

タイ王国
温室効果ガスの削減に係る
組織能力強化プロジェクト
詳細計画策定調査報告書

平成21年9月
(2009年)

独立行政法人国際協力機構
地球環境部

序 文

気候変動は、21世紀に人類が直面する最大の課題のひとつと位置づけられ、現在新たな国際的な対策の枠組みが模索されています。タイ王国政府は、京都議定書において温室効果ガス（GHG）の削減義務が課せられていないにもかかわらず、タイ温室効果ガス管理機構（TGO）をはじめとする気候変動関連機関による気候変動対策への取り組み意欲が極めて高く、GHG排出量削減に向けたアクションプランを策定するなどの取り組みを実行しています。

取り組みの推進にあたり、中心的な役割を担うのがTGOであり、現在のところCDMに関する承認、啓発、訓練を中心とする業務を行っていますが、TGOは、多くの途上国と同様、経験が浅いために人材の不足、知見の不足という問題を抱えています。

このような状況の下、TGOや対国内のCDM関係者の能力開発を目的に、タイ王国政府から日本国政府に対し「温室効果ガスの削減に係る組織能力強化プロジェクト」の要請が出されました。

これを受けて独立行政法人国際協力機構（JICA）は、協力内容の協議のために2009年5月26日から6月4日まで詳細計画策定調査団（団長：JICA国際協力専門員 千原大海）を派遣し、2009年6月3日に協議議事録（Minutes of Meeting：M/M）を署名しました。

本報告書は同調査団の調査・協議結果を取りまとめたものであり、今後、本プロジェクトの実施にあたり、広く活用されることを願うものです。

ここに、本調査にご協力頂いた外務省、環境省、在タイ王国日本国大使館など、内外関係機関のかたがたに深く謝意を表するとともに、引き続き当機構の活動に一層のご支援をお願いする次第です。

平成21年9月

独立行政法人国際協力機構

地球環境部長 中川 聞夫

目 次

序 文 目 次

第1章 詳細計画策定調査の概要	1
1-1 調査の背景・経緯	1
1-2 技術協力プロジェクトに関するタイ側からの要請概要	1
1-3 調査目的・内容	2
1-4 調査団構成	2
1-5 調査日程	3
1-6 調査結果	4
第2章 総 括	7
2-1 本詳細計画策定調査の概要	7
2-2 本案件の意義	7
2-3 他ドナーの動向	8
第3章 事業事前評価結果	9
3-1 プロジェクトの背景と必要性	9
3-2 プロジェクト概要	10
3-3 プロジェクトのモニタリングと評価	12
3-4 5項目評価と結論	13
付属資料	
1. 要請書	19
2. 詳細計画策定調査M/M	80
3. 詳細活動計画 (Plan of Operation)	107
4. プロジェクト・デザイン・マトリックス (PDM)	110
5. 質問票回答 (TGO)	112
6. TGO設立勅令	128
7. TGO発表資料 (タイにおけるCDMの実施)	144

第1章 詳細計画策定調査の概要

1-1 調査の背景・経緯

気候変動は、21世紀に人類が直面する最大の課題のひとつと位置づけられ、現在新たな国際的な対策の枠組みが模索されている。タイ王国（以下、「タイ」と記す）政府は、京都議定書において、温室効果ガス（GHG）の削減義務が課せられていないにもかかわらず、タイ温室効果ガス管理機構（Thailand Greenhouse Gas Management Organization : TGO）を初めとする気候変動関連機関による気候変動対策への取り組み意欲が極めて高く、GHG排出量削減に向けたアクションプランを策定するなどの取り組みを実行している。

また気候変動への対策については、タイ政府が省庁横断的な政策対応を目的として2008年1月に「気候変動対応国家戦略2008～2011」を策定しており、包括的・網羅的なデータ分析に基づく重点課題の抽出と対応のための6つの戦略を定性的に定めている。

戦略1 気候変動の影響に対応しリスクを低減するための能力づくり

戦略2 GHG排出量の削減と炭素吸収源の総合的開発の支援

戦略3 気候変動の理解を促進する開発と研究の支援

戦略4 気候変動による問題解決のための啓発活動

戦略5 気候変動業務に関係する個人と組織の能力向上

戦略6 気候変動に関する国際協力

これらの戦略の推進において中心的な役割を担うのがTGOであり、現在のところクリーン開発メカニズム（CDM）に関する承認、啓発、訓練、情報整備を中心とする業務を行っている。しかしながらTGOは、その名が示すとおり同国の「GHG抑制にかかわるすべての活動の促進と支援」を担うとしており、そのポテンシャルの高さから関心を集めているが、多くの途上国と同様、経験が浅いために人材の不足、知見の不足という問題を抱えている。

このような状況の下、タイ政府からわが国政府に対し、①TGO、②タイ国内のCDM関係者、③東南アジア諸国のCDM関係者、の能力強化を目的とした「温室効果ガスの削減に係る組織能力強化プロジェクト」が要請され、わが国政府は本要請を採択した。

1-2 技術協力プロジェクトに関するタイ側からの要請概要

本技術協力プロジェクトの要請書は、タイ政府から日本国政府に対して2008年9月に提出された。要請書概要（仮訳）は以下のとおりである。

要請案件名	温室効果ガスの削減及びCDMに係るキャパシティ・ディベロップメントプロジェクト Capacity Development and Institutional Strengthening for GHG Mitigation and CDM
要請機関	温室効果ガス管理機構 Thailand Greenhouse Gas Management Organization (Public Organization) (TGO)
上位目標	タイ及び東南アジア諸国において、GHGに係るアウェアネスが向上し、GHG削減に向けた取り組みが行われる。
案件の目標	GHG削減及びCDMに係る、①TGO、②タイ国内のCDM関係者、③東南アジア諸国のCDM関係者のキャパシティが向上する。

期待される成果	<p>①TGOのCDMチームに対しTOTが実施される。／TGOスタッフ、役員会、委員会の組織としてのキャパシティが向上する。</p> <p>②域内トレーニングセンターが設立される。／タイ国内関係者向けの研修カリキュラムが作成される。／関連分野の研究実施及び普及マテリアルが作成される。／関係者にトレーニング、ワークショップが実施される。</p> <p>③CDMやGHG削減を促進するための研修等活動が、近隣諸国に対して実施される。／関係国間の情報交換やネットワーキングのための研修等活動が実施される。</p>
活 動	上記のそれぞれの対象を想定した研修モジュールとして15のモジュールに分けて、それぞれについて研修を実施。また、上記分野に関連した専門家による指導。
投 入	<p>日本側</p> <ul style="list-style-type: none"> ・短期専門家（12分野の要請あり） ・本邦研修（15分野の要請あり） ・研修、ワークショップ実施のための機材（プロジェクター、コンピューター、ほか） <p>タイ側</p> <ul style="list-style-type: none"> ・専門家執務室、地域研修センターのスペース、実施経費（2年間のプロジェクト実施経費として400万バーツ）ほか
実施体制	プロジェクトマネージャーの下に5名のサポートスタッフを配置。2008年10月現在は20名体制。2009年度は40名に増員予定。

1－3 調査目的・内容

本詳細計画策定調査は、タイの「GHG抑制にかかわるすべての活動の促進と支援」を担うTGOの組織能力強化を目的とした技術協力計画を策定するため、同案件内容の検討及び事業事前評価に必要な情報収集を行うことを目的とした。

- （１）案件概要の合意（要請のあった専門家指導科目分野から特にTGOの組織能力強化に調整）、必要性・優先順位等も含め協議を実施。
- （２）活動内容をマスタープランとして取りまとめたのち、PDM（案）を作成。同PDM（案）に基づき専門家のインプット等のすり合わせ（指導科目分野及びTORの打合せ）。
- （３）マスタープランに基づき、詳細活動計画（Plan of Operation：PO）を作成。プロジェクトの論理構成を整理して全体像の取りまとめ。ローカルコスト等タイ側の負担事項や供与機材内容等細かい事項の協議。
- （４）世界銀行、GTZ、UNDPやUNEPとの意見交換から、タイの気候変動対策やTGOの位置づけ、他のドナーの気候変動対策に係る協力分野などを確認。
- （５）協議議事録（M/M）の取りまとめ、署名。R/D（案）の作成。

1－4 調査団構成

担当分野	氏 名	所 属
総 括	千原 大海	JICA 国際協力専門員
気候変動政策	川西 正人	JICA 国際協力専門員
調査計画	宇多 智之	JICA 地球環境部環境管理グループ 環境管理第一課 職員

1-5 調査日程

(1) 調査日程

2009年5月26日（火）～6月4日（木）

	日 付	
1	5月24日 （日）	（川西団員） 16:15 バンコク到着
2	5月25日 （月）	（川西団員） 別ミッション業務
3	5月26日 （火）	（川西団員） 別ミッション業務 （千原団長、宇多団員） → バンコク着（16:05） 18:30 JICAタイ事務所にて打合せ
4	5月27日 （水）	9:00 TGO協議 14:30 世界銀行協議（Mr. Manuel Cocco, Mr. Andres Zancada, Environmental Analyst, Rural Development, Natural Resources and Environment Unit）
5	5月28日 （木）	9:30 GTZ協議（Mr. David Oberhuber, Country Director, Mr. Torsten Fritsche, Dipl.-Ing., Director, Resource- Efficiency and Energy） 13:30 JICAタイ事務所にて打合せ、資料準備
6	5月29日 （金）	9:00 TGO協議 M/M作成
7	5月30日 （土）	資料準備、M/M作成
8	5月31日 （日）	資料準備、M/M作成
9	6月1日 （月）	9:00 TGO打合せ、M/M協議、移転先視察
10	6月2日 （火）	10:00 UNEP（Dr. Dechen Tsering, Deputy Regional Representative） 12:00 M/M最終チェック 14:00 M/M署名・交換 16:00 JICAタイ事務所報告
11	6月3日 （水）	9:00 タイ国際協力開発庁（Thailand International Development Cooperation Agency : TICA）報告 13:00 UNDP（Mr. Phansiri Winichagoon, Manager, Environment Unit, Mr. Faris Khader, Regional Technical Specialist for Climate Change） バンコク発（23:55）→
12	6月4日 （木）	成田着（8:10）

(2) 訪問先

TGO、GTZ、世界銀行、UNDP、UNEP、TICA

1-6 調査結果

(1) M/M署名・交換相手先

対処方針どおり、案件の実施機関であるTGOとのM/Mの署名・交換を行った。

(2) プロジェクト実施体制

プロジェクト実施体制については、タイ側との協議の結果、以下のとおりとなり、結果をM/Mに記載した。

プロジェクトダイレクター：TGO Executive Director

プロジェクトマネージャー：TGO Deputy Executive Directors (2名)

(3) R/D (案)

本詳細計画策定調査結果を踏まえてR/Dのドラフトを作成し、M/MのAppendix I として添付した。

(4) プロジェクト名称

プロジェクトの英文名称については、対処方針どおり以下の名称を用いることでタイ側と合意した (M/M Attached Document I . Title of the Project)。

英文名：Capacity Development and Institutional Strengthening for GHG Mitigation in the Kingdom of Thailand

和文名：タイ王国温室効果ガスの削減に係る組織能力強化プロジェクト

(5) 合同調整委員会 (Joint Coordinating Committee : JCC)

JCCの設置についてタイ側と協議を行い、以下の構成で結成されることとなり、結果をM/Mに記載した (M/M ANNEX I R/D ANNEX VI Joint Coordinating Committee)。構成委員には、緩和を推進するうえで欠かせない主要な行政機関が含まれており、本委員会によりTGOの活動に係る情報共有や意見交換が促進することが期待される。

① 委員長：

Executive Director of TGO

② 委員 (タイ側)：

Representative(s) of TGO

Representative(s) of Office of Natural Resources and Environmental Policy and Planning, MNRE

Representative(s) of Department of Alternative Energy Development and Efficiency, MOE

Representative(s) of Office of Transport and Traffic Policy and Planning, MOT

Representative(s) of Department of Industrial Works, MOI

Representative(s) of Royal Forest Department, MNRE

Representative(s) of National Park, Wildlife and Plant Conservation Department, MNRE

Representative(s) of Thai International Development Cooperation Agency, MOFA

③ 委員（日本側）：

Experts to be dispatched by JICA

Representative(s) of JICA Thailand Office

Other personnel concerned to be decided and/or dispatched by JICA, if necessary

④ オブザーバー

Official(s) of the Embassy of Japan in Thailand

Other official(s) of appointed by the Chief Advisor may attend the Committee meetings as observer(s).

（６）PO（案）、PDM（案）

PO（案）及びPDM（案）については、マスタープラン（案）を基にタイ側と協議のうえ策定し、それぞれAppendix II、Appendix IIIとしてM/Mに添付した。

（７）プロジェクト実施場所

TGOは2009年8月を目途に現在の事務所から約10km北に位置するChangwattana Government Office Complex（9階建ての巨大な合同庁舎）に移転する予定である。新事務所とプロジェクト実施場所（日本人専門家執務室、機材設置場所、研修場所等）を視察したところ、3,000m²近くのスペースにTGO5部局が入居する予定であり、加えて多くの会議室や研修室が用意されており十分以上のスペースが確保されていることが確認できた。同Complexの外装工事は終了しているものの内装が未完了であり、予定どおりプロジェクトが開始されるためにも早い時期の完成が望まれる。

（８）タイからの便宜供与

対処方針時に想定していた以下①～③の項目についてすべて協議を行い、結果をM/Mに取りまとめた（M/M ANNEX I R/D Attached Document III. Measures to be taken by the Government of Thailand）。

① 専門家用のオフィス、電気・水道・電話回線の提供、IDカードの交付等。

② 公務員であるC/Pにかかる経費（給料・日当・調査旅費等）の負担（プロジェクトのみに臨時に雇用する補助員、人夫等については、日本側経費負担とすることが可能）。また、研修参加者に対する旅費や日当についても先方（研修参加者の所属先負担も含む）負担になることを確認した。

③ プロジェクト専門家の人数や構成に応じたC/Pの配置及びプロジェクトの活動等への積極的な関与。現時点ではC/Pは24名配置されており、執務場所の移転が終了次第、増員が予定されている。C/Pの詳細については、Appendix I のANNEX IVを参照。

（９）投入資機材

プロジェクト目標の達成に必要な不可欠な投入資機材という観点から検討した結果、プロジェクト等研修機材のみを現時点での供与機材対象とし、他の機材については必要性が認められればプロジェクト開始後に日本側の専門家と意見交換を行いつつ再度検討を行うこと

で合意した。協議結果をM/Mに取りまとめた（M/M ANNEX I R/D ANNEX III List of Machinery and Equipment）。

第2章 総 括

2-1 本詳細計画策定調査の概要

- (1) 気候変動の緩和策及びクリーン開発メカニズム（CDM）に係るキャパシティ・ディベロップメント支援に関し、実施機関であるタイ温室効果ガス管理機構（TGO）と協議議事録（M/M）署名・交換を行った。
- (2) TGO（2007年設立）は、タイ天然資源環境省直属のCDMプロジェクトを承認するための国家機関（DNA）であるが、これにとどまらず、広く気候変動の緩和策の推進にかかわる。TGOによれば、今後、Nationally Appropriate Mitigation Actions（NAMA）の取りまとめ及び実施促進にあたるとのこと。
- (3) 本協力案件は、タイにおける気候変動緩和策の推進を図るTGOに対し、個人及び組織それぞれのレベルからキャパシティ・ディベロップメント支援を行うものである。
- (4) 個人レベルでは、TGOの職員（現時点の対象者24名）に対し研修を行うとともに、対象者の一部については本邦研修を実施する。研修で扱う項目は、CDMのほか、セクター別の緩和策（緩和ポテンシャルや技術）、GHGインベントリー、国家登録簿などを含む。
- (5) 組織レベルでは、TGOが果たすべき主たる機能に着目し、以下の支援を実施する。
 - 1) 研修カリキュラムや教材の開発支援を通じ、関連省庁や民間業者などステークホルダーに対し、TGOが研修を効果的に実施する能力の向上を図る。
 - 2) CDMパイロット事業の発掘・形成、プロジェクト設計書（PDD）の作成、承認事業のモニタリング演習等を通じ、TGOがDNAとしてCDM事業の審査・モニタリングを実施する能力の向上を図る。
 - 3) タイの気候変動緩和策に関するウェブサイト及びデータベースの質の向上を支援することにより、TGOの情報発信・管理能力の強化を図る。
- (6) 協力期間は2年。「第15回国連気候変動枠組み条約締約国会議（COP15）」が開催される2009年12月までには、本協力を開始する方向で準備を進める（早ければ10月開始の見込み）。なお、TGOは今年7月を目途に（若干遅れる可能性あり）事務所移転の予定。
- (7) 本件は、業務委託による実施を予定する。
- (8) 本件実施にあたり合同調整委員会（JCC）を構成し、MNRE/ONEPのほか、エネルギー省や運輸省など他の関連省庁も参画する。

