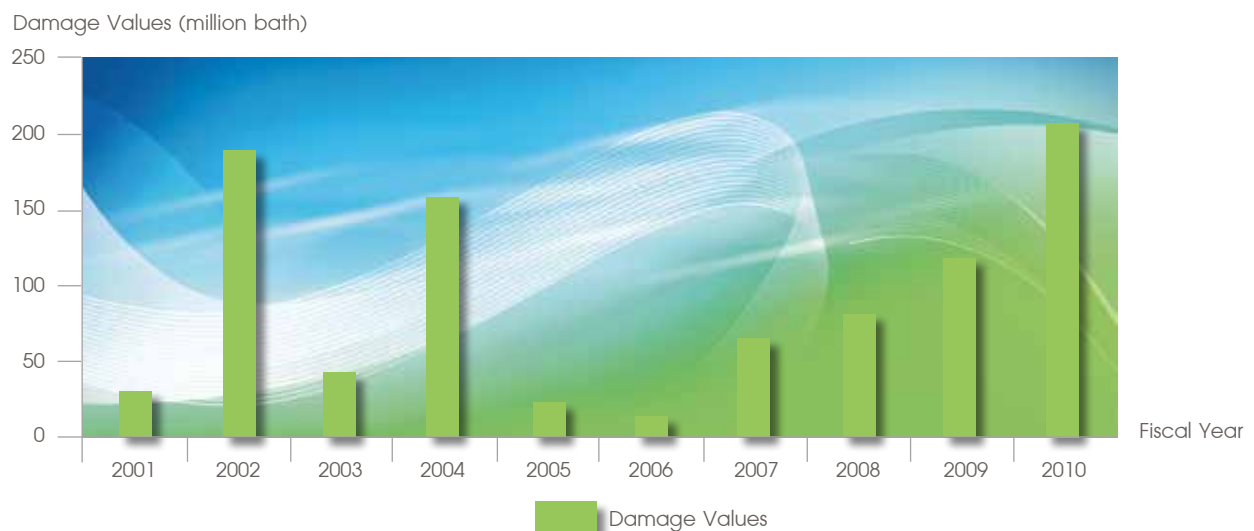
Number of accidents and values of property losses

Fiscal Year	Number (cases)	Value of Losses (Baht)
2001	406	25,808,811.03
2002	415	193,389,377.16
2003	392	48,395,018.21
2004	387	164,343,690.51
2005	433	19,771,444.41
2006	340	11,189,214.91
2007	411	70,097,168.36
2008	379	85,725,120.58
2009	344	124,773,885.46
2010	378	209,251,173.64

Number of property damages between 2001-2010



Values of property damages between 2001-2010



Employee Practices

EGAT employees have been identified as one among key group of stakeholders. Since our establishment over 40 years ago, EGAT has always regarded the caring for employees as a priority as they are capable of playing key roles in driving the organization towards success and sustainable growth. EGAT's policy on employee practices has been established and regularly revised to make it more relevant to the changing situations and more effective to be used as guidelines for human resources management and development, while ensuring their secure employment and success in working and in becoming employees with higher values.

In 2010, EGAT revised our personnel policy with the following policy aims.

1. To enhance the security of employment, spirits and morale, and the well-being of life of employees by promoting the employees with capability and high performance, including fair benefits and welfare.
2. To add value to employees by enhancing their capability to become professionals in their career path and their employability, and by providing adequate trainings and development while encouraging collaboration in team working.
3. To manage our human resources by focusing on their performance and output to increase the organization's productivity while ensuring the optimization of human resources.
4. To adopt the management approaches which focus on fairness, transparency, and accountability, by using competency-based performance system.
5. To encourage the practices of ethical behaviors, dedication and self-disciplines among employees by promoting the personnel who dedicate for the interests of EGAT and the society at large, including employees who participate and involve in social and community activities.

Employee data

At present EGAT has a total of 23,293 people (As of December 31, 2010) comprising 22,591 employees and 702

workers. EGAT has also employed about 5,000 subcontracted workers. In 2010, EGAT employees who resigned accounted for 32 people or 0.14 percent of the total workforce, and the employees who retired were 467 or 2.06 percent of the total number of employees. In 2011, EGAT employees of 540 or 2.06 percent of the total workforce will be due for retirement. In recognition of the importance of having adequate manpower for succeeding the organization's missions and responsibilities, a 5-year manpower master plan (2010-2014) has been developed to cope with the higher number of EGAT's retirement workforce in the next five years.

Remunerations and Welfare Benefits

EGAT has set up fair and appropriate wage rates, remuneration and welfare benefit to employees at all levels and at all stages of their work experiences, to enable them to have secure employment and a decent standard of living.

Starting Wage Rates

EGAT has established minimum wage rates for all employees as stipulated in the notification of the State Enterprise Relations Committee on the minimum standard for state enterprise employment and the notification of the Wage Committee on the minimum wages.

EGAT's starting wages are determined by an employee's experience, competencies, and educational qualifications. The wages are divided into clusters with different minimum and maximum rates for each cluster. The rates are competitive when comparing with those of the other enterprises engaging in the same kind of business.

Welfare and Benefits

There are two types of welfare and benefits for EGAT's employees and subcontracted workers as follows:

Type 1 - Welfare and benefits required by law under the notification of State Enterprise Relations Committee (SERC) on the minimum standard for state enterprise employment and by the other provisions of law.

Type 2 - Additional welfare and benefits provided by EGAT in commensurate with the nature and characteristic



of work performed. They are awarded in addition to normal welfare and benefits required by law or awarded as work incentives. They are, for example, additional payment for specific type of work and the emergency loans.

Freedom of Association and Collective Bargaining

EGAT has actively provided channels for communication between the management and employees to ensure that our employees will have freedom to form and join the representative committees for purposes of collective bargaining.

1. EGAT's Labour Union Relations Committee comprises nine representatives from the management and nine representatives from EGAT employees. A member of EGAT Board of Directors is the chairman of this committee whose duties are to consider and give opinions regarding all rules and regulations related to employment conditions as well as employee rights and benefits.

2. EGAT's Occupational Health, Safety, and Working Environment Committee consists of nine representatives from EGAT management and ten from EGAT employees and one secretary. The committee deliberates EGAT's safety of workplace policy and action plans for the operation of health and safety activities with aims at preventing and mitigating work-related accidents, injuries, and illness and promoting other health and safety activities.

3. EGAT's Working Group on Internal Coordination comprises seven administrators, seven employee representatives (from EGAT's Labour Union) and one secretary. It is the working group's duties to liaise and exchange vital information between different groups within EGAT. The working group also collects employee opinions for the consideration by EGAT management.

Voluntary Retirement and Mutual Separation Programs

EGAT's early retirement project was first introduced in 1995 with an aim at establishing a balance of manpower in terms of quality and quantity. Since 2009, there were two schemes implemented including the early retirement and mutual separation. Criteria and remunerations offering to prospective employees entering both projects have been based on the framework approved by Ministry of Finance and the Cabinet in February 2004.



Personnel Development and Training

Throughout over 40 years of operation, EGAT has always recognized the importance of personnel development and training. EGAT's personnel policy and initiatives had been established with an aim to expand the capability and functioning of employees at all levels encompassing both technical and managerial skills. Our policy and initiatives also have purposes to increase the capacity and employability of all individual employees to secure and retain decent work. EGAT has also developed many initiatives to raise awareness among the personnel to participate and involve in social and environmental responsibility activities.

