

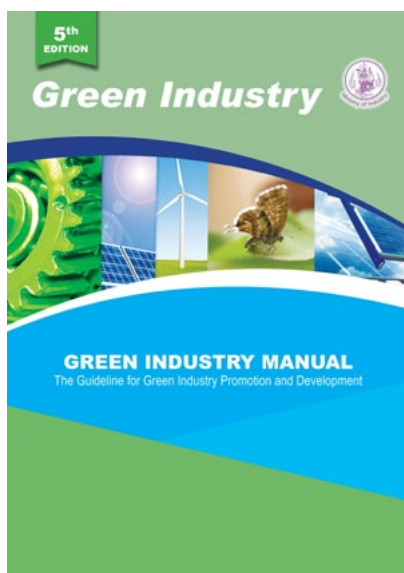
5th
EDITION

Green Industry



GREEN INDUSTRY MANUAL

The Guideline for Green Industry Promotion and Development



Green Industry Manual

Green Industry Project
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Message from the Permanent Secretary of the Ministry of Industry

So far our country has faced changes of society, economy, environment and natural disaster. These changes will dramatically affect the economy and our lives in the near future. Furthermore, we will still have to confront the global, regional and national changes which will have the effects on the country development. For example, such changes are economic and financial crisis and the commitment to ASEAN Economic Community (AEC) in 2015. Hence, the government has prepared the economic system to be ready to adapt itself to the effects of these changes. Also, the government has created the business opportunities by improving people, increasing knowledge-based, technology, innovation and creativity based on the concept of environmentally-friendly manufacturing industries. Moreover, the government has adopted His Majesty the King's idea of "Sufficiency Economy" in order to continually develop the country forward sustainability.

The goal of environmentally-friendly production is to cause Thailand become a low-carbon society, create appropriate rules to make the balance between industrial development and environmental sustaining, and promote the "Polluter Pays Principle" and the idea of "Payment for Ecosystem Services" in a concrete way. In addition, the Ministry of Industry as the main department of industry development has strategically planned to support the development of the industry and the sustainable development. The Ministry of Industry launched the project of "Green Industry" in 2011 so as to encourage the industries in the Country to be more environmentally-friendly, and more responsible to the society. This is according to the fact that we need the society to stay happily together with the industry while the sustainable development could be achieved.

The Ministry of Industry requires that the Green Industry project be the integration of environmental activities of all departments in the Ministry of Industry, the related institutes, the provincial Industrial offices, and the industrial



settlements all over the country. This project is regarded as our pride to celebrate His Majesty the King's 84th Birthday in 2011.

It is such a pleasure that the Green Industry project has received a great deal of cooperation from all parts. This has made the project grow as planned. It can be seen as a good sign of the country. The Ministry of Industry would like to thank all partners on this occasion and hopes that all organizations which have received the Green Industry license will continue to move up to the next steps. We also would like to persuade anyone who haven't applied for the Green Industry to take part in this project so that Thailand can achieve the development equilibrium and have the bright future.

(Dr. Witoon Simachokedee)



Preface

Concepts on green industry were arisen from importance given on staying happily together. In the current situation, environment was severely affected by industrial growth. Hence, it is time to further more develop, improve and create awareness to the industrial sector on effects on environment in order that environment and industry can stay together sustainably.

The Ministry of Industry has set up the green industry project to put forward and promote the industrial sector to conduct environmentally-friendly operations. This will help to make a good and reliable image of the industrial sector and gain people's trust and build green economy which will increase green GDP.

This guideline manual for entrepreneurs' green industry development is a part of green industry accreditation activity. It is a sample of guidelines for entrepreneurs in green industry development of the organization, who commit to environmentally-friendly business operations for sustainable development aimed at continuous improvement and social and environmental environment, both inside and outside the organization throughout the supply chain.

The objective of the guideline manual for entrepreneurs' green industry development is to be used as a guideline by entrepreneurs who wish to develop the organization into green industry for study and understanding the organization development in order to comply productively and efficiently with green industry criteria until obtaining green industry accreditation from the Ministry of Industry.

*Office of Green Industry
Promotion and Development*

Office of the Permanent Secretary



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1 Practice-based Application for the Green Industry Development

1.1 Scope

This green industry manual will be used as guideline for industry entrepreneurs of all sizes, all types and all areas for the application of the green industry accreditation of the Ministry of Industry. The manual covers definitions, principles, practice-based guidelines for green industry development and procedures for obtaining each level of green industry accreditation of the Ministry of Industry.

1.2 Definition

Green Industry	Industry which commits to environmentally-friendly entrepreneurship by focusing on development and continuous improvement in production process and environmental management
Organization	Industrial organizations which apply for the green industry accreditation from the Ministry of Industry
Green Commitment	Commitment demonstrated by policy, goals and action plans to reduce environmental impacts, and assuring effective organizational internal communication
Green Activity	Activities in compliance with policy, goals and plans which have been set to reduce concretely environmental impacts as commitment states
Green System	Systematic environmental management including follow-up, assessment and revision aimed to continuous development as well as receiving a widely-recognized award on environment and accreditations of various types of environments
Green Culture	Cooperation of employees in all level organization to implement friendly environment in all aspects of business operation until it becomes a part of organization culture
Green Network	Demonstration of network extension throughout green demand chains by supporting business partners and allies entering into accredited green industry process
Environmental Culture	Environmental awareness creation, attitude to people in the organization, collective behavior sharing, value building, environmental operations and promoting understanding to people inside the organization and concerned people. Practice guidelines setting to enhance awareness in order to sustain environment which will become an organization culture. Measurement setting for evaluating the organizational culture on environmental aspects which will be beneficial for continuous improvement
Environmental Ethics	Behavior characteristics for natural and environmental best practice. The environmental truth will be taken into account: reasonable uses of natural resources in parallel with sustainable development

First Tier	Industrial organizations which are direct producers of raw materials to the applicants for green industry accreditation and are classified, according to Act B.E. 2535 or Organizations under Mining Act B.E. 2510, as Type 1 or Type 2 or Type 3 factory
Type 1 Factory	Small factory (20 horsepower capacity or 20 workers maximum) with no pollution problem, which can conduct a business without authorization request, except small factories which cause pollution problem (as stated in the declaration of the Factory Act BE. 2535)
Type 2 Factory	Medium factory (50 horsepower capacity or 50 workers maximum) with no pollution problem or with some slight problems which can easily be improved, can conduct a business without authorization request, but needs to inform the concerned public sector before operation and pay the annual fees (as stated in the declaration of the Factory Act BE. 2535)
Type 3 Factory	Factory with more than 50 horsepower capacity and more than 50 workers which might cause pollution problems and accidents needed for close monitoring. Entrepreneurs must request an authorization before settlement (as stated in the declaration of the Factory Act BE. 2535)
Committee of Green Industry Accreditation	The committee appointed by Permanent Secretary of the Ministry of Industry, who is responsible for outlining concepts, plans, guidelines and budget frame for green industry development and operation, project integration and activity operation involved in green industry development of different sectors of Ministry of the Industry, criteria and conditions of criterions and benefits for entrepreneurs who participate in the project, and following up projects' evaluation, appointing sub-committees or committees for supporting the project operations as well as other activities assigned
Sub-Committee of Green Industry Accreditation	The sub-committee appointed by the Committee of green industry development and operation, who is responsible for setting up criteria, conditions to assess levels of the green industry and prepare a manual and documents on procedures, selection, assessment according to criteria and conditions set and consider the green industry logo accreditation as well as other activities assigned. In the present document, the term "Sub-committee" will be used
Sustainable Development	The development that meets the need of the present generation without compromising the ability of future generations to meet their own needs
Continuous Improvement	Improvement resulting from continuous efforts and its former standards including daily work improvement
Green Economy	Economy system which will improve quality of life and decrease inequality in a long term. The next generation of people will not face natural resource degradation and environmental problems
Certified Organization	Organization which was accredited and assessed whether it is in compliance with the green industry regulations of level application

2 Origin of the Green Industry Project

2.1 Origin

Thailand commits to Sustainable Development as promised in Johannesburg Declaration on Sustainable Development-JDSD in 2002 and Manila Declaration in 2009. The Ministry of Industry, which is the main sector to develop Thailand's economy, set up industry development strategies for environment and society and will proactively take action in enhancing and promoting industry growth and sustainability.

Thailand's green Industry project originated from Dr. Witoon Simachokdee's initiative after he had attended the Green Industry Seminar of United Nations Industrial Development Organization-UNIDO which was created at request of the Meeting of United Nations General Assembly. At that time, the Green Industry Project was still abstract. In order to implement concretely in the industrial sector, the Permanent Secretary assigned the Support Team to carry out these 2 points as follows:

- 1) Propose guidelines and work out concretely the green industry project in order that it can be carried out systematically under 2 main concepts: continuous improvement and sustainable development
- 2) Integration of all environmental projects from all sectors of Ministry of Industry under a big shadow of the green industry project

Concept on Green Industry, of which practice guidelines for accreditation application is presented in this manual, was the outcomes of the Support Team, Ministry of Industry's government officers. It is a real work of Thai people. Presented and recognized in the foreign country meeting, this work is a pride of the country.

The green industry driving force of the Ministry of Industry is based on industrial organizations' willingness to conduct a community-friendly and environmentally-friendly business for sustainable development. This operation consists of 5 levels, starting from easy to difficult levels. In the past, UNIDO commenced to use the policy to support the green industry in 2009 and developed the framework of public-private partnership in 2011. However, the guidelines for green industry development of UNIDO were abstract and lacked development steps to become green industry. The industrial organizations did not know how to start and it was finally ignored.