2-2 本案件の意義

- (1) 本案件は、TGOの能力向上を通じ、わが国によるタイのNAMA形成・促進を支援することにつながることを期待される。
- (2) 本件では、緩和策の実施が測定・報告・検証可能な方法（MRV）で行われるべき点に留意し、そのベースとなる温室効果ガス（GHG）インベントリーを、特にTGO職員向けの研修において取り上げる。本件は、これによりMRVの基盤づくりに貢献する。
- (3) 本件では、TGO職員向けの研修並びにステークホルダー向けのカリキュラム・教材開発支援において、地球温暖化対策のみならず、タイの開発便益にも資する、コベネフィット・アプローチを取り上げる。これにより、コベネフィットを考慮した緩和策の促進を図る。
- (4) TGOは、気候変動緩和策に関する周辺国向けの協力を念頭に置いていることから、本件

は第三国の能力向上に間接的に寄与することが期待される。

(5) 上記(1)～(4)はM/Mにも明記のうえ、TGOと確認。

(6) 緩和策の推進支援については、バンコク都(BMA)との間でも2009年6月から3年間にわたり協力を行う予定であり、本件との相乗効果が望まれる(ちなみに、BMA案件でも、NAMA、MRV、コベネフィットの各項目に配慮しつつ、協力が進められる)。一方で実施するセミナーやワークショップに他方の関係者を招くこと等を通じ、各機関の個人・組織レベルがそれぞれに行われるだけでなく、機関相互の連携強化など社会レベルの能力強化を内包するようなキャパシティ・ディベロップメント支援が望まれる。

(7) 気候変動プログラム・ローン導入の可能性などが協議されるなかで、TGO並びにBMAとの協力案件は、タイにおける気候変動分野のわが国協力で重要な位置づけをなすものと思われる。

2-3 他ドナーの動向

(1) TGOに対し、GTZが専門家(legal expert)を派遣する予定。着任予定は2009年7月、着任後2、3ヵ月をかけてTORを固め、その後2年間にわたり活動。右に関し、わが国支援との重複はない。なお、GTZは、ONEPとの間でも、気候変動分野の政策立案、人材育成、適応策推進など広範な協力を視野に協議を進めているが、気候変動の国際交渉に関する小規模なセミナーの実施にとどまっており、協力の方向性は依然としてまとまっていない。

(2) 世界銀行は、クリーン技術基金(CTF)による支援を準備中である。

第3章 事業事前評価結果

3-1 プロジェクトの背景と必要性

(1) 現状及び問題点

タイ政府は、京都議定書において温室効果ガス（GHG）の削減義務が課せられていないにもかかわらず、タイ温室効果ガス管理機構（TGO）をはじめとする気候変動関連機関による気候変動対策への取り組み意欲が極めて高く、GHG排出量削減に向けたアクションプランを策定するなどの取り組みを実行している。

また気候変動への対策については、タイ政府が省庁横断的な政策対応を目的として2008年1月に「気候変動対応国家戦略2008～2011」を策定しており、包括的・網羅的なデータ分析に基づく重点課題の抽出と対応のための戦略を定性的に定めている。

これらの戦略の推進において中心的な役割を担うのがTGOであり、現在のところクリーン開発メカニズム（CDM）に関する承認、啓発、訓練、情報整備を中心とする業務を行っている。しかしながらTGOは、同国の「GHG抑制にかかわるすべての活動の促進と支援」を担うとしており、そのポテンシャルの高さから関心を集めているが、多くの途上国と同様、経験が浅いために人材の不足、知見の不足という問題を抱えている。

(2) 相手国政府国家政策上の位置づけ

タイ政府は「気候変動対応国家戦略2008～2011」のなかで、以下の6つの戦略を掲げている。

- 戦略1 気候変動の影響に対応しリスクを低減するための能力づくり
- 戦略2 GHG排出量の削減と炭素吸収源の総合的開発の支援
- 戦略3 気候変動の理解を促進する研究と開発の支援
- 戦略4 気候変動による問題の解決のための啓発活動
- 戦略5 気候変動業務に関係する個人と組織の能力向上
- 戦略6 気候変動に関する国際協力

国際的な削減義務がないなかであっても、同国政府は「第10次国家経済社会開発計画」において、CO₂削減に関する目標を掲げ、又GHG排出量の約半分を占めるエネルギー産業に重点を置いたCDMの強化についても積極的な姿勢をみせる等、GHG削減を重要視している。

また、2009年9月末までに気候変動に対応するための「マスタープラン2010～2019」の策定に向けた業務も進めており、タイ政府が気候変動対策を重要な課題として高く位置づけていることが判断される。

(3) わが国援助政策との関連、JICA国別事業実施計画上の位置づけ（プログラムにおける位置づけ）

日本国政府は気候変動対策の取り組みを重要課題と位置づけ、「クールアース50」において、「GHGの排出の抑制と経済成長を両立させようとする途上国を広く支援する」ことを表明している。また、対タイ経済協力計画において、環境管理制度・体制の整備の強化はタイが取り組むべき社会の成熟化に伴う問題への対処のなかでも重要視されており、わが国の方針と合致するものである。なお、タイと日本国政府は、クールアース・パートナーシップ を正式に締結してお

り、気候変動対策に関して両国がともに協力し取り組んでいくことで合意している

3-2 プロジェクト概要

本協力案件は、タイにおける気候変動緩和策の推進を図るTGOに対し、個人及び組織それぞれのレベルからキャパシティ・ディベロップメント支援を行うものである。

個人レベルでは、TGOの職員（現時点の対象者24名）に対し研修を行うとともに、対象者の一部については本邦研修を実施する。研修で扱う項目は、CDMのほか、セクター別の緩和策（緩和ポテンシャルや技術）、GHGインベントリー、国家登録簿などを含む。

組織レベルでは、TGOが果たすべき主たる機能に着目し、以下の支援を実施する。

- （1）研修カリキュラムや教材の開発支援を通じ、関連省庁や民間業者等ステークホルダーに対し、TGOが研修を効果的に実施する能力の向上を図る。
- （2）CDMパイロット事業の発掘・形成、プロジェクト設計書（PDD）の作成、承認事業のモニタリング演習等を通じ、TGOが指定国家機関〔CDMプロジェクトを承認するための国家機関（DNA）〕としてCDM事業の審査・モニタリングを実施する能力の向上を図る。
- （3）タイの気候変動緩和策に関するウェブサイト及びデータベースの質の向上を支援することにより、TGOの情報発信・管理能力の強化を図る。

プロジェクトの詳細活動計画（PO）を付属資料3. に示す。

〔主な項目〕

（1）協力の目標（アウトカム）

① 協力終了時の達成目標（プロジェクト目標）

TGOのGHG緩和策に対する人材のキャパシティ・ビルディングと組織力強化が達成される。

〔指 標〕

- ・ TGO職員が、主体的に、CDMなど気候変動の緩和策に係る技術指導・普及啓発を他のステークホルダーに対し行える。GHG緩和策、炭素取引、気候変動枠組条約（UNFCCC）の各分野におけるキャパシティ・ディベロップメント進捗評価チェックリスト（Capacity Development Progress Evaluation Check List）でX%の成績。
- ・ TGOの組織力のレベル。具体的にはTGO独力で運営が行われる研修の数。

② 協力終了後に達成が期待される目標（上位目標）

タイにおけるGHG緩和の活動が促進される。

〔指 標〕

- ・ 国家承認を得るためにTGOに提出されるCDMプロジェクト数の増加。

（2）成果（アウトプット）と活動

① 成果（アウトプット）： TGO職員のGHG緩和策に対する知識レベルと専門知識の向上。

〔活 動〕

- 1-1. TGO職員へのCDMのための研修の実施。

- 1-2. TGO職員への炭素取引に関する研修の実施。
- 1-3. TGO職員への関連分野でのGHG緩和策に関する研修の実施。
- 1-4. TGO職員へのUNFCCCの概要と国際交渉に関する研修の実施。
- 1-5. TGO職員へのカーボンフットプリント（二酸化炭素排出量）に関する研修の実施。
- 1-6. TGO職員へのGHGインベントリーに関する研修の実施。

[指 標]

- ・ TGO職員が、CDMなど気候変動の緩和策に関する知識を習得する。専門家チームが実施するキャパシティ・ディベロップメント進捗評価チェックリスト（Capacity Development Progress Evaluation Check List）でY%の成績。

② 成果（アウトプット）：TGOの研修提供キャパシティの向上。

[活 動]

- 2-1. CDMに関する研修カリキュラム及び研修教材の開発。
- 2-2. 炭素取引に関する研修カリキュラム及び研修教材の開発。
- 2-3. 関連分野におけるGHG緩和策に関する研修カリキュラム及び研修教材の開発。
- 2-4. UNFCCCの概要と国際交渉に関する研修カリキュラム及び研修教材の開発。
- 2-5. 二酸化炭素排出量に関する研修カリキュラム及び研修教材の開発。
- 2-6. トレーナー訓練のためのワークショップ／セミナーの実施。
- 2-7. 2-6に記載されたセミナー／ワークショップに基づいたカリキュラム及び研修教材の評価の実施。

[指 標]

- ・ 各種研修教材とカリキュラムが整備され、各種の研修提供が可能となる。

③ 成果（アウトプット）：TGOのGHG緩和プロジェクトに対するレビュー及びモニタリング能力の向上。

[活 動]

- 3-1. 潜在的パイロットプロジェクトのリスト化。
- 3-2. パイロットプロジェクトの選定基準の設定。
- 3-3. パイロットプロジェクトの選定。
- 3-4. パイロットプロジェクトのプロジェクトアイデアノート（PIN）及び／又はPDDの準備。
- 3-5. タイの持続可能な開発基準を踏まえた、登録CDMプロジェクトに基づく試験的モニタリング実習。
- 3-6. PIN及び／又はPDD形成の経験普及のためのワークショップやセミナーの実施。

[指 標]

- ・ パイロットプロジェクトのPIN及び／又はPDDの増加。

- ④ 成果（アウトプット）：TGOのGHG緩和策に関する情報管理能力の向上。

[活 動]

4-1. ウェブサイトの改善。

4-2. データベースの改善。

[指 標]

- ・アクセス数のZ%の増加。

※なお、開始時に、TGOの個人及び組織としてのキャパシティ・アセスメントを実施し、ベースラインと設定する予定。

（3）投入（インプット）

① 日本国側

専門家派遣：チーフアドバイザー、プロジェクトコーディネーター、プロジェクト／活動の導入に伴い必要となる下記の分野での専門家（CDM、炭素取引、GHG緩和策、UNFCCCの概要と国際交渉、二酸化炭素排出量、GHGインベントリー、データベース、ウェブサイト、研修カリキュラム開発）。

供与機材：プロジェクター等研修機材（他の機材については必要性が認められればプロジェクト開始後に日本側の専門家との意見交換を行い検討）。

研修員受入：年間3、4名程度。

② タイ側：（2年間の実施経費として400万バーツ）

専門家執務室、インターネット回線、電気・電話の提供、IDカードの交付等。公務員であるC/Pにかかる経費（給料・日当・調査旅費等）の負担、研修参加者に対する旅費や日当の負担（研修参加者の所属先負担も含む）。プロジェクト専門家の人数・構成に応じたC/Pの配置及びプロジェクト活動等への積極的関与。

（4）外部要因（満たされるべき外部条件）

① 前提条件

- ・プロジェクト実施期間中、プロジェクト実施のための財源及び人材がTGOに分配されること。

② 成果（アウトプット）達成のための外部条件

- ・特になし。

③ プロジェクト目標達成のための外部条件

- ・TGOの職務、責務が変更しないこと。
- ・TGOの予算がタイ政府により確保されること。

④ 上位目標達成のための外部条件

- ・京都議定書で定められた第一約束期間（2008～2012年）が終了してもCDMの仕組みが残ること。

3-3 プロジェクトのモニタリングと評価

（1）実施体制と内容

活動と成果の進捗状況と達成状況のモニタリングは、日本人専門家の協力の下にTGOを

中心とするタイ側C/P機関が主体的に実施する。ただし、成果とプロジェクト目標の達成にかかわる評価項目と具体的な数値目標については、現時点で主要評価項目を設定しているのみであり、プロジェクト活動の本格化に伴い、必要に応じて各評価項目の見直しと具体的な数値目標の設定を行う。合同調整委員会（JCC）の監督と日本人専門家のアドバイスの下で総括責任者（プロジェクトダイレクター）がモニタリングにかかわる全体の調整と実施を行う。

（２）評 価

本プロジェクトの評価は、５項目評価の観点から、①妥当性、②有効性、③効率性、④インパクト、⑤自立発展性の項目について評価を行うこととする。なお案件が終了する半年前を目途に終了時評価調査を計画するとともに、必要に応じて運営指導調査等を実施する。

３－４ ５項目評価と結論

（１）妥当性

本案件は以下の理由から妥当性が高いと判断できる。

- ・ 今世紀に人類が直面する最大の課題のひとつといわれる気候変動対策に積極的に取り組むタイ政府に対し、TGO職員の能力及び組織力の向上を支援し、その結果タイにおけるGHG削減活動が促進されることは、将来的には広く東南アジア地域のGHG排出量削減にもつながることが見込まれ、本件の妥当性は高いといえる。
- ・ 2007年にDNAとして設置されたTGOは、同国のGHG削減にかかわるすべての活動の促進と支援を担う組織ではあるが、人材不足、知見不足の問題を抱えており、能力向上のための支援を必要としている。また、同国の掲げる「気候変動対応国家戦略2008～2011」の実現化に向けて、早期のTGOの組織力向上は不可欠であり、現時点で本件を実施することは、この点からも妥当性が高いと判断できる。
- ・ 前述した協力の必要性・位置づけのなかでも述べたとおり、日本国政府は「クールアース50」において、GHG排出の抑制と経済成長の両立をめざす途上国への支援を表明しており、又日本国とタイの両政府はクールアース・パートナーシップの締結を通じて、気候変動対策に協力して取り組むことに合意している。本案件は、日本国政府がタイをはじめとした途上国における気候変動対策支援のひとつを担うものであり、この点からも妥当性は高いといえる。

（２）有効性

本案件は以下の理由から有効性が高いと判断される。

- ・ TGOは現在のところCDMに関する承認、啓発、訓練、情報整備を中心とした業務を行っており、本案件ではTGO職員個人向けに、CDMのほか、セクター別の緩和策、GHGインベントリー、国家登録簿などの項目に関する研修を行い、職員の知識向上が図られることによりキャパシティ・ビルディングが達成される。
- ・ 組織レベルではTGO職員に対し、CDM事業の審査、モニタリングの実施能力向上を目的とした研修を実施する。同研修を通じて、TGOのDNAとしての機能が向上することから、現在実施中の案件も含めたタイでのCDM事業全体の有効性が高められるものと期待でき

る。

- ・本案件では、TGO職員の能力向上と、組織としての能力向上に向けた研修を平行して実施することにより、相互の要素が触発し合い、限られた協力期間のなかで効率的に成果が達成されることが期待できる。

（３）効率性

本案件は以下の理由から効率的な実施が見込める。

- ・本案件では、GHG削減に向けた取り組みを行う機関として既に設立されているTGOのキャパシティ・ビルディングを行うことから、日本側からの投入は専門家派遣、研修、必要不可欠な研修機材に限られている。また、専門家の執務場所はTGO施設内にあり、インターネット回線、電気、電話ほかプロジェクト実務のための費用はタイ側から投入されることが確認されており、又公務員であるC/Pにかかる経費、研修参加者に対する旅費や日当についても先方が負担する。これらのことから、本案件は効率的に実施されることが期待できる。

（４）インパクト

本案件のインパクトは以下のように予測できる。

- ・TGOのウェブサイト及びデータベースが充実し、GHG削減に関する情報が広く発信されることとなり、タイ国内でのGHG削減への取り組みやCDMに関する理解が深まることが期待される。
- ・2009年8月現在実施中の技術協力プロジェクト「バンコク都（BMA）気候変動削減・適応策実施能力向上」と、エネルギー管理者訓練センターを実施機関とするアセアン向け第三国研修に加え本案件が実施されることにより、GHG削減に有効な省エネルギーやCDMをテーマとした南南協力支援も可能になり、3つの技術協力の相乗効果をもたせれば、大きなインパクトが期待できる。
- ・気候変動対策へのタイ政府による取り組み意欲は極めて高く、又TGOは気候変動緩和策に関する周辺国向けの協力を念頭に置いていることから、将来的には第三国の能力向上にも間接的に寄与することが期待され、タイのみならず、より広い地域でのGHG緩和に向けた活動が展開されていくものと期待される。
- ・TGO職員の個別能力向上や研修カリキュラムや教材の開発により、TGOが研修を実施予定している関連省庁や民間業者等ステークホルダーに対して行う研修の効果向上が期待できる。

（５）自立発展性

以下の点から、本案件の自立発展性は高いと考えられる。

- ・既述のとおり、タイ政府はGHG削減義務が課せられていないにもかかわらず、気候変動対策に関してTGOを組織するなど積極的な姿勢をみせている。また、「気候変動対応国家戦略2008～2011」にも、タイ政府の取り組み意欲の高さが現れている。TGOが途上国の緩和行動の取りまとめ及び実施促進を視野に入れていることから、タイ政府が今後もTGOを通じて積極的に気候変動対策に力を注いでいくものと期待される。