In 2010, EGAT's guidelines for personnel development and training have been revised in order to make them more relevant to EGAT's key strategic themes on corporate social responsibility, which will further develop EGAT into a high performance organization (HPO) in social and environmental performance. The revised guidelines placed emphasis on the personnel competency and capability development and the raising of their attitudes towards social contributions. This was to encourage our personnel to become a model Thai citizen who is a professional in one's own career and also embraces good ethical morale. In short, EGAT personnel at all levels are the key to drive EGAT to be recognized as Thailand's leading organization.

2010 was also the first year EGAT launched the implementation of performance and competency based management system program (PMSP). The system was a combination between the new, modern performance evaluation system and EGAT's existing individual personnel evaluation. The flexible PMSP will be applied for the evaluation of personnel performance across the organization.

At present, EGAT's training programs designed to improve personnel performance at all levels included such courses as the work coaching, monitoring, counseling, assignment and rotations. In 2010, EGAT also developed a training roadmap for personnel consisting of numerous training courses and activities with an aim to develop them to be professional and model personnel while enjoying a happy working life.

EGAT's personnel training programs ranging from the entry level to the highest one included the followings.

- New employee orientation
- EGAT's young generation development
- Head of section development
- Chief of department development
- Assistant director of division development
- Director of division and assistant governor development

EGAT has developed the following training courses; preparation programs for junior and senior executives, programs on technical and managerial skills for technicians and administrative officers, programs organized directly by individual command lines, and programs for personnel

specializing in control systems engineering, information technology, as well as knowledge management. Other programs include the promotion of the well-being of personnel regarding health care and financial disciplines.

EGAT also encourages our employees to attend external training courses, seminars and conferences both locally and overseas, with an aim at providing opportunities to broaden their perspectives and to enhance learning experiences while creating new alliances and collaborative networks with related organizations and agencies.



Compliance with Laws

During 2010, EGAT has played significant roles in providing opinions for the formulation of the following articles in the Constitution of the Kingdom of Thailand: Articles 56, 57 and 59 regarding the rights to information and file complaints; Articles 66 and 67 regarding human rights, and Article 290 regarding the promotion of the environmental quality by local administrative organizations. In addition, EGAT had complied with the Thai Constitution and relevant laws and also submitted a report on compliance performance to the Ministry of Energy. A summary of such compliance performance are as follows:

Constitution	Measures and Protocols Adopted	Operational Outcomes
Article 57	Provided information and organized public hearings on EGAT power projects.	<ul style="list-style-type: none"> • Chana power plant project: Visits to the local scholars and leaders in Chana district, Songkla province for exchange of opinions and to create goodwill. • Meetings with the landowners in areas affected by the construction of 500 kV transmission line under the Hongsa lignite-fired thermal power plant project which included the 500 kV Thai/Lao Border (in Nan Province) - Nan 2 transmission line and the 500 kV Nan 2 - Mae Moh 3 transmission line. During these meetings, EGAT provided landowners details related to existing right-of-way and land rights protocols. • Transmission Line Protection Youth Camps were organized to raise the Thai youth's awareness on the protection of transmission lines.
Article 59	Formulated procedures for the filing of complaints about the impacts from EGAT's power projects.	<ul style="list-style-type: none"> • A working committee on complaints investigation was established to look into the local people's complaints against Chana power plant project in Songkla province, and to deliberate remedy measures for such complaints.
Article 66	Formulated measures and procedures and identified legal principles endorsing the rights of local communities and native communities to preserve or restore local customs and traditions, including the rights to keep a balanced and sustainable management, maintenance, and utilization of local natural resources, environment and bio-diversity.	<ul style="list-style-type: none"> • Hydro power plant downstream of irrigation dam development project: EGAT presented a progress report at a Khan Chong Tambon Administrative Organization's meeting in Wat Bot District of Pitsanuloke province. The meeting resolved to approve the operation of a hydropower plant downstream of Bamrungdaen irrigation dam. • Organized study-visits to Wang Noi power plant and Srinagarind dam for 220 local leaders from communities in Ayuthaya and Saraburi provinces. • Bhumibol Dam: Demonstrated weir construction technique and involved representatives of the Community Forest Committee of Ban Tha Pui, Village No. 5 at Sam Ngao district in Tak province, in building 13 community weirs. <ul style="list-style-type: none"> - Supported the construction of the Biological Way of Life for Sufficiency Economy Learning Centers for Ban Sanprapa community at Sam Ngao district in Tak province. • Vajiralongkorn Dam: Involved the Biological Way of Life Project's working committee in the construction of the Biological Way of Life for Sustainable Development Learning Center at Sangklaburi district in Kanchanaburi province. This center was established in addition to the other five centers located at Sangklaburi district, Kanchanaburi province. • Lam Takhleng Chonlapawattana Power Plant: The Social and Environment Working Committee, in conjunction with the Community Forest Committees of Ban Khao Yai Thieng in Klong Pai sub-district, repaired and improved six weirs in the area of Khao Yai Thieng community forest project in Sikhiew district, Nakhon Ratchasima province. • Bhumibol Dam: EGAT, in conjunction with 120 teachers and students from Sam Ngao Wittayakom School built weirs in the community forest housing project to restore water.

		<ul style="list-style-type: none"> Organized the tri-party meeting for the joint committee on the monitoring of environmental management and development in the communities close to North Bangkok power plant to monitor the performance of environmental management and community development activities. Organized training courses on the Biological Way of Life for Sustainable Development for local people affected by the 500 kV transmission line construction project along the Thai Border in Nan province. The National Environment Board passed a resolution to approve the EIA report for Wang Noi power plant project unit 4, following the Expert Committee's recommendations. The Expert Committee, in its 11/2553 meeting, passed a resolution to approve the EIA report for Chana power plant, unit 2. EGAT presented the details of Lam Takhlong wind turbine power project, phase II, at the third meeting of the Expert Committee (Khor Chor Kor). However, the Committee's approval had not been granted following the legal concerns raised by the Council of State on its 26 October 2010 meeting regarding the project's site. Lam Takhlong is located in a natural resource and environmental conservation zone determined by the Cabinet. The location is within a 100-meter vicinity of natural resource and environmental conservation zone determined by the Department of Industrial Work's regulations. The department, therefore, was unable to grant EGAT a permit for the construction of a wind turbine power plant.
Article 67	Conduct an EIA study prior to project implementation and organized public hearings from local communities around the project's site.	<ul style="list-style-type: none"> EGAT is preparing a term of reference (TOR) for conducting the EIA study of individual projects or activities that may have serious impacts on community's natural resources, environment, and health conditions under Article 67, Paragraph Two, of the 2007 Constitution of the Kingdom of Thailand.
Article 86(3)	Promoted R&D for the utilization of renewable energy resources on a continual basis.	<ul style="list-style-type: none"> Development of a prototype float-mounted solar cell power system and the solar power plant with water weight-based solar tracking system project. Equipment and the float-mounted infrastructure were installed on the reservoir of Srinagarind dam in Kanchanaburi province. Two R&D projects for development of small hydropower turbine generators consisting of : <ul style="list-style-type: none"> A 35 kW small hydropower turbine generator which was installed at the Lower Mae Ping dam on 30 September 2010. The 150 kW small hydropower turbine generator installed at the existing Mae Chang dam, including installation of a protection equipment for emergency shutdown during a blackout. R&D project for the development of two small hydropower generators: <ul style="list-style-type: none"> A 137 kW generator installed at the irrigation dam of the Royal Irrigation Department (RID). The trial operation was delayed due to flooding downstream of the dam. A 54 kW hydropower generator installed downstream of existing irrigation dam at which trial operation has also been postponed by RID. R&D project for the development of 1 kilowatt vertical axis wind turbine generator installed at the upper reservoir of Lam Takhlong pumped storage dam.