In Mid-Year 2010, Dr. Witoon Simachokdee, permanent secretary, had a meeting with the support team to find out more concrete ways of green industry promotion and development. Total Quality Management -TQM, combined with balance principles of triple bottom line of Social, Economic and Environmental issues, became the principles of the green industry on these 2 fundamental bases:

- 1) Continuous Improvement
- 2) Sustainable Development



*Dr. Witoon Simachokdee,
Permanent Secretary of the
Ministry Of Industry*

At the end of the Year 2010, the Ministry of Industry started operating the project seriously by signing MOU with sectors of the Ministry of Industry. This is to promote Thailand's industrial sectors to be society-friendly and environment-friendly, which will build a good image, trust and credibility. It is a start of green economy development which will increase Green GDP of the country. It is also for celebrating the Auspicious Occasion

of His Majesty the King's 7th Cycle Birthday Anniversary in 2011. The Ministry of Industry, joining forces with all sectors of the Ministry and the partners especially provincial industry offices and the industrial settlements over the country, supports industrial organizations to conduct an environmentally-friendly business and develop themselves to be 5-level green industry as follows:

Level 1	Green Commitment : Commitment demonstrated by policy, goals and action plans to reduce environmental impacts, and effective organizational internal communication
Level 2	Green Activity: Activities in compliance with policy, goals and plans which have been set to reduce substantially environmental impacts as commitment states
Level 3	Green System: Systematic environmental management including follow-up, assessment and revision aimed to continuous development as well as receiving a widely-recognized award on environment and accreditations on a variety of environments
Level 4	Green Culture: Cooperation of employee in all level organization to implement friendly environment in all aspects of business operation until it becomes a part of organization culture
Level 5	Green Network: Demonstration of network extension throughout green demand chains by promotion business partners and allies entering into accredited green industry process

2.2 Concept and Green Industry Operation Framework

Promoting and driving the production sector to green industry for sustainable and balanced development is the core of the projects of the Ministry of Industry who wants to see economy growth of the industrial sector comply with potential and ecosystem feasibility including society wellness such as energy conservation in production process, efficient utilization of resources by

using 3Rs principles and clean technology, green productivity, eco design, green label or eco-label, life cycle analysis, pollution reduction and reduced greenhouse gas emission for example. These projects are only parts of proactive work on environment preservation of Ministry of Industry in which entrepreneurs can take part to develop business operation to be more environmental friendly.

**“Green Industry for me is the industry which commits to environmentally-friendly entrepreneurship by focusing on development and continuous improvement, and practice business with responsibility towards society inside and outside organization as well as supply chain for sustainable development
Green Industry is based on 2 principles
1) Continuous improvement
2) Sustainable development”**



*Dr. Witoon Simachokdee,
Permanent Secretary of the
Ministry Of Industry*

Dr. Witoon Simachokdee gave a definition and shared his experience and his ideas on green industry operations and gave example of an organization which had been improved until it could live happily with community. A factory in the Southern part, for instance, which was regularly complained. 20 years later, this factory was awarded best environment. This case was surprising: how it could be changed until society and community accepted it to be a part of them and do activities together? It can be a case model because there are many factories in Thailand which

ignore and do not understand that environmental issues need investment. Another example, when I went to visit the industrial settlement Bayer in Leverkusen, Germany, white smoke was emitted from the factory's chimney and the factory is surrounded by high-rise apartments. However, they can live together. The guide said that “we depend on each other”, which is mutual reliance. People in the neighborhood go to work in the factory. The important thing is city, people and industry can live in harmony. It is the same principle as eco-industry that Thailand is trying to put forward.

These examples show that time should be accorded to people. In order to get more people to join the green industry, campaign must be launched for better understanding that practicing green industry is not difficult.

Therefore, for the green industry operation, firstly, a large number of people must be invited to join the project. Secondly, opportunities must be provided to improve the environment continuously. The problem is how to promote the idea that the green industry will lead to sustainability.

A third party always influences our life, for example, no one forces us to study Master Degree, but when we see everyone equipped with a Master Degree, we would like to do the same. This is the same as Green Industry. If industrial factories are labeled green industry, we would like to become a green industry as others.

Steps of being a green industry are from level 1 (Green Commitment): people will be invited to do a good practice and commit to green industry. The second level is Green Activity: factories must do as promised. Level 3 (Green System) must put an effort in order to get accredited. Level 4 (Green Culture) is green culture habits: everything which is well-organized will become a habit and a culture. People who lack discipline will live with us with difficulty so that they need to improve their behavior to be well-organized like us. Green industry will finally remove misconducts. However, it requires time for behavior change. The last level (Green Network): we cannot be a green industry alone. People around us must be green as well.

The green industry interested some public. Some organizations recognized its value: for example, a factory requested a green industry mark to label its products. We decided to grant it. Some public sectors such as Ministry of Natural Resource

and Environment, included green industry to the National Plan for Environment 2012-2016. The principles of the green industry aim at sustainable development. Sustainability cannot be possible if society and community deny it and it will not last without profit. Former business indicators are: cost, quality, service and rapidity. There is no businessman who will not think of cost reduction and profit increase. However, business will not last long without 2 significant indicators: innovation/creativity and corporate social responsibility: CSR. Innovation is important as new products are launched all the time so that we have to improve our products in order to compete with them. CSR is necessary because, if we are not accepted by society, our business will not last long.

The two main missions of the Ministry of Industry are monitoring and development. These missions are in need of brainstorming ideas in finding ways for sustainable development of the green industry, directions and guidelines to drive the green industry to comply with government policy in environmental-friendly industry, social responsibility and pleasant & sustainable community living. If the Ministry of Industry, acting as organization in charge of industrial manufacturers, can enable them to operate under these principles, there will be less protest against industrial manufacturers. The Ministry will then gain more time to develop other projects such as promoting the industry's growth etc. But if the green industry can not be put forward or not well enough, the Ministry will work with difficulty. How can the industry become environmental-friendly, take social responsibility and live with community and society? They are the standard features of the green industry.

1) The environmental-friendly industry can be possible by technology improvement, technology application, resource saving and resource efficiency. The industry of the future must be a low carbon society which might be settled in an eco-industry area. It may be, thus, difficult to build up individual or independent plants. Therefore, the Ministry of Industry must develop industrial settlement or eco-industry areas to serve it.

2) Social Responsibility Practice – many sectors of the Ministry of Industry have set up social responsibility projects, for instance the CSR-DIW Project of Department of Industrial Works, the CSR-DPIM Project and the Green Mining Project etc., under the idea of industry's awareness and people's understanding which will be linked to community living.

3) Community Living – the industry must love its community and local people and then they will love the industry. The industry must be accessible to local people and ensure effective communication between them, as an example of the projects of the Ministry of Industry, which aim to develop good governance system, enable industry and its community to access information and establish mutual understanding and affection in order that local people can trust the industry. Green industry development requires collaboration from 3 sectors: public sector, industrial sector and people sector.

2.3 Organizations Joining the Project

Many organizations which have collaborated in the green industry operation are Department of Industrial Works, Department of Industrial Promotion, Department of Primary Industries and Mines, Thai Industrial Standards Institute, Management System Certification Institute, Industrial Estate Authority

1) Department of Industrial Works (DIW)

The examples of the projects, which are related to green industry Development and can be equivalent to projects of the green industry, are the CSR-DIW project and the EMS for SMEs project. These two projects at level 2 can be equivalent to Green Industry, level 3. Moreover, other projects such as the clean technology project, the water reduction study project for big water consumer industries, the ES for SE project, the energy management project, the Eco Industrial Complex project, the EMS for SMEs project can be equivalent to green industry, level 2.

2) Department of Primary Industries and Mines

The examples of the projects, which are related to green industry Development and can be equivalent to projects of the green industry, are the CSR-DPIM project and the Green Mining project. Both of them are equivalent to green industry, level 3.

3) Department of Industry Promotion

The examples of the projects, which are related to green industry Development and can be equivalent to projects of the green industry, are the total energy management project for increasing energy use efficiency in industry, the Lean Manufacturing project, the wastewater treatment technology aid project. All of these projects are equivalent to green industry, level 2.

4) Thai Industrial Standards Institute

Some projects support green industry development such as the training and environment management ISO 14001 environmental system setting project and the training and ISO 50001 energy management project.

5) Management System Certification Institute

The projects are being operated. The examples of the projects which are related to green industry Development and can be equivalent to projects of the green industry are the operations following the policy on standards which might be equivalent to green industry, level 1, the greenhouse gas emission reduction project which may be equivalent to green industry, level 2, the ISO 14001 and ISO 50001 accreditation grant which may be equivalent to green industry, level 3, the ISO 28000 CSR project which may be equivalent to level 4. Moreover, the Institute set up Sustainable Excellent Award standard and the Sufficiency Economy standard which concerns economy, society and environment.

6) Industrial Estate Authority

Some projects related to green industry development can be equivalent to levels of green industry. The community participation in monitoring factories in industrial estate project (White Flag Green Star), for instance, can be equivalent to green industry, level 2. Beside, the ecology industrial estate project which works together with Department of Industrial Works can be equivalent to green industry, level 2.

Projects which each organization mentioned as example are only a part of projects which concern green industry development. Further information on each project can be searched on the green industry website or contact directly the organization. Concepts on industry development can be summarized into main points as follows:

- Driving green industry into the action plan for which all organizations are responsible

- Promoting more green industry through advertisement, public relations, events etc.

- Promoting advantages that factories will obtain from being a green industry at each level

- Organizing a talk to share experience to others factories on « how to become a green industry » by the factories that have been certified at each level

- Supporting factories which have been certified “green industry” to keep improving in order to reach a higher level, including building green industry network. For supporting factories’ improvement, there are many projects of Ministry of Industry which can support development of each level.

2.4 Advantages

Currently, trend in resource, energy and environment preservation is well responded by all sectors around the world. It is because energy source, petrol and gas, dropped more rapidly than expected, including fear of natural disasters of which a part results from greenhouse gas emission from the industrial sector. Furthermore, deterioration in soil and water quality which are food sources for men and plants causes a food shortage problem for men and affects living things in the ecological system. Therefore, the industrial sector has received negative feedbacks from society, community and neighboring people as they think that industrial estates are pollution and problem areas. The industrial sector must be adapted to environmental friendly process. This is the only way to be able to live with community and environment sustainability.

Advantages that green industry entrepreneurs will obtain are

1) Impact Reduction on environment and community, less complaints about impacts from industrial entrepreneurs, risk reduction of being responsible for the impacts in the future

2) Building a good image and receiving a good attitude for being environmentally friendly industry. It will develop a better understanding and mutual recognition between the industry and its neighboring people.

