

### THAI CORPORATE INCOME TAX CONSIDERATION ON CLEAN DEVELOPMENT MECHANISM UNDER KYOTO PROTOCOL

BY MS. SIRIKORN PEETHONG

AN INDEPENDENT STUDY PAPER SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF LAWS (TAXATION LAW)

> GRADUATE SCHOOL OF LAW ASSUMPTION UNIVERSITY

> > DECEMBER 2010

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### ASSUMPTION UNIVERSITY

**DECEMBER 2010** 

Independent Study Paper Title	:	Thai Corporate Income Tax Consideration on Clean	
		Development Mechanism under Kyoto Protocol	
Author		Ms.Sirikorn Peethong	
Major	:	Master of Laws (Taxation Law)	
Advisor	:	Dr.Panit Dhirapharbwongse	

Faculty of Law, Assumption University approves this Independent Study Paper as the partial fulfillment of the requirement for the Degree of Master of Laws.

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#### ABSTRACT

This study has explored Thai corporate income tax measure on Clean Development Mechanism under Kyoto Protocol. The Protocol is relevant to climate change that is the important problem for humanity. Recently, Thailand realized the significance of the climate change problem. In order to participate in solving the problem, Thailand ratifies in the Kyoto Protocol for an international cooperation. Therefore, Thai government should have domestic measures to create cooperation internally.

This study finds that, currently, Thailand has no specific tax measure to implement and promote the Clean Development Mechanism project (CDM). Pre-operating expenditures of the project are uncertain either they are the capital expenditure which is non-deductible expense according to section 65 ter (5) or they are normal expense which is deductible expense. Moreover, the government should provide tax incentive to the CDM project in order to encourage investment additionally and also to create capacity of competition to other countries where provides such tax incentive. However, there are problems to consider that what law and instrument of tax should be properly applied to the Clean Development Mechanism project.

This study not only examines and surveys Thai tax measure on Clean Development Mechanism under Kyoto Protocol but also recommends appropriate solutions to solve these problems.

#### ACKNOWLEDGEMENT

I would like express my appreciation and thank all the following persons. First of all, I would like to thank Dr. Panit Dhirapharbwongse for his knowledge, insightful comment, patience, and guidance to help me complete my research, Dr. Sathit Pongtanya for his comment, advice and research on related accounting matters, Dr.Vinit Visessuvanapoom and Mr. Prapas Kong-ied for the inspiration, comment, and advice to my writing research.

Moreover, I would like to thank my family members for their support and encouragement. I would like to thank my father greatly for his love and advice through all my difficult moments. And special thanks to my mother for taking good care of me and support during my research. Lastly, I would like to thank all my friends in LL.M. classmates at Assumption University, especially Miss Wanthida Piriyalertsak and Mr. Seathawuth Sirimongkol for their support and cheerfulness,

If I have missed anyone, please kindly accept my apology.

\* 2/29731

Sirikorn Peethong

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### Chapter 1 Introduction

### 1.1 Background and General Statement of the Problems

Nowadays, climate change is the important problem for humanity in which every country more or less has been affected by it. The difference is just the formation and the level of seriousness, the examples include the deviation of the weather, natural catastrophic, global warming from green house effect accumulation which turn into deserts in some areas, frequent forest fire, winter time is no longer frigid, the spring comes earlier, flash flood occurs from Arctic shrinkage, intense drought cause a famine impact on agriculture and unsanitary problem.

Actually, these problems are not only environmental issues but it also affects the manufacturing sector and service sector including agriculture business, livestock, fishery, aquaculture or tourism. These kinds of problems continually affect social and economic issues in the regional and the national level. In addition, certain lives, which cannot adjust themselves to these changes, start to die out and eventually they will face extinction. All of these are the sign in alarming us about undeniable global warming problem. As the result, the climate change causes damage to environment, natural resources and other human existence.

Thailand realizes the significance of the climate change problem. In order to participate in solving the problem, since 28 December B.E. 2537, Thailand joined the United Nation Framework Convention on Climate Change (hereinafter called "UNFCCC"). Therefore, Thailand ratified in the Kyoto Protocol since 28 august 2545 and it has been effective on 16 February B.E. 2548. Kyoto Protocol is a legal binding in climate change according to UNFCCC. The status of Thailand under Kyoto Protocol is a country in non annex I parties.

Kyoto Protocol is an international agreement linked to UNFCCC that the legal binding to nation parties to achieve the objectives in dealing with global warming convention. The purpose of this Protocol requires every nation to decrease the greenhouse gas emission. Particularly, carbon dioxide is the major factor which causes climate change pursuant to UNFCCC. It can be said that it is the mechanisms which make this Protocol practically affected.<sup>1</sup>

For developed countries as the parties which are the nations in annex I under Kyoto Protocol, they have a duty to reduce green house gas emission. However, the greenhouse gas may be released by them but they must compensate the over flown quantity of green house gases by purchasing carbon credit from either annex I parties according to Join Implement Mechanism and International Emission Trading Mechanism or non annex I parties according to Clean Development Mechanism. The purchasing for compensation of the annex I parties as known as carbon credit trading.

Thailand enters into Kyoto Protocol which is an international cooperation; thus Thai government should have a domestic measure to create cooperation internally. Tax measure is an importance government instrument which can be used to achieve the goal - reducing the green house gas emission. Taxation becomes an instrument to punish a person who releases the over quantity of green house gas, for example, carbon tax in United State of America. In the meanwhile, tax incentive also can be used as a government instrument to promote the Clean Development Mechanism projects (hereinafter called "CDM project"). Implementing tax incentive would encourage the trading of the carbon credit among non annex I parties which can lead the money inflowing to country.

There are three main problems on tax measure for operating the CDM project business in Thailand. Firstly, it is the question to what extent of the expenditures which entrepreneur paid for investment in the CDM project is allowed to deduct from income as taxable expenses for corporate income tax calculation under the Revenue Code. Investors are frequently concerned about the clarity of the law that governs the investment regime.

Secondly, since providing tax incentive to the CDM project in order to encourage investment additionally and also to create capacity of competition to other country where provides tax incentive. Therefore, it is created a third question

<sup>&</sup>lt;sup>1</sup> <u>United Nations Framework Convention on Climate Change Kyoto Protocol</u> at <u>http://unfccc.int/kyoto\_protocol/items/2830.php</u>, (last visited 7 June 2010).

what law and instrument of tax shall be applied in appropriated way to provide the tax incentive.

There are tax incentives under the corporate income tax which can be classified into two categories. Firstly, corporate income tax rate incentives, it is incentive in form of reduction in the corporate income tax rate could rage anywhere from complete exemption (CIT holiday). Secondly, investment cost recovery incentives, this incentive are primarily aimed at investments in plant and equipment in targeted industries.<sup>2</sup>

### 1.2 Hypothesis of the Study

Since the CDM project is required a high investment and take long time to gain income and recover its investment costs but Thailand does not have specific tax measure to implement on the pre operating expenditure and to encourage the CDM project. There are two issues that should be in primary consideration, namely, the future of pre-operating expenditure of the CDM project and the law and instrument of tax for suitable providing tax incentive.

### 1.3 Objective of the Study

1. To study the collection of corporate income tax regarding to carbon credit trading in Thailand.

2. To study related tax theories that could be used to encourage carbon credit trading in Thailand

3. To study tax measure of carbon credit trading in foreign country.

4. To recommend alternative in order to provide tax incentive to carbon credit trading entrepreneur in Thailand.

<sup>&</sup>lt;sup>2</sup> Tax Incentives for Business Investment: A Primer for Policy Makers in Developing Countries.

### 1.4 Study Methodology

This research will be analyzed and conducted by method of documentary research. The source of information is base on the Revenue Code B.E. 2481, the Investment Promotion Act (No.3) B.E. 2544, The Broad of Investment Announcement, Supreme Court Case, text book, internet, journals.

### 1.5 Scope of the Study

This research intends to study the problem of corporate income tax on especially pre operating expenditure and the appropriate law to provide tax incentive for carbon credit trading in Thailand. This research also studies tax instrument that can be applied to encourage the CDM project investor. Finally, this research intends to study the problems and the resolutions.

### 1.6 Expectation of the Study

1. To know the feature of corporate income tax that will be taxed on carbon credit trading's in Thailand.

2. To understand the objective and benefit of tax measure for carbon credit trading's supplement in Thailand.

3. To identify the problems in establishment of tax measure for carbon credit trading's supplement in Thailand.

4. To recommend the suitable solution for the problems on tax measure of carbon credit trading's incentive and supplement in Thailand.

### Chapter 2

### Carbon Credit Trading in Thailand and Related to Tax Issue under Thai Laws

### 2.1 Carbon Credit Trading in Thailand

The Kyoto Protocol was adopted in Kyoto, Japan, on 11 December 1997 and entered into force on 16 February 2005. The detailed rules for the implementation of the Protocol were adopted at seventh Conference of the Parties (COP) in 2001. The major feature of the Kyoto Protocol is set to binding targets for industrialized countries and the European community for reducing greenhouse gas (GHG) emissions. These amounts are averaged of five per cent against 1990 levels over the five-year period 2008-2012. The Protocol is designed to commit industrialized countries to reduce stabilize GHG emissions. Recognizing that developed countries are principally responsible for the current high levels of GHG emissions in the atmosphere as a result of more than 150 years of industrial activity, the Protocol assigns a heavier burden on developed countries under the principle of "common but differentiated responsibilities."

There six gases are provided to reduce emission by the Kyoto protocol because they contribute to the green house gas effect as follows:

- 1. Carbon dioxide (CO2) 39121 ลัยอัสส์
- 2. Methane (CH<sub>4</sub>)
- 3. Nitrous oxide (N<sub>2</sub>O)
- 4. Hydro fluorocarbons (HFCs)
- 5. Per fluorocarbons (PFCs)
- 6. Sculpture hexafluoride (SF<sub>6</sub>)

All of them will be converted to  $CO_2$  equivalent makes it possible to compare and add up all greenhouse gases.

The idea of carbon credit carbon trading is to make developed countries pay for their wild ways with emission while at the same time monetarily rewarding countries with good behavior in this regard. Since developing countries could start with the clean technologies so they would be rewarded and would get paid by those who were still polluting the environment and did not meet the norms. This system can become a machine which partially transfers the money from wealthy developed countries to the developing countries.

The parties with commitments under the Kyoto Protocol to limit or reduce greenhouse gas emissions must meet their targets primarily through national measures. As an additional means of meeting these targets, the Kyoto Protocol introduced three market-based mechanisms are:

Firstly, Joint Implementation (JI) allows annex I parties to implement projects that reduce emissions to claim credits for reducing emission that arises from investment in other industrialized countries. This in turn results in a transfer of equivalent "Emission Reduction Units" (ERUs) between the countries according to article 6.<sup>3</sup>

Secondly, Clean Development Mechanism (CDM) allows annex I parties to implement projects that reduces emissions, or increase removals by sinks, in the territories of non annex I Parties. The carbon credits are generated by CDM projects are "Certified Emission Reductions" (CERs) that can be claimed by the project investor according to article 12.<sup>4</sup>

Thirdly, International Emissions trading (IET) is the mechanism which supports selling and buying green house gas between annex I parties because several countries are obliged to reduce different amounts of the green house gas. The quantity, which shall be controlled by this mechanism, is called "Assigned Amounts Units" (AAUs) according to article 17.<sup>5</sup>

<sup>3</sup> United Nations Framework Convention on Climate Change, <u>Kyoto Protocol</u> <u>Mechanism</u>, at <u>http://unfccc.int/kyoto\_protocol/mechanisms/joint\_implementation/</u> <u>items/1674.php</u>, (last visited 7 June 2010).