Community Involvement and Development

Since our establishment over 40 years ago, EGAT has continuously placed greater emphasis on the development of CSR practices, projects, and initiatives with due regard to the needs and expectation of our stakeholders, in particular the communities living close to EGAT power plants and transmission line routes. Our primary goal is to minimize possible impacts occurring both during the project construction and in operation. During 2010, EGAT's CSR implementation in focus included the community relations, the engagement with public and private agencies to foster good relationships and to build CSR partnership and networks, the volunteer activities to sustain the well-being of communities and society, and the implementation of both in-process CSR and after-process CSR projects and initiatives which contribute to the society, communities, and the environment.

Community Relations

During 2010, EGAT has actively carried out community relations activities, focusing on the area around project construction site, the area at which additional generating capacity has been developed, and the areas targeted to be the sites of new power projects. Community relations activities were undertaken in order to foster partnerships with local communities, in pursuit of their engagement in power generating sources development. The activities range from the promoting and supporting of education, cultural activities, as well as the income creations by encouraging the use of high-efficiency microorganism to replace chemicals for sustainable agriculture under the biological way of life for sustainable development scheme. The target areas of EGAT's community relations activities included the communities living close to North Bangkok power plant, unit 1 construction project in Bang Kruai district, Nonthaburi province, the communities around Wang Noi power plant in Wang Noi district, Ayutthaya province and Chana power plant in Chana district, Songkla province, and the communities in the areas to be developed into new power plant sites in the following provinces; Nakhon Sawan, Chumphon, Surat Thani, Nakhon Srithammarat, and Ubon Ratchathani.

EGAT also involved with related government agencies to promote the conservation and restoration of natural forest resources as well as soil and water. Key projects and initiatives implemented were namely the campaigns for vetiver grass planting, the restoration of water and forest ecological system in northern region in commemoration of His Majesty the King's 80th birthday anniversary, the trees planting around Our Beloved King's residence, the expansion of green areas around Chana power plant, and the promoting of vetiver grass growing for soil and water conservation.



Engagement with Government Agencies to foster partnership

EGAT has always recognized the roles of government agencies as crucial to achieve our goals in social responsibility implementation. Thus, our engagement with related government agencies, which is one of our major group of stakeholders, has been actively conducted to seek for trust and acceptance, which will further lead to cooperation among all agencies concerned. During 2010, EGAT had engaged with related agencies in a wide range of activities including the organizing of study tours to EGAT's power plants and facilities, the presentations on EGAT's operations and the energy industry overview, the promotion of good relationship by participating with, involving in, and supporting of activities organized by other related agencies, as well as the expression of good will and congratulations during different occasions and events.

Volunteer Activities for Communities and Society

EGAT's employees at all levels have one prime mission and duty and that is to seek for trust and acceptance with regard to EGAT's operations and power project development from the communities and the society at large. This duty has been in consistent with EGAT's urgent policy established in pursuit of mutual understanding in the development of new power plant projects by adopting participatory approaches to encourage community involvement. Activities undertaken based on sincere intention will eventually bring EGAT achievements in social responsibilities implementation. During 2010, a wide range of volunteer campaigns were organized to encourage employees to volunteer in community services, and to support activities carried out by various volunteer groups.

CSR Implementation for Society, Communities, and the Environment

During 2010, EGAT has given greater importance to the implementation of in-process CSR projects and initiatives, which have been integrated into our on-going core business processes, to demonstrate our commitments to social responsibility. EGAT also implemented many other after-process CSR initiatives and campaigns, which are beyond our scope of operations and activities, comprising the on-going CSR projects and the new campaigns and activities launched during the year. These projects were developed in compliance with EGAT's key strategic themes to drive EGAT to be the organization with good corporate governance and with due care to the society, community, and the environment. Such strategic themes have also been developed to build good relationship with communities and the society, and to promote energy conservation and renewable energy development.

In-process CSR Projects

During 2010, EGAT has actively launched and implemented our 'Global Warming Reduction for Our Beloved King' initiative to celebrate the auspicious occasion of His Majesty's the King's 7th Cycle Birth Anniversary 5th December 2011. New and on-going projects and activities carried out under this initiative included the followings.

Wind Farm at Chalerm Phrakiat Energy Park Project

A wind turbines farm utilizing wind energy was installed in the compound of Lam Takhlong reservoir at Sikhiew district in Nakhon Ratchasima province. Electricity generation from this wind farm can annually cut CO₂ emissions by 22,000 tons.

Tree Planting around Our Beloved King's Residence Project

The project was implemented by the Ministry of Energy (MOE), EGAT and Prachuab Kirikhan province, with an aim to promote forest conservation in the forest conservation zones. A campaign was launched to encourage participation and involvement in tree planting by the public and EGAT employees. A total of 984,000 trees were planted including the scattering of 1,000,000 tree seeds from helicopters in planting areas in three districts, namely Hua Hin, Pranburi, and Kuiburi. It has been expected that tree planting under the project will absorb 9,000 tons of CO₂ emissions each year.



Development of Hydropower Plants Downstream of Irrigation Dams Project

This project has reflected EGAT's efforts to give primary importance to the development of renewable energy available, which is cost effective and environmentally friendly, such as the existing irrigation dams operated by the Royal Irrigation Department (RID). At present, EGAT's six small hydropower plants downstream of RID's existing irrigation dams, with a combined generating capacity of 78.7 MW, have been developed with an aim to optimize benefits from natural water resources.

1. Pasak Jolasid dam in Pattananikom district, Lopburi province. The project consists of the installation of one 6.7 MW hydropower generator, capable of producing an average energy of 34.80 million kWh and curbing 20,596 tons of CO₂ emissions yearly.

2. Khun Dan Prakan Chon dam in Muang district, Nakhon Nayok province. At this dam, a 10 MW hydropower generator is installed which is capable of producing an average energy of 27.99 million kWh and reducing 16,541 tons of CO₂ emissions annually.

3. Chao Phraya dam in Sappaya district, Chainat province. The project features two 6 MW hydropower generators, capable of generating an average energy of 61.75 million kWh and cutting CO₂ emissions by 36,518 tons per year.

4. Mae Khlong dam in Tha Muang district, Kanchanaburi province. Two 2 MW generators are installed at the dam, which can produce an average energy of 74.00 million kWh yearly while curbing CO₂ emissions by 43,768 tons.

5. Naresuan dam in Prompiram district, Pitsanulok province. An 8 MW hydropower generator installed at this dam can produce an average energy of 43.03 million kWh and reduce 25,430 tons of CO₂ emissions per year.

6. Quae Noi dam in Wat Bot district, Pitsanulok province. Two hydropower generators with a combined capacity of 15 MW installed at the dam can yield an average energy of 146.60 million kWh and cut 86,635 tons of CO₂ emissions annually.



Thapsakae Solar Power Project

The project consists of the installation of 5 MW solar cell generating unit at Thapsakae subdistrict in Prachuab Kirikhan province. This solar power unit is capable of reducing 3,603 tons of CO₂ emissions annually.