3) Surrounding people will obtain justice and have a better quality of life from economy and society development which results from the green industry

4) Increasing job creation and employability related to environment, fairness in job hiring. Workers will work safely and happily in a good environment

5) Natural Resource and Energy use reduction, cost saving in business operations, competition opportunities

6) Marketing opportunities in focusing on “green” products and production process which are being accepted and needed by consumers around the world

7) Add value in national economy which will not affect society, community and environment

Moreover, entrepreneurs who have been certified can request advantages from Ministry of Industry as follows

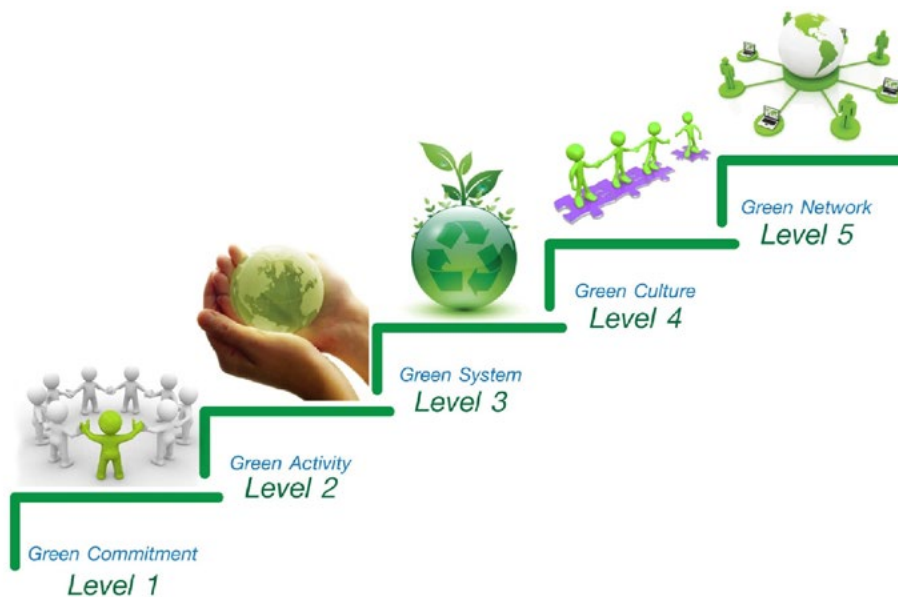
Benetits	Conditions	Organization
Annual Fee Waive for 5 years	1) Environment system or ISO 14001 accreditation obtained 2) Occupational health and safety management system standard	Department of Industrial Works Office of Permanent Secretary
Annual Fee Waiving for 5 years	1) Waste ad residue will be used to produce biogas as alternative energy 2) Waste Air from the production process will be reused.	Department of Industrial Works SMEs Babk
Green Productivity Loan Indulgent Verification	Must be a SMEs entrepreneur Reduced frequency of monitoring of factories which have been certified “green industry at above level 3”	Department of Industrial Works Office of Permanent Secretary
Award, Recognition	Green Industry Mark announcement on www.greenindustry.go.th	Office of Permanent Secretary

3 Regulations of Green Industry: 5-level Development of Green Industry (5 steps)

Criteria of Green Industry Level 1: Green Commitment

1. Organization must define environmental policy covering all commitment that related to

- (A) Impact Reduction on environment or Prevention Pollution or
- (B) Sustainable Resource Use or
- (C) Climate Change Mitigation and Adaptation or
- (D) Protection and Restoration of the Natural Environment



2. Organization must communicate environmental policy to all personnel for acknowledgement

Criteria of Green Industry Level 2: Green Activity

1. Organization must define environmental policy covering all commitment that related to at least one of environmental activities below:

- (A) Impact Reduction on environment or Prevention Pollution or
- (B) Sustainable Resource Use or
- (C) Climate Change Mitigation and Adaptation or
- (D) Protection and Restoration of the Natural Environment and communication environmental policy to all personnel for acknowledgement

2. Preparation environmental plan to reduce environmental impact or prevention of pollution or sustainable and efficient resource utilization or to reduce impact of climate change mitigation and adaptation and protection and restoration of natural environment, the environmental plan must consist of objective, target, procedure, responsible person and completed time frame

3. Organization must implement environment plan for achievement

Criteria of Green Industry Level 3: Green System

1. Environmental Policy

Top management of organization must define environment policy covering commitment to implement in order to

- (A) Reduction environmental impact or prevention of pollution or
- (B) Sustainable resource utilization
- (C) Reduction impact of climate change mitigation and adaptation or
- (D) Protection and restoration of natural environment and communication the environmental policy to all personnel in organization or working on behalf of organization for acknowledgement

2. Planning

(1) Organization must indicate environmental issues caused by activity, product and organization management and consider the environmental issues that affected significantly impact to environment

(2) Organization must indicate and follow provisions of law and all other provisions concerned environment which is related to environmental issues

(3) Organization must define environmental objective and target which is consistent to policy, law and significantly environmental issues

(4) Organization must prepare environmental plan to achieve the set objective and target, the action plan should consist of responsible description in all level and related organizations as well as procedures and completed time frame

(5) Organization must implement environmental action plan by distributing and suggesting the environmental action plan to related personnel for recognition and comprehension to implement according to defined plan

(6) Organization must follow up implementation of defined environmental plan

(7) Organization must conduct revision of environmental objective, target and plan periodically

3. Implementation

(1) Organization must provide sufficient resource for environmental management

(2) Organization must conduct training to create awareness for personnel in organization or working on behalf of organization on environmental issues and environmental impact

(3) Organization must define communication channel and method to distribute environmental information both for internal and external personnel of organization

(4) Organization must provide process of implementation in order to control document which is defined by environmental management system

(5) Organization must provide process of implementation in order to reduce environmental impact, to reduce impact of climate change mitigation and adaptation and efficient and sustainable resource utilization

(6) Organization must provide process of implementation to support emergent or unexpected situation that affected to environment and community

4. Follow up and evaluation

(1) Organization must provide process of implementation for follow up/monitor environment quality and parameters used for following up and monitoring, must be verified and maintained appropriately

(2) Organization must provide process of implementation to evaluate consistency between environmental management system and provisions of law during defined time frame

(3) Organization must provide process of implementation to cope with existed environmental defects or may be occurred by implementing preventive and corrective actions

(4) Organization must indicate, storage, prevent and specify duration of keeping record that related to environmental implementation

(5) Organization must conduct internal evaluation of environmental management which is defined periodically to ensure that the environmental management system is implemented efficiently and conformed to related requirements

5. Revision and system maintaining

Top management of organization must review environmental management system of organization to ensure that it is conformed to related provisions of law and the environmental management system which is appropriately and continuously effectiveness

Criteria of Green Industry Level 4: Green Culture

1. Organization must have environmental management system as mentioned in Level 3 all provisions

2. Organization must create organization culture in environment and implement it effectively by covering criteria of standard of corporate social responsibility ISO 26000 as follow

2.1 Organization is responsible for its impact to environment by:

1. Impact of decision making and implementation of organization to social and environment, especially significantly negative impact

2. Implement preventive action for unintentionally negative impact to avoid recurrence

2.2 Organization must have transparency in decision making and implementing that affected to environment, organization must reveal it clearly, correctly and completely by

1. Affected persons from organization's implementation can access directly to information source which is easy to understand

2. Updated information for appropriate time, being fact, clear and reliable, related persons can evaluate precisely

2.3 Organization must provide promotion for ethical implementation in environment seriously by

1. Announcement to define environmental value and criteria of organization clearly

2. Implement with respect to management structure that supported Ethical operation in environment in organization

3. Provide supervised and controlled mechanisms to follow up, promote and enforce for ethical implantation in environment

4. Encourage and promote ethical implantation in environment

5. Prevent and improve conflict of interest in organization that may lead to non ethical implementation in environment

6. Preparation report of ethical implementation in environment

2.4 Organization must respect, consider and respond to stakeholder's interest in environment

2.5 Organization must follow to environmental laws and provisions

2.6 Organization must respect international environment implementation n case of law or law enforcement is not sufficient to protect environment and the organization must impel to respect international implementation

2.7 Organization must respect human rights in term of good environmental condition and recognize the importance of environment and international human rights

3. Organization must prepare environmental implementing report which is communicated to the public

Criteria of Green Industry Level 5: Green Network

1. Organization must provide environmental management system and create organization culture with respect to Green Industry criteria of Level 4 in all aspects

2. Organization must implement promotion, creation and interrelation of environmental activity with stakeholder throughout supply chain, community and consumer with substantial achievement and to develop continuously and sustainably by:

1. To promote supply chain that leading to Green Industry and implement effectively by operating throughout supply chain and to develop continuously and sustainably

2. To promote community participation, community development and cooperate with community in encouraging awareness and promote earning, good understanding in sustainable consumption by emphasis and attention to environment

3. To provide learning and awareness of consumer in sustainable consumption

3. Organization must prepare implementation report which is related to promotion, creation and interrelation of environmental activity with stakeholder and achievement report for distribution.