- ・ TGOは設備の充実した新事務所へ移転を予定しており、又新たな職員の雇用も予定している。

付 属 資 料

1. 要請書
2. 詳細計画策定調査 M/M
3. 詳細活動計画 (Plan of Operation)
4. プロジェクト・デザイン・マトリックス (PDM)
5. 質問票回答 (TGO)
6. TGO 設立勅令
7. TGO 発表資料 (タイにおける CDM の実施)

APPLICATION FORM FOR JAPAN'S TECHNICAL COOPERATION

1. **Date of Entry:** Day 4 Month September Year 2008
2. **Applicant:** The Government of Thailand
3. **Project Title:** Capacity Development and Institutional Strengthening for GHG Mitigation and CDM

4. **Contact Point (Implementing Agency):**

Thailand Greenhouse Gas Management Organization (Public Organization) (TGO)

Address: 60/1 Soi Piboonwatna 7, Rama 6 Road, Samsen Nai, Phayathai, Bangkok 10400 Thailand

Contact Person: ① Mrs. Prasertsuk CHAMORNMAH

Deputy Executive Director

Tel. No.: + 66 2 615 8795 Fax No. +66 2 615 8794

E-Mail: sertsuk@tgo.or.th

Contact Person: ② Dr. Chaiwat MUNCHAROEN

Deputy Executive Director

Tel. No.: + 66 2 615 8796 Fax No. +66 2 615 8794

E-Mail: chaiwat.m@tgo.or.th

5. **Background of the Project**

5.1 Current Conditions for the Sector

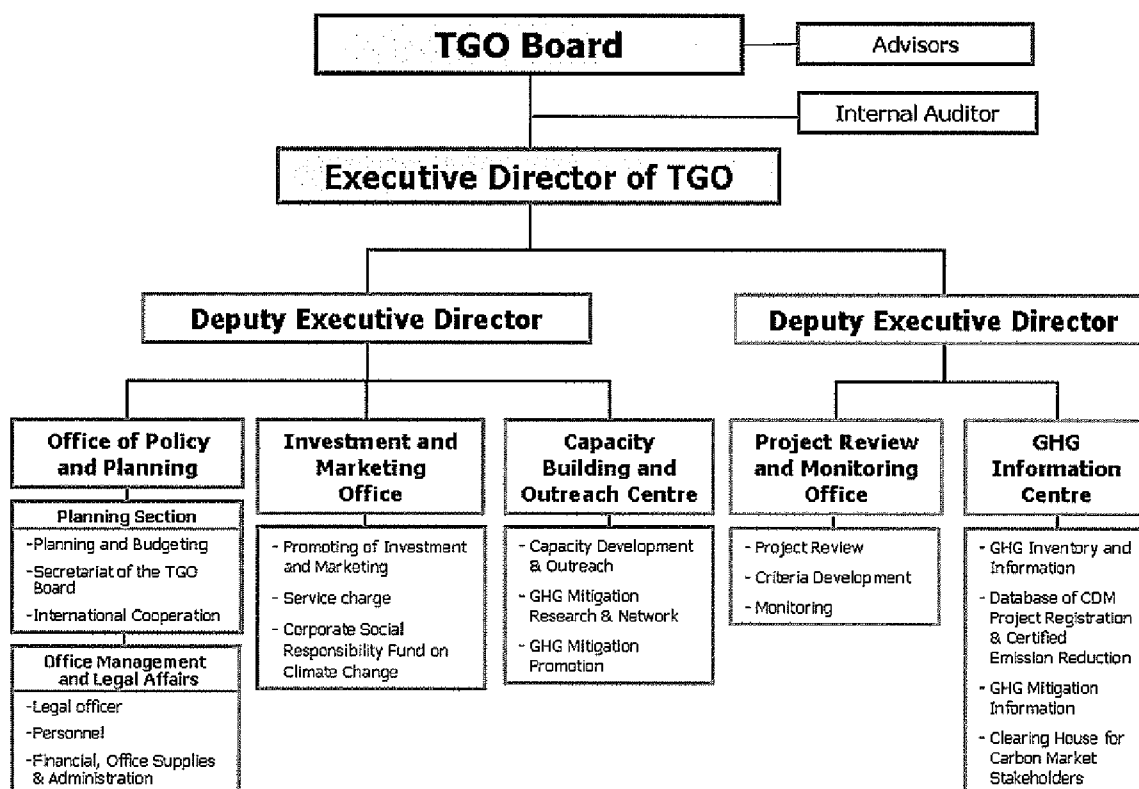
The Thailand Greenhouse Gas Management Organization (Public Organization), or TGO, is the newly established autonomous governmental organization as an implementing agency on greenhouse gas (GHG) mitigation reduction in Thailand. TGO has objectives and duties as follows:

- ▣ Promoting Low carbon activities;
- ▣ Investment and marketing on GHG emission reductions;
- ▣ Establishing GHG Information Centre and providing GHG related information;
- ▣ Reviewing CDM projects for approval;
- ▣ Providing capacity development and outreach for CDM stakeholders and promote low carbon activities;

- Promoting information and public outreach on GHG mitigation; and
- Promoting and supporting all activities related to mitigation measures and climate change.

Structure of TGO is as shown below.

Structure of Thailand Greenhouse Gas Organization (TGO)

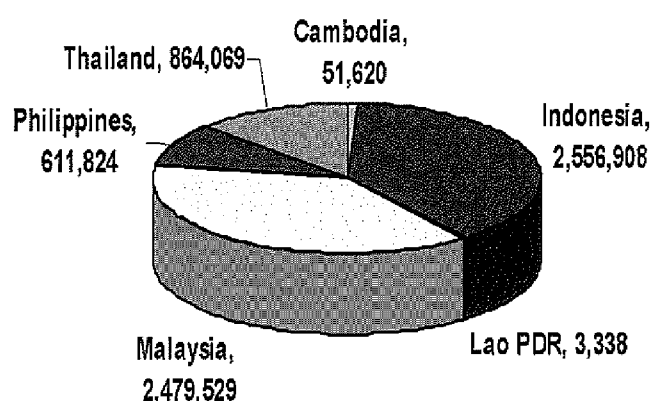


Therefore, TGO performs its role as the **Designated National Authority for CDM (DNA CDM) office in Thailand**. Since 2007, Thailand approved **38 CDM projects**, which account CERs more than 2.2 million tons CO₂ equivalent per year. Within these 38 projects, there are 10 projects registered with the CDM Executive Board, which account for GHG reduction at 864,069 tons CO₂ equivalent per year. Whereas, the rest of approved projects are at validation process, and 22 projects are in a pipeline for TGO consideration.

Moreover, **current status for CDM and GHG mitigation in the Southeast Asian countries is with a high potential**. It is recognizable from growing numbers of CDM projects from Southeast Asian countries registered at the CDM Executive Board – currently up to 76 projects, as follows:

Country in Southeast Asia	Registered CDM Project	CERs/Year
Cambodia	1	51,620
Indonesia	16	2,556,908
Lao PDR	1	3,338
Malaysia	29	2,479,529
Philippines	19	611,824
Thailand	10	864,069

Source: UNFCCC, August 2008.



These 76 registered CDM projects from Southeast Asian countries account up to GHG reductions at 6,567,288 CERs per year.

5.2 Government's Policy for the Sector

The Thai Government strongly supports **GHG mitigation activities** so as to combat climate change. Current policies and plans addressing and reflecting Thailand's attempts to move towards sustainable development and GHG mitigation include:

- **Policy Statement of the Royal Thai Government of Mr. Samak Sundaravej, Prime Minister to the National Assembly** (18 February 2008)
- **10th National Economic and Social Development Plan 2007 – 2011**
- **National Strategic Plan on Climate Change 2008 – 2012** (approved by the Cabinet in January 2008)
- **TGO's Vision Statement** on 'Moving Thailand towards a Low Carbon Society Based on Sustainable Development'
- **Board of Investment (BOI) of Thailand** policies on investment priority

5.2.1 Policy Statement of the Royal Thai Government of Mr. Samak Sundaravej, Prime Minister to the National Assembly (18 February 2008)

In the Policy Statement, the Government has set key policies for the administration of state affairs to be carried out in two phases: in the urgent term, which requires that work be started in the first year; and throughout the four-year tenure of the Government. For the **Urgent Policies Section**, greenhouse gas mitigation is one of nineteen urgent policies-in-priority set by the Government, which is stated as follows:

Policy Statement of the Royal Thai Government

1. Urgent policies to be carried out in the first year

1.19 Expedite measures and projects to mitigate the impact of global warming crisis by promoting and supporting the participation of the public, private business and communities to build consciousness on conservation of natural resources, particularly the cultivation and restoration of forest resources, and supporting use of alternative energy from household agricultural by-products **to reduce the emission of greenhouse gases.**"

Source: Office of the Prime Minister (2008)

Whereas in the **Economic Policy Section**, greenhouse gas mitigation is also emphasized, as follows:

Policy Statement of the Royal Thai Government

3. Economic Policy

3.4 Energy Policy

3.4.5 Promote development, production, and use of energy concurrently with environmental conservation. Promote development of clean energy, **including giving importance to the management of greenhouse gases in order to help alleviate global warming.**"

Source: Office of the Prime Minister (2008)

5.2.2 The 10th National Economic and Social Development Plan 2007 – 2011

In the 10th National Economic and Social Development Plan 2007 – 2011, supporting of greenhouse gas mitigation, CDM and sustainable development is clearly stated in Chapter 4: Strategy to restructure economy toward balance and sustainability, as follows:

The 10th National Economic and Social Development Plan 2007 - 2011

3.2 Developing decent environment to upgrade quality of life and sustainable development

2) **Restructuring the economy toward more balance and sustainability** through 5-year investment direction of the Tenth Plan.

(2.5) Control air pollution emitted from transportation, industrial and construction sectors, open burning, as well as emission of greenhouse gases which cause global warming and climate change. This can be achieved by: improving pollution-free mass transportation systems, such as sky train; promoting uses of clean engine, clean energy especially in public transportation; increasing urban green space; **and promoting the Clean Development Mechanism – CDM.”**

Source: Office of National Economic and Social Development Board (2008)

5.2.3 The National Strategic Plan on Climate Change 2008 – 2012

In the National Strategic Plan on Climate Change 2008 – 2012, approved by the Cabinet in January 2008, greenhouse gas mitigation is stated in Strategy 2: Promote greenhouse gas mitigation activities based on sustainable development, as follows:

The National Strategic Plan on Climate Change 2008 - 2012

STRATEGY 2: Promote greenhouse gas mitigation activities based on sustainable development

Goal: Reduce greenhouse gas emission and promote clean technologies

- Guidelines**
- Promote greenhouse gas mitigation in the energy sector through improving energy efficiency, promoting renewable energy
 - Promote greenhouse gas mitigation in the waste sector
 - Promote greenhouse gas mitigation in the industrial sector
 - Promote greenhouse gas mitigation in the agricultural sector
 - Increase carbon sinks
 - Develop and promote mechanisms that support clean technology development

Source: Office of Natural Resources and Environmental Policy and Planning (2008)

5.2.4 Vision Statement of Thailand Greenhouse Gas Management Organization

In the Vision Statement of Thailand Greenhouse Gas Management Organization (Public Organization) (TGO), it clearly states that TGO is the organization to lead Thailand “Towards a Low-Carbon Society Based on Sustainable Development”. TGO is also an implementing agency established for being a Secretariat Office of Thailand’s Designated National Authority for CDM (DNA-CDM) to approve an issuance of a Letter of Approval for CDM projects in Thailand, as well as provide services on carbon marketing, greenhouse gas information centre, capacity building and outreach on greenhouse gas mitigation and CDM.

5.2.5 Board of Investment of Thailand (BOI) policies on investment priority

Concerning policies from the Board of Investment (BOI) of Thailand, investment priority and privileges are set, as follows:

Board of Investment of Thailand (BOI) policies

The BOI places priority on promoting the following types of project:

- Agriculture & agricultural products
- Project involvement in technological & human resource development
- Public utilities & Infrastructure
- Environmental protection & conservation
- Targeted industries

The BOI shall announce the list of priority activities or industries.

Such project will be entitled to the following privileges:

- Exemption of import duty on machinery regardless of location
- Corporate income tax exemption of eight years, regardless of location
- Other privileges entitled for each zone.

Source: Board of Investment of Thailand (2008)

Implementation to the UNFCCC and the Kyoto Protocol on **greenhouse gas mitigation in Southeast Asia** also has strong implications addressed through the set up of DNA CDM and development of CDM projects activities in these countries. Potential of greater contribution is yet to be explored through capacity development programmes, institutional strengthening and international cooperation.

5.3 Issues and Problems to be Solved

Capacity of relevant stakeholders of GHG mitigation and CDM always remain major problems for a success its implementation in developing countries. Particularly, in Southeast Asian countries, there are common problems to be solved, for instance:

- Lack of staff;
- Lack of technical knowledge;
- Lack of expertise; and more importantly,
- Lack of budget support.

Therefore, capacity development for human resources and institutional strengthening are especially important issues and key success for balancing Sustainable Development and facilitating GHG mitigation in Southeast Asian countries. Each country in the region also has different levels of financial status, expertise, human resource and capabilities to facilitate CDM and GHG mitigation in their own countries.

These need a systematic, expertise and continuing approaches, particularly on financial and technical basis.

In order to remove such barriers, **pooling capacity building resources as to set up the ‘Regional Training Centre on GHG mitigation’** in Thailand and provide training courses, capacity development programmes and outreach for GHG mitigation **would offer a common excellent opportunity for capacity development and institutional strengthening for Thailand and countries in this region.**

5.4 Existing development activities in the sector

In Thailand, existing development activities in capacity development and institutional strengthening on CDM and greenhouse gas mitigation are through partnership programmes and events among TGO and several partners, which include:

Capacity building activities arranged by TGO and partnership agencies

Date	Issues	Activity focus		Target Group	Participants/ Booth visitors	Host Agency	Pattern
		CDM	GHG				
5-8/6/2008	World Environment Day 2008 “CO ₂ , Low Carbon, Kick the Habit” @ Impact Exhibition Hall	x	x	Student and General public	1,000	<ul style="list-style-type: none"> • TGO • Ministry of Natural Resources & Environment 	1. Host a seminar on Global Warming, GHG Mitigation and CDM 2. <i>Exhibitor</i>
16-17/6/2008	Seminar on “Eastern Local Administrative Organizations Change from Develop CDM Project” @ Mercure Hotel, Chonburi Province	x		Eastern Local Administrative Organization Officials	150	<ul style="list-style-type: none"> • TGO • UNDP • Regional Environment Office 10 	1. Seminar Speaker by TGO Executive Director and Deputy (Chaiwat) 2. <i>Exhibitor</i>
20-22/6/2008	Public Organization... Vision Shift @ 7 th Floor, World Trade Center	x	x	Student and General public	3,000	<ul style="list-style-type: none"> • Public Organizations • Office of the Public Sector Development Commission 	<i>Exhibitor</i>

Date	Issues	Activity focus		Target Group	Participants/ Booth visitors	Host Agency	Pattern
		CDM	GHG				
25/6/2008	Seminar on 'CDM procedure in energy sector to resolve Global warming problem' @ Twin Tower Hotel	x		Officials from State Agency and Private Organization in Energy Sector and General public	100	<ul style="list-style-type: none"> Department of Alternative Energy Development & Efficiency 	1. Seminar Speaker by Deputy Director (Chaiwat) 2. <i>Exhibitor</i>
1/7/2008	Open ceremony Photo Contest "greenhouse gas and global warming." @ Siam Paragon		x	Student and General public	50	<ul style="list-style-type: none"> TGO World Bank 	<i>Photo Exhibition</i>
7-8/7/2008	Seminar on 'Integrated Capacity Strengthening for Clean Development Mechanism (ICS-CDM) in Thailand' @ P.M.Y Beach Resort, Rayong Province	x		Entrepreneur, Consultant Company and financial institution	200	<ul style="list-style-type: none"> TGO TEI EU Industrial Estate Authority of Thailand 	1. Seminar Speaker by TGO Executive Director 2. <i>Exhibitor</i>
15/7/2008	Press Conference 'Carbon Label' @ Amarin Plaza		x	Mass Media	30	<ul style="list-style-type: none"> TGO TEI 	1. Press conference by TGO Executive Director 2. <i>Exhibitor</i>
29/7/2008	Thailand Environment Institute 15 Anniversaries @ Impact		x	Student and General public	1,700	<ul style="list-style-type: none"> TEI 	1. Seminar Speaker by Deputy Director (Chaiwat) 2. <i>Exhibitor</i>
31/7 – 3/8/2008	Industrial Sourcing Fair 2008 @ BITEC Exhibition Centre	x		Student and General public	1,000	<ul style="list-style-type: none"> SE-ED 	1. Seminar Speakers by Deputy Director (Chaiwat) and Dr. Phreutipa 2. <i>Exhibitor</i>

Date	Issues	Activity focus		Target Group	Participants/ Booth visitors	Host Agency	Pattern
		CDM	GHG				
5/8/2008	Seminar on 'CDM Projects Preparation and Implementation of Monitoring Procedures' @ Siam City Hotel	x		PDD Developer	110	<ul style="list-style-type: none"> • TGO • Asiatica 	Seminar Speaker by TGO Executive Director
7-8/8/2008	Policy, Technology and regulation to buy electricity from VSPP @ Rama Garden Hotel	x	x	Interested persons in Policy, Technology and regulation to buy electricity from VSPP	100	<ul style="list-style-type: none"> • IEEE • Provincial Electricity Authority 	<i>Exhibitor</i>
8-22/8/2008	National Sciences and Technology Week 2008 @ BITEC	x	x	Student and General public	100,000	<ul style="list-style-type: none"> • Ministry of Science and Technology 	<i>Exhibitor</i>
18/8/2008	Press Conference 'Thailand Carbon Credit Situation and Carbon Label Project' @ Ministry of Natural Resources and Environment	x	x	Mass Media and organizations in Ministry of Natural Resources and Environment	50	<ul style="list-style-type: none"> • TGO • Ministry of Natural Resources and Environment 	1. Press conference by TGO Executive Director and Deputy (Prasertsuk) 2. <i>Exhibitor</i>
22/8/2008	Thailand Industrial help reduce Global Warming @ Thai Army Club	x	x	Industrial Entrepreneur	500	<ul style="list-style-type: none"> • Department of Industrial Works 	1. Seminar by TGO Executive Director 2. <i>Exhibitor</i>
27-28/8/2008	Thai Airway help reduce Global Warming by ISO 14001 @ Suvarnabhumi Airport		x	Officials of Thai Airway Company and other agencies in Suvarnabhumi Airport	200	<ul style="list-style-type: none"> • Thai Airway International Public Company Limited 	<i>Exhibitor</i>

6. Outline of the Project

6.1 Overall Goal

To stimulate implementation and knowledge exchange on greenhouse gas mitigation through capacity development and institutional strengthening programmes, which will lead to awareness and greenhouse gas emission reduction activities from stakeholder groups in Thailand and Southeast Asian country members.

