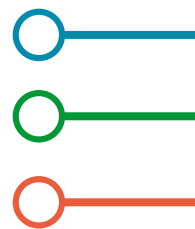


Light for Life





The next step ... to brighten up the world



Because this world...is home for all of us,
PEA committed to continue the mission
With constructive engagement,
while bringing and spreading
Happiness, security, development,
cares and brightens up society
Across the country for Thai people,
society and **“our home”**



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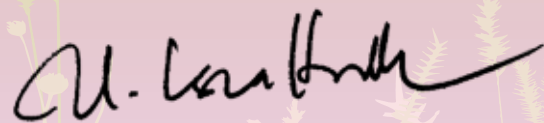


Message from PEA Governor

Provincial Electricity Authority (PEA) is a state enterprise in the utility sector under the supervision of Ministry of Interior. Provincial Electricity Authority (PEA) were responsible on procurement and distribution of electricity and related business over nationwide and across neighboring countries consistent with internal standard. To meet the requirement and satisfaction of our customers in 74 provinces across country on both services and quality of our products, PEA focused on corporate social and environmental responsibility together with business activities. PEA provided corporate social and environmental responsibility policy to ensure maximum efficiency and effectiveness of our business operations go together with social and environmental responsibility.

In 2013, PEA focused on operation in accordance with community partnership policy. PEA has already defined the definition of community, community classification. PEA has already analyzed the benefit and effect from both current and forthcoming PEA's operation that will lead to prioritization process for further operation of PEA. PEA considered community's reflection and stakeholder dialogue as most valuable opinions for PEA improvement to achieve community expectations.

Furthermore, PEA has developed business operations consistent with corporate social responsibility (CSR) principles to achieve our target on creating shared value (CSV). PEA followed the corporate social responsibility principles to solve the social problems and continuously develop our social with community participation to create the valuable economic and social as the same time. Presently, PEA developed alternative and renewable energy development with community collaboration abroad the country. PEA expanded the business and constructed outside the box outstanding value addition for our business, to achieve our supreme goals on sustainable and robust growth of our organization.



Mr. Numchai Lowattanakul
Governor of Provincial Electricity Authority

Vision

Provincial Electricity Authority is a leading organization of international standards, modernity and efficiency doing business in energy, services and related businesses.

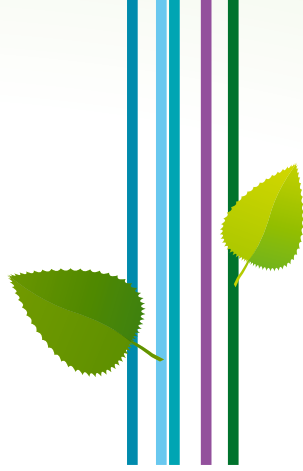
Mission

Provincial Electricity Authority is responsible for the generation and provision of standardized electricity services and related businesses to meet both domestic and international demands from Thailand's neighboring countries. There are continual corporate development plans to introduce modern and effective business to keep pace with changing market conditions and business competition with social and environmental responsibility.



Organization Profile

Name of organization	Provincial Electricity Authority (PEA)
Type of services	Distribution of electric energy and retail services from 516 power stations divided by area of responsibility
Business characteristic	<p>A state enterprise in energy business under the supervision of the Ministry of Interior (MOI), established under “Provincial Electricity Authority Act, B.E. 2503 (1960)” on September 28th, 1960 after asset and liabilities transfer from Provincial Electricity Organization.</p> <p>PEA’s core operation activities include power generation, acquisition, transmission and distribution of electric energy to general public, business and industrial sector.</p>
Service area	<p>All area covered 74 provinces (except Bangkok, Nonthaburi and Samut Prakarn provinces) approximately 510,000 km², accounting for 99% of country’s total area. The service areas were divided into 4 regions; Northern, Northeastern, Central and Southern, while each region was divided into 3 sub region (12 sub regions in total). PEA also had province, district, sub-district and branch offices covered service area in all levels.</p>
Location of Head Office	200 Ngamwongwan Road, Jatujak, Bangkok 10900
Subsidiaries	PEA ENCOM International Co., Ltd.
Number of employees	<p>Total number of employees is 27,792</p> <p>Head Office’s employees 3,963 (Male 2,415 and Female 1,548)</p> <p>Regional’s Office employees 23,829 (Male 18,120 and Female 5,709)</p>



Social and Environment Policy

Provincial Electricity Authority (PEA)'s policies were revised, with the emphasis placed on maximum efficiency and effectiveness of corporate responsibilities will be achieved, PEA has set the Policies as follows :