Solar Power System at the Royally-initiated Chang Hua Mun Project

In 2010, EGAT also involved in the installation of a 50 kW solar power generating system at the royally-initiated Chang Hua Mun project located at Tha Yang district in Petchburi province. This solar cell power system can help curb CO₂ emissions by 35 tons yearly.

A Joint Venture for the Development of Biomass Fuel for Power Generation

EGAT had signed a memorandum of understanding (MOU) with a joint venture of Fixam Global Limited and Beyond Glow Energy Co. Ltd., for the development of a 4.4 MW demonstration plant, located in the compound of Mae Hong Son power plant, to produce biomass fuel for electricity generation. The project has an aim to promote the utilization of agricultural wastes and community garbage, thus contributing to the well-being of local economy, and the quality of life in local communities and the lowering of greenhouse gas emissions.

Public Communication for Power Generation Plan

Since 2006, EGAT has actively implemented the public communication for power generation plan developed to promote and encourage the community involvement in 18 locations of EGAT's dams and power plants as well as lignite mining sites across the country. The objectives of the plan are to adopt a new approach of community participation and involvement between EGAT and local communities. The key strategies adopted include the development of EGAT personnel with skills to work with the communities, the two-way communication between EGAT and communities, and the building and fostering sustainable relationship with communities.



During 2010, the activities carried out under EGAT's public communication for power generation plan included the implementing of 74 action plans which fulfilled the strategic objectives determined by EGAT's power generation command line. These objectives included the promotion of good community relations, the building of acceptance regarding EGAT's environmental operation among the society at large, the development of proactive communication to contribute to the economic well-being in the communities living close to EGAT's power plants, the development of community volunteering networks, the development of information technology to support the complaints response system, and the formulation of a social mapping for communities.

The evaluations of activities implementation in 2010 and a survey on basic data revealed the higher scores related to the relationship between EGAT's power plants and the communities and that the communities had better attitudes towards the operation of power plants. However, there were some suggestions from communities related to the improvement of certain activities in certain operating areas and of the communication to cope with the situations and to meet the needs of communities. Overall, EGAT's ultimate goal in implementing the public communication for power generation plan is to build trust and acceptance among the communities living close to the locations where EGAT operates, while reducing the number of power plant protesters.

After-process CSR Projects

Reforestation Project

Since 1994, EGAT has actively and continuously supported the country's reforestation program initiated and implemented by the Thai government in commemoration of the Royal Golden Jubilee Celebrations of His Majesty's Ascension to the Throne.

EGAT's reforestation project covers a total area of 384,418 rais in 49 provinces across the country. The project implementation during 1994-2009 included on-going replanting and maintenance activities covering 377,638 rais of watershed forest areas and river basin areas of the Ping, Nan, and Meklong rivers, 7,430 rais of mangrove forests along the coasts of the Gulf of Thailand and the Andaman Sea, and 350 rais of swamp forests.

In 2010, EGAT participated with Third Army Area in the conservation of natural forest resources implemented under the restoration of water and forest ecological system in the northern region project in response to the royal initiative of Her Majesty Queen Sirikit. The project has also been implemented to celebrate the auspicious occasion of His Majesty the King's 80th birthday anniversary. EGAT's reforestation activities under this project included the reforesting of degraded forest areas of 4,000 rais, by replanting and providing maintenance works covering an area of 1,000, 1,500 and 1,500 rais in 2008, 2009 and 2010, respectively. It is expected that young trees replanted will absorb 899,330,630 ton of CO₂ emissions annually. EGAT also involved in the building of weirs and the growing of vetiver grass in tree planting beds to slow down the flow of water and to protect soil erosion.

Expansion of Green Area around Chana Power Plant

The project's purpose was to encourage and involve the communities living close to Chana power plant located at Chana district in Songkhla province to utilize benefits from the abandoned area around the power plant by planting fast-growing trees to increase the green area which will further create value for the community land. About 52 community members joined the project covering an area of 161 rais.



Vetiver Grass Planting for Soil and Water Conservation

The project was developed with an aim to promote the conservation of soil and water to restore and revitalize the country's natural forest resources. Vetiver grass has been planted along the slope of agricultural area in the communities living close to Bhumibol dam in Tak province, Sirikit dam in Uttaradit province, Srinagarind dam in Kanchanaburi province, and in EGAT's other reforestation plots. In 2010, EGAT involved with the communities to plant 600,000 vetiver grass seedlings on the community's cultivated land, including another 40,000 seedlings in reforested plots.

Green Learning Room Project

EGAT began implementing this project in 2007 by establishing green learning rooms for both primary and secondary schools countrywide. The project's primary goal is to raise awareness on energy and environmental conservation among young schoolchildren by encouraging them to learn from self-practices which will eventually lead to attitudes and habits of electricity saving. At present there are 426 green classrooms implemented under EGAT's green learning room project.

To extend the implementation of green learning room project to cover the entire management in schools, EGAT has developed a green school project in pursuit of an energy conservation network among schools across the country. The project has been implemented under EGAT's 5-year CSR master plan during 2009-2013. The existing schools involving in EGAT's green learning project will be promoted to become a model school for energy and environmental conservation. In 2010, there were twenty new schools selected to participate the project including another 40 schools selected from the network of schools participating the green learning room project, which at present accounts for 228 schools across the country.



Waen Kaew or "Eyeglasses for the Poor" Project

The project has been developed since 2006 to commemorate the 48th birthday anniversary of HRH Princess Maha Chakri Sirindhorn. The nomenclature of "Waen Kaew" derives from one of the names Princess Sirindhorn used in her writings. This project marked the beginning of EGAT's involvement in undertaking our social activities with the alliances, namely Mettapracharak Wattraikhing Hospital, TrueVision Group, Sai Jai Thai Foundation under the Royal Patronage, and Hawvan Group Co. Ltd. Campaigns were launched to raise fund from public donations to support the provision of eye care services and eyeglasses free of charge to the disadvantaged people, under the slogan "Light for the eyes is the light of life". In 2010, EGAT's Waen Kaew project could raise funds of 250,000 bath from donation by both public and private agencies and organized 28 eye care service mobile units for 6,226 people.



EGAT D.I.Y. Camp for Volunteering Spirit Cultivation Project

The project, which was launched for only 2 years, received great acceptance from academic institutions and students. During 2010, EGAT has organized the training courses on CSR concepts for the students engaged in volunteer camp activities at their universities, to enable them to apply knowledge and experiences gained from participating with the project to those of their own. Over the two years of project implementation, EGAT had provided CSR trainings for 120 students from 25 universities and educational institutes in Bangkok and the metropolitan area as well as from universities in the northern region. In 2011, the project will undergo changes and modification in efforts to better cope with the needs of participating students. The project also demonstrates EGAT's commitment to support all actions of good deed which contribute to the well-being of the society at large.





Construction of Bang Kraui - EGAT Elevated Railway Station Project

In 2010, EGAT provided a financial support of 17.85 million baht to the State Railway of Thailand for the project design and the conduct of EIA report for the construction of the Bang Kraui-EGAT elevated railway station, developed under the red suburban railway system project. The new railway system, scheduled for completion in 2015, will help improve the quality of life and the environment in Bang Kraui district, Nonthaburi province.