<sup>4</sup> United Nations Framework Convention on Climate Change, <u>Kyoto Protocol</u> <u>Mechanism</u>, at <u>http://unfccc.int/kyoto\_protocol/mechanisms/clean\_development\_</u> <u>mechanism/items/2718.php</u>, (last visited 7 June 2010).

<sup>5</sup> United Nations Framework Convention on Climate Change, <u>Kyoto Protocol</u> <u>Mechanism</u>, at <u>http://unfccc.int/kyoto\_protocol/mechanisms/emissions\_trading/</u> <u>items/2731.php</u>, (last visited 7 June 2010).

Being a developing country and a member of non annex I under Kyoto Protocol, Thailand has faction to submit National Inventories and to report their actions that take place to address climate change and its effects. These are the general commitments which place a fundamental obligation on both developed countries and developing countries. Although Thailand is not committed to reduce green house gas emission, Thailand can voluntarily participate to reduce green house gas emission by joining in CDM according to article 10 and article 12.

The purpose of this mechanism gives opportunity to create carbon credit trading between countries in annex I parties (developed countries) and non annex I parties (developing countries) by encouraging the investment in the project which can reduce green house gas emission in the area of developing countries. This mechanism seems to developing countries to use clean technology for operating business. Otherwise, non annex I parties have still used the low cost technology which release a lot of green house gas quantity. The mention incentive is CERs that the CDM entrepreneur will receive and can trade to country in annex I parties. For the non annex I parties which are developing countries group can take benefit by receiving knowledge in manage environment, technology transfer for reduce green house gas emission.

### 2.1.1 CDM Project Eligibility Criteria<sup>6</sup>

1. Creditable emissions reductions from CDM projects must be approved, validated, verified and certified as CERs through various entities. These include: a Designated National Authority (DNA), a Designated Operational Entity (DOE) and the Executive Board of the UNFCCC CDM, which is elected by conference of Parties.

 The creation of emission reduction credits can be achieved only through voluntary action. CDM projects must be approved by all Parties involved including the host countries.

<sup>&</sup>lt;sup>6</sup> Thailand Greenhouse Gas Management Organization (Public Organization), <u>Clean Development Machanism project criteria</u>, at <u>http://www.tgo.or.th/index.php?</u> <u>option=com content&task=view&id=21&Itemid=26</u>, (last visited11 June 2010).

3. A CDM project must be real, measurable and additional.<sup>3</sup> It must also result in long-term benefits in terms of climate change mitigation.

4. The development of a CDM project must be additional compared to business-as-usual scenario in terms of financial, investment, technology and environment bases.

 CDM project development must be in accordance with sustainable development objectives of the host countries.

6. All the processes involving the development of a CDM project must be transparent, efficient and accountable, and under independent auditing and verification.

Eligible project categories according to Conference of Parties, the fifteen eligible CDM project categories are listed below.<sup>7</sup>

- 1) Energy industries (Renewable/non-Renewable sources)
- 2) Energy distribution
- 3) Energy demand
- 4) Manufacturing industries

5) Chemical industries

- 6) Construction
- 7) Transport
- 8) Mining/Mineral production
- 9) Metal Production
- 10) Fugitives emissions from fuels (solid, oil and gas)

11) Fugitives emissions from production and consumption of

halocarbons and ulphurhexafluoride

- 12) Solvent use
- 13) Waste handling and disposal
- 14) Afforestation and reforestation
- 15) Agriculture

<sup>7</sup> Thailand Greenhouse Gas Management Organization (Public Organization), <u>Clean Development Machanism project categories</u>, at <u>http://www.tgo.or.th/index.</u> <u>php?option=com\_content&task=view&id=23&Itemid=26</u>, (last visited 11 June 2010).

### 2.1.2 Types<sup>8</sup> and Markets<sup>9</sup> of CDM Projects

The CDM projects can be divided on the basis of cooperation with financers can be divided into three forms:

Unilateral: The industrial party in the non annex I country can execute the project activity all by itself.

Bilateral: In this case a party from the annex I country takes part in the project through funding the project which in most of the cases is CERs buyer himself. The share of CDM financing from the CER buyer can vary from 1.5% in power generation to 100% in municipal projects, but in general it is less than 10%. Multilateral: Multilateral projects can be seen as bilateral projects where a third party takes care of the finance.

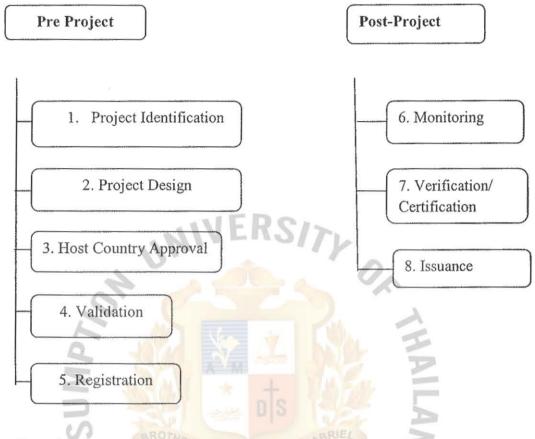
There are basically two types of markets for the CERs issued from the projects. The primary CERs market is the one in which there is transaction between the project developer and investor. It is the transaction that carries the CERs into the international market. The contract to transfer ownership of CERs from seller to buyer is known as an Emissions Reduction Purchase Agreement (ERPA). As the initial CDM contract is much like project finance, ERPAs vary from case to case. But it depends on the risk involved with the project.

The secondary markets are the ones where the CERs are traded like EU IETs or CCX where it is bought by the firms who will submit it to meet their targets. The buyers for this more expensive, low-risk secondary CERs tend to be European companies that face their specific target under the EU IETs.

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<sup>8</sup> Scribd, <u>Type of Clean Development Machanism project</u>, at <u>http://www.</u> <u>scribd.com/doc/13076341/Carbon-Credit-Market-structure</u>, (last visited 12 June 2010).

<sup>9</sup> Thailand Greenhouse Gas Management Organization (Public Organization), <u>Market of Clean Development Machanism project</u>, at <u>http://www.tgo.or.th/index.</u> <u>php?option=com\_content&task=view&id=24&Itemid=26</u>, (last visited 11 June 2010).



### 2.1.3 Processing to issue the CDM's certified (CERs)<sup>10</sup>

From the picture above can be illustrated as follows:

DNA (Designated National Authority) is the central agency which has duty to cooperate by the Clean and development mechanism. In the present, the agency of state of Thailand is Thailand Greenhouse Gas Management Organization (TGO). TGO has the duty to control and supervise the CDM project in Thailand under jurisdiction of Ministry of Natural Resource and Environment.

DOE (Designated Operational Entities) is the organization which is affirmed by executive board of CDM to investigate the correctly process of CDM. And then the DOE will send proposal CDM project to executive board of CDM.

CDM EB (Executive Board of CDM) is the board who mainly administrates CDM project and has authority to final approve the project.

<sup>&</sup>lt;sup>10</sup> Scribd, <u>Processing to issue the Clean Development Mechanism certified</u>, at <u>http://www.scribd.com/doc/13076341/Carbon-Credit-Market-structure</u>, (last visited 11 June 2010).

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#### 1. Project Identification

The CDM project starts with project identification. The parties who design to promote the project activity, referred to as the Project Proponents (PPs) that should formulate a Project Idea Note (PIN). It should contain all the essential elements of CDM project. The UNFCCC does not provide any official PIN guideline but the DNA has its own PIN template and the PPs have to use the same. The official CDM-cycle is laid out by the UNFCCC, it does not formally require the formulation of any kind of document in the project identification phase but the DNA requires it later.

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### 2. Project Design

The complete product of this phase is Project Design Document (PDD) that the PPs have clearly and concisely described the intended project activity. The PDD includes the following elements:

- General description of the project activity.
- Application of a baseline methodology.
- Starting date and duration of the project activity.
- Application of a Monitoring methodology and plan.
- Estimation of green house gas emission by sources.
- Environmental impacts.
- Stakeholder Comments.

In case the Project Participant is not using an approved methodology, it can submit a new methodology which has to be approved by the CDM EB first.

The expenditure for Project Design Document is about 1.5 - 2 million baht.

#### 3. Host Country Approval

After the PDD is satisfied, the PP has to submit both PIN and PDD to the host country DNA to apply for approval for the project. The host country approval process includes consideration of the project proponents and an in-depth analysis of the project by the DNA and other consultants. The DNA holds these consider on a monthly basis and it can approve over twenty projects per session. It looks for two things in the project, it is additional and whether it promotes sustainable development or not.

The expenditure for project reducing green house gas emission is not exceeding 15,000 tonnes of  $CO_2$  on average per year, an administration fee is 75,000 baht. The expenditure for project reducing green house gas emission is more than 15,000 tonnes of  $CO_2$  on average per year, an administration fee is baht 10 baht per ton of  $CO_2$  but the highest amount of fee is not excess 900,000 baht per project.

#### 4. Validation

The process which is independent evaluation of a project activity by a DOE is done against the requirements of the CDM on the basis of PDD. A project activity is expected to result in reduce green house gas emissions that are additional to any that would occur in the absence of the proposed project activity. In case a new methodology has to be developed for the project, it has to be approved by the CDM methodology panel. It also checks whether the provisions for monitoring, verification and reporting are in accordance with relevant decisions of the Conference of Parties (COP). A written approval constitutes the authorization by a DNA of specific entity participation as project proponents in the specific CDM project activity. In case the CDM is succeeding validation, the project proponent can apply for project registration.

The expenditure for validation is not exceeding 1 million baht.

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#### 5. Registration

Registration is the formal acceptance by the EB of a validated project as a CDM project Activity. During the registration phase, the DOE submits all necessary documents to the CDM EB and requests project registration. The registration decision is made by the CDM Executive Board.

The expenditure for project reducing green house gas emission in the first 15,000 tonnes is 10 cent per ton and more than 15,000 tonnes is 20 cent per ton but the highest amount of fee is not exceeding 350,000 dollar.

#### 6. Monitoring

After the project is registered and starts function of the job is not all done then comes the responsibility of monitoring the project. It consists of three things:

Monitoring Plan: Monitoring of a project is done according to the monitoring plan. The monitoring plan is a part of the PDD which is based on a previously approved monitoring methodology or a new methodology which is submitted with the PDD and approved by CDM EB. It is a collection of all relevant data during the crediting period. The identification of all potential sources of green house gas emissions, and the collection as well as archiving of data on, increased green house gas emissions outside the project boundary that are significant and reasonably attributable to the project activity during the crediting period; documentation of all steps involved in the calculations. It also consists of data necessary for the assessment of environmental impacts of project including quality assurance and control procedures.