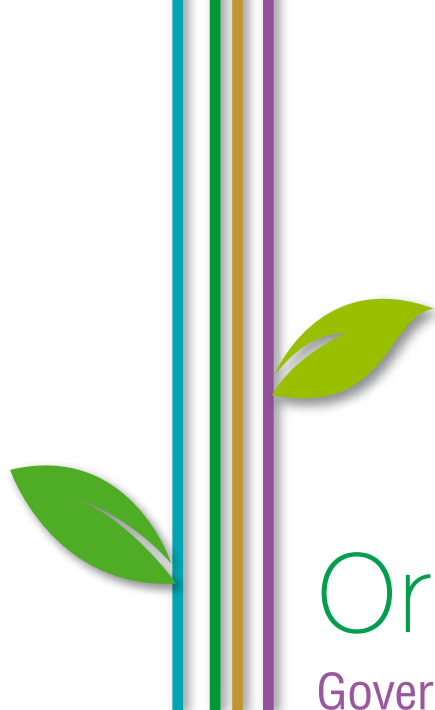
1. Focus on continuous improvement in electricity services in accordance with corporate governance, morality, transparency, accountability, legitimacy with regard to human rights, employee's right, consumers, environment and stakeholders.
2. Encourage and support all level employees to have good attitudes on social and environmental responsibility to support the corporation culture. Become transparent corporation with ethical and morality. Create the good environment for employees happiness together with employee's capability development for corporation's targets achievement.
3. Support and promote the use of renewable and alternatives energy with efficient energy usage, to strengthen the communities with sustainable development.
4. Link between social and environmental operation with the communities, to enhance the quality of life, and sustainable development of communities and society.
5. Integrate the social responsible operation to corporate-wide activities together with potential development, self learning encouragement and innovation development. To become the "High Performance Organization in Social Responsibility" and ready for the ASEAN Economic Community (AEC) in sustainable way.



Social and Environment Operations

PEA had set the scope of corporate social responsibility activities consistent with ISO 26000 to ensure corporation-wide integration activities with can be explained as follows :





Organizational Governance

PEA focused in management and operation consistent with corporate governance fairness, transparency, morality and accountability to achieve its vision to be the world class organization in energy, services and related business with adaptability for change. Furthermore, due to the fact that stakeholders' trustworthiness are the key success, PEA had structured the policy to promote 7 principles for enhancing organizational governance as follows :

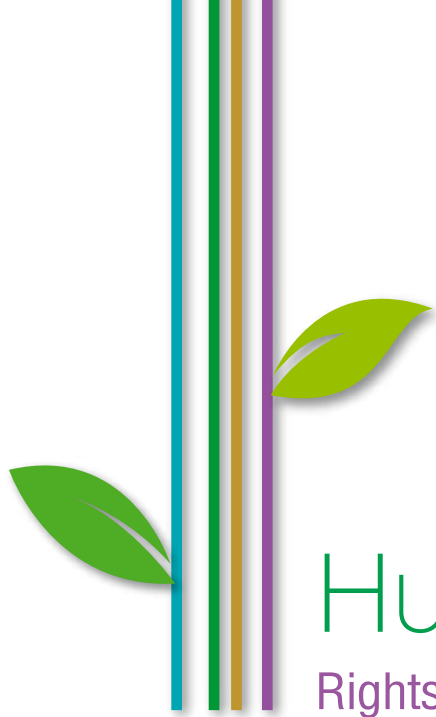
1. Accountability	Responsibility for duties and results
2. Responsibility	Sense of duty with sufficient capability and performance
3. Equitable Treatment	Equal and honest interaction with all stakeholders for example; Equality of all stakeholders in procurement process with capable to explanation if any complaints occur.
4. Transparency	Transparency shall be included in 2 characteristics - Operational transparency with accountability - Transparency of information disclosure is transparent operating results with every part of accessory.
5. Value Creation	Short term and long term value-added activities which increase the competitiveness in all aspect.
6. Ethics	Promote and support organizational governance and business ethics
7. Participation	Promote the participation of communities in express the opinion on organizational activities that can be affect environment, health, quality of life and communities and society livelihood



PEA's operation was controlled and conducted consistent with related regulation (Compliance Unit). Social and Environmental department was responsible for monitoring and controlling PEA's activities to ensure law, regulation, policies and framework compliance with authority and function as follows :

- Ensure all PEA's operation and management activities were conducted consistency with law and regulation with properly verified and assigned to appropriate authorized parties in PEA.
- Ensure policies and designed frameworks consistency in all PEA's operation
- Encourage to employees' awareness and expertise on PEA's operation in an appropriate way by training.
- Monitor on responsible of assigned activities to the suitable person to prevent the conflict of interest for example clearly authorize and activities defined between debts borrower and debts approver.
- Give the authorize to Director of Social and Environmental Department to request for approval for appointment of working parties as it may deem appropriate.
- Encourage all PEA's business unit for more participation with controlling units to ensure operation in accordance with regulation (Compliance Unit)





Human Rights

PEA realized the important of human rights in all business processes including the process in PEA's supply chains which had not been monitored by government to support transparency audit process and avoid human rights violation. PEA conducted business activities in accordance with international human right treaties and give most priority on personnel as the most valuable resource. PEA committed to increase the level of engagement and trustiness between corporation and personnel continuously. In 2013, PEA had surveyed "The Factors Effected on Level of Satisfaction and Organizational Engagement of the Different Group of PEA's personnel". An average organizational engagement score of PEA's staffs and outsourced staff were 4.14 and 3.61 respectively, most of PEA's employees (97.7 % from total number of PEA's employees who take the survey) had employee engagement level score more than 3.





Human Rights Operations

- Support and respect to human rights protection by monitor and control PEA's business to prevent human rights violations for example oppose to the use of child labor.
- Promote the monitor of PEA's activities in compliance with human rights term of reference and encourage operation consistent with international human rights treaties.
- Respect to the right and freedom of employees to speak and give the opinion without interventions. Prepare the channel for communicate and listen to stakeholders' opinion.
- PEA constructed the human rights guidelines on respect the rights and fair treatment for labor such as: establishing hot line fund to support hot line personnel who was affected by accident during working, medical care for employees and the family.