6.2 Project Purpose

Capacity development for human resources and institutional strengthening on GHG mitigation and CDM for TGO, CDM stakeholders in Thailand and Southeast Asian countries. Specific purposes are categorized into 3 groups of activities as follows:

Activity Group A	Capacity development on CDM & GHG Mitigation for TGO personnel (DNA CDM office) <ol style="list-style-type: none"> 1. To provide capacity building (Training-of-trainers) for TGO's CDM service team 2. To provide capacity building and institutional strengthening for TGO staffs, TGO Board, and committees on CDM and GHG mitigation policy and implementation
Activity Group B	Capacity development on CDM & GHG Mitigation for stakeholders in Thailand <ol style="list-style-type: none"> 1. To set up of the 'Regional Training Centre on GHG mitigation' in Thailand 2. To set up curriculums of capacity building programs on GHG mitigation and CDM for TGO, and CDM stakeholders in Thailand 3. To study and develop publications and outreach on CDM, GHG mitigation and Carbon Market 4. To provide training, workshop and activities as capacity building programs for stakeholder participants on CDM and GHG mitigation
Activity Group C	Capacity development on CDM & GHG Mitigation for stakeholders in Southeast Asia <ol style="list-style-type: none"> 1. To provide capacity building activities for stimulating CDM and GHG mitigation for stakeholders in Southeast Asian countries, particularly the Least Developed Countries (LDC) to the UNFCCC 2. To provide information and knowledge exchange, and a networking platform among countries in the Southeast Asian Region through capacity building programs

Quantitative target participants to the proposed project: Expected of **1,300 participants per year; or 2,600 participants at end of the 2-year project.**

6.3 Outputs

6.3.1 Target Groups & Expected Outputs of the proposed project are :

Activity Group A Capacity development on CDM & GHG Mitigation for TGO personnel (DNA CDM office)

Target Group: TGO personnel

Target Group A	Expected achievements	
(Expected 45 participants/year)	Participants/ Year	Expected output
A.1) TGO staffs on policy related issues, TGO Board and Committees	20	Capacity built for TGO Board, Committees, and policy related staffs, which are CDM & GHG mitigation policy driven mechanisms in Thailand through appropriate activities i.e. training, study visit, and information exchange meeting
A.2) TGO staffs on CDM service team, capacity building, awareness raising & outreach	5	Capacity built on CDM & GHG mitigation for staffs at TGO's Capacity Building & Outreach Centre, which will bring further great impacts on knowledge distribution. Outputs include: <ul style="list-style-type: none"> ▪ Training-of-trainer, ▪ Curriculum & Training courses set up, ▪ CDM & GHG mitigation Hand-outs and Publications in Thai/English languages, ▪ GHG mitigation learning centre, kits and materials
A.3) TGO staffs on project analytical process & monitoring	10	Capacity built for staffs at TGO's Project Review & Monitoring Office. Outputs include Technical Trainings on project review, monitoring and related issues
A.4) TGO staffs on carbon market	5	Capacity built and materials for staffs at TGO's Investment and Marketing Office. Outputs include Technical Trainings on carbon market and related issues.
A.5) TGO staffs on GHG information centre & project database	5	Capacity built on Database System, website, and materials in Thai/English language for staffs at TGO's GHG Information Centre

Activity Group B Capacity development on CDM & GHG Mitigation for stakeholders in Thailand

Target Group: CDM & GHG mitigation stakeholders in Thailand

Target Group B (Expected 1,200 participants/year)	Expected achievement Participants/ year	Expected output
B.1) Public sector officers related to GHG mitigation and CDM policy and implementation i.e. Ministry of Finance, Board of Investment of Thailand, Ministry of Natural Resources and Environment, Ministry of Energy, Ministry of Transport, Ministry of Industrial Works, Ministry of Agriculture and Cooperatives, etc.	100	Knowledge exchange & capacity built for relevant public sector officers, who are <u>relevant to GHG mitigation policy and implementation in their Ministries/ Agency</u> . Outputs include: <ul style="list-style-type: none"> ▪ Training/ Workshop ▪ Hand-out/ Publications ▪ Database of participants
B.2) Local government agencies related to CDM and GHG mitigation implementation i.e. Provincial Administration, Local Government Organization, Municipalities, etc.	400	Knowledge exchange & capacity built for relevant local government agency officers, who are <u>relevant to, or have authority on CDM project and GHG mitigation policy and implementation at the local level</u> . Outputs include: <ul style="list-style-type: none"> ▪ Training/ Workshop ▪ Hand-out/ Publications ▪ Database of participants
B.3) Academic sector i.e. university lecturer, school teacher in related areas of CDM and GHG mitigation (in central area and in the regions). This target group can provide various major roles on knowledge distribution, expertise recommendation to policy-makers, consultancy services to project developers, as well as education and awareness raising to society and students.	200	Knowledge exchange & capacity built for academic people at the university, and school levels, who are <u>relevant to CDM project development (academic institute with consultant service), and GHG mitigation research and teachings</u> . Outputs include: <ul style="list-style-type: none"> ▪ Workshop ▪ Hand-out/ Publications ▪ Database of participants/ Expert Roster
B.4) NGOs and Community leaders Better knowledge and correct information for NGOs and community leaders will help avoid problems from misconception/ misunderstanding about CDM and GHG mitigation activities, but instead, bring good results for public participation and awareness on GHG mitigation.	50	Knowledge exchange & capacity built for NGOs and community leaders, who are <u>relevant to knowledge distribution and public participation, changing habits on GHG mitigation activities</u> . Outputs include: <ul style="list-style-type: none"> ▪ Workshop & Study visit ▪ Hand-out/ Publications ▪ Database of participants

Activity Group B Capacity development on CDM & GHG Mitigation for stakeholders in Thailand

Target Group: CDM & GHG mitigation stakeholders in Thailand

Target Group B	Expected achievement	
	Persons/ year	Expected output
B.5) Financial sector i.e. banks, financial institutes, insurance companies	50	Knowledge exchange & capacity built for financial sector/ bankers, who are <u>relevant to CDM project risk assessment, loans, insurance, and carbon finance</u> . Outputs include: <ul style="list-style-type: none"> ▪ Workshop ▪ Hand-out/ Publications ▪ Database of participants
B.6) Media sector i.e. TV, radio, newspaper, magazines	50	Knowledge exchange & capacity built for media sector, who are <u>relevant to public communications for CDM & GHG mitigation</u> . Outputs include: <ul style="list-style-type: none"> ▪ Workshop/ Site visit/ Activity ▪ Hand-out/ Publications ▪ Database of participants
B.7) Private sector i.e. potential CDM developers, GHG mitigation project developers, consultants	300	Knowledge exchange & capacity built for private sector, who are: <ul style="list-style-type: none"> ▪ <u>Potential CDM developers,</u> ▪ <u>Potential to GHG mitigation activities,</u> ▪ <u>Consultants.</u> Outputs include: <ul style="list-style-type: none"> ▪ Training/ Workshop ▪ Hand-out/ Publications ▪ Database of participants
B.8) Professional lawyers i.e. Judge, Attorney, business lawyer	50	Knowledge exchange & capacity built for professional lawyers <u>both in public and private sectors, who are relevant to legal case, lawsuit, legislative authority, and policy recommendation on legal aspect</u> . Outputs include: <ul style="list-style-type: none"> ▪ Workshop/ Site visit ▪ Hand-out/ Publications ▪ Database of participants

Activity Group C Capacity development on CDM & GHG Mitigation for stakeholders in Southeast Asia
Target Group: CDM & GHG mitigation stakeholders in Southeast Asian countries

Target Group C	Expected achievement	
(Expected 55 participants/year)	Participants/ year	Expected output
C.1) Public sector officers related to GHG mitigation and CDM policy and implementation in Southeast Asian countries, particularly Least Developed Countries (LDC) to the UNFCCC <u>Country</u> i.e. Cambodia, Lao PDR, Vietnam, Philippines, Malaysia, Indonesia <u>Agency</u> i.e. Ministry of Natural Resources and Environment, Ministry of Energy, Ministry of Transport, Ministry of Industrial Works, Ministry of Agriculture and Cooperatives, Ministry of Science and Technology	20	Knowledge exchange & capacity built for relevant public sector officers in Southeast Asian countries, who are <u>relevant to GHG mitigation & CDM policy and implementation in their Ministries/ Agency.</u> Priority of Target Group: Public sector officers from LDC countries Outputs include: <ul style="list-style-type: none"> ▪ Training/ Workshop ▪ Hand-out/ Publications (English/ Local languages) ▪ Database of participants
C.2) Academic sector i.e. university lecturer, school teacher in related areas of GHG mitigation. This target group can provide various major roles on knowledge distribution, expertise recommendation to policy-makers, consultancy services to project developers, as well as education and awareness raising to society and students.	20	Knowledge exchange & capacity built for academic people at the university, and school levels, who are <u>relevant to GHG mitigation research and teachings.</u> Outputs include: <ul style="list-style-type: none"> ▪ Workshop ▪ Hand-out/ Publications ▪ Database of participants/ Southeast Asian Expert Roster on GHG mitigation
C.3) Media sector i.e. TV, radio, newspaper, magazines	15	Knowledge exchange & capacity built for media sector, who are <u>relevant to public communications for CDM & GHG mitigation.</u> Outputs include: <ul style="list-style-type: none"> ▪ Workshop/ Site visit/ Activity ▪ Hand-out/ Publications (English/ Local languages) ▪ Database of participants

6.3.2 Interactive Learning Station on Global Warming & GHG Mitigation

It could be a corner/compact size of learning station, or wall-attached station for encouraging a learning process on the global warming and greenhouse gas mitigation issues. The learning station is to be installed at the TGO office area.

6.4 Area to be covered by the Project

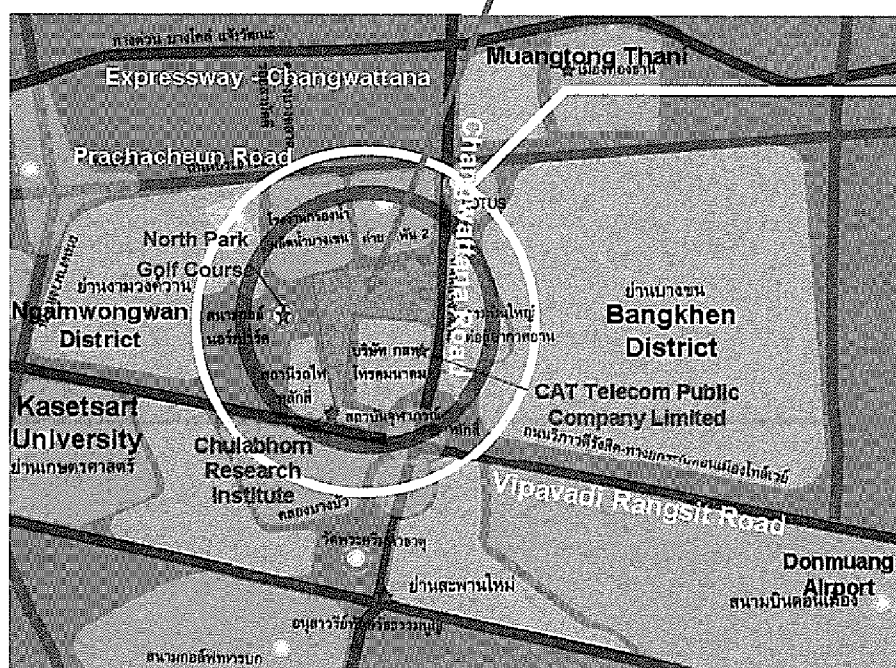
Area to be covered by the Project is at the new location of TGO office. In this regard, the Cabinet, in December 2007, decided a new location for TGO office to be relocated to **the Changwattana Government Office Complex**, on Changwattana Road, Laksi District, Bangkok (A map is as shown below). Location of the Changwattana Government Office Complex is:

North	Changwattana Road
South	Adjacent to the North Park Golf Course
East	CAT Telecom Public Company
West	Private lands and the Metropolitan Waterworks Authority

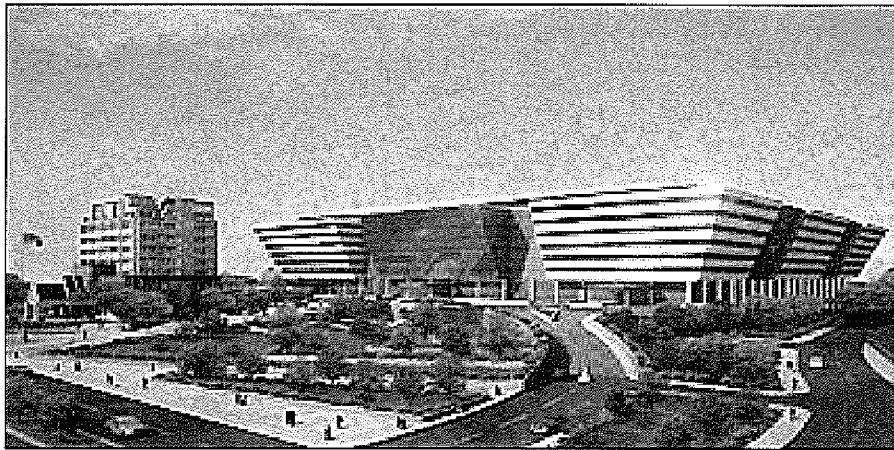
Inside the Government Office Complex, facilities include car park, banks, hotel (government rates) and shopping mall. Every government agencies that move to the Complex have to pay the estate management for office space rental, electricity, telephone and internet connection costs. The Complex just finished its construction in July 2008, the whole office complex is designed to be **eco-building, with energy efficiency and co-generation facilities**. Pictures of the Complex are as shown below.

TGO will be relocated in December 2008, and occupy around 3,000 square metres for the whole office space, in which some areas will be provided for a set up of the “**Regional Training Centre on GHG Mitigation**”.