Implementation: The PP should give the monitoring plan contained in the registered PDD. The DOE then verifies the data.

Report: The DOE after verification prepare a report in accordance with the monitoring plan for further verification and certification.

The expenditure for monitoring is about 150,000 – 300,000 baht.

#### 7. Verification and Certification

Verification is the periodic independent review and pervious determination by DOE of the reductions in green house gas emissions that have occurred as a result of the CDM project during the verified period.

In case the project cannot pass the verification, DOE will issue Corrective Action Request (CAR) to the PPs for solving the project's shortcoming. Certification is the written assurance by the DOE that, during a specified time period a project activity achieved the reduction in GHGs as verified.

The expenditure for validation is about 1-2 million baht.

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#### 8. Issuance

Finally, the CDM EB issues a certified number of CERs within 15 days of receivable of a request for issuance. The CDM EB deducts its own fee from the issued CERs.

The delivery CERs or selling carbon credit depends on the agreement between seller and buyer. In the present, there is a broker who is the middleman in buying and selling CERs to the developed country. In each transaction of carbon credit delivery must provide the verification.

The expenditure for issuing the CERs is the same as described in the registration phase.

### 2.2 Thai Tax Measure Related to Carbon Credit Trading under Kyoto Protocol

Since CDM project requires a large investment, all of the projects are operated in form of corporate entity. Thus, this section focuses on the corporate income tax, especially on the taxable expenses which is a part of tax base in order to calculate corporate income tax including, guideline of Thai corporate income tax is applied with Carbon Credit Trading.

Thai corporate income tax (CIT) is a direct tax levied on juristic company or partnership. All companies or partnerships carry on business in Thailand or not carrying on business in Thailand but deriving certain types of income from Thailand must levied Thai CIT. CIT also applies to other entities as well, including associations, foundations, and joint ventures.

Companies and juristic partnerships incorporated under Thai law, according to section 66 paragraph 1, are subjected to tax on their worldwide income at the end of each accounting period or twelve months, both from Thailand and foreign sources. This is known as "Residence Principle". Thus, if a Thai company receives income from selling CERs from Chinese branch, it is required to include this income calculation to derive net profit in order to pay CIT.

Companies and juristic partnerships incorporated under foreign laws are subject to tax only on income from sources within Thailand. This is known as "Source Principle". There are provisions in section 66 paragraph 2 refers to company under foreign laws carries on business in Thailand and also the provision in section 76 bis refers to company under foreign laws which has employee, agent or go-between for carrying on business in Thailand as a result receives income or profit in Thailand that are particularly and directly related to CDM project in Thailand. Thus, if a foreign company invests CDM project in form of a branch or has employee in Thailand, only the income derived from selling carbon credit in Thailand is required to compute CIT calculation.

Thai companies (Section 66 paragraph 1) and Foreign Companies (Section 66 paragraph 2 and Section 76 bis), described above, are both subject to corporate income tax on net profit tax base but the difference is the method of income or net profit calculation in order to pay CIT. In case of Thai companies, tax base is included all worldwide income according to "Residence principle" but in case of Foreign Companies, tax base is only income derived within Thailand which known as Source Principle.

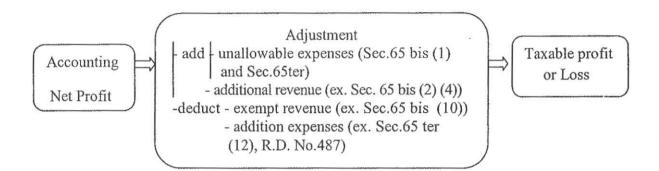
Tax base for corporate income tax calculation on net profit is calculated by deducting income from business or income arising from business carried on in and accounting period with expenses in according with conditions prescribed in section 65 bis and 65 ter.<sup>11</sup> A company or juristic partnership established under a Thai or foreign law which carries on business in Thailand has to apply this tax base.

Therefore, it is different between accounting profit and taxable profit. The taxable profit is tax base for corporate income tax calculation. Taxpayer cannot take accounting standard to apply in contrast with tax accounting standard under the Revenue Code provision. Because the accounting standard is guideline for accountant but corporate income tax calculation must be paid in rule of the Revenue Code.<sup>12</sup>

<sup>&</sup>lt;sup>11</sup> The Revenue Department, <u>Section 65 of the Revenue Code</u>, at <u>http://www.rd.go.th/publish/37764.0.html#section65</u>, (last visited 11 June 2010).

<sup>&</sup>lt;sup>12</sup> The decision of Supreme Court No. 11780/2547.

The picture below shows the method to calculate the corporate income tax.



Actually, the income word for corporate income tax calculation is not provided the definition under the Revenue Code. But the meaning of income will refer to assessable income which refers section 39. That assessable income includes cash, a property which may be computed into a monetary valuation, and any other benefit received for example, a headquarter company pays money to branch company or money which creditors discounts to debtor.

Income which must be calculated for corporate income tax, it can be classified into 2 cases. Firstly is income from business and secondary is income related from business. "Income from business" is income from operating business on objective which registered at Ministry of Commerce. For example, A company produces vehicle for sale. Income derives from sale vehicles is 100 baht that is the income from business of A company. For "Income related from business" might not arise but if it arises, it will be calculated corporate income tax. As before example, the scrap iron remains from producing vehicles, if A company does not sell them, the value of the scrap irons will not be calculated for corporate income tax. But whenever, A company sells the scrap irons and obtains 20 baht income. The income is calculated for corporate income tax as the income related from business. Therefore, gross income of A company is 120 baht.

The section 65 bis (1) of the Revenue Code provided that the expenditure shall not be allowed as taxable expense which is indicated in section 65 ter. The section 65 ter has twenty brackets but the last bracket refers that other expenses specified by laws not allowed as taxable expenses. It will be authorized by law to tax

authority for any additional taxable expense besides, provision in (1) to (19) of section 65 ter.

According to section 65 ter refers to the conditions on expenditures of business that are not allowed as taxable expenses are following the example below:

1. Capital expenditure according to section 65 ter (5) means expenses paid for permanent acquiring asset or any benefit related to business, which must be more than one accounting period, is both directly or indirectly. There are three principles to consider the capital expenditure as follows:<sup>13</sup>

The first, the ownership principle means any expenses are paid for acquiring the ownership or possession in assets, this will be considered as capital expenditure.

The second, benefit principle means expenses are paid but the company does not entitle to have the right to own the asset. However, the company gets the benefit from making use of assets a resorting all assets in business operating.

The third, materiality principle means expenses that normally are paid in lump sum. This lump sum can be either the expenses that is once paid in full amount or the expenses that was paid by installments. The foresaid expenses will be categorized under the principle 1 and 2 if their expenses are less than 500 baht, they will not be consider as capital expenditure.

For example the capital expenditures which are not allowed as taxable expenses to following:

- Payment for purchasing land or building including, ownership transfer fee of real estate<sup>14</sup>

- Payment for renting factory of warehouse<sup>15</sup>

- Payment for purchasing stock<sup>16</sup>

Payment for obtaining concession right<sup>17</sup>

<sup>13</sup> Chaiyasit Tharshutum, <u>tax law instruction</u>, 5<sup>th</sup> ed. (Bangkok: Thai Barrister Institution, 2552), p. 362.

<sup>14</sup> The Decision of Supreme Court No. 2510/2530.

<sup>15</sup> Tax ruling; Kor Kor 0802/12322, 31 October 2531.

<sup>16</sup> The Decision of Supreme Court No. 3853/2524.

<sup>17</sup> Tax Ruling; Kor Kor 0802/21078, 14 October 2536.

### - Payment for movie production or movie importation<sup>18</sup>

 Non-existent expenses according to section 65 ter (9) means any expenses that the company determines the unreal payment or payment without acquiring asset or any benefit to business including, the expenses that are related to other accounting period.

The purpose of this provision is for protecting the company from assuming the amount of unreal payment. The tax officer has an authority to determine whether it is considered as taxable expenses or not while the company has duty to prove whether the payment is correct or not. If it is unreal payment, it is not possible to consider as taxable expenses for CIT calculation. Moreover, the business is not allowed to calculate and assumed profit arbitrarily. If this practice occurs, it will lead the business to report the reduction of net profit in accounting period and it will affect taxable profit for the payment to CIT.

Recognizing income or expenses under accrual basis according to section 65 paragraphs 2 has an importance rule that any incurred income or expenses must be not be varied. The company must have absolute right or obligation to obtain income or payment. In additional, the amount of income or expenses must have certainty in recording into the account. Even though some expenses cannot incurred but could not be recorded as taxable expenses in the account. For example of those expenses as follow;

- Tax payment which still has some argument so the amount could not be fixed for the payment until it is terminated by the court's final judgment.<sup>19</sup>

- Accrued interest which can be paid by installment in other year. Such interest can be recorded as taxable expenses in lenient year although it has no real payment. However, it is not allowed as taxable expenses in reality in the payment year.<sup>20</sup>

- The payment for specific business tax which is late submitting.

<sup>&</sup>lt;sup>18</sup> The Decision of Supreme Court No. 2735/32.

<sup>&</sup>lt;sup>19</sup> The Decision of Supreme Court No. 4806/2546.

<sup>&</sup>lt;sup>20</sup> Tax Ruling; Kor Kor 0802/11795, 2 September 2530.

- In case of the expenses of company which has the binding for certain payment to recipient such as salary of employee, accounting auditor and it is due to pay in that accounting period. Even though the company does not create the real payment, the company has the right to record as taxable expenses.

The expenses which are set up by the business owner and they are not considered as actual incurred expenses. Those expenses often occur from operating business can be categorized into two cases.

1) The business has actual payment but there is no evidence document for supporting. The document must be issued by outsider and it also must be able to prove the reality. The outsider must have real embody. The example of this expense is backhander payment which is the real expenses of the business operation but there is no supporting document to indentify the recipient.

2) In case of recording account as expenses and also there are several payment document of payment but the company cannot prove the actual payer such as:

- The company is a juristic person who is determined by the law that must provide an account and keep any documents which are related to that account as payment evidence. Thus, only goods delivery recording book of company is not enough for being judge as real payment evidence.<sup>21</sup>

- Cash bill which has the name and address of seller but it is without name and address of the payer.

- The company records the salary payment in spite of no cash flow. It can be indicated that the company does not have the real payment.<sup>22</sup>

3) Damages claimable from an insurance or other protection contracts or net losses from previous accounting period unless the company can be carried forward its incurred loss from previous accounting periods up to five years up according to section 65 ter (12) which is explained into two classified;

<sup>&</sup>lt;sup>21</sup> The Decision of Supreme Court No. 8439/2647.

<sup>&</sup>lt;sup>22</sup> The Decision of Supreme Court No. 7808/2547.

The first, damages claimable from insurance or other protection contracts is the expenses which, is incurred from business asset. There business expenses are unexpected. It is not normal expense of business such as the damage in asset from conflagration or flood. The damage payment is not allowed as taxable expense in order to CIT calculation because the company has the right to receive the compensation from insurance company party. But if there is lacking amount of the damage payment, the company is allowed to take that amount for deducting as taxable expense.