Mae Moh Technology and Management College Establishment Project

This project has been developed in collaboration between EGAT and the Office of Vocational Education Commission (OVEC). It was also approved by EGAT's Board of Directors with a purpose to establish an educational institution in commemoration of the 80th birthday anniversary of His Majesty the King. The project has the following objectives: to provide a vocational education opportunity to meet the needs of communities at Mae Moh district in Lampang province, to produce skilled workers, technicians and technologists to serve the demand of skillful manpower of EGAT and other entrepreneurs, and to encourage students to be capable of self-employed jobs.

During 2006-2010, EGAT had provided a funding of 372 million baht for the construction of buildings and facilities and the procurement of educational equipment. In 2010, Mae Moh Technology and Management College won the first prize of HRH Princess Maha Chakri Sirirhorn's Cup in the 2nd Honda's Eco Car Innovation Contest.



Water Quality Monitoring by Community Members Network

The project has been implemented with a purpose to train young community people to involve in the safeguarding of natural water resources for the well-being of their locals, including the making of a living as fisherman. EGAT has developed a "water quality monitoring by community members network", a pilot activity at Chana power plant in Songkla province, consisting of groups of students, young people outside formal schooling system, local protection volunteers, community leaders, and net-pen aquaculture farmers. EGAT asked for assistance from the Faculty of Science and Technology, Prince of Songkla University, Pattani Campus, Pattani Freshwater Fishery Research and Development Centre to provide trainings and workshops for these network members, including field equipment for water quality monitoring practices. The project has enabled the community members to have knowledge and skills in water quality monitoring and to understand the indicators of water ecology fertility, which will benefit their local net-pen aquaculture activities.

Chemical-free Rice Cultivation Learning Centre

This project has been implemented to encourage local farmers to grow rice free of chemicals in response to His Majesty the King's sufficiency economy philosophy. After many years of rice growing that relied heavily on chemical use, Khun Sirirat and Khun Tosaporn Soi-glom attended lectures on the biological Way of life for sustainable development and later applied the principles to their rice field cultivation. That was the turning point of their lives and by adopting the sufficiency way of life and completely quitting chemical use in 2009, the couple's livelihood had significantly improved.

The Soi-glom family grew rice following the biological way of life concept in a field covering 46 rais, which were divided into four plots. They grew rice on each of the four plots at successive intervals of 1-1.5 month, using four strands of rice: Homnin fragrance rice, Cholasith fragrance rice, Keo-kaset and Pin-kaset. The new practice adopted increased the yields from their rice fields by 60 thangs per rai to 75 thang per rai, which eventually rose to 120 thangs per rai while the cost lowering from 3,600 baht per rai to 1,800 baht per rai. At present, the Soi-glom family has turned their rice farm into the "Biological Way of Life for Sustainable Development Learning Centre" for interested persons and communities. The couple also provided lectures on new rice farming practices to interested persons and extended their knowledge to relatives who grew rice at Sampran district in Nakhon Pathom province and to the rice fields around Wang Noi power plant in Ayutthaya province.



Fund for Sports project

EGAT has been a key supporter of the Thai Amateur Weightlifting Association (TAWA) since 2004. The achievement of the project is evident as the association has continuously experienced impressive records. The Thai weightlifters brought fame to the country by winning medals from the Athens Olympic Games in 2004 and the Peking Olympic Games in 2008. At the 16th Asian Games held in Guangzhou, Guangdong Sheng, China, Pensiri Laosirikun, a member of Thailand's women weightlifting team, won the first silver medal for Thailand. EGAT also sponsored live telecast of the events.

Disaster Relief Activities

During 2010, many regions of Thailand suffered from major disasters including heavy flood, typhoon and extreme draught. As an organization engaging in the operation of dams, power plants, transmission lines and facilities located in all regions across the country, EGAT have been fully equipped with heavy machinery and equipments, including personnel ready to volunteer in disaster relief and rescuing activities for communities living close to EGAT's locations in operation. In 2010, EGAT had involved in the following disaster relief activities.

- Provided assistance to the people who suffered from natural disasters, including the distribution of survival supplies, flat hull boats, blankets and medicine. EGAT also participated in many post-disaster rehabilitation programs.

- Participated with other government agencies under the supervision of the Minister of Energy (MOE) to organize a campaign on "Energy to Support Draught Victims", by supplying 1.5 million liters of diesel oil worth 45 million baht to the people affected from draught for use in water pumping and transportation.



Report Parameters

EGAT Corporate Social Responsibility Report 2010 was prepared in accordance with the evaluation criteria of the state enterprise performance appraisal (SEPA), which was developed by the State Enterprise Policy Office (SEPO), focusing on the roles and performance of state enterprises regarding the corporate governance (CG) and the corporate social responsibility (CSR). SEPO has also assigned TRIS Corporation Limited (TRIS) to engage in the formulation of the evaluation criteria. TRIS's criteria included the requirement for all state enterprises to prepare CSR reports as part of social responsibility implementation to fulfill the measure and analysis related to their performance and achievements, including the beneficial impacts on stakeholders, board of directors, top executive and management, employees, communities, customers, as well as the public in general.

EGAT CSR report 2010 was prepared during the fiscal year 2010, covering the reporting period from January 1 to December 31, 2010. The report was produced separately from EGAT Annual Report 2010. In addition to presenting to readers about EGAT's economic, social and environmental performance during the reporting year, the report also provided information to ensure all groups of stakeholders that we at EGAT have established our CSR commitments, directions, and management approaches to sustain the operations of our business activities in a socially and environmentally responsible manner.

In preparing this report, EGAT had applied the guidance in the Sustainability Reporting Guidelines and Electric Utility Sector Supplement, developed by the Global Reporting Initiative (GRI) for the standard information disclosure, including the electric sector specific disclosure and performance indicators. EGAT expected that we will capable of extending the reporting boundary of our CSR report for the next consecutive year to meet the B level in the disclosures of both the standard information and the sector specific one, as well as the core performance indicators. Regarding the reporting content, a working group committee for EGAT's CSR Report 2010 Production, took responsibility for the considering and reviewing of data and information to be disclosed and reported. The committee organized five meetings between December 2009 and March 2010.

However, the contents and information disclosure in our CSR report 2010 were limited to EGAT's own performance and achievement in social and environmental responsibility. The report did not include those performed by EGAT's subsidiaries, associated company, and joint ventures, namely Ratchaburi Electricity Generating Holding PCL (RATCH), EGAT International Co., Ltd. (EGAT Inter), Electricity Generating PCL (EGCO), District Cooling System and Power Plant Co., Ltd. (DCAP), and EGAT Diamond Service Co., Ltd. The committee expected to include the CSR performance and achievements of EGAT's subsidiary companies in EGAT's CSR report in the years to come.