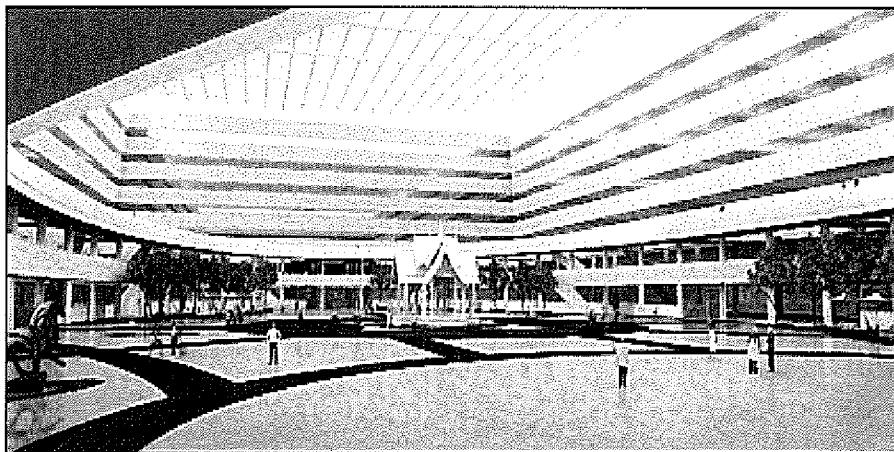
Map shows a new location of TGO office located on Changwattana Road (at Changwattana Government Office Complex)



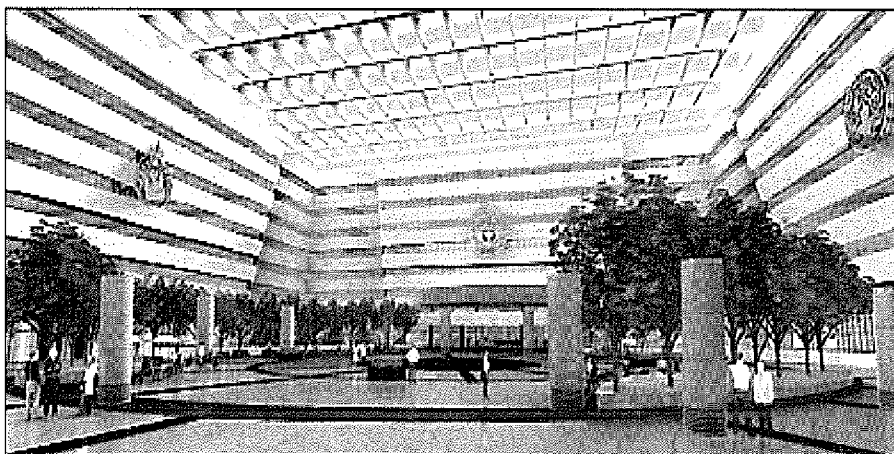
Pictures below illustrate the **Changwattana Government Office Complex**.
TGO office will be located on the 9th floor of Auditorium B.



*Entrance of
the Complex*



Auditorium B



Auditorium A

6.5 Project Activities

6.5.1 Expected Budget from JICA : US\$ 2 million

6.5.2 Activity Content :

Activity content for training courses at the “Regional Training Centre on GHG Mitigation” are categorized into **15 modules**. Each target group can be personalized to modules as appropriate to their interest. Tentative Modules for training are as follows:

Module 1 : Background knowledge on global warming, climate change, CDM and GHG mitigation

Example of contents:

- ❖ *United Nations Framework Convention on Climate Change*
 - Global climate change issues – GHGs, their consequences and mitigation
 - Rio Agreement & Kyoto Protocol – Thai and international perspective
 - Commitment by Annex I countries
 - Inventory by non-Annex I countries
 - Marrakech Accords and the Flexible Mechanisms
 - Current status of Kyoto Protocol ratification
- ❖ *CDM Projects – briefly on the business drill*
 - Means of financing
 - The market for Certificates, the buyers and the sellers
- ❖ *CDM Projects*
 - What is a CDM project?
 - CDM project cycle in general
 - What is in it for companies and governments
 - Eligible project types
 - Additionality
 - Eligible project Proponents
 - Status of CDM in Thailand
- ❖ *CDM Framework*
 - Document formats and terminology
 - Baseline and additionality
 - Sustainability – national criteria
 - IEE/ EIA
 - Public participation
 - DOEs - validation and verification
 - Approved CDM methodologies to date

- ❖ *Designated National Authority.*
 - The role of the Thai DNA
 - National CDM criteria and requirements
- ❖ *CDM Financial Aspects*
 - Transaction cost
 - Possible financial contribution of CERs
 - Global demand and supply of CERs.
 - Price of CERs and market risks
- ❖ *Pros and Cons of CDM project Development*

Module 2 : Project Idea Note (PIN) and Project Design Document (PDD) Development

Example of contents:

- ❖ *Feasibility study and Project Idea Note*
 - Formats and purpose
 - Project boundaries
 - Preliminary estimation of CO₂(e) reductions and leakages
- ❖ *Eligibility criteria for CDM projects*
 - Eligible greenhouse gases and their Global Warming Potential
 - Host Country criteria
 - Eligible project categories
 - Eligible project proponents
 - Other key criteria
- ❖ *Project Design Document (PDD) Preparation*
 - Formats and purpose
 - General description of the project activity
 - Title and description of the project
 - Project participants
 - Project categories
 - Technology to be employed by the project activity
 - Public funding of the project activities
 - Baseline methodology and assessment of additionality
 - Duration of the project activity
 - Monitoring methodology and plan
 - Environmental impacts
 - Stakeholder comments
- ❖ *Workshop on PIN and PDD Development*

Module 3 : Baseline, Additionality, and Validation

Example of contents:

- ❖ *Projects size*
 - Projects larger than 15 MW
 - Projects smaller than 15 MW
- ❖ *Definition of project boundaries*
- ❖ *Baseline*
 - Baseline methodologies.
 - Calculation or determination of baseline emissions
 - Use of approved baselines
 - Submission of a new baseline methodology
 - Approval of new methodologies
- ❖ *Justification of and application for approval of baseline methodology*
- ❖ *Additionality*
 - Establishing difference to Business as Usual:
Project barriers (Technical, financial, common practice, others)
What will happen in the absence of the project
 - Project emissions avoided by sources
 - Determining of leakages
 - Summing project activity emissions
- ❖ *Calculation of emission reduction for certification*
- ❖ *Interaction with Designated Operational Entity*
 - Level of documentation
 - Costs
- ❖ *Validation by the Designated Operational Entity*
 - Interaction with the DOE
 - Payments
- ❖ *Workshop on Baseline and Additionality*

Module 4 : Monitoring and Evaluation of CDM Project

Example of contents:

- ❖ *Name and reference of approved monitoring methodology applied to the project activity, or:*
 - Establishing a Monitoring Methodology
 - Project specifics

- ❖ *Justification of the choice of the methodology and make probable that it applicable to the project activity*
 - Points of monitoring
 - Data to be monitored
 - Technology employed
 - Data capture
 - Data processing
- ❖ *Administrative procedures*
 - Organizational set up
 - Name of person/entity determining the monitoring methodology
- ❖ *Presentation of a Designated Operational Entity – verification*
- ❖ *Workshop on Monitoring Methodology Development*

Module 5 : Validation Roles of Designated Operational Entity (DOE) and rules for registration as a DOE

Example of contents:

- ❖ *Role of Designated Operational Entity for project validation*
 - PDD public available through Secretariat
 - Validation of PDD
 - Submission of validation report to the Executive Board
- ❖ *Role of Designated Operational Entity for project verification through operation*
 - Verification of the monitoring results
 - Submission of report to the Executive Board
- ❖ *Submission of application to register as a DOE*
- ❖ *Presentation of a Designated Operational Entity – validation*
 - Methods, costs, reports
- ❖ *Workshop on PDD Validation*

Module 6 : Carbon Credit and International Transaction Log System

Example of contents:

- ❖ *Getting to know : Types of Account and function*
 - Pending account
 - Holding account
 - Canceling account
 - Transferring account

- ❖ *Accounting System Set-up*
- ❖ *Rule and Procedure for accounting management*
- ❖ *Workshop on Accounting Set-up*

Module 7 : Carbon Finance, Trading and Carbon Market

Example of contents:

- ❖ *Overview of CDM Carbon Finance/Trading*
 - Transaction cost
 - Possible financial contribution of CERs
 - Carbon buyers and brokers
- ❖ *Update Status of CDM Carbon Market*
 - Global demand and supply of CERs.
 - Price of CERs and market risks
- ❖ *Other Mechanisms of Carbon Trading*

Module 8 : Laws and Legal Aspects on CDM and GHG Mitigation

Example of contents:

- ❖ *Relevant Laws and Regulations on CDM and GHG Mitigation in Thailand*
- ❖ *Relevant Laws, Policy and Regulations on CDM and Investment in Thailand*

Module 9 : GHG Mitigation - Buildings and Household Sectors

Example of contents:

- ❖ *GHG Emission Trends from Buildings and Household Sectors*
- ❖ *Technological & Economic Potential of GHG Mitigation Options*
- ❖ *Barriers, Opportunities & Market Potential of Technologies & Practices*
- ❖ *Hand-on-training workshop: How to write a GHG mitigation project in the sector*

Module 10 : GHG Mitigation - Waste Minimization and Management

Example of contents:

- ❖ *GHG Emission Trends from Waste Sector*
- ❖ *Technological & Economic Potential of GHG Mitigation Options*
- ❖ *Barriers, Opportunities & Market Potential of Technologies & Practices*
- ❖ *Hand-on-training workshop: How to write a GHG mitigation project in the sector*

Module 11 : GHG Mitigation – Transport Sector

Example of contents:

- ❖ *GHG Emission Trends from Transport Sector*
- ❖ *Technological & Economic Potential of GHG Mitigation Options*
- ❖ *Barriers, Opportunities & Market Potential of Technologies & Practices*
- ❖ *Hand-on-training workshop: How to write a GHG mitigation project in the sector*

Module 12 : GHG Mitigation – Energy and Industrial Sectors

Example of contents:

- ❖ *GHG Emission Trends from Energy and Industrial Sectors*
- ❖ *Technological & Economic Potential of GHG Mitigation Options*
- ❖ *Barriers, Opportunities & Market Potential of Technologies & Practices*
- ❖ *Hand-on-training workshop: How to write a GHG mitigation project in the sector*

Module 13 : GHG Mitigation – Agriculture, Land use change and Forestry

Example of contents:

- ❖ *GHG Emission Trends from Agriculture, Landuse Change and Forestry*
- ❖ *Technological & Economic Potential of GHG Mitigation Options*
- ❖ *Barriers, Opportunities & Market Potential of Technologies & Practices*
- ❖ *Hand-on-training workshop: How to write a GHG mitigation project in the sector*

Module 14 : UNFCCC Structure and Negotiations

Example of contents:

- ❖ *Climate Change Mitigation and Sustainable Development*
- ❖ *Greenhouse Gas Emission (GHG) Trends*
- ❖ *GHG Mitigation Scenarios and Implications*
- ❖ *Roles of IPCC and the Latest Summaries*
- ❖ *UNFCCC and the Kyoto Protocol : Structure and Process of Negotiations*
- ❖ *Negotiation Updates*

Module 15 : Carbon Footprint

Example of contents:

- ❖ *Introduction on Carbon Footprint & Carbon Neutral Concept*
- ❖ *Information on Carbon Footprint Calculation*
- ❖ *Good Practice Guidance on Reducing Carbon Footprint*
- ❖ *Workshop: How to reduce your carbon footprint*

6.6 Input from the Recipient Government

6.6.1 Counterpart personnel

(1) Project Manager

Name: Mrs. Prasertsuk CHAMORNMARN
 Position: Deputy Executive Director of TGO
 Tel. No.: + 66 2 615 8795 ; +662 615 8791 /3
 Fax No. +66 2 615 8794
 E-Mail: sertsuk@tgo.or.th

(2) Support Staff : 5 persons

6.6.2 Office Space & Running Expenses

TGO will provide a budget of 4 Million Baht (for the proposed 2-year project operation), to which the following expenses are included:

6.6.2.1) Office Space for:

- (1) JICA experts and the Project's office;
- (2) Set up of the "Regional Training Centre on GHG Mitigation"

These are to be located at the new TGO office location in **Changwattana Governmental Office Complex**. TGO will pay for maintenance costs of the office space as mentioned above to the Complex's property management, which are applied to every organizations/agencies located in the Complex.

6.6.2.2) Maintenance Costs & Running Expenses:

(1) Rental costs of the JICA-Thai Project's office space and for the "Regional Training Centre on GHG Mitigation"

(2) Office Facilities for JICA experts on the project, i.e.

- Tables,
- Chairs,
- Telephone,
- Fax machine,
- Stationeries

(Note: Any equipments and facilities which are parts of Training/Workshop/Activity, and/or as the outputs of the project are not included)

(3) Running Expenses, i.e.

- Electricity,
- Water,
- Internet connections,
- Domestic telephone call expenses

6.7 Input from the Japanese Government6.7.1 Expert in priority

Field of Expert	Duration & Activity Type			
	IHE: In-house Expert OHT: On-hand Training Expert			
	Year 1		Year 2	
	IHE	OHT	IHE	OHT
(1) Training, Curriculum Development & Evaluation	x			
(2) CDM project development	x	x	x	x
(3) Carbon Finance/ Carbon Market	x	x	x	x
(4) GHG and database system	x			
(5) Monitoring and Evaluation of CDM Project	x	x		x
(6) Carbon Credit and International Transaction Log System	x	x		x
(7) GHG mitigation - energy and industrial sectors	x	x	x	x
(8) GHG mitigation - waste minimization & management	x	x	x	x
(9) GHG mitigation - transport sector	x	x	x	x
(10) GHG mitigation - building and household sectors	x	x		x
(11) GHG mitigation - agriculture, land use change & forestry	x	x		x
(12) International environmental laws on the UNFCCC and its negotiation issues		x		x

6.7.2 Number and qualification of Japanese experts/consultants

Expected 5 - 10 in-house experts (could be at different time in a year) to help in setting up training course curriculums, hand-outs, publications according to expected outputs identified in **Activity Group A, B, and C**. Matching qualifications and experience of Japanese experts as identified under items: **Activity Group**; **Contents of Activity**; and **Expert in Priority** are at JICA consideration, as appropriate.

6.7.3 Contents of training (in Japan & in-country) courses and expected input

Contents of training *in Thailand* are as identified in **6.5.2 Activity Content to suit Activity Group A, B and C**.

Input of Japanese Government includes financial support (DSA, Air tickets, Accommodation) for participants from outside Thailand, as identified in **Target Group C** to participate in the capacity development programs in Thailand.

However, contents of training *in Japan* for TGO Staffs, TGO Board and committees (as identified in **Target Group A**) are yet to be best jointly identified by Japanese experts under the project - in order to provide effective outputs of the activity. Suggested topics for training/workshop/activity in Japan include: CDM and Carbon market; GHG Mitigation Best Practices; GHG information Centre; and Public Awareness Raising.

6.7.4 Training and workshops equipments

Equipments and facilities for experts and the training/ workshops/ activities to achieve the expected outputs, for instance:

- LCD projectors
- Computers
- Computer programmes
- Photocopier & Scanner
- Publication related costs/ facilities
- Financial and administration staffs for the project

7. **Implementation Schedule**

Month March Year 2009 to Month March Year 2011

8. **Description of Implementing Agency**

8.1 Budget Allocation of TGO

Budget allocated to TGO, in the current financial year of 2008, is at 30 Million Baht (inclusive of personnel salary and management).

8.2 Number of Staff at TGO

There are 20 TGO staffs since January 2008 (first year of establishment). Number of staff will be extended in the following year, but limited to maximum 40 persons. Organizational structure of TGO is as shown in item 5 - Background of the Project.

8.3 Department/division in charge of the project

TGO Deputy Executive Director (Mrs. Prasertsuk CHAMORNMARN) will be Project Manager. TGO's Capacity Building and Outreach Office (maximum 6 staffs at the office) will be in charge of the proposed project. However, currently there are 2 staffs at the Capacity Building and Outreach Office.

9. **Related Information**

9.1 Prospects of further plans and actions/ Expected funding resources for the Project:

TGO has a concrete plans/action on capacity building and outreach for CDM and GHG mitigation, as it is a part of TGO's roles and responsibilities prescribed in the Royal Decree on Establishment of Thailand Greenhouse Gas Management Organization (Public Organization) B.E.2551 (2007). Therefore, TGO would need to propose for the Royal Thai Government budget on CDM & GHG mitigation capacity building and outreach issues. Therefore, the funding source is mostly from the Royal Thai Government. However, the amount of budget allocation from the Government varies depending on urgent issues. TGO would have to manage the budget allocation to serve all duties and responsibilities in priority of the whole office.

9.2 Projects by other donor agencies, if any:

▪ **TGO has a policy to pay attention to avoid overlapping of cooperation between partnership agencies.** Therefore, the same activity written in this proposed project to JICA has not been requested to any other donor agencies. There have never been any projects/ studies regarding this proposed project - a systematic capacity development and institutional strengthening - before.

▪ **IGES** used to establish small-group CDM workshops (within 30 - 40 participants) for potential CDM developers with TGO, but not yet confirmed continuing program for the next fiscal year of 2009.

▪ **World Bank, UNDP, and consultants** have organized several seminars/ workshop with TGO. However, most of the projects are Half-Day, or One-Day seminars/workshops **to deliver information regarding their programs and services.**

▪ **World Bank** recently launched the Country Development Partnership - Environment 2008 – 2010 (CDP-E) with the Ministry of Natural Resources and Environment. There are many agencies covered in this program including TGO. However, TGO identified CDP-E activities with the World Bank focusing on: (1) Afforestation/Reforestation CDM; and (2) Programmatic CDM. **These are in different focus and topic from topics requested to JICA.**

9.3 Other relevant Projects (Activities in the sector by the recipient government and NGOs), if any:

- none -

9.4 Other relevant information (Available data, information, documents, maps, etc. related to the Project)

- none -

10. Global Issues (Gender, Poverty, Climate change, etc.)

The most commonly discussed topic under the United Nations Framework Convention on Climate Change (UNFCCC) is the reduction in greenhouse gases emission. Every country is all bound by one common responsibility since climate change knows no borders. Each individual effort is a jigsaw part of the whole global picture. If one piece is left out, the picture is incomplete. The same goes for our shared common responsibility on climate change. If one nation fails to do its part, the rest of us would be affected. Thus, cooperation under the UNFCCC and beyond should be respected and implemented.