According to PEA's strategic plan which aim to become the "Live Organization" while focus on human and knowledge development and support the continuous learning and knowledge management in organization. The improvements of quality of life for PEA's personnel in parallel with increase adaptability to changes in appropriate way were also prepared. The goals are to increase the effectiveness of business activities for organizational targets fulfillment, Development of the reliable and efficient smart grid system for adequate electric energy services in accordance with international standard, Development of electricity infrastructure with quality of life and competitiveness enhancement.



PEA employees' potential development

In accordance with PEA's Training and Human Resources Development Plan 41 courses, 89 groups for 9,584 employees which were divided into 6 categories as follows :

1. Management Level Development Program
2. Officer Development Program
3. Learning Organization (LO) Development Program
4. Knowledge Management (KM) Development Program
5. International Cooperation Program
6. Scholarship Program

PEA promoted training and seminar program in addition from planned training program for 88 training courses, 113 groups, 6,722 employees. Management level staffs joined the training courses/seminar/field trip in external institutes for example King Prajadhipok's Institute, Damrong Rajanuphap Institute, Military College, Office of Civil Service Commission, Capital Market Academy and Thailand National Defense College. Furthermore, Management and officer level also joined the international conference and training courses in foreign countries for ASEAN Economic Community (AEC) readiness in 2015.

PEA considered educational programs for increase level of knowledge and awareness of AEC importance, conducted foreign languages for communication development plan, academic and technical cooperation, scholarships and business and field trip and prepared the infrastructure. Knowledge Management Center was constructed for educating, experiences and technical progress sharing via VDO conference, e-Learning was also applied.

PEA constructed High Voltage Operational Training Center that was started its operation on the end of 2012. To efficiently increase engineering expertise, PEA provided the workshop with up-to-date instruments, machines and facilities in accordance with international standard. Learning by workshop practices by PEA's experienced expert and external expert both domestic and international were also applied. In 2013, PEA conducted 61 training courses; 14 training courses on mechanical engineering, civil engineering and safety, 34 training courses on electrical engineering and 13 training courses on information and communication technology.

In 2013, Number of hours spending in training courses of PEA's staffs were 0.4 hour per person per year. (Total number of PEA employees were 27,792 employees and Total number of training hours were 11,296 hours)



Labour Practices

PEA determined the Occupational Health, Safety and Environmental policy in accordance with the Zero Accident principles by appointed working parties; increase the safety awareness in all level of employees together with review of all related law and regulation. PEA appointed the Occupational Health, Safety and Environmental working party consistent with law included with applied the Occupational Health, Safety and Environmental management system.

Occupational Health, Safety and Environmental Policy

1. Management and staff level must give first priority to Occupational Health, Safety and Working Environment.
2. Management level must support at all effort to reduce the chance of accident consistent with the Zero Accident target.
3. Management must manage and Staff level must perform activities in consistent with law, standard and safety regulation continuously.
4. Support staff to increase knowledge, awareness and good attitude in safety including with educating people about safety in electricity usage.
5. Support resources allocation and budget for Occupational Health, Safety and Environmental operation to ensure sufficient resources for its operation.
6. Support the management, follow up and evaluation of Occupational Health, Safety and Environmental operation results in all business units.



Occupational Health, Safety and Environmental Activities and Training Programs

In 2013, PEA conducted training courses and occupational health, safety and environmental campaign as follows :

- Conduct occupational health, safety and environmental training courses for working party.
- Conduct work safety training courses for safety officer who will be expert and lecturer on occupational health, safety and safe work environment.

- Award the prize for working group, supervisor and outstanding safety officer.
- Conduct the exhibition in National Safety Week Exhibition 2013.
- Conduct PEA Safety Week Exhibition 2013 at PEA's head office.
- Conduct the professional safety survey and inspection training course 2013
- Perform light intensity measurement and air quality assessment in LED building and Building 3 Head office.
- Conduct the meeting for safety work control clarification.
- Provide the manual, recommendation and standard for work safety.
- Describe work safety at work locations by on the job training.
- Perform vehicles safety inspection.
- Investigate possible risks in power system that might cause accident on both users and officer.
- Conduct meeting for safety plan preparation.
- Conduct fire fighting and evacuation practice for PEA's head office.
- Conduct basic fire fighting training



Contingency plan for emergency situations and crisis management.

PEA provided disaster prevention and mitigation model scheme 2012-2016, aims to prepare appropriate preparedness, planning and prevention measures for fatal effects from disasters, war perils or other catastrophes especially effects on power system. This model scheme was consist of policy and 5 years operation plan for obviously operational scheme, to ensure to immediately and promptly responses to emergency situations with minimum loss occur.

Furthermore, PEA provided work instruction for emergency situations and fight prevention and fire fighting in work places manual as guideline for promptly response.



Accident Statistics from PEA operation

In 2013, the total number of PEA's staffs was 45,952 persons which can be divided to 27,792 persons as PEA's employees and 18,160 persons as outsourced staffs. The total number of accident was 39 times with 42 injured and 13 deaths. The number of day loss from injury was 85,045 days and calculated PEA's accident index was 0.132.