4 Practice Guidelines for Green Industry Criteria

1) Practice Guidelines for Green Industry Level 1: Green Commitment

Criteria of Green Industry Level 1

1. Organization must define environmental policy covering all commitment related to
 - (A) Impact Reduction on environment or Prevention Pollution or
 - (B) Sustainable Resource Use or
 - (C) Climate Change Mitigation and Adaptation or
 - (D) Protection and Restoration of the Natural Environment
2. Organization must communicate environmental policy to all personnel for acknowledgement

Practice Guidelines for Entrepreneurs

- The policy on environment is top management's official declaration of commitment. Top management must be sure that the policy environment which was issued
 - will be suitable for type, size, impacts on environment of product activity and services
 - will aim at continuous improvement and protects environment
 - will comply with law and other regulations related to environmental issues
 - will be in the framework and review objectives and goals about environment
 - will be written, implement and conserve
 - will be informed to all employees in the organization or people who work on behalf of the organization
 - can be communicated to public
- Top Management must define policy on environment and prepare a written version and sign in environment policy declaration. For establishing environment policy, it should emphasize directions of environment impact reduction environment impact protection, sustainable utilization of natural resources climate change mitigation and natural resource protection and restoration
 - Top management must indicate follow-up methods in order that everyone working for the organization understands and can implement effectively
 - Organization must inform and communicate policy on environment to public and neighboring community to show commitment to environment by using one of appropriate communication tools

2) Practice Guidelines for Green Industry Level 2: Green Commitment

Criteria of Green Industry Level 1

1. Organization must define environmental policy covering all commitment related to
 - (A) Impact Reduction on environment or Prevention Pollution or
 - (B) Sustainable Resource Use or
 - (C) Climate Change Mitigation and Adaptation or
 - (D) Protection and Restoration of the Natural Environment

Practice Guidelines for Entrepreneurs

- The policy on environment is top management's official declaration of commitment. Top management must be sure that the policy environment which was issued
 - will be suitable for type, size, impacts on environment of product activity and services
 - will aim at continuous improvement and protects environment
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 - will be in the framework and review objectives and goals about environment
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 - will be informed to all employees in the organization or people who work on behalf of the organization
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- Top Management must define policy on environment and prepare a written version and sign in environment policy declaration. For establishing environment policy, it should emphasize directions of environment impact reduction environment impact protection, sustainable utilization of natural resources climate change mitigation and natural resource protection and restoration
 - Top management must indicate follow-up methods in order that everyone working for the organization understands and can implement effectively
 - Organization must inform and communicate policy on environment to public and neighboring community to show commitment to environment by using one of appropriate communication tools

Criteria of Green Industry Level 2 (Next)

2. Preparation environmental plan to reduce environmental impact or prevention of pollution or sustainable and efficient resource utilization or to reduce impact of climate change mitigation and adaptation and protection and restoration of natural environment, the environmental plan must consist of objective, target, procedure, responsible person and completed time frame
3. Organization must implement environment plan for achievement

Practice Guidelines for Entrepreneurs

- Organization should review activities in the organization to know which activities affect environment. Priority order must be considered, based on the most significant impact on environment
- One of activities which have significant impacts will be chosen to set objectives and goals in order to reduce impacts on environment
- Organization must set up operation plans on environmental issues by
 - Collecting details and data related to what will affect objectives and goals e.g. problem causes, concerned organizations for plan development
 - Specify the operations in order to achieve the objectives and the goals
- Indicate completed time frame and time frame for each step of operations
- Appoint a responsible person for the overall plan and responsible persons of each step of operations
- Prepare necessary natural resources e.g. equipments, personnel, expenses
- Propose the plan to Authority
- Organization must put the plan into practice for effective outcomes, and specify monitoring system and record system for the outcomes of the environment plans
- Top Management should review and improve environment policies according to circumstance changes

3) Practice Guidelines for Green Industry Level 3: Green System

Criteria of Green Industry Level 3

1. Environmental Policy

Top management of organization must define environment policy covering commitment to implement in order to

- (A) Reduction environmental impact or prevention of pollution or
- (B) Sustainable resource utilization
- (C) Reduction impact of climate change mitigation and adaptation or
- (D) Protection and restoration of natural environment and communication the environmental policy to all personnel in organization or working on behalf of organization for acknowledgement

Practice Guidelines for Entrepreneurs

- Organization should review activities in the organization to know which activities affect environment. Priority order must be considered, based on the most significant impact on environment
 - One of activities which have significant impacts will be chosen to set objectives and goals in order to reduce impacts on environment
 - Organization must set up operation plans on environmental issues by
 - Collecting details and data related to what will affect objectives and goals e.g. problem causes, concerned organizations for plan development
 - Specify the operations in order to achieve the objectives and the goals
- Indicate completed time frame and time frame for each step of operations
- Appoint a responsible person for the overall plan and responsible persons of each step of operations
 - Prepare necessary natural resources e.g. equipments, personnel, expenses
 - Propose the plan to Authority
- Organization must put the plan into practice for effective outcomes, and specify monitoring system and record system for the outcomes of the environment plans
 - Top Management should review and improve environment policies according to circumstance changes

Criteria of Green Industry Level 3 (Next)

2. Planning

- (1) Organization must indicate environmental issues caused by activity, product and organization management and consider the environmental issues that affected significantly impact to environment
- (2) Organization must indicate and follow provisions of law and all other provisions concerned environment which is related to environmental issues
- (3) Organization must define environmental objective and target which is consistent to policy, law and significantly environmental issues
- (4) Organization must prepare environmental plan to achieve the set objective and target, the action plan should consist of responsible description in all level and related organizations as well as procedures and completed time frame
- (5) Organization must implement environmental action plan by distributing and suggesting the environmental action plan to related personnel for recognition and comprehension to implement according to defined plan
- (6) Organization must follow up implementation of defined environmental plan
- (7) Organization must conduct revision of environmental objective, target and plan periodically

Practice Guidelines for Entrepreneurs

- Organization must plan environmental management system to be used as guidelines for systematic and effective environmental management to solve pollution problems and protect environment. It should focus on principles of prevention, rather than symptoms

- Organization must set up steps of operations to indicate environmental issues resulting from product activity and services under the scope of environment management. The points which have significant impacts must be found out

- Organization must set up steps of operations and follow up. For the understanding of law and other regulations, registration of law and related regulations should be communicated to concerned organization, including updated regulations or changes on environmental issues of the organization

- Organization must set up objectives and goals in compliance with policy, law and significant environmental issues. They must be written. Objectives should be clearly specified. Goals should be the overall goal and subgoals should be set for each organization concerned. The goals must consist of the components which are

- Specific
- Measurable
- Achievable
- Relevant
- Time

- Organization must set up the environment plan in order to achieve objectives and goals by

- Collecting details and data related to what will affect objectives and goals e.g. problem causes, concerned organizations for plan development

- Specify the operations in order to achieve the objectives and the goals

- Indicate completed time frame and time frame for each step of operations

- Appoint a responsible person for the overall plan and responsible persons of each step of operations

- Prepare necessary natural resources e.g. equipments, personnel, expenses

- Propose the plan to Authority

- Organization must put the environment plans into practice for effective outcomes and should inform and explain to concerned people for mutual understanding in order to carry out the operations as planned

- Organization must specify the follow-up system and the system to record the results of environment operations and indicate the progress report timeframe and summarize the progress of operations in comparison with the plan

- Top Management should review and improve objectives, goals, environment plans to be suitable with circumstance changes such as

- When the operation results are not as planned e.g. delay, outcomes are not as planned, no progress, causes must be analyzed and measures to solve problems will be set up to revise and improve action plans.

- For the plan in the future, if product activity or new services are developed or changed, environment plans will be revised according to circumstance changes.

Criteria of Green Industry Level 3 (Next)

3. Implementation

- (1) Organization must provide sufficient resource for environmental management
- (2) Organization must conduct training to create awareness for personnel in organization or working on behalf of organization on environmental issues and environmental impact
- (3) Organization must define communication channel and method to distribute environmental information both for internal and external personnel of organization
- (4) Organization must provide process of implementation in order to control document which is defined by environmental management system
- (5) Organization must provide process of implementation in order to reduce environmental impact, to reduce impact of climate change mitigation and adaptation and efficient and sustainable resource utilization
- (6) Organization must provide process of implementation to support emergent or unexpected situation that affected to environment and community

Practice Guidelines for Entrepreneurs

- Organization must apportion sufficient resource for management of each environment aspect. To indicate the need of necessary resource for environment management system, - Land Structure such as building, place, public utility, equipment, communication system

- Information System
- Single Skill Training
- Technology
- Finance, Personnel, Other appropriate

resources for operation must be considered.

- Organization must indicate the need in training related to environment issues and environment management system as well as training workshop to create awareness to personnel in organization or working on behalf of the organization and store related record

- Organization must provide operation steps for communication by specifying information that need to be communicated, target group for communication, communication channels, ways of communication and communication assessment

- Organization must provide operation process to control document by covering document approval before use, status of documentation showing, document distribution to concerned people for work, out-of-date documentation use protection and appropriate explanation if documentation needs to be kept

- Organization must provide operation process to implement environmental issues to monitor operations and avoid mistakes, set up operation criteria in operation process, including communication to sellers and service providers in case of product or service purchase from an outside organization

- Organization must provide operation process for indicators of emergent situations or severe accidents from activities or organizations which will have impact on environment, and must have ways of readiness preparation for protection and mitigation, reducing impact on environment from those emergent situations or severe accidents, organize trainings and repetition to test regularly efficiency of operation process, revise and improve operation steps, especially after emergent situations or accidents occur

Criteria of Green Industry Level 3 (Next)

4. Follow up and evaluation

(1) Organization must provide process of implementation for follow up/monitor environment quality and parameters used for following up and monitoring, must be verified and maintained appropriately

(2) Organization must provide process of implementation to evaluate consistency between environmental management system and provisions of law during defined time frame

(3) Organization must provide process of implementation to cope with existed environmental defects or may be occurred by implementing preventive and corrective actions

(4) Organization must indicate, storage, prevent and specify duration of keeping record that related to environmental implementation

(5) Organization must conduct internal evaluation of environmental management which is defined periodically to ensure that the environmental management system is implemented efficiently and conformed to related requirements

Practice Guidelines for Entrepreneurs

- Organization must provide process of implementation for follow up and assessment of operation values which have significant impact on environment, storage data of monitor and measurement, including equipments for monitor and measurement tools which must be verified, maintained and recorded

- Organization must provide process which indicates frequency and methods in evaluating consistency between environmental management system and provisions of law and other related regulations, evaluate consistency between environmental management system and provisions of law and other related regulations according to defined time frame and methods, record evaluation and report evaluation result to concerned people

- Organization must provide process of implementation to cope with existed environmental defects or may be occurred by implementing preventive and corrective actions, which cover communication process of preventive and corrective actions, basic operations for defects, cause search and preventive process to avoid recurrence, revision and improvement, operation result record

- Organization must provide process of implementation for indication, storage, prevention and use, and specify duration of keeping record and destruction record which must be easily read, well indicated with feedback possibility

- Organization must provide process of implementation for internal evaluation to ensure that the environmental management system is conformed to environment management plans, implement and keep appropriately the plans, which consist of the main process: internal evaluation auditor invitation, internal evaluation plans, internal evaluation process, report of internal evaluation result, improvement and correction follow-up and conclusion for revision by management team

Criteria of Green Industry Level 3 (Next)

5. Revision and system maintaining

Top management of organization must review environmental management system of organization to ensure that it is conformed to related provisions of law and the environmental management system which is appropriately and continuously effectiveness