Therefore, in case of operating business occurs the damage which may be expected. The damage payment is allowed as taxable expenses in order to CIT calculation. For example, the damage from burglary and the company does not make insurance contract. The company is allowed to take the damage payment to deduct as taxable expense. However, if there is repayment for such damage in any accounting period, the company must take it to CIT calculation as income of business in that accounting period.<sup>23</sup>

The second, net losses in previous accounting period unless company can be carried forward its incurred loss from previous accounting periods up to five years up. This would help to reduce tax burden to the company on the accounting period that company has profit. There are three conditions for calculating loss carried forward.<sup>24</sup>

Firstly, the losses which shall be carried forward to deduct net profit in accounting period must be already adjusted under section 65 bis and section 65 ter's conditions.

Secondly, the losses from previous accounting period must not be excess five years to count down from the present accounting period.

The last condition, the loss from previous accounting period which is the firstly arising must be brought to deduct from net profit in the first accounting period and also must be brought to deduct with accumulated net profit which has pervious the net loss year.

<sup>24</sup> Paijit Rojjanawanit et al., <u>Revenue Tax</u> (Bangkok: Samjaruen Panid Co., Ltd, 2549), p. 2-0162.

<sup>&</sup>lt;sup>23</sup> Tax Ruling; Kor Kor 0802/208, 7 January 2530.

The table below is an example of losses carries forward as taxable expenses to apply according to section 65 ter (12).

Accounting year	Net Profit/loss	Accumulated	Remark	
B.E.	(million baht)	Profit/loss (million baht)		
2546	-9	-9		
2547	-1	-10	(-9+(-1))	
2548	2	-8	((-10)+2)	
2549	3	RS15	((-8)+3)	
2550	VI	-4	((-5)+1)	
2551	2	-2	((-4)+2)	
2552	8	7	3	

From the example above can be shown that, although the accounting period in year 2552 has accumulated loss from the accounting period in year 2551 at the amount 2 million baht, the accumulated loss can be deducted only 1 million baht as taxable expenses for net profit calculation. Because the amount 2 million bath in accumulated loss is the result of net loss the accounting period year 2546 at the amount 1 million baht and another 1 million baht is the result of net loss of accounting period in year 2547. By the reason that the net loss of accounting period in year 2546 is the loss from previous accounting periods which arises excess five years, therefore, it cannot be allowed to deduct as taxable expenses for calculating corporate income tax in accounting period year 2552.

4) Expense not especially for making profit or for business according to section 65 ter (13) mean expense which is not related to business, not arising for the purpose of business, not making profit to business and also unreasonable to pay. The expense for making profit or revenue expenditure can be explained more that it is the cost of goods or service of business which is paid for creating revenue or any expenses which is paid for preparing goods or service. These expenses shall be deemed the expenses that related to business.

- The compensation for damage is paid to company's party because the goods under contract have low quality.<sup>25</sup>

- Although the company has money, he ignores to repayment the loan and causes an increasing in interest. It cannot make the interest which is allowed as taxable expenses at first, becomes illegal deductible expenses.<sup>26</sup>

- Advertising expense and entertainment expenses which are paid for promoting new hotel.<sup>27</sup>

- The company makes the life insurance group for his employees and also identifies the beneficial person is the employees. The life insurance premium which, is paid by the company, is the expense related to business.<sup>28</sup>

Surcharge which the company pays due to default contract.<sup>29</sup>

- Loss from foreign currency exchange rate. 30

- Loss from evaporation of oil.<sup>31</sup>

For example, the expenses, which are irrelevant to business, are not allowed as taxable expenses as follows:

Repayment for loan of related company. <sup>32</sup>

The payment for other business such as payment for rental residence of foreign customer.<sup>33</sup>

- The payment for transportation of managing director and group which is not approved by the company's board of meeting. Once they come back, they have no any document as evidence to prove that payment.<sup>34</sup>

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<sup>25</sup> The Decision of Supreme Court No.2510/2530.

<sup>26</sup> The Decision of Supreme Court No. 6501/2534.

<sup>27</sup> Tax Ruling; Kor Kor 0802/8888, 21 May 2536.

<sup>28</sup> Tax Ruling; Kor Kor 0811 (Kor Mor)/795, 22 April 2541.

<sup>29</sup> Tax Ruling; Kor Kor 0802/Por.6499, 19 April 2536.

<sup>30</sup> Tax Ruling; Kor Kor 0804/20968, 28 October 2524.

<sup>31</sup> Tax Ruling; Kor Kor 0804/5577, 23 July 2525.

<sup>32</sup> The Decision of Supreme Court No. 5251/2543.

<sup>33</sup> The Decision of Supreme Court No. 3319/2550.

<sup>34</sup> The Decision of Supreme Court No. 2951/2527.

#### - Losses of headquarter in foreign country

5) Non-document expense means the expense that the payer cannot identify the recipient according to section 65 ter (18). This provision has feature to provide authorize for tax officer to estimate and determine the non-document expense. The duty to prove who the recipient is belonged to the company which has payment. Normally, only the documentary evidence of payment is basically sufficient to prove the recipient unless in special case that is the false evidence.

In case of lost in evidence and the payer cannot prove the recipient is considered in different meaning because sometimes lost in evidence but it can prove the recipient. In contrast, if the company has the payment evidence but cannot prove the recipient, that payment is not allowed as taxable expense for CIT calculation.

For example, a sale employee of company left the town and withdrew the money for staying over-night in a hotel and there is the receipt to show. Also, there are payments of food and transportation which have no any receipts to show but the company paid for their expenses to the sale employee. Although the expenditures have no any receipt of payee from the employee, the company can prove that there is the real payment by his employee including, if the company pays in reasonable amount for that job, the expense which is paid by the company to the employee is allowed to taxable expenses.<sup>35</sup>

The principle to consider the document of payment which, is proved the recipient, must follow the lists below:<sup>36</sup>

(1) Name and address of seller, service supplier or payee

(2) Tax Identification Number or ID card number of seller, service supplier or payee

(3) Name and address of buyer, service receiver, or payer

However, the tax authorities should estimate and determine the non-document expenses by additional consideration the fact and the necessary

<sup>&</sup>lt;sup>35</sup> The Decision of Supreme Court No.4963/2536.

<sup>&</sup>lt;sup>36</sup> Somdate Rojkuresatient, <u>Flip tax issues Open Supreme Court's judgment</u>, (n.p.: n.d.), p. 594.

situation of each business as case by case basis. They shall consider the nature of business that it should have the expenses for operating business or not, for example;

- A department store buys vegetable and fruit from the gardeners who have no commercial registered. In additional, the garden does not issue receipt to the department store. However, the department store can make any evidence regarding to these payments to prove the recipient.<sup>37</sup>

- The company operates construction business and rents an office. For the rental payment is not appeared the receipt document by lessor however, the company has copy of cheque which is paid to lessor and the lessor signed in that cheque as the recipient. If the copy of cheque is indicated that the cheque was drawing the money, it can be documentary evidence for recording as taxable expenses.<sup>38</sup>

The expenditures, which are not allowed as taxable expenses for net profit base calculation, may affect the CDM project to pay CIT. If the expenses of the project cannot be deducted as taxable expenses, tax base of the project for corporate income tax calculation will be high amount and then it is also have high tax payable.

Generally, corporate income tax rate on net profit base is flat rate at 30 percent unless the special rate like tax incentive is given to some business that the section 3 is provided for tax officer has authorize to provide tax exemption or reduce tax rate. For example, the reducing tax rate is provided to small and medium enterprises (SMEs) including, regional operating headquarters (ROHs) that tax rate shall be reduced.

<sup>&</sup>lt;sup>37</sup> Tax ruling; Kor Kor 0802/15656, 4 November 2531.

<sup>&</sup>lt;sup>38</sup> Tax ruling; Kor Kor 0802/Por.6499, 19 April 2536.

The table below is shown the tax rate of SMEs and ROHs.

Tax Rate	
15%	
25%	
RSIT.	
10%	

### 2.3 The Board of Investment of Thailand related to Carbon Credit Trading

Tax incentive can be provided by other law besides the Revenue Code, for example, Petroleum income tax Act. However, this paper mainly focuses on the Investment Promotion Act which is directly related to support CDM project.

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#### 2.3.1 The Board of Investment of Thailand

The business which is granted a promotion certification under the Investment Promotion Act will receive tax benefit. The business which is eligible for investment promotion is business that is important, beneficial to the economic and social development, and related security of the country. The business that has activities involved production for export, involved in high content of capital, labour or service, and utilized agricultural produce or natural resources as raw materials are also eligible for investment promotion with the condition that they are nonexistent in Thailand, or existent but inadequate, or use out-of-date production processes according to the opinion of the Board.<sup>39</sup>

The tax benefit for the businesses which are granted promotion according to section 31:

Firstly, the exemption of corporate income tax on the net profit derived from the promoted business for a period of not less than three year and not more than eight years from the date of income firstly derived from such business.

The income on which the computation of the net profit derived from the activity is to be based shall include income from the sale of such by-products and semi-manufactured products as the Board may deem appropriated.

In case of a company operates the business that is both granting CIT exemption (because it is granted promoted business) and not granting CIT exemption (because it is not granted promoted business). The company must calculate net profit and net losses of each business separately. But in the part of net profit calculation in order to pay CIT of the company must combine net profit and net losses together.<sup>40</sup> Therefore, deducting taxable expenses from income must be separated between the expenses of business which is granted CIT exemption.

For example, A company is granted promoting investment in ethanol business but is not granted promoted investment in benzine 91 business, thus, the cost of purchasing benzene 91 can be patently separated from the cost of ethanol business.

If it has no separating expenses condition of the A businesses, it may cause tax avoidance of such company. Since the expenses of business which, is granted CIT exemption, may be transferred to the expenses of business that is not granted CIT exemption.

<sup>39</sup> The Board of Investment of Thailand, <u>the Investment Promotion Act</u>, at <u>http://www.boi.go.th/english/download/boi\_forms/proact\_eng.pdf</u>, (last visited 20 June 2010).

<sup>40</sup> The Revenue Departmental Notification, 5 February 2530, clause 3.

The table below is explained the CIT calculation for the business which is both granting CIT exemption and not granting CIT exemption in the same company including the method of tax avoidance of this company.

A Comp	any (m/b)	Adjusting Account (m	
Ethanol business	Benzine 91 business	Ethanol business	Benzine 91 business
Revenue 100 Expenses 30	Revenue 100 Expenses 20	Revenue 100 30 Expenses	Revenue ) 100 Expenses 20
Net profit 70	Net profit 80	Net profit 100	Net profit 50
(tax exemption)	(pay CIT at 24)	(exempt exemption)	(pay CIT 15)

From the table, it can be shown that if it has no separating expenses condition of the businesses, A company may transfer expenses of the business which is granted CIT exemption to the business which is not granted CIT exemption. Therefore, the taxable profit of A company is reduced at the amount of 30 million baht and it causes pay less tax amount at 9 million bath.

Secondly, in case of the promoted business incurs loss during the exemption of the corporate income tax period, the promoted business shall be permitted to use the loss during the exemption period to deduct from the net profit which is generated after the exemption of corporate income tax period but not excess five years from the end of the exemption period. And the business is also permitted to choose to deduct the loss from the profit in one certain year or many years.