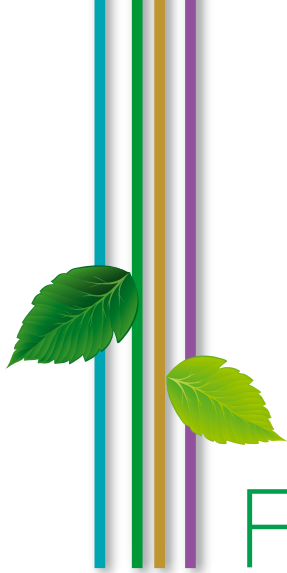


Environmental



PEA conducted business activities with concerned in environmental effects. Nowadays, global warming, the crucial reason for severe climate changes, was caused by greenhouse gases releasing from power generation, transportation, loss in power transmission and distribution system and also electric energy usage. PEA conducted the policy to improve power saving and efficient electric energy usage which started by corporation-wide LED technology. PEA developed the offices to become the energy saving building model for government sector (PEA LED Building) by replacing all usual electric lamp (36 Watts) to energy saving LED (23 watts), which results in 50% electric energy reduction or 407,700 kWh per year. Furthermore, this campaign reduced amount of greenhouse gases releasing and also reduced amount of electronic waste because LED lamp has 4 times longer lifetime compare with fluorescent lamp with magnetic ballast.

For street lighting which more than three million lamps was installed and tend to continuous increasing number in the future together with expansion of city. Electric energy usage for the installed fluorescent lamps was 144 MW or 1,600 million baht. PEA in cooperation with Department of Local Administration conducted the pilot project to enhance efficiency of street lighting from ordinary fluorescent lamp to LED lamp in 4 provinces herein after; Chiang Mai, Nong Bua Lampu, Ayutthaya and Phuket provinces. Furthermore, PEA planned to do the nationwide 3,000,000 lamps replacement within the next 3 years after finished 200,000 lamps replacement in the pilot provinces. If, the result from pilot provinces reflects in good manner with good cooperation with local administration organization, PEA will replace the 3,000,000 lamps within 2014 which can reduce electricity usage for street lighting to 66 MW or 914 million baht are saving per year and also reduce the releasing of carbon dioxide for 200,000 tons CO₂ per year.



Fair Operating Practices

PEA as the state enterprise which take important roles in the national economic and social development, all management and officer level employees of PEA are united in action and spirit to operate with moral and ethical aspects. In 2013, PEA applied the code of ethics as the framework for both management and officer level activities which consist of 10 sections as follows :

- Section 1 Core Value of Business Conducts and Ethics
- Section 2 Customers and People Responsibility
- Section 3 Owners Responsibility
- Section 4 Employees Responsibility
- Section 5 Government Agencies Responsibility
- Section 6 Social and Environment Responsibility
- Section 7 Organizational Goals responsibility
- Section 8 Ethics for Management Level
- Section 9 Ethics for Employees
- Section 10 Practices for Conflict between Personal and Public Interest

PEA submitted the report of complaints and inconsistent issues against code of ethical in accordance with fair operating practice to the Office of the Ombudsman in every 4 months since 2011.





Consumer Issues



The satisfaction towards service of PEA staff / student in “Safe Community Using PEA Electricity” Project

“Safe Community Using PEA Electricity” Project was the cooperation among PEA, Department of Disaster Prevention and Mitigation and the Office of Vocational Education Commission. Under the policy of “Zero Accident” 3-years period (2013-2015), the project required to raise the standard of safety in using electricity and reduces electrical accidents in both normal and crisis conditions. PEA staff and Department of Disaster Prevention and Mitigation conducted safety training in using electricity and protecting community in disaster to 1,200 government officers, political officials, community leaders and public. The project also conducted training to 3,700 students from schools under the Office of Vocational Education Commission. The trained students have provided checking and fixing electrical appliances service to at least 100,000 households, schools, and buildings in communities every years (3 years : 300,000 households). The project has covered 74 provinces.

In 2013, PEA surveyed people’s satisfaction towards service of PEA staff / students in “Safe Community Using PEA Electricity” Project. The survey found that most people satisfied the project. The overall averages were high (total average was 4.47). The result can be concluded as follows :

Analysis data of the respondents

Service areas	Percent
Municipal area	56.5
Non-municipal area	37.7
Housing development / Housing	5.3
Industrial area	0.1
Others	0.4
Total	100.0

The majority of respondents, 56.5 percent were in the municipal area.

Type of respondents	Percent
Home-owners	66.9
Inhabitants	21.7
Parents of students participate in the project	0.6
Students participate in the project	9.7
Teachers participate in the project	1.1
Total	100.0

The majority of respondents, 66.9 percent were home-owners.

Perception of information regarding the project	Percent
Cable TV / Television	4.0
Newspapers / Magazines	1.1
Community leaders	15.2
Posters / Leaflets	5.7
Student / PEA staff's suggestions	53.8
Wire broadcasting / Car broadcasting	19.7
Others	0.6
Total	100.0

The majority of respondents, 53.8 percent received information regarding the project from the suggestions of student / PEA staff.