Practice Guidelines for Entrepreneurs

- Top management of organization must review environmental management system during defined time frame to ensure that the system is appropriate, sufficient and efficient
- Evaluate opportunity for improvement and necessity of environment management changes, environment policy and goals on environment
- Revision record storage

4) Practice Guidelines for Green Industry Level 4: Green Culture

Criteria of Green Industry Level 4

1. Organization must have environmental management system as mentioned in Level 3 all provisions

Practice Guidelines for entrepreneurs

- Organization must set up environment management system of the ISO 14001 standard or equivalent

Criteria of Green Industry Level 4 (Next)

2. Organization must create organization culture in environment and implement it effectively by covering criteria of standard of corporate social responsibility ISO 26000 as follow

2.1 Organization must be responsible for its impact to environment by:

1. Impact of decision making and implementation of organization to social and environment, especially significantly negative impact
2. Implement preventive action for unintentionally negative impact to avoid recurrence

Practice Guidelines for Entrepreneurs

- Organization must have process for building organizational culture and implement effectively. Samples of organizational culture building process are

- Process to inculcate common belief to personnel in organization on organization's ability in reducing impacts on environment, climate change mitigation, natural resource sustainable use

- Process in creating value and awareness on environment

- Activities to promote personnel participation which will reflect value demonstration on environment

- Practice guidelines to keep behavior which will become organizational culture in environmental concern

- Method set up for evaluating the persistence of organizational culture

- Organization must define methods in evaluating impacts from decision and operations of organization on community and environment, especially significant negative impacts

- Organization must evaluate significant negative impacts on community and environment in case of decision on product/service development and/or improvement machine/equipment production process venue business strategy

- Organization must provide action plans or measures for handling and preventing significant negative effects

- Organization must review and verify regularly measures for significant effect prevention to ensure that it is still appropriate with situation change

- In case of operation mistakes, organization must set up appropriately measures to correct the mistakes and avoid recurrence, and record operation results

Criteria of Green Industry Level 4 (Next)

2.2 Organization must have transparency in decision making and operation which affect environment. Organization must reveal it clearly, correctly and completely by

1. Affected persons from organization's implementation can access directly to information source which is easy to understand
2. Updated information for appropriate time, being fact, clear and reliable, related persons can evaluate precisely

Practice Guidelines for Entrepreneurs

- Organization must indicate clearly stakeholders of each part, including impacts on stakeholders of each part for instance staff and family, stockholders, suppliers, sub contractors, dealers, customers, public sector, community

- Organization must classify information system about impacts and inform stakeholders of each part

- Organization must prepare information system in order that affected persons can get access directly and it is easy to understand. Moreover, information system must be appropriate with time frame, facts. Presentation must be clear and reliable in order that stakeholders of each part can evaluate correctly effects from decision and operations of the organization

- Organization must provide process of operations to ensure that information system is up-to-date and accurate

Criteria of Green Industry Level 4 (Next)

- 2.3 Organization must provide promotion for ethical implementation in environment seriously by
1. Announcement to define environmental value and criteria of organization clearly
 2. Implement with respect to management structure that supported ethical operation in environment in organization
 3. Provide supervised and controlled mechanisms to follow up, promote and enforce for ethical implantation in environment
 4. Encourage and promote ethical implantation in environment
 5. Prevent and improve conflict of interest in organization that may lead to non ethical implementation in environment
 6. Preparation report of ethical implementation in environment

Practice Guidelines for Entrepreneurs

- Organizational culture must be based on fundamental values about honesty, equality and justice. These values include concern on community and environment and determination for dealing with effects which result from decision and operations of organization toward stakeholders' benefits

- Organization must have indicators and define organization's values and principles on environmental issues

- Organization must set up management structure to promote ethical implementation on environment in the organization, including decision making process and relationships building with other organizations

- Organization must define and preserve the system to stimulate and promote regularly ethical implementation on environmental issues

- Organization must define and preserve the system to prevents and corrects conflict of interest which will lead to non-ethical implantation

- Organization must define and preserve the system which will help for ethical and non-ethical implementation report without any fear of being threatened

Criteria of Green Industry Level 4 (Next)

2.4 Organization must respect, consider and respond to stakeholder's interest in environment

Practice Guidelines for Entrepreneurs

- Organization must respect, consider, take action in response to benefits of stakeholders of the organization although objectives of the organization are restricted in response only to owner's benefits. Members, customers or association of which organization is a member. However, rights to request benefits for individuals or group of people must be considered as individual or group of people are stakeholders of the organization

- Organization must indicate stakeholders
- Organization must give importance and pay attention to benefits as well as legal rights of stakeholders in response to concerns

- Organization must give importance to some stakeholders who are affected significantly by operations of the organization

- Organization must evaluate and take into account relationships building of stakeholders for following up the relationships and their influence on the organization

- Organization must take into account relationships building of stakeholders and expectation from society/community and sustainable development

Criteria of Green Industry Level 4 (Next)

2.5 Organization must follow to environmental laws and provisions

Practice Guidelines for Entrepreneurs

- Organization must indicate and collect laws and regulations and provisions on environmental issues

- Organization must follow all provisions of law which cover operations of the organization although those law and provisions are not enforced appropriately

- Organization must have a system to ensure that sector with which organization has relations carry out operations in the frame of law

- Organization must define and preserve the follow up system in order to know matters of law for which organization must be responsible

- Organization must define and preserve the system used to review obedience to law and provisions which are related to the organization during defined time frame

Criteria of Green Industry Level 4 (Next)

2.6 Organization must respect international environment implementation in case of law or law enforcement is not sufficient to protect environment and the organization must impel to respect implementation of international standard

Practice Guidelines for Entrepreneurs

- Organization must respect implementation of international standard and rules of law
 - In case that law or law process is not sufficient for protecting environment or society, organization must put forward the respect for international practice guidelines at a minimum
 - In case that law or legal process contradicts international practice guidelines, organization must put forward the respect for international practice guidelines most widely possible
- Organization must consider opportunities and channels in law to invite organizations and sectors responsible for related laws to solve conflicts
 - Organization must avoid misconduct with other organizations in operations which do not follow international practice guidelines

Criteria of Green Industry Level 4 (Next)

2.7 Organization must respect human rights in term of good environmental condition and recognize the importance of environment and international human rights

Practice Guidelines for Entrepreneurs

- Organization must indicate and collect laws related to human rights concerning environmental issues
 - Organization must define and conserve the system which enhances human rights and acceptance of human rights importance and universality
 - Organization must define and conserve the system which enhances respect and promotion of law concerning human rights, especially which are related to environmental issues
- In the situation where human rights are not protected, organization must take action in order that human rights are respected. Organization must avoid getting profits from these situations
 - In the situation where law and use of law enforcement are still not appropriate to protect human rights, organization must follow the principles of respect for international norms of behavior

Criteria of Green Industry Level 4 (Next)

3. Organization must prepare environmental implementing report which is communicated to the public

Practice Guidelines for Entrepreneurs

- Organization must indicate and collect information on results of operations in environment issues

- Organization must have process to decide which information must be communicated to public

- Organization must prepare a report on results of operations in environment issues to communicate to public, which might be included in organization annual report or through electronic communication channels

5) Practice Guidelines for Green Industry Level 5: Green Network

Criteria of Green Industry Level 5

1. Organization must provide environmental management system and creation organization culture with respect to Green Industry criteria of Level 4 in all aspects

Practice Guidelines for Entrepreneurs

- Organization must be accredited green industry, level 4 from Committee of Green Industry Promotion and Development

Criteria of Green Industry Level 5 (Next)

2. Organization must implement promotion, creation and interrelation of environmental activity with stakeholder throughout supply chain, community and consumer with substantial achievement and to develop continuously and sustainably by:

1. To promote supply chain that leading to Green Industry and implement effectively by operating throughout supply chain and to develop continuously and sustainably
2. To promote community participation, community development and cooperate with community in encouraging awareness and promote earning, good understanding in sustainable consumption by emphasis and attention to environment
3. To provide learning and awareness of consumer in sustainable consumption

Practice Guidelines for Entrepreneurs

- Organization must indicate stakeholders of organization operations
 - Organization must define and preserve the system in promoting, creating and interrelating activities on environment issues with stakeholders
 - Organization must prepare a project or plan related activities on environment issues with stakeholders of the organization according to capacity and readiness of stakeholders in environment activity participation
 - Organization must define and preserve the system which helps supply chain of the organization to become green industry. It must include at least suppliers, subcontractors and service providers
 - Organization must set up projects or operation plans related to promotion, creation and interrelation of activities on environment issues with supply chain of the organization. It must include at least suppliers, subcontractors and service providers
- Organization must set up plans to promote people in the supply chain who do not deliver directly product and service to organization, but through someone else, and also wholesaler and retailer to participate in environment activities for continuous improvement and sustainable development
- Organization must set up projects or plans operations related to promotion, creation and interrelation of activities on environment issues with community who is affected organization' operations for creating awareness on environment and understanding of sustainable consumption
 - Organization must have activities or procedures to develop knowledge and create understanding and awareness on sustainable consumption to consumers who are group customers of Trade Agency or organization's product users

Criteria of Green Industry Level 5 (Next)

3. Organization must prepare implementation report which is related to promotion, creation and interrelation of environmental activity with stakeholder and achievement report for distribution.