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The example of bringing the net profit from operation business which grants promoted investment and assumes that the business grants corporate income tax exemption for five years.

Accounting year B.E.	Accumulated profit/loss (million baht)	Net profit/loss (million baht)	Remark
2548	-9	-9	
2549	-1	-10	(-9+(-1))
2550	21VE	-10	
2551	3	-10	
2552	1	-10	

From the example above can be shown that the accounting period in year 2548 to 2549 of business gets losses. But the accounting period in year 2550 to 2552 of business has profit which is exempted corporate income tax because of granting promoted investment. Therefore, the business has the right to bring the losses of accounting period in year 2548 to 2549 deduct with the profit which arises after expire time corporate income tax exemption (the accounting period in year 2553) but it must not excess five years.

## 2.3.2 Issue on CDM Project Related to The Board of Investment of Thailand

There is a question regarding to income of the CDM project that can be exempted by the Board of Investment or not. The Board of Investment justified that section 31 of the Investment Promotion Act provides the net profit from the operating business that is obtained from investment promotion, it will be exempted including income from the sale of such by-products and semi-manufactured products as the Board may deem appropriate.

However, the income from selling carbon credit will be the income from the CDM project which supports the developing countries for green house gas reduction. The Investment Promotion law pursuant to the Investment Promotion Act

is not provided the exemption for the income from the sale of such by-products and semi-manufactured products as the Board may deem appropriate so net profit from the operating business in the CDM project cannot be exempted by the Board of Investment.

Since the CDM project is an importance project to global climate change, the government should have the support measure to encourage the private sector to be more interested and to participate the CDM project. There are many types of CDM projects and the Promotion Investment law has no provision to exempt income derived from the CDM project.

Therefore, the government should provide support measures in general by assigning Ministry of Finance to consider the support measure in tax aspect to the CDM project in Thailand as appropriate.

### 2.4 Principles of Good Taxation

Since taxation is applied general enforcement to people in country. The purpose of taxation is utility of country; it is without anything directly return to taxpayer. Therefore, legislation of taxation law including, provided tax incentive must be considered these principles of Good Taxation below will be analyzed in Chapter 4 in order to providing tax incentive to the CDM project.

There are many academics, such as Ian T.G. Lambert, circulate concepts and rules what the good taxation should have. However, the most basic principles of good taxation cited more than two hundred years that has still referred this day is the Adam Smith's Four Maxims principles of good taxation.

Adam Smith is generally considered to be the father of modern political economy<sup>41</sup>. In "An Enquiry into the Nature and Causes of the Wealth of Nations" he set forth four maxims, or canons, of taxation, saying that "the evident justice and utility of these maxims have recommended them more or less to the attention of all

<sup>&</sup>lt;sup>41</sup> <u>Principles of Taxation</u>, at <u>http://www.cooperativeindividualism.org/lambert</u> <u>-ian\_on-adam-smith.html</u>, (last visited 9 November 2009).

nations".<sup>42</sup> He discussed the subject of government revenue and the methods by which it may be best collected, including new taxes. When examining the different forms of taxation, Smith adheres to four maxims which a good tax should conform to<sup>43</sup>:

The subject of every state should contribute towards the support of the government as nearly as possible, in proportion to their respective abilities which can be described more that in proportion to the revenue which are respectively enjoy under the protection of the state.

The taxation which each individual is bound to pay should be certain and not arbitrary. The time of payment should be levied at the time. The manner of payment should be most likely to be convenient for the contributor to pay it. The quantity to be paid should be clear and plain to the contributor, and to every other person. Every tax should be contrived as both to take out and to keep out of the pockets of the people as little as possible over and above what it brings into the public treasury of the state.

These four maxims have been summarized in four words: Equity, Certainty, Convenience and Efficiency.<sup>44</sup>

Equity refers to both horizontal and vertical equity. Horizontal equity describes the concept that taxpayers with equal abilities to pay should pay the same amount of tax. Similarly situated of taxpayers should be taxed similarly. Vertical equity means that taxpayers with a greater ability to pay should pay more tax. In summary, similarly situated taxpayers should be taxed similarly.

Certainty: The tax rules should clearly specify when the tax is to be paid, how it is to be paid, and how the amount to be paid is to be determined. Tax payers should understand how the system works difficult to evade. Tax rates should be relatively stable from year to year and should not be subject to sudden fluctuations.

<sup>42</sup> Everyman's Library, Edition 1975 (n.p.: J.M. Dent & Sons Ltd., n.d.), pp. 206-308.

<sup>43</sup> <u>Principles of Taxation</u>, at <u>http://www.cooperativeindividualism.org/</u> lambert-ian on-adam-smith.html, (last visited 9 November 2009).

<sup>44</sup> Adam Smith, <u>An Inquiry into the Nature And Causes of the Wealth of</u> <u>Nations</u>, (n.p.:nd.).

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This allows people to undertake their own financial planning knowing the basic tax liabilities they will face in the coming year.

Convenience: A tax should be due at a time or in a manner that is most likely to be convenient for the taxpayer. Convenience in paying a tax helps ensure compliance. The appropriate payment mechanism depends on the amount of the liability and the how easy or difficult it is to collect.

Efficiency: The costs to collect a tax should be kept to a minimum for both the government and taxpayers. This principle considers the number of revenue officers needed to administer a tax. Compliance costs for taxpayers should also be considered.

Sometimes the efficiency is referred to the principle of neutrality that a tax system should stay out of the way of economic decisions. If individuals or businesses make their investment or spending decisions based on the tax code rather than basing them on what makes economic sense on its own, that's a violation of the neutrality principle. State and local governments should not use tax policy to create "winners and losers" by promoting one sector of the economy ahead of another or by favoring one type of income over another<sup>45</sup>.

<sup>&</sup>lt;sup>45</sup> Institute on Taxation and Economic Policy, <u>Tax Principles: Building</u> <u>Blocks of A Sound Tax System (Policy Brief #9 2008)</u>, at <u>http://www.itepnet.org/</u> <u>pb9princ.pdf</u>, (last visited 9 November, 2009).

### Chapter 3

# Chinese and Indian Taxation on Carbon Credit Trading under Kyoto Protocol

China is one of the most famous carbon credits trading in the world; moreover, China is successful in term of CDM projects which has the maximum proportion of the world, besides, India is ranked as the second potential country in this business. Thus, this chapter shall compare Thai laws with Chinese and Indian laws related to the CDM project taxation especially, tax incentive measure.

#### 3.1 Chinese Corporate Income Tax

Corporate income tax is levied on enterprises and other organizations (hereinafter called "enterprise") that have income inside the People's Republic of China, and shall pay corporate income tax. Enterprises are classified as resident enterprises and nonresident enterprises. Resident enterprises refer to enterprises that are set up according to law inside China or in accordance with laws of foreign countries or regions but with actual management institutions inside China. Non-resident enterprises refer to enterprises that are established in accordance with laws of foreign countries or regions, without actual management institutions inside China, but have set up institutions or business outlets inside China, or have income generated from within China though without institutions or outlets inside China.

Taxpayers of corporate income tax have the concepts of "tax resident enterprise "and "non-tax resident enterprise" to differentiate taxpayers:

<sup>46</sup> <u>Chinese Corporate Income Tax</u>, at <u>www.investteda.org/downloads/ Tax.doc</u>, (last visited15 March 2010).

Taxpayers	Definition	Taxable Income	
Resident Enterprise	Established in China under PRC laws Established under foreign laws but has its place of effective management in China	Worldwide income	
Non-resident Enterprise	Established under foreign laws, and has its place of effective management outside China	China-sourced income	

Foreign enterprises established outside China without a substantive presence in China will need to determine whether their place of effective management is based in China.

Corporate income tax calculation is the taxable incomes of an enterprise during each taxable year is equal to the total incomes minus incomes exempted from taxation, tax-free incomes, various deductibles, and the amount used to make up the losses of the previous years. The formula for computing the corporate income tax payable is: income tax payable = the total income - the sum of the tax-deductible items.<sup>47</sup>

The income for corporate income tax calculation is income generated by enterprises in the form of currencies and non-currency from various sources is considered total income, which includes, income from production and business operation, incomes from sales of commodities, incomes from provision of labour services, incomes from transfer of property, investment gains from shares and dividends, incomes from interest, incomes from rental, incomes from royalties, incomes from accepting donations and, other incomes.

<sup>&</sup>lt;sup>47</sup> Chinese State Administration of Taxation, <u>Chinese Corporate Income Tax</u>, at <u>http://202.108.90.130/n6669073/n6669088/6888563.html</u>, (last visited 15 March 2010).

Expenditures of enterprises that take place and are related to the obtaining of incomes, including cost, fees, duties, losses and other expenses may be deducted from the taxable incomes, provided that they are reasonable. The following expenditures shall not be deducted in the calculation of taxable incomes are investment gains paid to investors, corporate income tax, overdue charges of taxation, fines, losses caused by properties confiscated, Expenditure in the form of donation beyond what is specified by the law, sponsoring expenditure, expenditure of reserve that has not been verified, other expenditures that are not related to the obtaining of incomes.

In case of the enterprise has losses incurred by an enterprise during one taxable year are allowed to be settled and transferred to subsequent years and made up with incomes from subsequent years. However, the duration of settlement and transfer cannot be longer than 5 years.

The corporate income tax rate is 25%. The reduced CIT rate of 20% would apply to small-scale and thin-profit enterprises and the preferential CIT rate of 15% is only available to high and new technology enterprises which require support from the State.

# 3.2 Chinese Tax Measures on Carbon Credit Trading under Kyoto Protocol

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The Chinese government ratified the Kyoto Protocol in August 2002, and issued "Measures for the Operation and Management of CDM Projects" (CDM Project Measures) in 2005. As of 17 March 2009, 1,935 CDM projects have been approved by the China National Development and Reform Commission (NDRC) and 711 Chinese CDM projects were successfully registered with UNFCCC. In addition to the CDM introduced by the Kyoto Protocol, there are a number of other emission reduction standards and trading markets.<sup>48</sup>

<sup>&</sup>lt;sup>48</sup> United Nations Framework Convention on Climate Change, <u>China</u> Statistics of <u>Clean Development Mechanism project Registration</u>, at

China issues Income Tax Policy for CDM project, the China State Administration of Taxation (SAT) and the Ministry of Finance (MOF) jointly issued a long-awaited Cai Shui No. 30 on 23 March 2009 (Circular No. 30), regarding the Corporate Income Tax Policy for CDM Fund and CDM Implementing Enterprises in China, which provides guidance on the tax treatment of CDM related income. The circular took effect retroactively on 1 January 2007 but the exact manner in which this will be carried out is yet to be determined.<sup>49</sup>

Tax practice for CDM projects before the issuance of Circular No. 30, it was not clear whether the income generated from the sales emission quota would be subject to Chinese enterprise income tax. In addition, since the Chinese government stated that emission reduction resources are owned by the government, the government would retain a certain portion of the revenue generated from the sales of the CERs from CDM projects (up to 65% of revenue). Taxpayers generally are comfortable that they have contributed a portion of revenue to the government and accordingly no additional tax should be paid, a position accepted by many Chinese tax authorities under previous practice. Chinese enterprises also benefit from the trading of emissions reduction in other markets, although the amount of revenue has been relatively small compared with CERs sales revenue from CDM projects. It appears that the Chinese government has no specific contribution requirements on other emission reduction projects similar to those stipulated for CDM projects, and it is common practice that many Chinese tax authorities do not impose tax on the income under such projects either.