The report also provided information with respect to the information required by TRIS, for the No. 2.6 indicator - social and environmental responsibility. Information disclosures on GRI-G3 indicators and electric utility specific sector indicators were provided in the GRI Content Index. EGAT CSR report 2010 was prepared in two languages: Thai and English and can be downloaded from EGAT website. For more information about this report, please contact the address below:

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List of indicators formulated by TRIS Corporation Limited

Indicator in Detail	Page
- CO ₂ emissions reduction achieved from the energy efficient NO. 5 label campaigns/projects.	32-33
- Percentage of electricity generated from clean energy sources, namely solar, wind, hydropower, geothermal, and fossil fuel based, comparing to gross electricity generation and purchase in 2010.	43
- Emissions of No _x and So _x (ppm and mg/m) from individual power plant and all power plants and generating units. (g/kWh)	37-38
- Emissions of particulates (mg/m ³) from individual power plant and all power plants in comparison with total electricity generation and purchase. (g/kWh)	38
- CO ₂ emissions volume (ton and kgCO ₂ /kWh) in comparison with total electricity generation and purchase.	38
- Areas of reforestation implemented and accumulative volume of CO ₂ absorption by the number of trees reforested. (ton)	60
- Budgets and expenses for social and environment responsibility implementation.	30
- Budget for R&D projects and initiatives.	32, 45
- Social and environmental aspects management during power project construction projects including prevention and mitigation measures.	45

GRI Content Index

EGAT AR 2010 = EGAT Annual Report 2010

EGAT CSRR 2010 = EGAT Corporate Social Responsibility Report 2010

N/R = not relevant

N/A = not available

Profile Disclosures			EGAT AR 2010	EGAT CSRR 2010
			Page	
	1.1	Statement from the most senior decision-maker of the organization.		6
	1.2	Description of key impacts, risks, and opportunities.		12-13
Organizational Profile				
	2.1	Name of the organization.		8
	2.2	Primary brands, products, and/or services.		8
	2.3	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures.		8
	2.4	Location of organization's headquarters.		8
	2.5	Number of countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report.		N/R
	2.6	Nature of ownership and legal form.		8
	2.7	Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries).		8
	2.8	Scale of the reporting organization, including number of employees; net sales (for private sector organizations) or net revenues (for public sector organizations); total capitalization broken down in terms of debt and equity (for private sector organizations); and quantity of products or services provided.		9
	2.9	Significant changes during the reporting period regarding size, structure, or ownership.		9
	2.10	Awards received in the reporting period.		73-74
Electric Utility Sector-Specific				
Organizational Profile Disclosures				
	EU1	Installed capacity, broken down by primary energy source and by regulatory regime.		8
	EU2	Net energy output broken down by primary energy source and by regulatory regime.		9
	EU3	Number of residential, industrial, institutional and commercial customer accounts.		8
	EU4	Length of above and underground transmission and distribution lines by regulatory regime.		8
	EU5	Allocation of CO ₂ emissions allowance or equivalent, broken down by carbon trading framework.		N/R
Report Parameters				
Report Profile				
	3.1	Reporting period (e.g., fiscal/calendar year) for information provided.		64
	3.2	Date of most recent previous report.		
	3.3	Reporting cycle		64
	3.4	Contact point for questions regarding the report or its contents.		65
	3.5	Process for defining report content, including determining materiality; prioritizing topics within the report; and identifying stakeholders the organization expects to use the report.		64
	3.6	Boundary of the report.		64
	3.7	State any specific limitations on the scope or boundary of the report..		N/A
	3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organizations.		N/A
	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.		N/A
	3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such restatement.		N/A
	3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.		64
	3.12	Table identifying the location of the Standard Disclosures in the report.		66-71
	3.13	Policy and current practice with regard to seeking external assurance for the report.		N/A

Governance, Commitments, and Engagement			EGAT AR 2010	EGAT CSR 2010
Governance			Page	
	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.		22
	4.2	Indicate whether the Chair of the highest governance body is also an executive officer.		23
	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.		24
	4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.		24
	4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives, and the organization's performance (including social and environmental performance).		24
	4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided.		24
	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.		25
	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.		25
	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.		25
	4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance.		25
	4.11	Explanation of whether and how the precautionary approach of principle is addressed by the organization.		25
	4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses.		N/A
	4.13	Memberships in associations and/or national/international advocacy organizations in which the organization: <ul style="list-style-type: none"> • Has positions in governance bodies; • Participates in projects or committees; • Provides substantive funding beyond routine membership dues; or • Views membership as strategic. 		N/A
	4.14	List of stakeholder groups engaged by the organization.		26
	4.15	Basis for identification and selection of stakeholders with whom to engage.		26
	4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder groups.		26-28, 45
	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.		29
Economic Performance				
Management Approach				
Core	EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.		30
	EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change.		31
	EC3	Coverage of the organization's defined benefit plan obligations.		30, 52-53
	EC4	Significant financial assistance received from government.		N/A
Add	EC5	Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operation.		N/A
Core	EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.		30
	EC7	Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation.		N/A
	EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement.		N/A
Add	EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts.		N/A

Electric Utility Sector-Specific			EGAT AR 2010	EGAT CSRR 2010
Economic Disclosures on Management Approach			Page	
Availability and Reliability	EU6.	Management approach to ensure short and long-term electricity availability and reliability.		31
Demand-Side Management	EU7.	Demand-side management programs including residential, commercial, institutional and industrial programs.		32-33
Research and Development	EU8.	Research and development activity and expenditure aimed at providing reliable electricity and promoting sustainable development.		34
Plant Decommissioning	EU9.	Provisions for decommissioning of nuclear power sites.		N/R
Electric Utility Sector-Specific				
Economic Performance Indicators				
Availability and Reliability	EU10.	Planned capacity against projected electricity demand over the long term, broken down by energy source and regulatory regime.		34
System Efficiency	EU11.	Average generation efficiency of thermal plants by energy source and by regulatory regime.		35
System Efficiency	EU12.	Transmission and distribution losses as a percentage of total energy.		35
Environmental Performance				
Management Approach				
Core	EN1	Materials used by weight or volume.		
	EN2	Percentage of materials used that are recycled input materials.		
	EN3	Direct energy consumption by primary energy source.		
	EN4	Indirect energy consumption by primary energy source.		
Add	EN5	Energy saved due to conservation and efficiency improvements.		
	EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.		43-44
	EN7	Initiatives to reduce indirect energy consumption and reductions achieved.		
Core	EN8	Total water withdrawal by source.		
Add	EN9	Water sources significantly affected by withdrawal of water.		
	EN10	Percentage and total volume of water recycled and reused.		
Core	EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.		
	EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas, and areas of high biodiversity value outside protected areas.		
Add	EN13	Habitats protected or restored.		
	EN14	Strategies, current actions, and future plans for managing impacts on biodiversity.		
	EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.		
Core	EN16	Total direct and indirect greenhouse gas emissions by weight.		37
	EN17	Other relevant indirect greenhouse gas emissions by weight.		37-38
Add	EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved.		
Core	EN19	Emissions of ozone-depleting substances by weight.		38
	EN20	No _x , SO _x , and other significant air emissions by type and weight.		39
	EN21	Total water discharge by quality and destination.		
	EN22	Total weight of waste by type and disposal method.		
	EN23	Total number and volume of significant spills.		
Add	EN24	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally.		
	EN25	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.		
Core	EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.		37
	EN27	Percentage of products sold and their packaging materials that are reclaimed by category.		
	EN28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations.		
Add	EN29	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce.		
	EN30	Total environmental protection expenditures and investments by type.		