Level of satisfaction towards service of PEA staff / student in “Safe Community Using PEA Electricity” Project

Aspects	Average
1. Project publicity	4.42
2. Courteous and friendly service	4.50
3. Enthusiastic and willing service	4.50
• Ready to serve and check	4.43
• Rapid and active service	4.43
• Willing to listen to problems and questions	4.48
• Provide clearly explanations and answers	4.48
• Provide clearly suggestions	4.52
Total average	4.47

Source : Corporate Social Responsibility Project Management Division, PEA As of Q4 2013

Result of respondents satisfaction towards “Safe Community Using PEA Electricity” Project

Level of satisfaction	Percent
Very satisfied	65.8%
Satisfied	33.8%
Disatisfied	0.4%
Total	100.0%

Source : Corporate Social Responsibility Project Management Division, PEA As of Q4 2013

Determination of the proper channels to receive complaints.

The “1129 PEA Call Center” is the information center of PEA. The center is responsible in reporting electrical outages, electricity bill, electricity service requests, and services of the PEA for 24 hours. To ensure that stakeholders who have complaints or issues can contact PEA easily and quickly through various channels. PEA also provides social network channels such as Facebook Twitter and so on.



“PEA Front Office” Model Project

Research and technology development fund of PEA has awarded research fund to Graduate School of Commerce Burapha University for study in the model project of “PEA Front Office”. This project support users in various services such as electricity bill payment, electricity request, electricity meter installation, reporting electrical outages, receiving the petition and so on. The project also has an innovative automatic payment called PEA Genius Machine to facilitate the consumers by scanning the bill and putting money into the machine and can get the change immediately. In 2013, PEA started the project in four provinces including Chon Buri, Chiang Mai and Phuket and studied to correct the problems that may arise from actions in order to expand the project to other provinces across the country.



Community Involvement and Development

PEA has carried out projects and activities to promote and improve the quality of life in terms of occupation, education, health, comfort and the safety of life and property including energy conservation and environment and natural resources conservation. PEA recognized that the basis of building a strong community comes from quality of life, thus leading to "PEA sustainable growth with social and community partnership" under the 3E form consist of



ECOLOGY : PEA has carried on many projects to community such as reforestation, building weirs, planting sea grass to improve ecosystem and balance the nature.

ENERGY : PEA has promoted research on electricity generating development from renewable energy, wind power, solar power, waterpower and biomass.

ECONOMY : PEA promoted the use of electricity to be effective in careers and producing unique products of community. PEA provided market and promoted ecotourism in order to create sustainable income.

PEA defined the definition of “Community” as “Group of people who live nearby power distribution area of PEA which receive benefits or effect from PEA’s business activities including with PEA’s partnerships on CSR activities”

Important community for PEA’s operation can be physical and relational classified to three main groups as follows :

1. Local community located around PEA’s location such as office building, substation, warehouse, power plant, concrete plant and hydro power plant

2. Local community nearby transmission line and distribution line construction site and electrical equipment in power system

3. CSR activities partnership network community of PEA such as school, government offices, local administration offices, volunteer spirit network

PEA determined the policy for organizational development and management on social and environment by conducted social and environmental project (CSR-Project) both in process and after process for supporting public benefit activities.





Social and environmental project in PEA process (CSR-Project In Process)

The project was divided on 4 aspects as follows :

1. Development of renewable and alternative power generation for community

- Research and development project on power generation from biomass by designed, constructed and tested of biomass power generation system at Chitralada Villa Royal Residence.
- Study of power generation from renewable energy for community by design of biomass power plant (≤ 25 kW) and power system for area without electricity.
- From smoke to electricity project : study of biomass power generation from tree branches and agricultural wastes in local area.

2. Safe, value appreciated and economical electricity usage promotion

• Safe Community Using PEA Electricity

PEA in cooperation with partnership network, Department of disaster prevention and mitigation and schools affiliated with Office of vocational education commission conducted the training on safety in using electricity and household power system safety inspection on 100,000 household target with plan to increase to 1,000,000 household in 2016.



• “LED lamps installation at Ancient Site” Project

PEA defined Road to LED as main policy to be leader on efficient energy usage by LED technology in all sections. PEA has conducted improvement project for to promote efficient energy usage in parallel with religious maintaining and tourism promotion.

In 2013, PEA improved electrical systems and changed High Pressure Sodium Fluorescent lamps and Metal Halide lamps to LED lamps at Phrathat Hariphunchai temple, Lamphun province. LED lamp saves 66-70% of energy and 2.5 times longer lifetime. It decreases 23,760 units of electricity per year, which saves 111,264 baht in electricity bill. LED lamp also reduces greenhouse gas emissions to 12.15 tons per year.



• “Blackout Reducing” Project

PEA has continuously carried on this project since 2008 in order to educate people in electricity distribution system including safety in using electricity and participation in PEA’s electrical system inspection. In 2013, PEA, the Local Administration Organizations and 1,629 volunteers carried on 26 activities in frequent electricity outage area.



• “Kids Saving Energy” Project

PEA participated with schools, teachers, students and parents in order to lead about saving energy within households and schools which continuously in operation since 2005, in 2009 PEA has developed project using Outcome Mapping (OM). In 2011, the “Kids Saving Energy” project acquired excellent award on social and environmental operations from State Enterprise Policy Office. Nowadays, there were 53 schools and 6,577 students have joined the project.



• Project to Support Strong Community (Pha Pang, Lampang Province)

PEA supported budget for purchase machines, support the weir construction and study of method to promote and joint venture on power generation in community.