Practice Guidelines for Entrepreneurs

- Organization must collect information on results of operations related to promotion, creation and interrelation of activities on environment issues with stakeholders of supply chain, community and consumers

- Organization must prepare a report on results of operations to show successful outcomes of operation
- Organization must define ways of operation diffusion

Guidelines and Assessment Framework of Green Industry Level 5, Green Network (Supplementary)

• Components of assessment are divided into 2 parts

1. Assessment by Green Industry Auditors

- ✓ Assess consistency of green industry criteria which covers supply chain, community and consumers

2. Assessment by Communities

- ✓ Neighboring community: population living in the organization/establishment 's neighborhood

- ✓ Methods: Questionnaire will be sent to each local government to conduct. The survey must not be conducted directly in the establishment

- ✓ Sample Size 50 persons minimum for each local government , in total not less than 200 samples. Random sampling is conducted under statistical principles

- ✓ Means of satisfaction from the survey will not be less than 70%

Assessment Criteria Assessment Results must be judged “pass” by both auditors and neighboring communities

- **Scope of Suppliers** Only first tier will be considered as follow

Establishment will conduct supplier risk assessment according to international standard or definitions of Ministry of Industry which consist of 3 groups as follow

1. Group of High Impact on Environment

- Establishments in the country which are class 1,2 and 3 factories must be all accredited “level 2” or above from the Ministry of Industry

- Establishment in a foreign country or establishments in the country which are not class 1,2 and 3 factories must provide assessment evidence of the applicants showing that it is in compliance with green industry criteria of level 2 or above

2. Group of Medium Impact on Environment

- Establishments in the country which are class 1,2 and 3 factories must be all accredited level 1 and have planned to be accredited green industry, level 2 minimum within 1 year
- Establishment in a foreign country or establishments in the country which are not class 1,2 and 3 factories must provide assessment evidence of the applicants showing that it is in compliance with green industry criteria of level 1 and have planned to be accredited green industry, level 2 minimum within 1 year

3. Group of Low Impact on Environment

- Establishments in the country which are class 1,2 and 3 factories have a plan to obtain accreditation of level 2 minimum within 3 years
- Establishment in a foreign country or establishments in the country which are not class 1,2 and 3 factories must provide assessment evidence of the applicants showing that they have a plan to obtain accreditation of level 2 minimum within 3 years

- Levels of Impact on Environment must be considered from

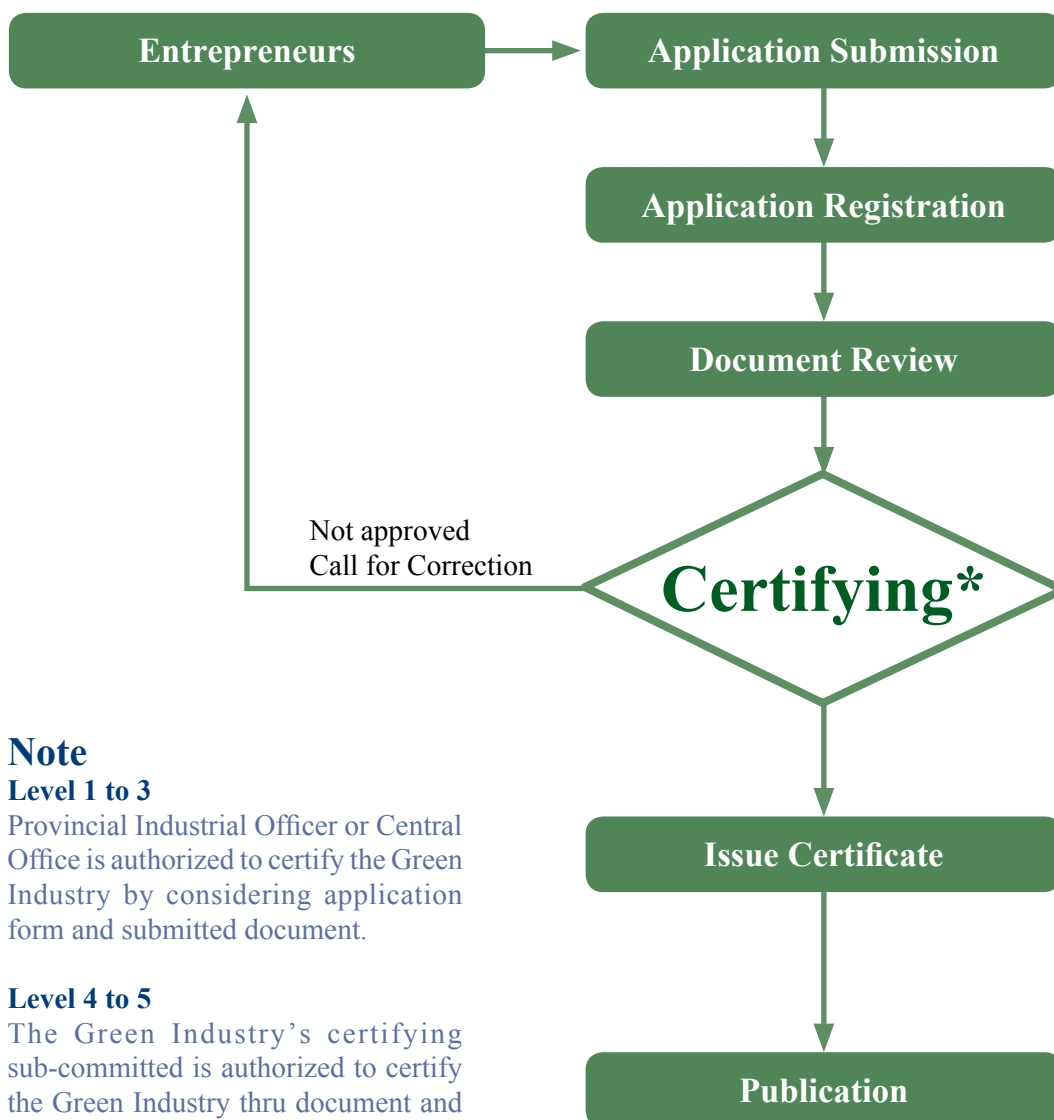
- Severity : 3 levels of severity (low, medium and high)
- Opportunity which will have an impact on 3 levels : low medium and high

- Risk Assessment Method

Risk Assessment is a step which indicates risk levels of all dangers related to work activities which cover place, machines, equipments, personnel and work process. This may cause injures/sickness, property damage, damage on environment or combined consequences. Supplier distribution should be based on academic principles in international standard of risk assessment or standards that Ministry of Industry approved.

5 Process of Green Industry Accreditation Grant

Process of green industry accreditation grant



Note

Level 1 to 3

Provincial Industrial Officer or Central Office is authorized to certify the Green Industry by considering application form and submitted document.

Level 4 to 5

The Green Industry's certifying sub-committed is authorized to certify the Green Industry thru document and on-site assessment

• Accreditation Consideration

Level 1 to 3 (Assigned organizations) Provincial Industry Office/ Green Industry Promotion and Development Office are the assessors who consider qualifications from documents and the application form

*** Green Industry Promotion and Development Office issues accreditation certification and processes as follow*

- (1) Issue green industry certifications according to the levels obtained
- (2) Propose to the Permanent Secretary to consider the approval
- (3) Register accredited organizations in the list
- (4) Send the certificate to accredited organizations and a copy to the assigned organization

Documents that applicants must submit in order to obtain accreditation level 1

1. Documents of environment policy announcement
2. Evidence showing communication on environment policy such as meeting minutes, photos, board announcement or others

Documents that applicants must submit in order to obtain accreditation level 2

1. In case that applicants get accredited for projects/activities which were granted accreditation of level 2 by the sub-committee of green industry accreditation

Applicant: must submit a certifying document or activity certificate as below

- (1) In case that the certifying document or certificate mentioning the expiry date, it must be still valid on the day of application submission
- (2) In case that the certifying document or certificate without the expiry date, a document/evidence to show that the organization is still carrying on environment operations must be provided

2. In case that applicants do not get accredited for projects/activities which were granted for level 2 by the sub-committee of green industry accreditation

Applicant: must submit documents as below

- (1) Documents of environment policy announcement and evidence showing communication on environment policy such as meeting minutes, photos, board announcement or others
- (2) Environment plans which are related to environment policy as stated in (1)
- (3) Document, evidence, outcomes of operation of at least an activity/project

Documents that applicants must submit for green industry accreditation application level 2

Certifying document or activity certificate showing that the Sub-committee of green industry accreditation granted level 3:

- (1) In case that the certifying document or certificate mentioning the expiry date, it must be still valid on the day of application submission
- (2) In case that the certifying document or certificate without the expiry date or the date is already expired, a document/evidence to show that the organization is still carrying on environment operations must be provided

Documents that applicants must submit for green industry accreditation application level 4

1. Green industry level 3 certificate or certifying document or project/activity certificate showing that the Sub-committee of green industry accreditation granted level 3
2. Report on operations related to organizational behavior for environment building
3. Report on environment operations, which is communicated to public

Documents that applicants must submit for green industry accreditation application level 5

1. In case that the organization get accredited level 4, the following documents must be submitted
 - (1) Certifying document of green industry level 4
 - (2) Report on promotion, creation and interrelation of environmental activity with stakeholders and summary report of outcomes for diffusion
2. In case that the organization do not get accredited level 4, the following documents must be submitted
 - (1) Certifying document of green industry level 3 or certifying document or project/activity certificate showing that the Sub-committee of green industry accreditation granted level 3
 - (2) Report on operations related to organizational behavior for environment building
 - (3) Report on environment operations, which is communicated to public

Marks Project /Activity title which was accredited for level 1, level 2 and level 3 can be checked on www.greenindustry.go.th

Marks

* Accreditation consideration

For Level 4 and level 5, the sub-committee of green industry accreditation is the accreditation assessor.

The Assessment will be conducted on site

** Central Administration of Provincial Industry Office is the organization which issues certification and processes as follow:

- (1) Issue green industry certifications according to the levels obtained
- (2) Propose to the Permanent Secretary to consider the approval
- (3) Register accredited organizations in the list
- (4) Send the certificate to accredited organizations and a copy to the assigned organization

6 Criteria and Conditions of Green Industry Accreditation

The Ministry of Industry gives service on green industry accreditation as the objectives are to promote, support and put forward organizations, industrial establishments, factories or mining establishment of Thailand to succeed sustainably in management of impact on environment, impact on climate mitigation, efficient and sustainable use of natural resources. Operations of Ministry of Industry accreditation aims at helping and stimulating and improving to upper level on environmental management and putting continuously into practice in order to be productive and effective

6.1 Scope

This document determines levels of green industry, definitions and applicants' qualifications, condition certification, follow-up, new assessment, accreditation repeal, cancellation of accreditation, appeal, petition, argument, confidentiality, change notification and others, including accreditation application form, how to demonstrate green industry label in the appendix

6.2 Green Industry Levels

Green Industry has 5 levels as follow

Level 1	Green Commitment means organization which has commitment demonstrated by policy, goals and action plans to reduce environmental impacts, and effective organizational internal communication
Level 2	Green Activity means organization which carries on activities in compliance with policy, goals and plans which have been set to reduce substantially environmental impacts as commitment states
Level 3	Green System means organization which has systematic environmental management including follow-up, assessment and revision aimed to continuous development as well as receiving a widely-recognized award on environment and accreditations on a variety of environments
Level 4	Green Culture means organization which has cooperation of employee in all level organization to implement friendly environment in all aspects of business operation until it becomes a part of organization culture
Level 5	Green Network means organization which demonstrates network extension throughout green demand chains by promotion business partners and allies entering into accredited green industry process

6.3 Applicant's qualifications

Applicants must have the following qualifications

- Juristic persons or person who obtained permit for factory operation, mine resources of patent permit or establishment having business registration in industry or mine operation
- whose accreditation was cancelled, unless it occurred more than 6 months
- who work in compliance with related laws

6.4 Accreditation

1) Applicant must submit the application form to the Ministry of Industry by using the model of green industry accreditation application form, as stated in the appendix 2.7 with evidences and documents mentioned

2) When the Ministry of Industry receive the application form, the process will be document verification/assessment for obtaining green industry accreditation as follow

2.1) Consider application form and details of the applicant. If there are some details to be improved, the applicant will be notified by written statement.