The proposed project is directly relevant to climate change issue, and capacity development is widely accepted as an important issue in the UNFCCC. The Government of Japan plays significant roles to the implementation of the UNFCCC and Kyoto Protocol. At the same time, the Thai Government also implement on the UNFCCC and CDM under the Kyoto Protocol. This could be reflected from the establishment of TGO, and the National Committee on Climate Change Policy.

The attempts of the Thai Government are also shown in the Governmental Policy Statement; the 10th National Economic and Social Development Plan 2007 – 2011; the National Strategic Plan on Climate Change 2008 – 2012, TGO's Vision Statement.

11. Environmental and Social Considerations

(Please fill in the attached screening format.)

12. Beneficiaries

Populations for which positive changes are intended directly and indirectly by implementing the project are:

- 1) **Public sector officers** i.e. Ministry of Finance, Board of Investment of Thailand, Ministry of Natural Resources and Environment, Ministry of Energy, Ministry of Transport, Ministry of Industrial Works, Ministry of Agriculture and Cooperatives, etc.

This direct beneficiary group is government officer group related to GHG mitigation and CDM policy and implementation, in Thailand & in Southeast Asian countries.

Indirect beneficiary group will be the government, people, and CDM & GHG mitigation developers.

- 2) **Local government agencies** i.e. Provincial Administration, Local Government Organization, Municipalities, etc.

This beneficiary group is related to GHG mitigation and CDM policy and implementation at the local level in Thailand. Understanding of the local government agencies will put forward to the implementation of the UNFCCC and Kyoto Protocol directly and indirectly.

Indirect beneficiary group will be CDM and GHG mitigation developers.

- 3) **Academic sector** i.e. university lecturer, school teacher in related areas of CDM and GHG mitigation

This beneficiary group can provide various major roles on knowledge distribution, expertise recommendation to policy- makers, consultancy services to project developers, as well as education and awareness raising to society and students.

Indirect beneficiary group will be CDM and GHG mitigation developers, students and children.

- 4) **NGOs and Community leaders**

Better knowledge and correct information for NGOs and community leaders will help avoid problems from misconception/ misunderstanding about CDM and GHG mitigation activities, but instead, bring further benefits to people on public participation and awareness on GHG mitigation.

Indirect beneficiary group will be people in locality, and CDM & GHG mitigation developers.

5) **Financial sector** i.e. banks, financial institutes, insurance companies

This beneficiary group is related to financing CDM and GHG mitigation projects.
Better understanding of CDM and GHG mitigation for financial sector.

Indirect beneficiary group will be CDM and GHG mitigation developers.

6) **Media sector** i.e. TV, radio, newspaper, magazines

Direct beneficiary group is media sector people, while indirect beneficiary group will be people who are general public audience.

7) **Private sector** i.e. potential CDM developers, GHG mitigation project developers, consultants

Direct beneficiary group is private sector, especially who are potential project developers.

8) **Professional lawyers** i.e. Judge, Attorney, business lawyer

Direct beneficiary group is professional lawyer group, while indirect beneficiary group will be people, public sector, and private sector.

13. **Security Conditions**

14. **Others**

Signed:  _____

Mr. Sirithan Pairoj-Boriboon

Executive Director

Thailand Greenhouse Gas Management Organization

(Public Organization)

On behalf of the Government of Thailand _____

Date: 4 September 2008

Screening Format (Environmental and Social Considerations)

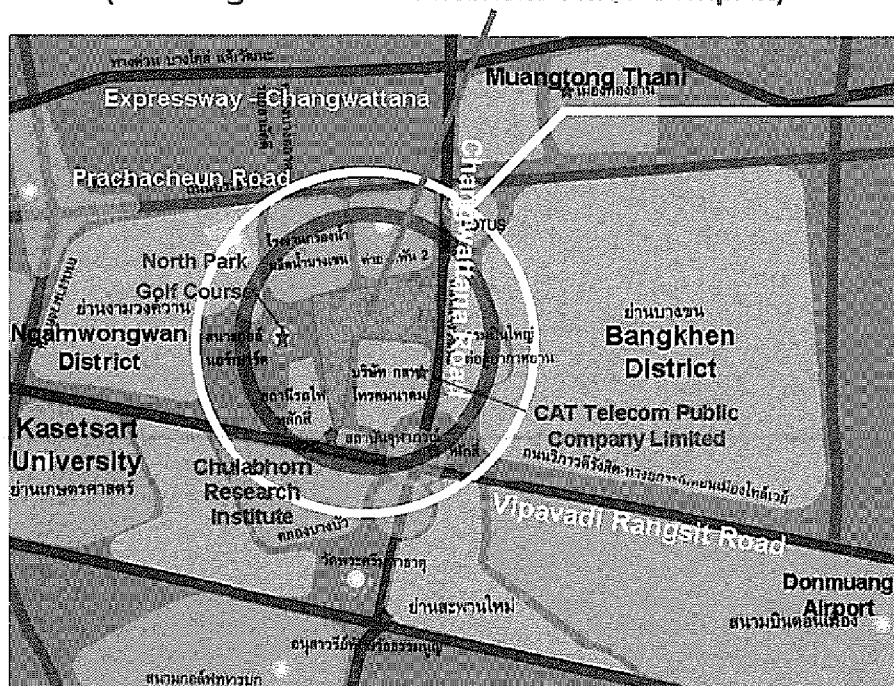
Question 1 Address of a project site

Area to be covered by the Project is at the new location of TGO office. In this regard, the Cabinet, in December 2007, decided a new location for TGO office to be relocated to **the Changwattana Government Office Complex**, on Changwattana Road, Laksi District, Bangkok (A map is as shown below). Location of the Changwattana Government Office Complex is:

<i>North</i>	Changwattana Road
<i>South</i>	Adjacent to the North Park Golf Course
<i>East</i>	CAT Telecom Public Company
<i>West</i>	Private lands and the Metropolitan Waterworks Authority

Inside the Government Office Complex, facilities include car park, banks, hotel (government rates) and shopping mall. The Complex just finished its construction in July 2008, the whole office complex is designed to be eco-building, with energy efficiency and co-generation facilities. **TGO will be relocated in December 2008, and occupy around 3,000 square metres for the whole office space**, in which some areas will be provided for a set up of the “Regional Training Centre on GHG Mitigation”.

Map shows a new location of TGO office located on Changwattana Road (at Changwattana Government Office Complex)



Question 2 Outline of the project

2-1 Does the project come under following sectors?

☒Yes ☐NoIf yes, please mark corresponding items.

- ☐ Mining development
- ☒ Industrial development
- ☐ Thermal power (including geothermal power)
- ☐ Hydropower, dams and reservoirs
- ☐ River/erosion control
- ☐ Power transmission and distribution lines
- ☐ Roads, railways and bridges
- ☐ Airports
- ☐ Ports and harbors
- ☒ Water supply, sewage and waste treatment
- ☒ Waste management and disposal
- ☐ Agriculture involving large-scale land-clearing or irrigation
- ☐ Forestry
- ☐ Fishery
- ☐ Tourism

2-2 Does the project include the following items?

☐Yes ☒NoIf yes, please mark following items.

- ☐ Involuntary resettlement (scale: households, persons)
- ☐ Groundwater pumping (scale: m³/year)
- ☐ Land reclamation, land development and land-clearing (scale: hectors)
- ☐ Logging (scale: hectors)

2-3 Did the proponent consider alternatives before request?

☒Yes: Please describe outline of the alternatives

(The alternative is the TGO will have to set up all the capacity development program, and defends for each year budget allocation from the Government.)

☐No

2-4 Did the proponent have meetings with related stakeholders before request?

☒ Yes ☐ No

If yes, please mark the corresponding stakeholders.

☒ Administrative body

☐ Local residents

☒ NGO

☒ Others (private sector who are interested in developing CDM projects; local government agencies; financial institutions; academic sector; and media sector)

Question 3

Is the project a new one or an on-going one? In case of an on-going one, have you received strong complaints etc. from local residents?

☒ New ☐ On-going (there are complaints) ☐ On-going (there are no complaints)

☐ Others { }

Question 4 Name of laws or guidelines:

Is Environmental Impact Assessment (EIA) including Initial Environmental Examination (IEE) required for the project according to laws or guidelines in the host country?

☐ Yes ☒ No

If yes, please mark corresponding items.

☐ Required only IEE (☐ Implemented, ☐ on going, ☐ planning)

☐ Required both IEE and EIA (☐ Implemented, ☐ on going, ☐ planning)

☐ Required only EIA (☐ Implemented, ☐ on going, ☐ planning)

☐ Others: { }

Question 5

In case of that EIA was taken steps, was EIA approved by relevant laws in the host country?

If yes, please mark date of approval and the competent authority.

<input type="checkbox"/> Approved: without a supplementary condition	<input type="checkbox"/> Approved: with a supplementary condition	<input type="checkbox"/> Under appraisal
--	---	--

(Date of approval: Competent authority:)

☐ Not yet started an appraisal process

☐Others:()

Question 6

If a certificate regarding the environment and society other than EIA, is required, please indicate the title of certificate.

☐Already certified ☐Required a certificate but not yet done

Title of the certificate :()

☒Not required

☐Others ()

Question 7

Are following areas located inside or around the project site?

☐Yes ☒No ☐Not identified

If yes, please mark the corresponding items.

☐National parks, protected areas designated by the government (coast line, wetlands, reserved area for ethnic or indigenous people, cultural heritage) and areas being considered for national parks or protected areas

☐Virgin forests, tropical forests

☐Ecological important habitat areas (coral reef, mangrove wetland, tidal flats)

☐Habitat of valuable species protected by domestic laws or international treaties

☐Likely salts cumulus or soil erosion areas on a massive scale

☐Remarkable desertification trend areas

☐Archaeological, historical or cultural valuable areas

☐Living areas of ethnic, indigenous people or nomads who have a traditional lifestyle, or special socially valuable area

Question 8

Does the project have adverse impacts on the environment and local communities?

☐Yes ☒No ☐Not identified

Reason: ()

Question 9

Please mark related environmental and social impacts, and describe their outlines.

- | | |
|---|---|
| <input type="checkbox"/> Air pollution | <input type="checkbox"/> Social institutions such as social infrastructure and local decision-making institutions |
| <input type="checkbox"/> Water pollution | <input type="checkbox"/> Existing social infrastructures and services |
| <input type="checkbox"/> Soil pollution | <input type="checkbox"/> The poor, indigenous of ethnic people |
| <input type="checkbox"/> Waste | <input type="checkbox"/> Maldistribution of benefit and damage |
| <input type="checkbox"/> Noise and vibration | <input type="checkbox"/> Local conflict of interests |
| <input type="checkbox"/> Ground subsidence | <input type="checkbox"/> Gender |
| <input type="checkbox"/> Offensive odors | <input type="checkbox"/> Children's rights |
| <input type="checkbox"/> Geographical features | <input type="checkbox"/> Cultural heritage |
| <input type="checkbox"/> Bottom sediment | <input type="checkbox"/> Infectious diseases such as HIV/AIDS etc. |
| <input type="checkbox"/> Biota and ecosystem | <input type="checkbox"/> Others () |
| <input type="checkbox"/> Water usage | |
| <input type="checkbox"/> Accidents | |
| <input checked="" type="checkbox"/> Global warming | |
| <input type="checkbox"/> Involuntary resettlement | |
| <input type="checkbox"/> Local economy such as employment and livelihood etc. | |
| <input type="checkbox"/> Land use and utilization of local resources | |

Outline of related impacts:

- | | |
|--|---|
| {
The project is expected to bring positive impacts to better understanding of people regarding global warming and climate change issues.
} | } |
|--|---|

Question 10

Information disclosure and meetings with stakeholders

10-1 If the environmental and social considerations are required, does the proponent agree on information disclosure and meetings with stakeholders in accordance with JICA Guidelines for Environmental and Social Considerations?

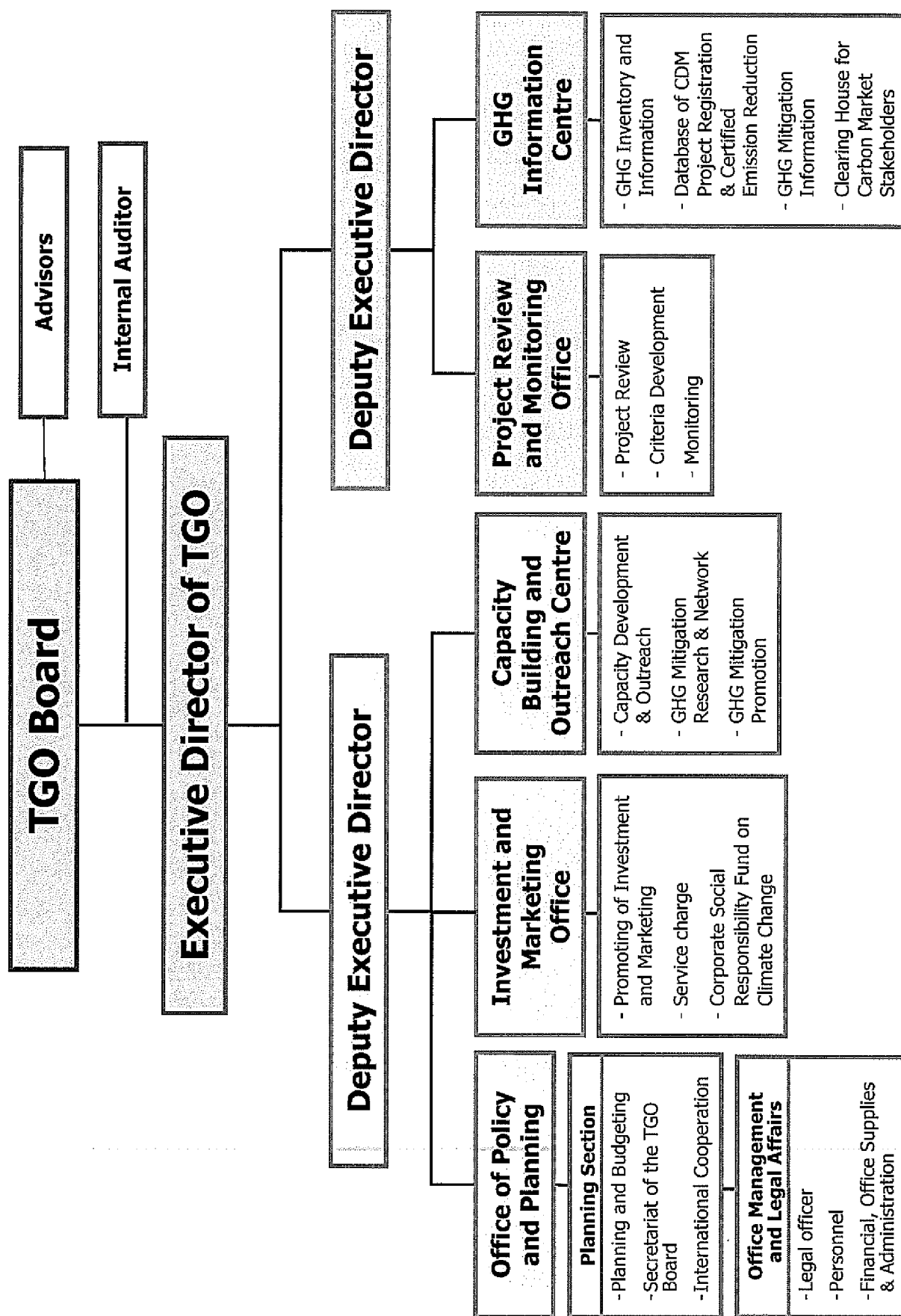
☒ Yes

☐ No

10-2 If no, please describe reasons below.

--

Structure of Thailand Greenhouse Gas Organization (TGO)



**Policy Statement of the Royal Thai Government
of Mr. Samak Sundaravej,
Prime Minister,
to the National Assembly,
Monday 18 February B.E. 2551 (2008)**

Respected Speaker of Parliament,

Pursuant to the gracious royal appointment of myself as Prime Minister, according to the Royal Command dated 29 January 2008, and of the Cabinet, according to the Royal Command dated 6 February 2008;

The Cabinet has now completed the formulation of its policies on the administration of state affairs, based on democratic parliamentary rule with the King as Head of State, and encompassing the fundamental policy approach stipulated in Chapter 5 of the Constitution of the Kingdom of Thailand. The Cabinet therefore wishes to declare the said policies to this joint session of the National Assembly, to apprise the latter of the intent, strategy and policy of the Government, which is committed to building stability, security and progress in economic, social and political and administrative development, and fostering reconciliation for the benefit and happiness of the nation and all Thai people.