• LED Lamp Installation Study Project for Fishing Community

PEA has carried on LED Lamp Installation Study Project for Fishing Community which aims to conducting a feasibility study of using LED lamp in luring light fishing and reducing greenhouse gas from combustion of engine generated power. PEA conducted the test by 2 fishing boats for 3 days at the same time at gulf of Thailand, Sri Racha district, Chonburi province. The first boat using metal halide and mercury lamps and the second using LED lamps in equivalent characteristic of the first one. From comparison of dispersion of light underwater, amount of catch aquatic animal and rate of energy usage, the result of the project, found that the ship using LED lamp used less fuel oil and there was 70% less greenhouse gas emissions.



• “60+ Earth Hour 2013” Project

PEA has joined “60+ Earth Hour 2013” Project with Bangkok Metropolitan Administration, Foundation for Environmental Education for Sustainable Development (Thailand), Metropolitan Electricity Authority (MEA), Electricity Generating Authority of Thailand (EGAT), Government agencies, the private sectors and artists on March 23rd, 2013, 20.30 – 21.30, which aim to save energy, reduce amount of carbon dioxide releasing that cause global warming. Furthermore, PEA has continued the campaign “I Will if You will”. This campaign led people to change their behavior which led to biggest change from people all over the world.



3. Social Environment Restoration

• Greenhouse gas emission reduction project

PEA has supported the reduction of greenhouse gas emission projects of both internal and external organizations. The scope of PEA activities was determined under the principle of The Greenhouse Gas Protocol (2004). Greenhouse gas emission was classified into two classes included the emission directly from the organizations under PEA and the indirect emission from electricity generating organizations which sold electricity to PEA.

Project implementation and overall operation in reduction of greenhouse gas emission in the year 2013 are as follows :

1. Reforest and global warming reduction activities were operated together with communities throughout the country in planting 21,500 trees. These activities reduced 458.47 tCO₂ of greenhouse gas emission per year.

2. Improve performance of diesel plant in order to reduce the use of oil in electricity generation of diesel engines by improved efficiency of diesel engines and installed the new engines, which can reduce energy input per unit and can control fuel consumption rate from the set target of 0.310 liters / kWh to 0.305 liters / kWh. This project can reduce 416.73 tCO₂ of greenhouse gas emission per year.

3. Optimization of electric power consumption in air conditioning system program has purchased and installed 710 air conditioners. The program can save 1,400,000 kWh / year and reduced 715.82 tCO₂ of greenhouse gas emission per year.

4. The Project of purchasing 5,000 LED bulbs and connector kits at LED building saved 348,388 kWh / year and reduced 178.13 tCO₂ of greenhouse gas emission per year.

5. The 1,378 VDO Conferences were held which saved 4,981 kilometers of traveling and reduced greenhouse gas emission 310.04 tCO₂ / year.

6. The project of providing energy management consultant for business sector and industry has conducted to 37 businesses and industries. The project saved 6,624,000 kWh / year and reduced 5,814.02 tCO₂ of greenhouse gas emission per year.

7. The project to purchase electricity from Very Small Power Producers: VSPP has purchased 493.14 mW and reduced 1,980,172.56 tCO₂ of greenhouse gas emission per year.

8. The project to promote the use of LED bulb at historical site has conducted at 3 sites included Wat Phra That Phanom, Wat Phra That Hariphunchai, and Wat Pha Ko (Wat Rat Pradit Sathan). This project reduced 50.86 tCO₂ of greenhouse gas emission per year.

Greenhouse Gas Emission Reduction of PEA in 2013



Greenhouse gas reduction project	tCO ₂ e/year
Direct Emission	
Reforest and global warming reduction activities	458.47
Improve performance of diesel plant	416.73
Optimization of electric power consumption in air conditioning system program	715.82
Purchasing LED bulbs and connector kits project	178.13
VDO conference	310.04
Electricity generation from renewable energy sources	34,965.26
Biodiesel utilization	1,964.68
Indirect Emission	
Energy management consultant for business sector and industry Project	5,814.02
Purchasing electricity from VSPP project	1,980,172.56
Using LED bulb at historical site project	50.86
Total reduction of greenhouse gas emission	2,025,046.57

Source : Corporate Social Responsibility Project Management Division, PEA As of Q4 2013

• Ecology Conservation Promotion Project

In celebration of His Majesty the King's 86th birthday anniversary on December 5th, 2013 and to show the gratitude to His Majesty the King as "The Father of Natural Resources and Environment Conservation" PEA has brought teak plants of "Sak Mahesak" and "Sak Siammintra" and other plants from Genetic Conservation Project under the royal initiative of Her Royal Highness Princess Maha Chakri Sirindhorn to reforest for ecology restoration and forest maintaining by PEA's staffs and community. PEA had already planted 21,500 plants of "Sak Mahesak" and "Sak Siammintra" and others in 2013.



• "Weir Construction for King PEA 53rd Anniversary" Project

PEA applied His Majesty the King's thought on water conservation in accordance community partnership management and development, sustainable growth together with community, social and partners. PEA in cooperation with Local administration offices and community constructed weir from concrete wastes such as electric poles and foundation pillars for usage, consumption and agriculture. In 2013, PEA has constructed 53 weirs through out country.