2.2) In case of accreditation application of green industry level1 to level 3, officers working in the central administration of the sector or officers working in local office

will be assigned to process document verification according to the criteria of green industry, level 1 or level 2 or level 3 as per request and will summarize results of document verification to head of the central administration of the sector or head of local office who is assigned to approve the accreditation

2.3) In case of the accreditation application of green industry, level 4 or level 5, a committee will be appointed to process accreditation assessment of green industry level 4 or level 5 as per request, and summarize the result of the assessment to sub-committee for approval

3) When sub-committee or head of the central administration of the sector or head of local office consider for approval, the Ministry of Industry will issue an accreditation certificate by

(3.1) Certificate as shown in Appendix 7.3

(3.2) Certificate with duration of accreditation as follow

• Accreditation Certificate of Green Industry Level 1 duration of one year

• Accreditation Certificate of Green Industry Level 2 duration of 2 years

• Accreditation Certificate of Green Industry Level 3, 4 and 5 duration of 3 years

(3.3) It cannot be transferred to others

4) Accreditation label must be shown as stated in Appendix 7.4

6.5 Conditions of Accredited Persons

Accredited persons must follow these following conditions

1) Accredited persons must preserve activity/system which was certified according to green industry criteria of each level for the entire duration of accreditation

2) Accredited persons can refer to level obtained only

3) If accredited persons modify significantly activity or system, the Ministry of Industry must be informed

4) If accredited persons transfer business or place, accreditation certificate will be automatically expired. Accredited persons must inform the Ministry of Industry to request anew for accreditation assessment and sub-committee's approval and cancellation of the former accreditation certificate.

5) Certification or logo must not be misused which will cause misunderstanding.

6) Accredited persons must stop the advertisement by printing media related to accreditation when it was repealed or cancelled for any reason.

7) Accredited persons must clearly identify to customers that certificate or accreditation granted does not include approval from the

Ministry of Industry for products or service.

8) Accredited persons must collaborate with the Ministry of Industry for each assessment

9) Accredited persons must submit documents and evidences to the Ministry of Industry when requested.

10) Accredited persons must set up standards and prepare safety equipment necessary for personnel of the Ministry of Industry for each assessment for their safety while working.

11) Accredited persons must prepare all complaint records and results regarding the complaints which are related to accredited activity or system, and must submit the complaints and the results to the Office when requested.

12) If accredited persons wish to terminate accreditation, the Ministry of Industry must be informed in advance, not less than 90 days by written.

6.6 Follow-up and accreditation renewal

1) The Ministry of Industry must follow up accredited activity or system of each level at least once a year or at appropriate frequency. When the follow-up period is reached, if accredited persons do not allow to be assessed, the Ministry of Industry may terminate accreditation.

2) The Ministry of Industry may conduct the assessment before its usual assessment period for these following cases

(1) Any doubt on environment management deterioration which does not comply with level of accreditation obtained

(2) Any significant change which affects the activity and the procedures of accredited persons for example major change in structure of the organization

(3) When complaint or information is verified and it is found out that accredited persons do not follow these present regulations and conditions

3) For the follow-up assessment, the entire activity or system can be checked or partially as per suitability.

4) Accreditation Renewal

(1) Certificate of Green Industry level 1 cannot be renewed at the same level

(2) Certificate of Green Industry level 2 can be renewed at the same level, but the green industry operations must not be the same as the former accreditation

(3) Certificate of Green Industry level 3 to 5 can be renewed at the same level

5. The Ministry of Industry will process the renewal. The new assessment must be notified by written in advance for not less than 90 days before the expiry date by accredited persons.

6.7 Accreditation Repeal

If accredited persons cannot assure activity or environment management system as accredited and/or did not follow regulations and conditions, the Sub-Committee may consider for accreditation repeal for one of these following reasons:

(1) Accredited persons did not follow regulations and conditions that the Sub-Committee specified

(2) Accredited persons do not follow the significant criteria of the green industry level which was obtained

(3) Accredited received a complaint and the Sub-Committee agree that it will affect the accreditation

6.8 Accreditation Cancellation

Accreditation will be cancelled because of one of these following reasons

- 1) Accredited persons ceased business
- 2) Accredited persons are bankrupted
- 3) Accredited [persons request cancellation by written
- 4) The Ministry of Industry announces modification or cancellation of criteria of green industry level which was obtained
- 5) Accredited persons did not allow the Ministry of Industry to conduct the assessment follow-up within 30 days counting from the due date of the follow-up as informed in the letter of the Ministry of Industry

6.9 Petition, Appeal and Argument

1) Any petition to decision or any process which has an impact on applicants or accredited persons

2) Applicants or accredited persons can submit a petition request within 30 days, starting from the day where the Ministry of Industry informs the result or the progress. It must be a written request submitted to the Sub-Committee.

(1) The Ministry of Industry will appoint the committee which consists of a group of people to consider the petition and inform the result within 60 days, starting from the day where the Ministry of Industry receives the petition.

(2) During the petition process, the former judgment is still applied.

(3) The determination of petition is the final judgment

(4) Person who submits the petition will be responsible for expenses of the petition, except the petition rising from the Ministry of Industry's mistake.

3) Appeal and Argument

Appeal and argument must be submitted in written to the Ministry of Industry or the chairman of sub-committee who will process accordingly to find out a conclusion .

6.10 Confidentiality

The Ministry of Industry will treat confidentially information, documents received from applicants or accredited persons, but will not be responsible for any damage on applicants or accredited persons which results from information disclosed by others, except by the Ministry.

6.11 Change Notifications

1) In case that criteria and conditions related to accreditation are modified, the Ministry of Industry will notify the changes to applicants or concerned people.

2) Accredited persons must ensure improvement in order to comply with new criteria and conditions within a specified time frame. The Ministry of Industry will then reassess the improvement.

6.12 Others

1) The Ministry of Industry will not be responsible for any misuse of accreditation or non-respect of specified criteria or conditions

2) The Sub-Committee will consider for issuing a new accreditation to accredited persons for the following cases:

(1) Accreditation certificate reaches its expiry date and the rules stated in 6.6 have been processes

(2) Accreditation certificate is damaged or lost

(3) Accredited persons change their name and it will not affect the accredited management system.

A new certificate obtained under (2) and (3) will have the same expiry date as its former.

3) The Ministry of Industry will publish the list of accredited persons on the website of the Ministry of Industry and the sectors controlled by the Ministry.

7

Appendix

7.1

Sample of the Green Industry Form and Certificates

Green Industry Application Form	
1. I (Organization name) 2. Address Postal Code Factory License Number Telephone Fax..... 3. Coordinator's name Telephone..... Fax	
Wish to obtain accreditation at level (.....) Level 1 Green Commitment (.....) Level 2 Green Activity (.....) Level 3 Green System (.....) Level 4 Green Culture (.....) Level 5 Green Network and attach the following documents () level 1 : <input type="checkbox"/> Policy on environment and evidences of communication on this policy () level 2: <input type="checkbox"/> Certifying document /certification of environment activity of <input type="checkbox"/> Action plan on environment and outcome report () level 3: <input type="checkbox"/> Certifying document /certification of environment activity of () level 4: <input type="checkbox"/> Certifying document of level 3 accreditation <input type="checkbox"/> Certifying document /certification of environment activity of <input type="checkbox"/> Report on organizational culture building on environment () level 5: <input type="checkbox"/> Certifying document of level 4 accreditation <input type="checkbox"/> Certifying document /certification of environment activity of <input type="checkbox"/> Report on organizational culture building on environment <input type="checkbox"/> Report on environment activities, which is communicated to public <input type="checkbox"/> Report on promotion, creation and interrelation of environmental activity with stakeholder and outcome report to be published I certify that - Information indicated in the application form and attached documents are correct. - I will follow criteria and conditions for green industry accreditation	
For administrator only Application Number Received on Receiver's name.....	Signature..... Name..... Position.....

Certification Number :



This certifies that

.....

Located at

.....

.....

Achieve

The Green Industry Certification : Level 1

Green Commitment

An organization shall have policy and commitment to reduce environmental impact and effectively communicate the various levels of the organization

.....

(Mr.Witoon Simachokedee)

Permanent Secretary of the Ministry of Industry

Issued on :

Expiration :

Industrial Registration :

Certification Number :



This certifies that

.....

Located at

Achieve

The Green Industry Certification : Level 2

Green Activity

An organization shall establish and implement program(s) to reduce environmental impacts based on the policy and commitment from the Green Industry Level 1 Green Commitment

.....

(Mr.Witoon Simachokedee)

Permanent Secretary of the Ministry of Industry

Issued on :

Expiration :

Industrial Registration :

Certification Number :



This certifies that

.....

Located at

.....
.....

Achieve

**The Green Industry Certification : Level 3
Green System**

An organization shall have either systematic approach to environmental management
or well-recognized environmental management award / certificate

.....

(Mr. Witoon Simachokedee)

Permanent Secretary of the Ministry of Industry

Issued on :

Expiration :

Industrial Registration :

Certification Number :



This certifies that

.....