The Circular 30, which addressed CIT incentives available to CDM project enterprises in China which engaged in the sale of CERs and the China CDM Fund. The Circular 30 sets forth some tax reductions and exemptions rules with respect to the CIT obligation of CDM project owner's in the China.

http://cdm.unfccc.int/Statistics/Registration/NumOfRegisteredProjByHostPartiesPie Chart.html, (last visited 15 March 2010).

<sup>49</sup> <u>Chinese tax incentive measure for Clean Development Mechanism project</u>, at <u>http://www.mallesons.com/publications/2009/May/9927938W.htm</u>, (last visited 15 March 2010).

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Firstly, the Circular 30 clarifies that a CDM project owner may deduct the State levies on CDM proceeds as expenses in calculating the project owner's enterprise income tax obligations. According to CDM project development and management rules issued by the Chinese NDRC and other Chinese central ministries in October 2005, a certain percentage of the CERs proceeds received by a CDM project owner in China shall be levied by and turned over to MOF as the representative of the central government.

 the Chinese Government's sixty five percent share of revenue for HFC and PFC projects

- the Chinese Government's thirty percent share of the revenue for  $N_2 O$  projects, and

- the Chinese Government's two percent share of the revenue for energy efficient improvement, development and utilization of new and renewable energy, recovery and utilization of coal bed methane and CDM reforestation projects.

Secondly, Circular 30 grants CIT holidays to CDM project owners regarding their net CERs proceeds (net of CDM-related development costs and expenses) gained from CDM projects categorized as HFC, PFC or N2O projects (but not other types of CDM projects). The tax holidays include CIT exemption for an initial three years and CIT half reduction for a subsequent three years, starting from the taxpaying year in which the CERs proceeds are received for the first time.

This table below is explained about providing Chinese tax incentive measure to the CDM project by assumption that this CDM project can reduce HFC emission and also revenue creating from sale of CERs annual in equally at the amount of 100 million baht.

Years	Revenue	1 <sup>st</sup> tax benefit (exemption)	2 <sup>nd</sup> tax benefit	Tax payable	Net profit
1-3	100	65	35 exempt	-	100
4-6	100	65	35 reducing half of tax rate	4.37	95.63
7 and onward	100	65	-	8.74	91.26

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From the table is shown that the revenue from selling CERs of company is exempted CIT at 65% permanently that is considered as the first step of tax benefit. Thereafter, the company will receive the second step of tax benefit that is CIT exemption from the surplus revenue after deduction the first step of tax benefit from year 1 to year 3 and from the part of year 4 to year 6 the company will not receive the CIT exemption like in the previous years but the company will receive tax rate reduction. In the year 7 and onward, the company will not further receive the second step of tax benefit.

In the meantime, some further developments to the CDM policy and legal regime in China and Hong Kong, two significant recent developments were the introduction of tax relief to the China CIT for enterprises implementing CDM projects and the announcement by the Hong Kong Secretary for Environment of the qualifying criteria for Hong Kong companies to be treated as Chinese enterprises under the Chinese CDM Measures.

Qualification criteria for Hong Kong companies engaging in China CDM projects, on 8 April 2009 it was reported that companies:

- registered and established in Hong Kong

- whose executive director is a Chinese national or Hong Kong permanent resident or where at least half of the members of the board of directors are Chinese nationals or permanent residents, and

- that are publicly tradable companies where at least fifty percent of its shares are non-tradable

It may be CDM project developers in China for the purposes of the CDM Measures, while implementing arrangements still have to be issued and there are problems in respect of the applicability of non-tradable shares to listed enterprise under Hong Kong law, this development is a step in the right direction to ramp up Hong Kong investment in China CDM projects and carbon finance. For existing and prospective investors in China CDM projects, real consideration can now be given to using Hong Kong enterprises to gain full control of a CDM project vehicle.

Year	Chinese Tax incentive measure for income derived from CDM	
	project	
1-3	fully CIT exemption	
	CIT half reduction on tax rate after deduct the state levies on CI         project as follows:         Type of projects         Percentage of the revenue from the	
	transfer of green house gas emission reduction to the	
4-6	state as expenses of business.	
	HFC and PFC 65% N <sub>2</sub> O 65%	
	-energy efficient improvement -development and utilization of new and renewable energy -recovery and utilization of coal bed methane, -CDM reforestation project	
7 and onward	limited exemption revenue of CDM project according to the type of reducing green house gasses emission.	

The Table below Summarizes the Tax Incentive Measure of Carbon Credit Trading on CDM Project under Chinese Corporation Income Taxes Law

In summary, the three plus three tax holidays outlined above highly apply to HFC, PFC or  $N_2O$  projects, but not to other projects. This indicates a policy of the central government to incentivize enterprises to develop more HFC, PFC or N2O projects. However, a project owner should be well aware that tax holidays are available only if it keeps clear separate accounting for a CDM project.

#### 3.3 Indian Corporate Income Tax

The taxpayer of India CIT is levied on enterprises the both resident company and nonresident company. Resident companies in India are taxed on their worldwide income arising from all sources. A company is said to be resident company, if it is an Indian company or it has control and management of its affairs is situated by expression control and management signifies controlling and directive power in India. Non-resident corporations are essentially taxed on the income earned from a business connection in India or from other Indian sources that the income which accrues outside India shall not be so included to CIT calculation.<sup>50</sup>

Taxpayers	Definition	Taxable Income	
Resident Company	Domestic corporation or not an Indian company then, the control and the management of its affairs is situated wholly in India	Worldwide Income	
Non-Resident Company	not an Indian company and some part of the control and management of its affairs is situated outside India	India-Source Income	

The Table Below is Summarized Tax Base of the CIT Taxpayer in India

CIT calculation is total income that is deducted all expenditure incurred forbusiness purposes. This includes interest on borrowings paid in the financial year

<sup>&</sup>lt;sup>50</sup> Income Department of India, <u>Indian Corporate Income Tax</u>, at <u>http://law.</u> <u>incometaxindia.gov.in/TaxmannDit/DispCitation/ShowCit.aspx?fn=http://law.incom</u> <u>etaxindia.gov.in/DitTaxmann/IncomeTaxActs/2009ITAct/section5.htm</u>, (last visited 18 March 2010).

and depreciation on fixed assets. The calculation of income and expenses shall use an accrual basis.<sup>51</sup> The example of CIT calculation

Net Profit/Loss Accounting	XXX
Add: deemed income	XXX
disallowed taxable expenses and	XXX
Less: allowed taxable expenses	XXX
depreciation	XXX
Profits of Business	XXX

The total income for Indian CIT calculation is income earned by company which is carried on business by the assessed at any time during the year, whether in cash or in any other manner whatsoever including deemed income. The income shall be chargeable to income-tax profits of business such as income derived by a trade or similar association from specific services performed for its members and the value of benefit accruing to him shall be deemed to be profits.<sup>52</sup>

The expenses wholly and exclusively for the purposes of the business shall be allowed in computing the income chargeable but there are examples of expenditure, which is specifically disallowed includes:<sup>53</sup>

- Nature of capital expenditure
- Entertainment expenses

<sup>51</sup>Income Department of India, <u>Indian Corporate Income Tax</u>, at <u>http://law.incometaxindia.gov.in/TaxmannDit/DispCitation/ShowCit.aspx?fn=http://l</u> <u>aw.incometaxindia.gov.in/DitTaxmann/IncomeTaxActs/2008ITAct/section14A.htm</u>, (last visited 18 March 2010).

<sup>52</sup> Income Department of India, <u>Indian Corporate Income Tax</u>, at <u>http://law.</u> <u>incometaxindia.gov.in/TaxmannDit/DispCitation/ShowCit.aspx?fn=http://law.incom</u> <u>etaxindia.gov.in/DitTaxmann/IncomeTaxActs/2009ITAct/section5.htm</u>, (last visited 18 March 2010).

<sup>53</sup> <u>Deductible expense of Indian Corporate Income Tax</u>, at <u>http://finance.</u> <u>indiamart.com/taxation/corporate\_tax/taxableincome.html</u>, (last visited 18 March 2010). - Interest or other amounts paid to a non-resident without deducting without tax

- Corporate taxes paid

- Indirect general and administrative costs of a foreign head office.

The corporate tax rate in India depends on the origin of the company. Resident companies are subject to tax at a basic rate of 35% and a 10% surcharge if the net wealth exceeds 10 million. Non-resident companies have a basic tax rate of 40%. In addition, an education tax at the rate of 3% on the tax payable is also charged.<sup>54</sup> However, the effective tax rates of 33.99% for resident companies and 41.2% for non-resident companies. The table below is summarizing tax rate of Indian CIT.

Type of Company	Normal Tax Rate	Surcharge	Effective Tax
L.			Rate
Resident	30%	10%	33.99%
Non-resident	40%		41.2%

# 3.4 Indian Tax Measures on Carbon Credit Trading under Kyoto Protocol

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India has 478 registered CDM projects, more than any other country and about a third of all projects globally. In terms of the overall volume of the CDM projects, China ranks first with 35.92% followed by India at 23.91%.<sup>55</sup>

<sup>&</sup>lt;sup>54</sup> Wikipedia, <u>Indian Corporate Income Tax Rate</u>, at <u>http://en.wikipedia.org/</u> wiki/Income tax\_in\_India#cite\_note-8, (last visited 18 March 2010).

<sup>&</sup>lt;sup>55</sup> India Statistics of Clean Development Mechanism project Registration, at http://cdm.unfccc.int/Statistics/Registration/NumOfRegisteredProjByHostPartiesPie Chart.html, (last visited 18 March 2010).

Providing tax incentives to the Indian CDM project are deferent form, they depend on category of project that the Indian desires to encourage. There are mainly six categories of CDM project in India.

- 1. Biomass 33%
- 2. Wind Power 16%
- 3. Waste gas / heat utilization 14%
- 4. Energy Efficiency 12%
- 5. Hydro Power 12%
- 6. Others 13%

The largest of CDM project categories are biomass and wind power. Most projects in India are undertaken on a unilateral basis—developed independently by local stakeholders without the direct involvement of Annex I countries

Currently, the India policy framework has been strengthened to reduce upfront costs to investors. Long-term low-interest loans are being provided by the Indian Renewable Energy Development Agency. Including, tax incentive measure for supporting the CDM projects is different which depends on the type of the project.

The examples of Indian central government provide tax incentive for subsidiary as follows:<sup>56</sup>

 Biomass projects for power generation receive fiscal incentives including subsidies as follows:

- income tax holidays
- excise duty and sales tax exemptions and
- accelerated depreciation.

Currently, the CDM also attracts developers to build biomass projects.

- 2) Wind power project is allowed
  - 80% accelerated depreciation for the first concessions on import duties
  - sales tax and excise duties exemption and
  - 10 years income tax exemption for profits from wind generation

<sup>&</sup>lt;sup>56</sup> <u>Indian tax incentive measure for Clean Development Mechanism project</u>, at <u>http://www.pewclimate.org/docUploads/India-FactSheet-09-08.pdf</u>, (last visited 19 March 2010).