• City and Urban Landscape Improvement

PEA in cooperation local administration office provided plan for underground cable installation in urban areas for power system reliability improvement and make better landscape for city road, central business district, historic areas and important tourist attractions in accordance with government policy in 14 provinces as follows : Chiang Mai, Phitsanulok, Udonthani, Nakhon Ratchasima, Chonburi, Nakhon Pathom, Phetchaburi, Phuket, Songkhla, Khon Kaen, Mukdahan, Nakhon Phanom, Surat Thani and Trang provinces. In 2013, PEA organized electric poles and power cables removal work and underground cables installation for 16 works in Mukdahan, Nakhon Phanom, Chonburi, Nakhon Pathom, Songkhla, Phuket, Chiang Mai, Khon Kaen and Nong Khai. Furthermore, PEA corporate with telecommunication companies to organize signal and communication line in better manner.

4. Morality, Ethic and operation in consistent with Corporate Governance in Organizational Management

PEA provided 5 years action plan for moral and ethical improvement (Soft Control) which consist of training/broadcasting, corporate governance principles and policy, PEA code of ethics, code of ethics for business operation and regulation on PEA's personnel.





After Process Social and Environment Project (CSR-Project After Process)

• Medical Mobile Unit Project

PEA, National Defense College Class No.27, Sang-Saiki Haetrakool Foundation, Daily News, and Department of Medical Service provided the medical mobile units in celebration of His Majesty the King's 86th birthday anniversary on December 5th, 2013 and Her Majesty the Queen 81st birthday anniversary in August 12th, 2013 which aim to provide free of charge medical services from medical specialists for people in rural areas. The mobile units can support many medical services such as common disease, digestive diseases, eye diseases, heart diseases, pediatric diseases, skin diseases, osteopathy, obstetrics and Thai traditional medicine. PEA also supported electricity, vehicles, staff and equipment. In 2013, the project was conducted in 15 provinces as follows : Chiang Mai, Tak, Uthai Thani, Khon Kaen, Maha Sarakham, Kalasin, Buriram, Prachinburi, Srakaew, Chanthaburi, Kanchanaburi, Ratchaburi, Phetchaburi and Surat Thani. There were 29,999 participants joined this project in 2013



• Blood Donation for Thai Red Cross Project

PEA has continuously carried on this project four times a year on January, April, July and October. In 2013, there were 1,217 PEA staff donated 472,600 cc of blood. PEA realized that blood is precious in helping the sick and injured.

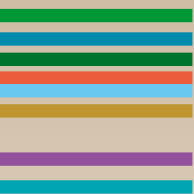
• Scholarship

To support primary education of PEA staffs' children and financial aids for entry level PEA staffs who had low-income or too much children in their care, PEA gave scholarship for good academic result students as follows :



Scholarships	No. of beneficiaries	Amount (Thai Baht)
PEA housewife and families fund	-	650,000
"Dr.Veera Pitarachart" fund	21	210,000
"Sai Nitinant" education fund	7	35,000
"Krengsak Kantharak" education fund	6	30,000

Source : Office of the Governor and Financial division, PEA



Performance Consistent with International Standard **ISO 26000**

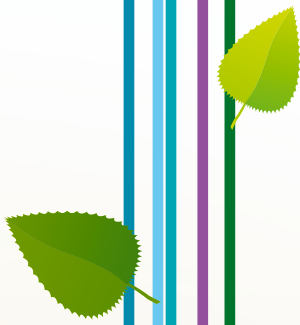
PEA's performance on social and environmental responsibility were done consistent with the 7 core subjects in the international standard ISO 26000 herein after organizational governance, human rights, labor practices, the environment, fair operating practices, consumer issues and community involvement and development. In 2013, PEA analyzed the benefits and effects from PEA's operations on stakeholders and made prioritization on stakeholders for further stakeholder's opinion dialogue.

Stakeholders	Expectations
1.Power disconnecting and reconnecting representative (Contractor)	1.1 Fairness/Transparency of contract, term of references and procurement processes. 1.2 Efficient collaboration with PEA ex. information preparedness for operations 1.3 Operational risks 1.4 Supporting processes from PEA to reduce complaints and conflicts with communities 1.5 Regulation in acceptance and disbursement process
2.Tree cutting contractor	2.1 Satisfaction of payment 2.2 Fairness/Transparency of contract, term of references and procurement processes. 2.3 Operational risks 2.4 Supporting processes from PEA to reduce complaints and conflicts with communities 2.5 Regulation in acceptance and disbursement process 2.6 Operational troubles and obstacles
3.Billing representative	3.1 Satisfaction of payment 3.2 PEA's account payable and receivable process and disbursement process 3.3 Operational risks 3.4 Supporting processes from PEA to reduce complaints and conflicts with communities 3.5 Operational troubles and obstacles
4. Customers	4.1 Satisfaction on PEA's services on power requesting, power failure rectification, power bill payment 4.2 Security and reliability of power system 4.3 Safety on electricity usage ex. effect from electric current and voltage on electrical appliances 4.4 Communication channels and response to complaints 4.5 Prevention and compensation measure on power failure 4.6 operation and maintenance of power system
5. Community	5.1 Effect on community from PEA's operation ex. maintenance and improvement of power system, power system expansion, tree cut off. 5.2 Communication channels and response to complaints 5.3 PEA's framework and operation on prevention and restoration of natural disasters effects on community. 5.4 PEA's framework and operation on social and environment.