Social Section			EGAT AR 2010	EGAT CSRR 2010
Electric Utility Sector-Specific				
Labor Practices and Decent Work Disclosures on Management Approach			Page	
Employment		EU14. Programs and processes to ensure the availability of a skilled workforce.		45, 54
		EU15. Percentage of employees eligible to retire in the next 5 and 10 years broken down by job category and by region.		52
		EU16. Policies and requirements regarding health and safety of employees and employees of contractors and subcontractors.		46
Social Performance Indicators				
Labor Practices and Decent Work Performance Indicators				
Aspect: Employment				
Core	LA1	Total workforce by employment type, employment contract, and region. Commentary on LA1 Report on total contractor workforce (contractor, subcontractor, independent contractor) by employment type, employment contract and region.		52
	LA2	Total number and rate of employee turnover by age group, gender, and region. Commentary on LA2 For the employees leaving employment during the reporting period, provide the average length of tenure of employees leaving broken down by gender and age group.		N/A
	EU17	Days worked by contractor and subcontractor employees involved in construction, operation & maintenance activities.		N/A
	EU18	Percentage of contractor and subcontractor employees that have undergone relevant health and safety training.		47-48
Add	LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations.		N/A
Aspect: Labor Management/Relations				
Core	LA4	Percentage of employees covered by collective bargaining agreements. Commentary on LA4 Report on percentage of contractor employees (contractor, subcontractor and independent contractor) working for the reporting organization covered by collective bargaining agreements by country or regulatory regime.		53
	LA5	Minimum notice period(s) regarding operational changes, including whether it is specified in collective agreements.		N/A
Aspect: Occupational Health and Safety				
Add	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.		53
Core	LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related facilities by region. Commentary on LA7 Report on health and safety performance of contractors and subcontractors working onsite or on behalf of the reporting organization off site.		48-51
	LA8	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.		47
Add	LA9	Health and safety topics covered in formal agreements with trade unions.		47-48
Aspect: Training and Education				
Core	LA10	Average hours of training per year per employee by employee category.		N/A
Add	LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.		54
	LA12	Percentage of employees receiving regular performance and career development reviews.		54
Aspect: Diversity and Equal Opportunity				
Core	LA13	Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity.		N/A
	LA14	Ratio of basic salary of men to women by employee category.		N/A
Human Rights Performance Indicators				
Aspect: Investment and Procurement Practices				
Core	HR1	Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening.		N/A
	HR2	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken.		N/A
Add	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.		N/A

Aspect: Non-discrimination Aspect: Freedom of Association and Collective Bargaining			EGAT AR 2010	EGAT CSRR 2010
			Page	
Core	HR4	Total number of incidents of discrimination and actions taken.		N/A
	HR5	Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights. EU Commentary on HR5 Report on management mechanisms to address the right to organize, right to bargain and right to strike or instances of lock out given the context of the industry's need to ensure continuous provision of essential services. Where the right to strike does not exist or is limited, report on remedial measures such as binding arbitration. Where freedom of association or expression are limited or prevented by regulatory regime, report on mechanisms and processes that exist for getting employee input on conditions of employment.		53
Aspect: 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.		N/A
Aspect: Forced and Compulsory Labor				
	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.		N/A
Aspect: Security Practices				
Add	HR8	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations.		N/A
Aspect: Indigenous Rights				
	HR9	Total number of incidents of violations involving rights of indigenous people and actions taken.		N/A
Electric Utilities Sector-Specific Society Disclosures on Management Approach				
Aspect: Community				
		EU19. Stakeholder participation in the decision making process related to energy planning and infrastructure development. EU20. Approach to managing the impacts of displacement.		55-56
Aspect: Disaster/ EU21. Emergency Planning and Response				
		Contingency planning measures, disaster/emergency management plan and training programs, and recovery/restoration plans.		N/A
Society Performance Indicators Aspect: Community				
Core	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. Commentary on 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. Include discussions of programs related to: <ul style="list-style-type: none"> • Ways in which information is exchanged and local population is involved, prior, during and after the event and the provision for intervener funding for the local population. • Influx of workers and impacts on neighboring communities (including changes to local social structures and culture); • Changes to land-use including loss of global commons (e.g. access to land, natural resources, and heritage); • Impacts on infrastructure (e.g. roads, housing), and access to services (e.g. education, utilities, healthcare); and • Changes to the aesthetics and quality of the landscape. 		N/A
Aspect: Community				
		EU22. Number of people physically or economically displaced and compensation, broken down by type of project.		N/A
	Access	EU23. Programs, including those in partnership with government, to improve or maintain access to electricity and customer support services.		N/A
	Provision of Information	EU24. Practices to address language, cultural, low literacy and disability related barriers to accessing and safety using electricity and customer support services.		N/A
Aspect: Corruption				
	SO2	Percentage and total number of business units analyzed for risks related to corruption.		N/A
	SO3	Percentage of employees trained in organization's anti-corruption policies and procedures.		N/A
	SO4	Actions taken in response to incidents of corruption.		N/A

Aspect: Public Policy			EGAT AR 2010	EGAT CSRR 2010
			Page	
	SO5	Public policy positions and participation in public policy development and lobbying.		N/A
Add	SO6	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.		N/A
Aspect: Anti-competitive Behavior				
	SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes.		N/A
Aspect: Compliance				
Core	SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations.		N/A
Product Responsibility Performance Indicators				
Aspect: Customer Health and Safety				
Core	PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures. EU Commentary on PR1 Indicator Protocol: For electric utilities the following categories should also be addressed: <ul style="list-style-type: none"> • Resource Planning • Generation • Transmission • Distribution • Use State the processes for assessing community health risks including monitoring, prevention measures and, if applicable, long term health-related studies. Identify community health risks that are assessed such as: <ul style="list-style-type: none"> • Compliance with exposure limit(s) to electric field (in kV per m) and magnetic fields (in uT) where available, for members of the public and employees in the areas in which the reporting organization operates. 		N/A
Add	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.		N/A
Aspect: Public Health and Safety				
		EU25. Number of injuries and fatalities to the public involving company assets, including legal judgments, settlements and pending legal cases of diseases.		N/A
Aspect: Access				
		EU26. Percentage of population unserved in licensed distribution or service areas.		N/A
Core		EU27. Number of residential disconnections for non-payment, broken down by duration of disconnection and by regulatory regime.		
		EU28. Power outage frequency.		35
		EU29. Average power outage duration.		35
		EU30. Average plant availability factor by energy source and by regulatory regime.		35
Aspect: Product and Service Labeling				
Core	PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.		N/A
Add	PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes.		N/A
	PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.		N/A
Aspect: Marketing Communications				
Core	PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.		N/A
Add	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.		N/A
Aspect: Customer Privacy				
	PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.		N/A
Aspect: Compliance				
Core	PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services.		N/A