Located at

.....

Achieve

The Green Industry Certification : Level 4

Green Culture

An organization shall demonstrate everyone's accountability on environmental and social concerns as an integral part of the organization's culture

.....

(Mr. Witoon Simachokedee)

Permanent Secretary of the Ministry of Industry

Issued on :

Expiration :

Industrial Registration :

Certification Number :



This Certifies that

.....

Located at

.....

Achieve

The Green Industry Certification : Level 5

Green Network

An organization shall incorporate entities of their supply chains
into the Green Industry umbrella

.....

(Witoon Simachokedee)

Permanent Secretary of the Ministry of Industry

Issued on :

Expiration :

Industrial Registration :

7.2 Demonstration Ways of Green Industry Accreditation Logo

1. Green industry accreditation logo belongs to the Ministry of Industry. The form, the proportion must be as stated below. The logo must be in an appropriate size and must be in green only.

2. Only accredited persons can show the green industry accreditation logo.


3. The green industry accreditation logo must be shown with level and number of accreditation which are clearly readable. The logo and the text must be in green.

4. The green industry accreditation logo can be used only for advertisement and sales promotion.

5. The green industry accreditation logo must be used only with products or services related to accredited activities. If there are other products or services included, it should be mentioned that accreditation does not cover these products.

6. The green industry accreditation logo on products or packages must not lead to miscommunication that it is for accrediting products.





7.3 Guidelines for Industrial Sector Improvement following the 11th National Economic and Social Development Plan

Guidelines for Industrial Sector Improvement

Industrial sector improvement aims at changing the industry structure into a structure with quality and sustainability by emphasizing on science, technology and creativity application towards green industry and low carbon. It is based on creative and environmental friendly knowledge for well-balanced and sustainable development by

1) Developing the ecology industry and restoring continuously the environment of main industrial estates of the country by creating awareness on industry living with its community. It promotes collaboration of private sector, community, educational institutes and public sector in development, from setting up the guideline frame for developing standards of important components of ecology industry, measures for management in environment and natural resource quality and impacts on health of people living in concerned areas, to having an environment alert center in the concerned areas, setting up the measures for the private sector's investment in restoring environment with the community and the government sector in form of promoting activities for society. It also includes

preparation for new economic area development by specifying zones for industry development of each area to be suitable with the size of community and the carrying capacity of each area. It will provide information on pollution carrying capacity of each area to be used as standard of industry development to be balanced with area and community.

2) Developing and promoting agro-processing industry and new industries, based on knowledge, creativity, local wisdom and innovation to increase the value and improve products' quality to be environmentally friendly and safe, in compliance with the international standard. Marketing opportunities will be increased, following the number of world population by promoting the development group forming in form of cluster, collaboration network will be built and linked to enterprise or other businesses, and concerned sectors, including research promotion and production and product processing development.

3) Increasing productivity and efficiency of the industrial sector by developing fundamental factors which help increase efficiency and production standards. Supporting the application use of science, technology and innovation to increase industrial product value in order to reduce imported products from overseas, including collaboration between public sector, private sector, educational institutes and specialized training centers to equip the personnel with skills, creativity and knowledge.

4) Promoting and supporting the link between building the big industry estate and the local industry and spreading industry development to local areas by building the link among medium, small enterprise and OTOP entrepreneurs and the big industrial sector through supply chain, as well as promoting medium and small enterprise where technology and innovation are used, in parallel with business matching for common technology and innovation development.

Good Collaboration Enhancement between Countries in Supporting Ethically the Economic Growth without Impact on Environment

1) Process following the frame of environment collaboration at sub-region level e.g. environment action plan and biodiversity under the collaboration framework of Mae Khong Sub-Region of 6 countries and collaboration in Mae Khong sustainable development and at region level e.g. Agreement in the ASEAN Ministerial Meeting on the environment, as well as commitment between countries on the environment

2) Promoting production and consumption of products and services which help reduce greenhouse gas emission, pollution, inefficient natural resource use and impacts on environment e.g. green industry expansion, alternative energy, low-carbon production, efficient water management by spreading knowledge on efficient and appropriate technology use and low cost, motivation in the private sector, partnership collaboration building between public and private sectors.

7.4 Industrial Standard Products following Sufficiency Economy of Industrial Sector (TIS 9999 No.1-2556)

Guidelines for Sufficiency Economy of Industrial Sector Integration in a Whole Organization

1. General

In order to implement efficiently the guidelines for Sufficiency economy of Industrial sector, top management should have a role in leading the organization to use continuously the guidelines to plan, implement, monitor, assess and improve.

In order to show the faith in philosophy of sufficiency economy and commitment to use productively the guidelines of sufficiency economy in the industrial sector, top management should be a role model and

2. Organisation

(1) Planning directions of the organization by integrating sufficiency economy in industrial sector as a part of philosophy, vision, mission, value, strategy, culture, structure and all processes and communication to the personnel of the organization to ensure understanding and efficient work

(2) Ensure that the personnel of the organization has a unity and take part in practicing sufficiency economy in industrial sector

(3) Provide personnel, technology, method, budget, sufficient equipments which are necessary for work and ensure that natural resources and local wisdom are used productively and efficiently

(4) Ensure that the organization follows laws and conduct a business with transparency and moral

(5) Review the results of sufficiency economy operations during a defined time frame and use the results to improve and plan next operations.

3. Planning

The organization should have a plan to implement, by defining clearly authority and responsibility, monitor, assess and review and improve appropriately to support operations on sufficiency economy and comply with capacity of management of the organization. The organization should

(1) Assess capacity at present and in the future of the organization, including readiness on staff, procedures, technology, budget by considering history and origin of the organization and the area where business is conducted, as well as philosophy, vision, mission, value of business operations of the organization

(2) Define strategy to support principles of guidelines for sufficiency economy in industrial sector and policy on sufficiency economy of the organization, by considering internal and external environment. This includes the need and expectation of stakeholders, factors of success and failure of the industry in the past, at present and in the future and uncertainty of the future, social, technology, economy, environment, political, rule changes inside and outside the country

(3) Plan and specify strategic goals which can be assessed at all levels of the organization and persons

(4) Manage strategic risks, including specifying indicators of risk management operations

(5) Communicate strategy, strategic goals, policy and risks to the personnel in the organization in order that they will understand and implement efficiently

4. Implementation

Organization controls operations in different aspects e.g. personnel, economy, society and environment in order to comply with defined strategies, strategic goals and policy on sufficiency economy.

Organization should specify channels and communication tools inside and outside the organization concerning operation, outcome and result of the efficient implementation.

4.1 Personnel

The personnel should

(1) organize a staff training or other operations to make them understand philosophy of sufficiency economy

(2) Create awareness and form the staff to be economical, patient, diligent, disciplined, self-independent, fair, kind-hearted, generous and honest

(3) Support the personnel for knowledge, theory and new concepts to develop their own potential and the organization's in adaptability and response to new changes, and have the balance between career and living

(4) Enhance the balance between the quality of working life of the personnel and their family and readiness preparation for retirement living, including saving since working age, health care, good family building, network building for socialization after retirement, preparation for the costs after retirement e.g. ability to conduct the living, preparation for making a living.

(5) Support the personnel for knowledge and understanding of natural resource and ecological system utility, including soil, water, forest and ecological diversity for developing mind, living existence and interdependence

4.2 Economy

The organization should

(1) build or conduct a secure business by exploiting the main capacities of the organization.

(2) consider profit sharing-based compensation in short and long terms in order that all parts of the organization get appropriate and fair benefits.

(3) expand or invest on business in accordance with financial status of organization, by considering capacity of debt coverage and other bindings and risks of the organization and partners' in short and long terms.

(4) use and develop appropriately the possessed technology, be able to manage in accordance with organization's need, its environment, geography and society.

(5) promote development and transfer advanced and modern technology, including selection of important and useful parts to be adjusted according to organization's need and environment

(6) study management science and advanced and modern technology, including selection of important and useful parts to be adjusted according to organization's need and environment

(7) give supports to create a good atmosphere to enhance all staff's creativity which will lead to innovation creation and development

(8) create innovation on production factors, products, procedures, technology, organization or management which are useful and comply with strategy and lead to sustainability of the organization and society

(9) enhance innovation development from wisdom of the organization, community and society. It may be developed by collaboration of community, experts, business networks, consumer organization, public sector and other sectors.

4.3 Society

Organization should

- (1) study history, tradition and culture of community and society where organization is located, as well as preservation and restoration of good tradition and culture to keep them last
- (2) promote activities which lead to unity of organization, community and society.
- (3) participate, with experts, business network, consumer organization, public sector and other sectors accordingly, in knowledge and resource sharing for strength and self-dependency.
- (4) promote and support labor use and production factors in community and society for mutual help
- (5) share knowledge and promote implementation of sufficiency economy philosophy in community and society

4.4 Environment

Organization should

- (1) use resources worthily by taking into account resource acquisition and maximum utility from raw material provision, utility and waste management, and consider impact on next generations
- (2) acknowledge and show impacts on environment from organization's operation, and seek knowledge or new methods to reduce and eliminate impacts on environment
- (3) develop products and environmentally-friendly procedures and avoid production which lacks management or pollution protection
- (4) use efficiently and productively energy, study alternative energy in order to apply it to organization's business operation.
- (5) define ways of systematic water management which covers provision, monitor, treatment and drainage without destroying natural water sources, and consider utility for business operation of community and society.
- (6) participate in conservation, development and restoration of soil, water and forest which are fundamental for living of community and society.

5. Monitor, assessment and revision

Organization should define methods, monitor, assess and review operations according to the stated time frame to show that

- (1) operation of the organization complies with stated strategies, objectives and policy
- (2) operation of the organization complies with guidelines of sufficiency economy of the industrial sector
- (3) stated strategies, objectives and policy are still appropriate for changes of internal and external environment
- (4) there are protection and solution measures in case that operations have tendency not to comply with policy, strategy, objectives and guidelines of sufficiency economy of the industrial sector

6. Improvement

Organization should improve, develop and expand systematically and continuously operations following guidelines of sufficiency economy in the industrial sector through policy, strategy, objective, monitor, assessment and revision of protection and solution operations, or personnel and partner's participation

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Green Industry Assessment





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