After the dialogue with stakeholder for opinions and expectations finished, PEA regional offices had considered stakeholder's expectations in all aspects and constructed the action plan and project consistent with international standard ISO 26000. The concrete projects for 2014 are as follows :

Responsible Offices	Plan/Project
Provincial Electricity Authority Area 1 North (Chiang Mai province)	<ol style="list-style-type: none"> 1. Training courses on "Procurement and Contract Management of Power disconnecting and connecting contractor" for PEA's staffs. 2. Safety training for power disconnecting and connecting contractor.
Provincial Electricity Authority Area 2 North (Phitsanulok province)	<ol style="list-style-type: none"> 1. Human resources development program for branch office's staffs on SAP-ISU system and distribution system
Provincial Electricity Authority Area 3 North (Lop Buri province)	<ol style="list-style-type: none"> 1. Sub-district PEA's staff appointment for efficient community services in natural disaster risk area of PEA area 3 North (Lop Buri province)
Provincial Electricity Authority Area 1 Northeast (Udonthani province)	<ol style="list-style-type: none"> 1. Enhancing efficiency and satisfaction level of billing representative project 2. Enhancing efficiency of tree cutting survey project
Provincial Electricity Authority Area 2 Northeast (Ubon Ratchathani province)	<ol style="list-style-type: none"> 1. Security and reliability improvement project on power distribution in flood zone of PEA area 2 Northeast (Ubon Ratchathani province)
Provincial Electricity Authority Area 3 Northeast (Nakhon Ratchasima province)	<ol style="list-style-type: none"> 1. Enhancing power disconnection efficiency for power connection and disconnection contractor
Provincial Electricity Authority Area 1 Central (Ayutthaya province)	<ol style="list-style-type: none"> 1. Enhancing power connection and disconnection contractor for efficient operation 2. Enhancing tree cutting contractor efficiency in responsible area of PEA area 1 Central (Ayutthaya province)
Provincial Electricity Authority Area 2 Central (Chonburi province)	<ol style="list-style-type: none"> 1. Electricity bills sending to customers by E-mail project 2. Development of electric meter website by Automatic Meter Reading (AMR) for electricity bills download 3. Provide procedure and framework for additional business management project 4. Increasing communication channel via "Line Application" for public relations project 5. Increasing communication channel via "Line Application" for informal power outages notification project 6. Plan to increase inspection and maintenance interval of substations in industrial estates area 7. Survey and improvement of power system on frequently lightning areas project 8. Uniform for power failure recovery on shift staffs project 9. Construction plan and power system improvement project booklet 10. Organize meeting with Industrial customers together with business trip at Load dispatching center at PEA area 2 Central (Chonburi)
Provincial Electricity Authority Area 3 Central (Nakhon Pathom province)	<ol style="list-style-type: none"> 1. Power and telecommunication line organizing in geographic information system (GIS) plan 2. "Convenient pay with Luck" plan 3. Reliability improvement for power distribution system plan 4. Power system inspection and maintenance plan for industrial customers 5. Relation enchantment dialogue with industrial customers
Provincial Electricity Authority Area 1 Southern (Phetchaburi province)	<ol style="list-style-type: none"> 1. Mobile electricity bill payment (Mobile Front Office) project
Provincial Electricity Authority Area 2 Southern (Nakhon Sri Thammarat province)	<ol style="list-style-type: none"> 1. Enhancing power disconnection and connection efficiency for Phunphin district area.
Provincial Electricity Authority Area 3 Southern (Yala province)	<ol style="list-style-type: none"> 1. Obstructed tree on transmission line survey project



Awards and Honors



“The Exhibitor Winner Award from Red Cross Fair”

PEA received the exhibitor winner award for Red Cross fair on 2013 in medicine and public health category. Under the concept of “120th Anniversary the Red Cross Society works for the happiness of people” to express PEA intention in electrical energy supply and services together for maintaining the happiness of people and better livelihood both normal and disaster situation. In the booth, PEA provided media and activities concerning Social and Environment project of PEA such as Medical mobile unit for people in rural and disaster areas and PEA disaster victims recovery program.



Thailand Energy Award 2013

PEA received excellent class from Thailand Energy Award 2013 in on-grid renewable and alternative category from On grid wind turbines project at Baan Pang Samed, Sathing Phra, Songkhla province for more than 1,500 kW grid connected power generation from renewable energy sources to reduce imported fossil fuel usage and environmental emission in accordance with government's policy in renewable energy utilization Furthermore, PEA opened renewable and alternative energy learning center for community and youth to encourage learning in wind turbines power generation.



Honorable Shield from Ban Bang Khae Social Welfare Development Center for Older Persons

PEA received honorable shield from Ban Bang Khae social welfare development center for older persons in 60th anniversary of Ban Bang Khae, as PEA continuously support Ban Bang Khae activities.

ICT Excellence Awards 2013

PEA received ICT Excellence Award 2013 in Core Process Improvement Projects category from ICT Management Forum & Thailand ICT Excellence Award 2013 The Project tracking system of 1129 PEA call center was used for check and tracking status of customers request, work coordination with concerned parties to ensure services quality improvement and prompt response to customers request.





Turn off
Pollution