Subsidies also are provided for demonstration projects in states where commercial activity has not begun.

3) Energy efficiency specifies on solar power has various subsidies for manufacturers and users of solar power such as raw materials and photovoltaic components are exempt from excise duties and benefit from concessional import duties.

- 4) Small hydropower projects (up to 25 MW) are eligible for incentives such as
  - concessional customs duties and
  - income tax exemptions for 10 years.

# 3.5 The table Comparison: between China, India and Thailand on tax incentive for Carbon Credit trading under Kyoto Protocol

The summary table below compares the providing tax incentive to encourage the CDM project in China, India and Thailand in order to consider an appropriated providing Thai tax incentive in Chapter 4 (4.2).

Country	Tax Incentive Policy to CDM Project
China	Taxation on carbon credit trading specify on CDM projects has tax
	incentive measure to promote them but it depends on the type of
	reducing green house gas emission of the CDM project.
India	Indian tax measure is more incentive than Chinese tax measure since
	tax incentive of India is provided in many types of tax benefit which
	is explained more that there are custom duty exemption and
	accelerate depreciation which can be reduced cost of the CDM
	project and also there is CIT exemption from net profit of which has
	no limited amount of the exemption.
	But Chinese tax incentive is only provided only CIT exemption.
	Besides, providing tax incentive of India is focused on eligible CDM
	project categories but the China focuses on the type of gas that the
	project can reduce emission.

Country	Tax incentive policy to CDM project		
Thailand	Thailand taxation on CDM projects has no specific tax measure to promote them. The developers of CDM project are subject to tax the whole amount of income derived from selling CERs and also the normal rate of corporate income tax at 30%.		
	normal rate of corporate income tax at 30%.		



## Chapter 4

### **Analysis of Legal Problems**

## 4.1 Current Problems of Thai Taxation on CDM Business under Kyoto Protocol

Although net profit is calculated for corporate income tax bases on accounting standard according to section 65 of the revenue code, taxable net profit is different from accounting net profit. Since some expenses in accounting is allowed to be deducted as deductible expense, but it may not be allowed to deduct wholly or partly in taxation. Thus, calculating for corporate income tax is necessary to adjust net profit or net loss in accounting under law of taxation before paying tax. Operating the CDM project is required to investigate by CDM EB's prescription for the project registration until trading. This requirement may result in high preoperating expenditures of company. The cost incurred in preparing CDM project period (pre-operating expenditures) for registration which is composed of the expenditures as follows: <sup>57</sup>

1. payment for project design document is about 1.5 - 2 million baht.

2. payment for the first Validation by DOE is not excess 1 million baht.

3. analysis fee, monitoring and follow-up project is the expenditure for project reducing green house gas emission is not exceeding 15,000 tones of  $CO_2$  on average per year, an administration fee is 75,000 baht.

The expenditure for project reducing green house gas emission is more than 15,000 tones of  $CO_2$  on average per year, an administration fee is baht 10 baht per ton of  $CO_2$  but the highest amount of fee is not exceeding 900,000 baht per project.

<sup>&</sup>lt;sup>57</sup> Thailand Greenhouse Gas Management Organization (Public Organization), <u>Expenditure of Clean Development Mechanism project</u>, at <u>http://www.tgo.or.th/</u> <u>index.php?option=com\_content&task=view&id=11&Itemid=25</u> (last visited 9 February 2010).

4. registration fee with CDM Executive Board - the expenditure for project reducing green house gas emission in the first 15,000 tones is 10 cent per ton and more than 15,000 tones is 20 cent per ton but the highest amount of fee is not exceeding 350,000 dollar.

These expenditures are especially incurred in the CDM project, which is a new business in Thailand. Nowadays, the pre-operating expenditures are not indentified that what type of these expenditures are. It is unclear that whether or not such expenditures can be considered as deductible expense according to section 65 ter of the Revenue Code. These expenditures are not relevant to business (according to section 65 ter (13)) or capital expenditure (according to section 65 ter (5)).

Therefore, there is an important problem to consider whether the preoperating expenditures of the CDM project entrepreneur are allowed to deduct from income as taxable expenses for corporate income tax calculation or not.

Any expenditure, which is not relevant to business, is considered as nondeductible expense according to section 65 ter (13). The expenditure is not relevant to business is expense which is not paid for the purpose of making profits or for the business. But the payment of the CDM entrepreneur in pre-operating period is expenses of enterprise in order to register the CDM project. Afterwards, the enterprise is able to trade the amount of green house gas emission from operating the CDM project that creating profitability to enterprise additionally. The pre-operating expenditures are expenses for the purpose of making profits to business; thus they are not the non-deductible expense according to section 65 ter (13).

However, consideration the non-deductible expense according to section 65 ter must be analyzed the all of thirteen brackets. Some case of expenditures maybe deductible expense in a bracket but it may be non-deductible expense according to another bracket. Thus, there is a continual question to consider whether these expenditures are the capital expenditure according to section 65 ter (5) of the Revenue Code or not.

The capital expenditure and the other expenses regarding to capital expenditure are non-deductible expense for calculating corporate income tax that is consistent to accounting standard. There are two principles to consider the feature of the capital expenditure which is accepted in taxation law as follows:<sup>58</sup>

First, ownership principle means any expense which is paid for acquiring the ownership or possession in assets, this will be considered as capital expenditure.

Second, benefit principle means payment of the enterprise which is not created acquiring the ownership or possession in assets. However, the enterprise can get benefit from a resorting asset in business operation.

From the principles mentioned above, there are two issues to consider – firstly, whether the pre operating expenditures of the CDM project are able to create any asset to enterprise or not. Secondly, if such expenditures are able to create the asset to enterprise, there is a question whether the enterprise can take benefits from such asset or not.

Asset in accounting means right and resource which are controlled by the entity as a result of past events and it incurs future economic benefits. Indicating future economic benefit is capacity of asset for contribute cash flow or cash equivalent to business directly and indirectly. Such capacity may be in the form of additionally benefit in enterprise operation <sup>59</sup>.

There are two classifies of asset, which are tangible asset and intangible asset. Physical is not significant to indicate the existence of intangible asset. An intangible asset is an identifiable non-monetary asset without physical substance. The asset is a resource that is controlled by the entity as a result of past events and from which future economic benefits (inflows of cash or other assets) are expected.<sup>60</sup>

The pre operating expenditures of the CDM project are payment which can be separated from payment for construction, machine and equipment of business. But the payment is necessary to the CDM project registration because there are conditions prescribed by CDM EB. A CDM entrepreneur must prepare the project design document for clarifying detail of project. It also must be approved by

<sup>&</sup>lt;sup>58</sup> Chaiyasit Tharshutum, op. cit., p. 362.

<sup>&</sup>lt;sup>59</sup> Thai Accounting Framework (amendment 2550) paragraphs 85.

<sup>&</sup>lt;sup>60</sup> Thai Accounting Standard No.51 refers to intangible asset paragraphs 4.

host country (TGO) and verified by DOE for registration. Otherwise, the project cannot trade carbon credit in the CDM primary market.

The pre-operating expenditures of the CDM project are payment that creating right of the CDM project operation in the CDM primary market. Asset in accounting is not focused on the legal right in the view of ownership or possession but it will be focused on the opportunity of resource to create future economic benefits to business. The ownership is not emphasized to consider the feature of asset in accounting.<sup>61</sup>

The right of the CDM project operation is able to generate future economic benefits and it can be indicated that such right is under control of business. Since after the enterprise obtains the right of the CDM project operation, the CDM project entrepreneur can make a pre sale carbon credit contract before obtaining CERs. Besides, the CDM project entrepreneur can sell the right to another person for making profit. The right is able to generate cash flow to enterprise directly.

The right is identifiable (arising from contractual or other legal rights, regardless of whether those rights are transferable or separable from the entity or from other rights and obligations.), under the controlling of business (power to obtain benefits from the asset) and creating future economic benefits (capacity to create profitability). Thus, the right is considered as an intangible asset of business. The pre-operating expenditures of the CDM project are able to create any asset to enterprise and the enterprise can take benefits from such asset more than one accounting period. Since there are two selections in the CDM operating period as follow:

1) renewable crediting period is the highest right for 7 years but it can be renewable twice time. or

2) fixed crediting period is the highest right for 10 years to the CDM project operation and it cannot be renewable.

Therefore, such expenditures could be considered as the capital expenditure according to the benefit principle.

<sup>&</sup>lt;sup>61</sup> Thai Accounting Framework (amendment 2550) paragraph 53-59.

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Asset and expenditure recognizing, in case any future economic benefits are generated the benefits in many accounting periods, and the expenditure incurred relates to revenue whether directly or indirectly. The enterprise must recognize such expenditure in the statement of financial position under the principle of depreciation and amortization.<sup>62</sup> However, the enterprise must immediately recognize expenditure as expense if the expenditure cannot be generated the future economic benefits to business.<sup>63</sup>

Thus, in case the enterprise cannot register the CDM project, the all preoperating expenditures of the CDM project cannot be contributed the future economic benefits to enterprise. There is no asset for recognizing and the enterprise must immediately recognize the expenditures as expenses. These expenses are existence and relevance to business so they are deductible expense.

In case the enterprise can register the CDM project, the all pre-operating expenditures of the CDM project can be contributed the right of the CDM operation as asset of business. The right can be generated the future economic benefits in many accounting periods by carbon credit trading in primary market. The enterprise must recognize such expenditure in the statement of financial position under the principle of depreciation and amortization.

Even though the expenditures incurred in pre-operating of the CDM project possibly tend to be the capital expenditure in accounting, there is a problem concerning an interpretation in taxation law. It is unclear whether The pre-operating expenditures of the CDM project operation can be considered as other right for calculating depreciation according section 4 (4) of the Royal Decree No.145 or not. Since any right as capital expenditure is not allowed to deduct as expense according to section 65 ter (5) of the Revenue Code but it must be allocated to deduct under the depreciation in each accounting period pursuant to section 4 (4) of the Royal Decree No. 145. Interpretation to the expenditures incurred in pre-operating of the CDM project may be discussed into two manners.

<sup>&</sup>lt;sup>62</sup> Thai Accounting Framework (amendment 2550) paragraph 96.

<sup>&</sup>lt;sup>63</sup> Thai Accounting Framework (amendment 2550) paragraph 89-90, 94-98.

(1) The expenditures incurred in pre operating are cost for acquiring the right of the CDM project operation in primary market (the reason is mentioned above). or

(2) The expenditures incurred in pre operating are just a certificate that a business is allowed to operate the CDM project in primary market. Such expenditures are not constituted any right to business but they are just normal preoperating expenses.

However, there is a problem regarding the type of expenditures incurred in pre-operating. Currently, it is unclear that these expenditures should be considered as the capital expenditure or deductable expense of business. This problem is not good of taxation in the view of certain principle. If the CDM project entrepreneur does not know the feature of such expenditures, the entrepreneur cannot pay tax correctly.