Prizes Achieved, Pride of EGAT



Awards of Great Pride in 2010

National Level Awards

Award Name	Award in Details	Name of Presenter
Outstanding State Enterprise Awards	<p>Since 2005, EGAT has won the outstanding state enterprise awards for six consecutive years, by winning for the fifth time in 2005 in the category of "outstanding organizational management" and by receiving for five consecutive years since 2006 in the category of "outstanding social and environmental programs".</p> <ul style="list-style-type: none"> Outstanding Organizational Management and Outstanding Social and Environmental Program 2010 	Ministry of Finance
Thailand Energy Awards 2010	EGAT won the special mention award in the category of innovative energy program for the "Development and Application of Absorption Chiller in Mae Moh Power Plant Units 8-9 Air Conditioning System by Energy Recovery Project".	Ministry of Energy
CSR-DPIM Green Mining Award 2009-2010	<p>In 2010, EGAT's Mae Moh Mine won two awards, namely the green mining and the Mining Industry's corporate social responsibility - Department of Primary Industries and Mines (CSR-DPIM). The CSR-DPIM award was presented to organizations which operate with due care to the society, communities, and the environment, according to the policy developed by the Department of Primary Industries and Mines, which cover the following aspects:</p> <ol style="list-style-type: none"> 1. Recognizing social and environmental responsibility. 2. Conducting environmental impact mitigation and preventive measures. 3. Implementing the occupational health and safety activities for employees and nearby communities. 4. Developing green areas and landscapes for the surrounding communities. 5. Being an organization of transparency and accountability. 6. Utilizing ore resources for optimum benefits. 	Department of Primary Industries and Mines, Ministry of Industry
Zero Accident Campaign 2010	EGAT's Vajiralongkorn dam received a "Silver Level" recognition plaque for our participation in the zero-accident campaigns launched under EGAT's occupational, safety, and working environment policy and successfully achieved a zero disabling injury frequency rate per 3,000,000 employee-hours.	Department of Labor Protection and Welfare, Ministry of Labor
Plaque of Excellent Recognition from the National Anti-corruption Commission	In 2010, EGAT won a plaque of excellent recognition from the Office of the National Anti-corruption Commission (NACC) for our involvement in the prevention and suppression of corruption.	Office of the National Anti-corruption Commission (NACC)

International Level

Award Name	Award in Details	Name of Presenter
ASEAN Outstanding Engineer Award	EGAT Governor Suthat Patmasiriwat won an ASEAN outstanding engineer award and EGAT won an ASEAN outstanding engineering achievement project award from ASEAN Federation of Engineering Organizations (AFEO) during the 28 th Conference of ASEAN Federation of Engineering Organizations (CAFEO 28) held in Vietnam in December 2010.	ASEAN Federation of Engineering Organizations (AFEO)
ASEAN Outstanding Engineering Achievement Project Award		

Awards of Great Pride from the Earlier Years National Level

Award Name	Award in Details	Name of Presenter
Outstanding State Enterprise Awards 2005-2009	<p>Since 2005, EGAT continuously received awards from the best state owned enterprises (SOE) awards held by Ministry of Finance, which included the followings.</p> <ul style="list-style-type: none"> • Outstanding Social and Environmental Programs 2009 • Outstanding Organizational Management (Honorary) and Outstanding Social and Environmental Programs (EGAT Reforestation Program) 2008 • Outstanding Organizational Management and Outstanding Social and Environmental Programs 2007 • Outstanding Organizational Management and Outstanding Social and Environmental Programs (Biological Way of Life for Sustainable Development Project) 2006 • Outstanding Organizational Management and Outstanding Board of Directors 2005 	Ministry of Finance
Thailand Energy Awards 2009	In 2009, EGAT's new office building located at our headquarters (Building Tor. 102) won Thailand Energy Awards 2009 for energy efficient building award in the category of new and existing building.	Department of Alternative Energy Development and Efficiency, Ministry of Energy
EIA Monitoring Awards 2008	<p>EGAT won two EIA monitoring awards in 2008 which included;</p> <ul style="list-style-type: none"> • An outstanding mining award for Mae Moh Mine in the category of mineral mine, • An outstanding award for fuel oil uploading port at Krabi power plant. 	Ministry of Natural Resources and Environment

Award Name	Award in Details	Name of Presenter
Star Awards for Mining and Quarry Plants 2009	<p>EGAT's Mae Moh Mine received in 2009 two star awards for mining and quarry plants, namely</p> <ul style="list-style-type: none"> • An excellent grinding mill award, • An excellent mining award. 	Ministry of Natural Resources and Environment
CSR-DIW 2009	<p>EGAT's Mae Moh power plant won the CSR-DIW award (Corporate Social Responsibility, Department of Industrial Works - CSR-DIW award) in recognition of its outstanding social and environmental management practices.</p>	Department of Industrial Works, Ministry of Industry
National Occupational Safety and Health Award 2009	<p>In 2009, EGAT's Mae Moh power plant won the national occupational safety and health award for four consecutive years since 2006.</p> <p>In 2009, EGAT also won these national awards of 31 in total. The awards included the national occupational safety and health awards for 19 locations of EGAT's power plants, facilities and departments which have been in operation for over five years, and for 12 locations of those in operation for less than five years.</p> <ul style="list-style-type: none"> • Power plant and facilities receiving these national awards for nine consecutive years included Vajiralongkorn dam and Nam Phong power plant. • Departments receiving these national awards for eight consecutive years were the Northern Region Operation Division in Pisanuloke province and the Southern Region Operation Division at Lam Phura district. • Power plant and department winning these national awards for seven consecutive years comprised Tha Thung Na dam and the Northeastern Region Operation Division in Khon Kaen province. • Power plant and departments winning these national awards for six consecutive years included Sri Nagarind dam, the Northern Region Operation Division in Chiang Mai province, the Northern Region Operation Division in Nakhon Sawan province, the Metropolitan Operation Division in Nonthaburi province, the Northern Region Operation Division in Lampang province, and Lam Takhong pumped storage power plant. • Power plants and departments winning these awards for five consecutive years were the Southern Region Operation Division in Krabi province, Bhumibol dam in Tak province, the Northeastern Operation Division in Nakhon Ratchasima province, the Southern Region Operation Division at Ban Don district, and Surat Thani power plant in Surat Thani province. • Power plants and facilities receiving these national awards for less than five consecutive years comprised Ubol Ratana dam, Bang Lang dam, Mae Moh power plant, Nam Phung dam, Kaeng Krachan dam, the Northeastern Region Operation Division in Sakon Nakhon province, the Southern Region Operation Division at Hat Yai district, Rajjaprabha dam, Krabi power plant, Lan Krabue power plant, Sirindhorn dam, and the Northeastern Region Operation Division in Ubol Ratchathani province. 	

Award Name	Award in Details	Name of Presenter
ASA Green Awards 2009	EGAT's new office building (Building Tor 102) won this award in recognition of our adoption of innovation and technologies to develop a green office building model.	The Association of Siamese Architects under the Royal Patronage of His Majesty the King (ASA)
Plaque of Appreciation for Outstanding CSR Performance 2009	<p>A plaque of appreciation as an organization with outstanding CSR performance. In 2009, EGAT was selected as one among six organizations and agencies located in Nonthaburi province which regularly carried out the community activities which included the followings;</p> <ul style="list-style-type: none"> • the environmental safeguarding, • the prevention and control of problems related to drugs in the locality, and • the providing of supports to activities that enhance the well-being of education and life in communities. 	Nonthaburi Chamber of Commerce The Federation of Thai Industries, Nonthaburi Chapter

International Level

Award Name	Award in Details	Name of Presenter
ASEAN Energy Awards 2009	<p>In 2009, EGAT's new energy efficient office building (Building Tor 102) won the ASEAN Energy Award in the category of best practices for energy efficient building for new and existing building.</p> <p>The office building, the first of its kind in Thailand and also one among the 5 high-rise buildings of the world, was designed to be a complete energy efficient building by the installation of solar cell system modules mounted on the building's wall.</p>	ASEAN Centre for Energy
Emerson Cup 2009 India and South East Asia	<p>EGAT's new energy efficient building (Building Tor 102) also received a special mention award in the category of innovation and human comfort from the interior air-conditioning design contest for India and Southeast Asian Countries (Emerson Cup 2009).</p> <p>The Building is outstanding for its design concept and the adoption of energy efficient and the environmentally friendly technologies to improve air quality in the building.</p>	Emerson Climate Technologies



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