Respected Speaker of Parliament,

The Thai economy this year will face at least two serious problems from the global economy: the subprime lending problem of an economic superpower, which has affected financial markets and the economies of other countries around the world; and the problem of crude oil prices on the world market, which are on an upward trend and creating inflationary pressure on the world, including Thailand.

Apart from these immediate problems, the Government also has other important tasks in laying the groundwork for stable and sustainable growth, and supporting the ability of the manufacturing and services sectors to shift towards higher-value-added manufacturing and services to enhance competitiveness, a long-term structural challenge for the country. On the social and environmental fronts, Thai society will start to become an aging society in 2009, and the Thai population, from children to the elderly, is in the position of having to adapt to a knowledge-based society under globalization, even as global warming, natural disasters and natural resource and environmental issues become increasingly important for the economy and quality of life.

Over the next four years, the Government will look after both short and long-term problems, and is committed to the administration of the country under two main principles, which the Government is confident will contribute to the sustainability of the Thai economy and society, as well as establish confidence among Thai and foreign investors and the international community.

First is the fostering of reconciliation among all Thais, who will have to work together in guiding the country through various crises and building a secure foundation for the country's future. This fostering of reconciliation includes the important matter of resolving and healing the problems in the three southern border provinces, leading towards peaceful co-existence and harmony among the local people, and developing the economic potential of the country's South so that it becomes a significant national economic base.

Second is creating balance and immunity for the national economy, which involves all policy aspects, from development of ethical and knowledgeable people, support for long-term savings, promotion of the New Theory of agriculture in suitable areas, step-by-step development of communities that are self-reliant and linked to markets, to the building of energy security, supervision of capital flows, and enhancing the ability to utilize and build on technology in a manner compatible with Thai wisdom, so as to lead to innovation and income generation for the economic system in line with the Sufficiency Economy philosophy, which is the Government's main approach in performing its work according to the fundamental policy approach of the state.

Besides these two principles, the present Constitution attaches importance to public participation in national development and check-and-balance mechanisms to monitor the performance of the public sector to ensure compliance with the principles of good governance. The Government recognizes the importance of this, and will abide by it in carrying out its work.

Respected Speaker of Parliament,

The Government has set key policies for the administration of state affairs to be carried out in two phases: in the urgent term, which requires that work be started in the first year; and throughout the four-year tenure of the Government, as follows:

1. Urgent policies to be carried out in the first year

The Government considers it an urgent necessity to establish harmony and reconciliation in society, suppress narcotic drugs, build investor confidence, revitalize the economy, redress the poverty problem, develop the grassroots economy to enhance its income generating potential, reduce expenditures, create sustainable job opportunities for the people, in particular farmers, labour and small and medium enterprises, and tackle urgent environmental problems. Key policies are to:

1.1 Establish harmony and reconciliation among the nation's people and restore democracy by enhancing the common understanding among the nation's people to foster cohesiveness and solidarity, and abiding by democratic rule with the King as Head of State, to foster cooperation in solving the country's crisis and build political, administrative, social and economic stability, with the people's benefit and happiness as the prime consideration, which will form a secure basis for the country's further sustainable development.

1.2 Resolve the unrest in the southern border provinces by applying His Majesty's approach of "understand, reach, develop" in carrying out security and development efforts, by ensuring congruence with particular local conditions, way of life, culture and popular beliefs, as well as dispensing fairness and justice by emphasizing the participation of all sectors to bring about peace and order, safety of life and property, and build peace and reconciliation in the region as quickly as possible.

1.3 Expedite resolution of the narcotic drugs problem and clamp down on influential persons by adhering to the principle that "Addicts are patients who need treatment, while traffickers need to be punished according to the judicial process." The Government will expedite the suppression of drug trafficking, reduction in the number of drug abusers, and prevent at-risk groups from falling victim to drugs. This would involve cooperation from the local community in conjunction with suppression and just application of law enforcement measures. Legal and judicial measures will be used to cut off all channels for influential persons to acquire ill-gotten gains, whether through illegal logging, drug trafficking, human trafficking or gambling operations, for example.

1.4 Pursue measures to resolve pressing problems faced by people and business operators by maintaining the stability of the baht, prices for consumer goods, and energy prices, at a level that is suitable and fair for both producers and consumers, and arrange for the sales of affordably-priced products to alleviate the suffering of low-income earners.

1.5 Increase the potential of village and urban community funds so that they are a source of revolving funds for investment, employment and vocation generation, income generation and expenditure reduction for people living in communities and for small household enterprises; develop village and urban community funds that have good management to be upgraded to village and community banks.

1.6 Allocate budgets for all villages and communities by population size (Small, Medium, Large - SML) to create opportunities for communities to solve their own problems and develop projects that will generate sustainable revenue, develop community assets, conserve and protect natural resources and the environment in the community in a manner that would efficiently link resource usage among the state, localities and provinces.

1.7 Resume the People's Bank project to improve access of low-income individuals to sources of funds, create funding alternatives and reduce reliance on informal sources of credit, which would give people the opportunity to create employment and generate their own revenue.

1.8 Support the extension of credit to owners of small and medium sized enterprises and community enterprises to create opportunities for employment and revenue generation, utilizing state financial institutions and the Small and Medium Enterprise Development Bank of Thailand.

1.9 Improve the management efficiency of the One Tambon One Product project to enable each community to utilize its resources and local knowledge in developing their products. The Government stands ready to improve the access of communities to new know-how and funding sources, as well as enhance the management and marketing capabilities of communities in order to link local products with national and overseas markets.

1.10 Suspend the debt of small and low-income farmers who have passed the occupational rehabilitation process, to create opportunities for farmers to raise their living standards by having a secure income and livelihood.

1.11 Create a risk insurance scheme for farmers to reduce risk due to damage from natural disasters, and build mechanisms to maintain price stability, at a fair level, for agricultural products.

1.12 Expand the role of the community fix-it centre and vocational training institutes to provide advice and transfer of knowledge in the use, maintenance and repair of occupational equipment and household appliances, and create networks of such centers with communities and businesses to prompt development of innovations and basic quality control and certification systems for community products.

1.13 Create opportunities for the people to have their own housing, for example, the Compassionate Housing, State Welfare Housing and First Home of One's Own projects, particularly in areas where there are transportation linkages between Bangkok and its environs through rapid mass transit systems.

1.14 Expedite the country's important investments, such as the development of the nine rapid mass transit rail lines in Bangkok and its environs, high speed trains, double-tracked trains,

commuter trains and “fishbone” railway networks connecting provinces without passenger and cargo rail service, and improving the capabilities of international airports, for example, to build confidence to drive the economy forward continuously and improve the country’s competitiveness.

1.15 Take measures to reduce the impact of energy prices by speeding up projects promoting the use of alternative energy from natural gas and biofuels such as gasohol and biodiesels; accelerating energy conservation measures and efficient energy use to reduce the oil import burden.

1.16 Restore confidence in investment and promote tourism in Thailand by announcing 2008-2009 as the “Year of Investment” and “Year of Tourism in Thailand.”

1.17 Establish a system governing land ownership and land zoning that is comprehensive and fair, using geo-informatics data in a process that includes community participation so that all people have adequate land to live off and make a living from.

1.18 Expand the acreage of irrigated land and improve the efficiency of the irrigation system by rehabilitating and dredging natural sources of water, including development of ground-surface and underground water sources, by constructing large, medium and small-scale irrigation systems to support the restructuring of the agricultural sector, mitigate the impact of floods and droughts in urban community and agricultural areas, as well as sanitary water supply systems for use and consumption by people in all areas; enhance the efficiency of water distribution by developing various types of irrigation systems, such as piped irrigation.

1.19 Expedite measures and projects to mitigate the impact of the global warming crisis by promoting and supporting the participation of the public, private businesses and communities to build consciousness on conservation of natural resources, particularly the cultivation and restoration of forest resources, and supporting use of alternative energy from household agricultural by-products to reduce the emission of greenhouse gases.

Respected Speaker of Parliament,

With regard to policies to be carried out during this Government’s four-year term, the Government will pursue major policies to administer the country, which appear as policy sections 2 to 8 as follows:

2. Social Policy and Standards of Living

Respected Speaker of Parliament,

The Government attaches importance to the State providing basic guaranteed social services under the provisions of the Constitution, upgrading human and social quality, and having an environment that leads to good quality of life, security in life and the people’s happiness, by undertaking the following:

2.1 Education Policy

2.1.1 Raise the quality of education for the Thai people in an integrated and complementary manner, from primary through higher education, in both formal and informal educational systems, and establish life-long learning.

2.1.2 Develop teachers’ curricula, adjust teacher production and develop teachers of quality and virtue in a manner that is comprehensive, continuous and able to keep up with changes under globalization;

2.1.3 Promote the use of information technology to seriously enhance the efficiency of learning, teaching and acquiring knowledge; arrange for widely available access to high-speed internet; and extensively provide information technology equipment to complement learning and teaching in schools.

2.1.4 Ensure equal access to 12 years of education free of charge, including supporting the indigent, disabled or invalid, or in situations of distress, so that they may also have access to education; increase opportunities for youth to continue their education through lending funds tied to future income; and link this with the policy of producing university graduates in response to the country's need for knowledgeable and capable personnel; and provide supplemental scholarships for both domestic and overseas education;

2.1.5 Support production and development of a work force that is responsive to the structural changes in the manufacturing and services sectors; accelerate the development of a high-quality vocational labour force to enhance the country's competitiveness in such sectors as petrochemicals, software, food, textiles, health and tourism services and logistics management, with cooperation among businesses, educational institutions and specialized institutions; provide professional certification in accordance with international standards.

2.1.6 Expand the role of creative learning through organizations such as the Office of Knowledge Management and Development, a modern library system, or knowledge parks, the National Discovery Museum Institute, the Thailand Creative and Design Centre, a centre for development of sports, music and art, a centre for the treatment and development of autistics, children with attention deficit disorder, and other disadvantaged individuals, and an information and communications technology learning centre.

2.2 Labour Policy

2.2.1 Accelerate training and development of both people with jobs and those terminated from their jobs, to boost their chances of entering the manufacturing and services sectors at a higher level of technology.

2.2.2 Establish an early warning and monitoring system to keep track of situations that may have an impact on hiring and termination of employment due to economic structural changes, and provide for swift re-employment.

2.2.3 Provide labour protection according to Thai labour standards, which gives importance to work safety and labour welfare; and put in place a system for more comprehensive protection of informal labour.

2.3 Policy on Developing the People's Health

2.3.1 Improve the quality of the health insurance system across the board and ensure unobstructed public access to the system; undertake comprehensive and thorough reform of the public health management system, including medical care, health rehabilitation, disease prevention, and promotion of good health.

2.3.2 See to measures to reduce health risk factors and poor diet that lead to chronic illnesses such as cancer, heart disease, diabetes, high blood pressure, and traffic accidents; introduce tax measures on consumption of products harmful to health, to stimulate personal behavioural change towards decreasing, suspending and giving up health-risk behaviour.

2.3.3 Put in place a proactive disease surveillance, prevention and control system to prevent illness and death from newly emerging and reoccurring diseases in humans; systematically build surveillance, diagnostic and treatment capacities in a coordinated manner and involving all relevant sectors.

2.3.4 Increase incentives for and expand the work of public health volunteers so that they play a major role in caring for children, the elderly, and the disabled, looking after hospital patients, and disease surveillance in communities; and link their efforts with local administrative organizations;

2.3.5 Encourage people at all levels to have the opportunity to exercise and play sports to maintain good health; develop the skills of Thai athletes toward excellence so that they may bring recognition to the country; inspire love of sports and productive use of spare time to avoid unhealthy habits with vice and drugs.

2.4 Policy on Religion, Arts and Culture

2.4.1 Patronize, protect and nurture Buddhism and other religions so that they play an important role in inculcating the people's understanding and application of religious teachings in enhancing virtue and quality of life.

2.4.2 Revitalize and ensure the preservation and passing on of the diverse Thai culture, including way of life, traditions, positive values, local wisdom, and maintenance of historical parks, archaeological sites, and museums, for learning and benefiting from in adding value based on Thai knowledge and identity; and promoting and developing archaeological sites into world heritage sites.

2.4.3 Develop cultural learning and recreational spaces for Thai youth to learn correctly, make good use of their spare time, be virtuous and care about others, and foster creative art appreciation.

2.4.4 Expand the role of provincial cultural councils so that they can serve as cultural watchdog mechanisms to monitor lifestyles and all media that encourage cultural and behavioural deviancy on the part of children and youth; eradicate media that are socially harmful; expand good media to lead towards building social immunity in time with the situation.

2.5 Policy on Security of Life and Society

2.5.1 Coordinate and integrate efforts and make use of various funds, such as the Fund for the Elderly, the Health Promotion Fund, Community Development Fund, and Thailand Research Fund, so that they are efficient partners in fostering social development and human security.

2.5.2 Create a life-long learning society by developing knowledge and ethics from infancy through all stages of youth, paying attention to the creation of an appropriate environment, warm and loving families, and places of learning that closely look after their charges by instilling in them up-to-date knowledge of the world and the positive values of Thai culture; and provide guidance to parents on proper child rearing according to brain development level.

2.5.3 Ensure human security and dignity for children, women and underprivileged people with disabilities by eradicating human trafficking rings, firmly eradicating all forms of discrimination and violations of the rights of children, women and people with disabilities; promote appropriate social welfare for the disabled and underprivileged; and promote learning and occupations for women and the disabled to become self-reliant.

2.5.4 Prepare for an aging society by recognising that the elderly are valuable resources for the country's economy and society; ensure that the elderly are in good physical and emotional health by providing a system of savings that ensures that income earned during their productive years will be sufficient for their retirement years; encourage age-appropriate healthy lifestyles; support strong families that can provide quality care for their own; expand the stipend base for the elderly without income; and promote the use of the experience of the elderly in national development through a brain trust system.

2.5.5 Create livable urban environments via systematic city planning and strict enforcement of laws related to public safety and the environment; provide appropriate basic services, with a school in every neighbourhood, efficient modes of transportation and communications, and safety of life and property.

3. Economic Policy

Respected Speaker of Parliament,

The Government will manage the economy to have growth that is continuous, balanced and strong in both domestic and foreign sectors, immunity against various risks associated with the global economy in both trade and investment; restructure the economy to enhance competitiveness by laying a knowledge infrastructure, good environmental governance and improved efficiency in manufacturing and services; including infrastructural development in industry, agriculture, logistics, energy, and information and communication technology, by undertaking the following:

3.1 Fiscal and Monetary Policy

3.1.1 Pursue monetary policy to support stable economic growth by regulating inflation and the value of the baht in line with prevailing economic conditions and market mechanisms; promote the efficiency and stability of the domestic financial sector, and enhance the private sector's risk management capacity.

3.1.2 Maintain fiscal discipline to induce long-term fiscal stability, covering the central budget, off-budget monies, local budgets, the financial status of state enterprises and specialised state financial institutions; reform the Kingdom's entire budgetary system in an integrated manner in line with the country's development; improve the taxation and tax collection systems to make them fair, efficient and sufficient for expenditures for economic and social development in the future.

3.1.3 Encourage a long-term savings system so that people have adequate savings for old age, and serve as a pool of savings for the country's mobilization of funds in the future.

3.1.4 Put in place a system to monitor and encourage both short and long-term capital flows for the benefit of the country; promote Thai investment overseas, including both individual and institutional investors; and attract foreign investment in line with the country's competitiveness, capacity-building targets for necessary manufacturing sectors, and economic stability.

3.1.5 Improve the efficiency of capital markets to be on par with major regional and global markets in terms of governance, price, and quality, giving attention to improving incentives to encourage national savings, increasing the roles of capital markets and debt instrument markets as sources of financing for the Government's large-scale investment projects, and setting up

mechanisms to monitor and regulate capital market development in coordination with money market development.

3.1.6 Improve the capacity of state-owned enterprises to function as efficient supporting mechanisms for Thailand's development and investment strategies; establish a revenue base and value for state assets, with professional management, monitoring and regulation based on good governance, including having a separate 'social account' for transparency, the use of performance indicators not lower than the standards set by the Securities and Exchange Commission of Thailand; and the accelerated rehabilitation of state enterprises with financial problems.

3.2 Economic Restructuring Policy

3.2.1 Agricultural Sector

3.2.1.1 Accelerate the restructuring of agricultural production to be in line with market opportunities and changes in consumer tastes in both traditional and emerging markets, through a strategy to turn Thailand into a global food-production hub, with emphasis on improving production efficiency in fisheries, livestock, and major cash crops in an integrated manner, including support for energy crops such as oil palm, sugar cane, and cassava to promote the alternative energy policy; and support production of new products with market potential such as fiber plants and medicinal herbs.

3.2.1.2 Promote value addition for agricultural goods through processing that meets international quality standards to create links with agro-industry, by supporting research and development on standards for food and agricultural production and food safety; see to an effective disease prevention and control system, as well as supporting agricultural processing within communities.