The pre-operating expenditure of the CDM project should be classified by tax authority's interpretation. The Revenue Department as the supervision and control institute of taxation should provide a Revenue Departmental Notification in order to make it clear. If it is interpreted that it is the capital expenditure as cost of right in CDM project operation, it is not allowed as taxable expense according to section 65 ter (5) of the Revenue Code. But the CDM project entrepreneur can allocate to deduct the expenditure under the condition of amortization (depreciation) according to section 4 (4) of the Royal Decree (No.145) B.E.2527.

If it is interpreted that the pre-operating expenditure is merely a certificate to operate the CDM project, it means this payment does not generate any right to business. Then, it will be considered as normal pre-operating expenses and shall be allowed to deduct the whole amount in once accounting period as taxable expense. It is not non deductible expense according to section 65 ter. It should be noted that the CDM project requires a high investment and it is also created high amount of company's expenditure, therefore, any allowance of expense deduction will not benefit to the CDM's projects, if it has no taxable profit.

However, the pre-operating expenses period of the CDM project are considered by this paper that it should be the capital expenditure according to section 65 ter (5) of the Revenue Code. Because the pre-operating expenses period are high investment and incurable long term of future economic benefits which are consistent to accounting standard under the benefit principle. The enterprise must recognize as an intangible asset of business.

The pre-operating expenses period are non-deductible expenses. They are not allowed to deduct from income for CIT calculation in once accounting period but they must be allocated to deduct 10 percentages of asset value from income under the condition of depreciation and amortization according section 4 (4) of the Royal Decree No.145.

# 4.2 The Problems on the Law and Measure for Providing Tax incentive to the CDM Project in Thailand

The tax incentive to the CDM project can be used as a tool to encourage investment additionally and also to create capacity of competition to other countries where provides tax incentive. Because it is able to reduce cost of the CDM project which is required a high investment and take long time to gain income and recover its investment costs. Moreover, tax incentive is an importance measure that the government can apply as an instrument to enhance the investment promotion as well as environmental conservation. There are additional two reasons to consider for the CDM project which should be encouraged by granting tax incentive as follows:

Firstly, providing tax incentive can be created economic advantage since some Thai CDM project retards selling CERs because the CERs price would rather fluctuate. Providing tax incentive can give benefit or advantage to private sector and also can stimulate profit making instinct of entrepreneur, thus, it may also stimulate selling CERs for bringing revenue to Thailand.

Secondly, tax incentive may attract other industry entrepreneurs who do not response to environment in their production to enter into the CDM project. For example, A company buys low price and also low quality machine which makes pollution by green house gas emission but after there is the tax incentive providing, A company may turn to improve their production thus, Thailand is able to preserve sustainable environment and this business is an environmental friendly investment. At present, the Royal Decree No.487 refers to the corporate income tax exemption for income incurred from material or equipment asset which saves energy. Although the environmental protection is concerned by this Royal Decree, it is not obviously and directly concerned about CDM project entrepreneur in Thailand. The provision is provided for supporting the general enterprise. There is no especially tax measure to support the CDM project.

However, providing tax incentive to the CDM project is caused discrimination to other businesses. Although the CDM project is any business which can reduce green house gas emission in manufacturing, only certain business operators can carry on such project and obtain tax incentive. Whereas, other business operators which cannot join CDM project, are not entitled to obtain the tax incentive.

For example, discrimination explaining in case proving tax benefit to only the CDM project; both of AA and BB enterprises sell fresh food. In the manufacturing of AA enterprise can change excretion from pig and chicken to biogas for reducing green house gas while BB enterprise cannot do it. Only AA enterprise can take tax benefit from the state's tax benefit but BB enterprise cannot take the tax benefit.

Besides, there are 15 types of the CDM projects but only some projects such as bio mass project and small project face capital investment problem. The large project or additional project for operating the CDM project is hardly facing the capital problem.

Therefore, providing tax incentive to the CDM project business has two important problems to consider as following;

1. Providing tax incentive to encourage the CDM project can be implemented by two laws, namely, the Revenue Code and the Investment Promotion Act. Then, the problem is which laws are most appropriate for providing tax incentive to the CDM project business.

2. The next thing that should be considered is what kind of tax incentive measure is most appropriate to encourage the CDM project business.

Although section 3 (1) of the Revenue Code provides that tax benefits can be granted by issuing the Royal Decree for tax rate reduction or income tax exemption, the Revenue Code is not appropriated to provide tax incentive for indicated type of

special circumstance business. Because the Revenue Code is a general law that the government applies for taxation from the people in country equally. Providing tax incentive to the CDM project is caused un-equity for other business.

However, there is the Investment Promotion Act as a specific law in order to promote investment in country by applying tax incentive as an instrument. This law is not applied in general business. In this regard, the similar business may be granted the different tax benefit because it depends on the authority's consideration to arrange the suitable tax benefit for each company (according to chapter 3 of the Investment Promotion Act).

Therefore, the Investment Promotion Act should be an appropriate law for proving tax incentive to the CDM project business. Board of Investment is empowered by this law and entitled to use its sole discretion for granting tax benefit to each business. Un-equity of providing tax benefit depends on the problem and obstacle of each business.

The CDM project business is important and beneficial to the economic and social development to the country. Consequently, the CDM project should be a new type of promoted activity by issuing the Board of Investment Announcement pursuant to section 16 of the Investment Promotion Act.

Regarding tax incentive measure, there are many tax incentive instruments which can attract the CDM project entrepreneur, who faces high capital investment and tends to suffer a loss at the beginning. In case the CDM entrepreneur has to import machinery for the CDM project operation, import duties exemption on machinery according to section 28 of the Investment Promotion Act is able to reduce cost of the CDM entrepreneur.

Moreover, corporate income tax exemption is not useful to a business, but losses carry forward as an instrument under section 31 paragraph 4 of the Investment Promotion Act seems to be appropriate tax benefit for the CDM project business which takes longer time to gain income and recover its investment costs. This is because implementation loss carry forward to promoted activity is not required to compliance with section 65 ter (12) of the Revenue Code, the period for applying loss carry forward to deduct from income is longer.

## Chapter 5

### **Conclusion and Recommendations**

#### 5.1 Conclusion

Currently, there is the climate change problem that every country has been unavoidably affected; as a result, United Nations implemented Framework Convention on Climate Change (UNFCCC) which requires international participation of every country to solve problem. The objective of the Convention is to achieve stabilization of reducing green house gas emission in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Therefore, the convention established the Kyoto Protocol as the commitment for the contracting parties to perform.

The Kyoto Protocol is an international and legally binding agreement to industrialized countries and the European community which are developed countries for reducing green house gas emissions. The Protocol was adopted by the parties to the UNFCCC with the objective of achieving quantified emission limitations through specific policies and measures to minimizing the adverse effects of climate change. The protocol provides for three mechanisms like joint implementation to meet their targets as follows:

The Joint Implementation (JI) and International Emissions Trading (IET) which applies only annex I parties group to join these mechanisms excluding, the non annex I parties. The mechanisms allow between annex I parties to purchase Emission Reduction Units (ERUs) and Assigned Amount Units (AAUs) of green house gas for removal the over quantity emission of their countries.

The Clean Development Mechanism (CDM), which is one of three Kyoto protocol flexibility mechanisms, allows annex I parties (developed countries) to meet their emission reduction targets by purchasing for Certified Emissions Reductions (CERs) in non-annex I parties (developing countries) to compensate the over quantity green house gas emission by them. The three mechanisms of the Kyoto Protocol created carbon credit trading that is established for helping countries commit under protocol to meet their targets by reducing green house gas emission or removing carbon from the atmosphere in other countries in a cost-effective way.

Thailand is a country which realizes the significance of the climate change problem in order to participate in solving the problem; therefore Thailand entered into the UNFCCC and ratified in the Kyoto Protocol. The role of Thailand is the developing country and non annex I party can voluntarily participate to reduce green house gas emission by joining in CDM.

China is one of the most famous carbon credits trading in the world; moreover China is successful in term of CDM projects which has the maximum proportion of the world. Besides, India is ranked as the second potential country in this business. Both of them encourage the CDM project by providing tax incentive policy.

Chinese tax incentive measure fully exempts corporate income tax (CIT) from years 1 to 3, in years 4 to 6 period grants CIT half tax rate reduction after incurred revenue is transferred to the state as expenses of the CDM project (the proportion of revenue transferred depends on the type of gas that the project can reduce) and in year 7 and onward grants tax benefit only incurred revenue is transferred to the state as expenses of CDM project that the proportion of them is similarity in the years 4 to 6 period.

Indian tax incentive measure provides many types of tax benefit to CDM project such as custom duty exemption, accelerate depreciation or CIT exemption from net profit base. However, the tax benefits are different formats depending on categories of CDM project, for example, the wind power project is allowed tax benefit that is 80% accelerated depreciation, sales tax and excise duties exemption and 10 years income tax exemption for profits from wind generation but the small hydropower projects are allowed customs duties exemption and income tax exemptions for 10 years.

Thailand has no tax incentive measure to encourage the CDM project. Thai CDM project is subjected to tax the whole amount of income derived from selling CERs and also subjected to the normal rate of corporate income tax rate at 30%. In additional, there are two important problems on tax measure for Thai CDM project which should be considered.

The first problem, there is a question to consider whether the pre operating expenditures of the CDM project entrepreneur are allowed to deduct as taxable expenses for corporate income tax calculation or not. It is uncertain whether these expenditures should be considered as the capital expenditure (that are not allowed to deduct as taxable expense according to section 65 ter (5) of the revenue code) or deductible expense of business.

The second problem, as mentioned earlier, providing tax incentive to the CDM project can encourage investment and also to create capacity of competition to other countries where provides tax incentive but there is still no specific tax measure to support CDM project in Thailand. In this regard, the government should support the CDM project business by applying tax incentive policy. Tax incentive is an important measure that the government can apply as an instrument to enhance the investment promotion as well as environmental conservation.

Thus, there are problems to consider that what law and instrument is most appropriate for implementing tax incentive to the CDM project entrepreneur. Providing tax incentive to encourage in the CDM project can be implemented by two types of law. The first law is the Revenue Code as general law of taxation and the second is the Investment Promotion Act.

# 5.2 Recommendations

In order to solve the uncertain problem on recognizing the pre-operating expenditure of the CDM project, it should be identified by tax authority's interpretation. The Revenue Department should provide a Revenue Departmental Notification to create clarity in practical to both tax authority and taxpayer for taxable profit calculation. Otherwise, the CDM entrepreneur cannot calculate his certain of tax burden in order to pay corporate income tax according to section 65 of the Revenue Code.

For solving the second problem regarding which law should be used as an instrument for providing tax incentive to the CDM project in Thailand, it should be

noted that both the Revenue Code and the Investment Promotion Act are able to provide tax incentive to the CDM project business but it seems to create discrimination to other businesses. In this sense, the Revenue Code is general law of taxation, thus the law is not appropriate to provide tax incentive to special business. Otherwise, it can be created un-equity to other taxpayers.

However, the Investment Promotion Act is a specific law which is legislated in order to investment promotion by applying tax incentive instrument. An authority is empowered by this law to provide tax incentive to each business differently. It depends on suitable and necessary of business. Additionally, the loss carry forward provision of this law may be the best tax incentive to the CDM project which requires a high investment and take longer time to gain income and recover its investment cost.



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