3.2.1.3 Expedite negotiation of agreements on food and agricultural product standards to prevent non-tariff barriers to trade; and improve logistical networks for agricultural products in both rural and urban areas to expand access to global markets.

3.2.1.4 Promote New Theory agriculture at the community level according to His Majesty's concept to give agricultural households food security; promote the learning process on organic farming, integrated farming, forest farming, school lunch projects, and livestock banks according to His Majesty's concept, with farmers and communities setting their own direction and approach.

3.2.1.5 Promote and encourage agricultural institutions such as co-operatives, community enterprises, and farmers' councils to enable farmers to participate in setting the approach to agricultural development and developing their own competitiveness.

3.2.2 Industrial Sector

3.2.2.1 Improve the efficiency and productivity of the industrial sector, including creating value for industrial products by upgrading labor skills, entrepreneurial management, and product standards; improve the efficiency of machinery, industrial logistics on the basis of cooperation among the public sector, the private sector, and educational institutions.

3.2.2.2 Develop and drive industries in which Thailand has high potential and advantage, such as food, metals, automobiles, petrochemicals, energy, electronics, making them regional and global production hubs through the promotion of investment incentives or granting of privileges to high-potential industries, including securing and developing suitable acreage and

infrastructure to support industrial development in the next twenty years, bearing in mind the issues of environmental impact and local community participation.

3.2.2.3 Create products of high quality and standards to add value and protect the intellectual property of products produced in Thailand, by supporting skills development and utilization of modern technology, such as fashion goods, jewelry and accessories, as well as using marketing tools and building brand recognition of Thai products to enhance their popularity both domestically and abroad.

3.2.2.4 Create and strengthen small and medium-scale entrepreneurs, including community enterprises, to serve as a production base for the domestic economy, by encouraging cluster formation to improve product value and competitiveness, through support for knowledge and innovation; and foster good entrepreneurial governance and social responsibility.

3.2.2.5 Promote and expand the role of business incubation centres for entrepreneurs wishing to create high-value products and services by using modern technology custom-designed to make use of the potential of each area; create centres for industrial product development and design; and promoting commercial utilization of knowledge and innovation.

3.2.2.6 Establish a fund for building competitiveness and investment capacity to stimulate industrial adjustment; and support investment in high-tech, low-energy-consumption industries; and expand the role of existing funds so that they may efficiently support structural adjustment of the industrial sector.

3.2.3 Tourism and Services Sector

3.2.3.1 Accelerate revenue generation from tourism by revitalizing and improving tourism quality and standards for sustainability; establish new tourist destinations in areas with potential that can link nature, arts and culture with community ways of life, as well as creating linkages with neighboring countries; promote quality tourist markets, such as retiree groups, health-conscious groups, MICE groups, and groups interested in ecological systems, local cultures, historical and archeological sites; and keep tourists safe from crime, fraud and accidents caused by the negligence of business operators.

3.2.3.2 Develop service businesses with potential to create opportunities for expanding the manufacturing and marketing base in the region, for example, healthcare services, MICE services, international education, construction, the movie industry and sports and recreation-related services, by giving priority to strengthening business operators, improving the investment climate, business standards and personnel development to prepare for business expansion and marketing promotion.

3.2.3.3 Promote and develop cooperation between the trade and services industries with emphasis on each area's potential and cultural uniqueness, as well as human resource capacity to create economic value, such as healthcare and medical services which are linked with research and development in the pharmaceuticals and medical supplies industries.

3.2.4 Marketing, Trade and Investment

3.2.4.1 Promote a policy of free and fair competition, prevent monopolization and protect consumers effectively; and reassure business operators regarding protection of intellectual property rights.

3.2.4.2 Undertake proactive marketing to maintain existing markets and acquire new ones in order to reduce the country's dependence on major export markets by promoting exports to new markets, namely, China, India, the Middle East, Africa and Eastern Europe, and maintaining market share in major exports, with emphasis on the export of goods with high growth in new markets.

3.2.4.3 Expand economic linkages for trade benefits under multilateral and bilateral cooperation frameworks and trade arrangements to support economic restructuring; and improving facilities to expand markets in international trade and border trade.

3.2.4.4 Review the establishment of commercial offices overseas and improve, in an integrated manner, the mechanisms for managing the country's trade, by coordinating policy-level mechanisms with relevant implementing agencies to facilitate and streamline procedures for the private sector, in keeping with the changing nature of global market conditions.

3.2.4.5 Support overseas investment in areas where Thai operators have potential, including investment to set up production factories, contract farming agreements, opening of branches, acquiring representatives and partners in foreign countries to build Thai business networks overseas.

3.2.4.6 Revise and improve laws and regulations that hinder foreign investment to create a favourable investment climate and build investor confidence both domestically and abroad.

3.3 Policy on Infrastructure, Logistics and Mass Transit Management

3.3.1 Develop and expand infrastructure services to all regions extensively and sufficiently, in particular by providing necessary basic public utilities such as potable water, telecommunications services and housing, to upgrade people's quality of life.

3.3.2 Develop the transport system and link together rural, urban and international logistics networks, giving priority to the development of infrastructure and rail transport services, as part of multimodal transport networks, to reduce the cost of exporting goods and services.

3.3.3 Develop water transport and the merchant marine industry, both domestic and international; develop deep-water ports in the South; develop community ports and Thai fleets, to improve efficiency and reduce energy use in the transport sector, link to new trade gateways and promote tourism.

3.3.4 Develop Suvarnabhumi Airport, regional airports and Thailand's aviation industry for Thailand to become a leading aviation, tourism and air cargo hub in Asia and the world.

3.4 Energy Policy

3.4.1 Establish energy security through acquisition of sufficient energy for the country's development and the people's well-being by expediting more investment in the exploration

and development of energy within the country, in joint development areas and from neighboring countries; as well as promoting energy cooperation with foreign countries.

3.4.2 Encourage the supervision of the energy sector so that energy prices are appropriate, fair and stimulate competition to invest in the energy industry, while maintaining high standards of quality, service and safety.

3.4.3 Develop and promote research in all forms of renewable energy as an alternative for the Thai people, in line with the principles of the sufficiency economy philosophy and sustainable development, as well as undertake studies to prepare readiness for deciding on the development of other alternative energy which utilizes high technology and locally compatible energy.

3.4.4 Seriously and continuously promote plans to conserve and save energy, as well as promote efficient use of energy in the manufacturing, services, and public sectors with appropriate incentives.

3.4.5 Promote development, production, and use of energy concurrently with environmental conservation. Promote development of clean energy, including giving importance to the management of greenhouse gases in order to help alleviate global warming.

3.5 Policy on Information Technology

3.5.1 Develop basic infrastructure for information technology, such as extensive and adequate high-speed communications networks, at appropriate, fair and competitive prices, to serve as the main network supporting Thailand's development into a knowledge-based society, reducing the urban-rural divide and enhancing national competitiveness.

3.5.2 Develop the software, hardware, and electronic knowledge services industries. Arrange mechanisms to support capital resources for small and medium entrepreneurs in information technology. Promote human resource development to meet market demand and standards in order to establish Thailand as a regional center for information and communications technologies.

3.5.3 Promote use of information technology to improve public sector management and services by utilizing electronic systems, linkage of data on transportation and management of goods and services, early warning systems and national security, education services and public health. Develop geo-informatics and space technology to improve quality of life and increase national competitiveness.

4. Policies on Land, Natural Resources, and the Environment

Respected Speaker of Parliament,

The Government attaches importance to the role of natural resources and the environment in fostering public well-being and national competitiveness, by attaching importance to the integrated management of the economic, social, environmental and natural resources dimensions, and encourages public and community participation through the following measures:

4.1 Conserve, develop and make sustainable use of bio-diversity to create economic value by emphasizing local wisdom and culture, including bio-safety in order to create food and health security as well as to add economic value at the domestic and international levels.

4.2 Expedite natural resources and environmental management that involves the participation of the public, local communities, local administrative offices and the private sector. Ensure balance between utilization, tenure, and conservation of the resource base, land, forest, wildlife, water resources, marine and coastal resources, and geological resources by applying geoinformatics together with improvement and strict enforcement of relevant laws and regulations, by seriously expediting suppression of deforestation and destruction of wildlife and natural resources. Increase participation by relevant actors for maximum benefit, and use natural resources in a manner that leads to sustainable development of the country and quality of life.

4.3 Conserve soil and forestry by ending illegal farm-burning and topsoil destruction; reducing chemical use in agriculture; rehabilitating soil and preventing soil degradation by planting vetiver grass in accordance with His Majesty's initiatives; fairly distributing and managing land ownership; conserving and protecting mature forest; supporting forestation and forest rehabilitation in accordance with His Majesty's initiatives; supporting establishment of community forests; growing economic timber in suitable areas as determined by academic research; supporting community roles in water resource management such as construction of dams and dykes in accordance with His Majesty's initiatives.

4.4 Provide preventive and early warning measures against natural disasters such as floods, droughts, earthquakes, climatic changes; take any necessary measures to minimize the impact of natural disasters on the public.

4.5 Expedite control of air pollution, garbage, wastewater, odours, and noise resulting from manufacturing and consumption, in particular construction of wastewater treatment systems for urban areas as well as agricultural and industrial activities; implement an environment-friendly waste disposal system, and increase the capacity of local administrative authorities regarding waste disposal and wastewater treatment.

4.6 Encourage the public and private sectors to research and develop appropriate technologies for energy conservation, environmental management, production of bio-degradable materials, recycling of raw materials, use of clean technology, and application of the "polluter pays" principle to reduce pollution and social impact in accordance with good environmental governance.

4.7 Raise environmental awareness, including through activities to change consumption and production behaviors in order to mitigate the effects of climate change, and support the observance of international obligations that will lead to enhanced efficiency in natural resources and environmental management.

5. Policy on Science, Technology and Innovation

Respected Speaker of Parliament,

The Government recognizes the significance of research and development in science, technology, and innovation as a key factor in enhancing economic competitiveness and improving quality of life. The Government will, therefore, undertake the following:

5.1 Promote the application of scientific and technological research to the development of the country, in parallel with the development of the existing research and development system to meet the needs of the manufacturing and services sectors, giving priority to linking the private sector, research institutions and universities, and develop enterprise networks that would lead to

supplemental research and development and commercial application of the knowledge and technological base.

5.2 Enhance public scientific knowledge and thought, expediting production and development of human resources with quality and integrity in science and technology, in line with the growth of the manufacturing and services sectors. Develop career paths to retain personnel in science and technology within the system. Provide facilities to attract highly-qualified personnel from abroad to generate knowledge transfer to Thai personnel.

5.3 Develop infrastructure for science, technology and innovation sufficient in quality and size to meet demand, and support the creation of Thai intellectual property through the development of an efficient intellectual property management system, developing a modern standards certification system, and the creation of an incubation centre for technologically intensive businesses, science parks, and a centre of excellence for important technologies.

5.4 Improve the national research system to correspond with economic restructuring, by developing incentives and legislation conducive to private-sector investment in research and development, and by supporting investment in the acquisition of appropriate and strategic technologies from abroad.

6. Foreign Policy and International Economic Policy

Respected Speaker of Parliament,

The Government shall conduct a foreign policy to serve the highest interests of the country and the people, by playing a proactive role in enhancing cooperation and expanding cordial relations with all countries, in political, security, economic, social and cultural aspects; upholding Thailand's existing international commitments through various treaties and agreements to which it is party; and abiding by its obligations under international law, the United Nations Charter and the Universal Declaration of Human Rights, while building immunity and developing all sectors of the Thai economy to benefit from international economic relations, and shall continue with the "Team Thailand" policy so that the conduct of foreign affairs will be efficient, effective and concerted, through the following measures:

6.1 Promote and develop relations with neighbouring countries by expanding cooperation at the levels of government, the private sector, the public and the media, to enhance mutual understanding and closeness, which would lead to increased economic cooperation in trade, investment, tourism promotion, and transport and communications and other areas, under such subregional frameworks as the Ayeyawady-Chao Phraya-Mekong Economic Cooperation Strategy (ACMECS); the Greater Mekong Subregion (GMS) economic cooperation framework; the Indonesia-Malaysia-Thailand Growth Triangle (IMT-GT); and the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC).

6.2 Promote cooperation with countries in Asia, the Asia Cooperation Dialogue (ACD), and enhance Thailand's role in strengthening ASEAN to realise the goal of creating an ASEAN Community, and raise the profile of ASEAN in international forums during Thailand's chairmanship of ASEAN.

6.3 Play a constructive role in international organizations, in particular the United Nations and other regional organizations, in order to maintain peace and security, promote the democratic

process, human rights and humanity, and cooperate in addressing all facets of transnational problems that affect human security.

6.4 Strengthen cooperation and strategic partnership with countries and groups of countries that play important roles in world affairs; establish free trade agreements, both multilaterally and bilaterally, for the highest aggregate benefit to the country; create mechanisms to help operators adapt to and benefit from such free trade agreements.

6.5 Conduct proactive diplomacy for the people, culture and education, including people-to-people exchanges with foreign countries, promoting technical cooperation with developing countries, and coordination of close cooperation to enhance understanding with other religious organizations.

6.6 Protect the interests of and look after Thais and Thai workers abroad, in particular Thais who work and reside in foreign countries; promote the role of Thai communities abroad in preserving Thai identity and Thainess.

7. State Security Policy

Respected Speaker of Parliament,

The Government will maintain the security of the country, the institution of the monarchy, and the democratic system with the King as Head of State; and will build reconciliation among the people, enhance national readiness to deal with threats of all kinds, including natural disasters and conflicts that may affect Thailand, resolve the conflict in the three southern border provinces and promote peaceful co-existence, ensure safety of life and property for people in all parts of the country, and oppose all forms of threat to society through the following actions:

7.1 Honour, protect and preserve the institution of the monarchy; defend the majesty of the King from violation by any person; promote loyalty to the institution of the monarchy in the public consciousness; and create an environment that fosters harmony, unity, and peaceful co-existence among the people of the nation.

7.2 Strengthen the national defence system to be proficient in protecting the independence, sovereignty, and territorial integrity of the state and in protecting national interests, by modernising weapons and equipment and enhancing the readiness of the armed forces; mobilise the public to participate in the maintenance of national security; and support nation building and peacekeeping missions within the framework of the United Nations.

7.3 Expedite development of management systems to address the problem of illegal immigrants, illegal alien workers and persons without clear legal status; emphasize strict enforcement of the law with regard to illegal migrant smuggling rings backed by influential persons, to minimize the scale and long-term security impact of the problem, in parallel with addressing the status and rights of persons without clear legal status, under a balance between maintaining national security and caring for basic rights.

7.4 Develop and strengthen a network for international cooperation to prevent and resolve the problems of terrorism and transnational crime; aim to develop a system to manage border areas for economic benefit, while maintaining security, and taking serious action to protect national maritime interests and expeditiously remove conditions that create misunderstandings with

neighbouring countries so as to promote good relations while advancing economic and security cooperation.

7.5 Reform the intelligence system to benefit security maintenance and enhance the national interest by setting up a system of integrated cooperation among civilian agencies, the police, and military; and give importance to in-depth economic, social and security data that would be truly beneficial to preventing and resolving the nation's problems.

7.6 Develop a system of national preparedness by emphasizing management of crises caused by natural and man-made disasters, through force mobilization from all sectors to work efficiently together to prevent, resolve, alleviate and rehabilitate damage to the nation caused by disasters.

8. Policy on Good Management and Governance

Respected Speaker of Parliament,

The Government shall develop and improve the public sector management system so that government agencies may be well-prepared and equipped with an able workforce to meet the needs of the people efficiently, effectively, cost-effectively and fairly in the provision of public services; and will improve the legal and justice system, support political development and public participation in the conduct of public policy in order to foster good management of public affairs, by undertaking the following:

8.1 Efficiency of Administration of State Affairs

8.1.1 Improve public services through innovation and introducing new technologies to provide various types of services to ease the workload and provide greater convenience to the public.

8.1.2 Develop the system and specify measures to attract qualified and capable people to the civil service by improving the remuneration and incentives system to a level comparable or competitive with the labour market, so that the civil service is viewed by job seekers as a desirable employer, and supporting the mobility and transfer of personnel both within the civil service system and between government agencies and other sectors.

8.1.3 Continuously develop the work system and performance of civil servants and government officials at every level, for enhanced competence in performing civil service work and delivering public services, by emphasizing development of civil servants in positions of importance to the country's development strategy, and build change leaders in the civil service, including setting in place measures for evaluating work results and fair results-based remuneration, to boost morale and motivation to improve work results.

8.1.4 Improve the quality of life of civil servants and government officials so that they may live in dignity, by increasing salaries, remuneration and benefits to suit working conditions and changes in the cost of living, including improving work welfare and debt [relief] so that civil servants and government officials may enjoy balance between work and personal life.

8.1.5 Strengthen moral and ethical standards for civil servants and government officials and develop transparency in the work of the government sector, including seriously

preventing and suppressing corruption and malfeasance by civil servants and government officials, so that the public finds the civil service sector dependable and trustworthy.

8.1.6 Promote the serious devolution of administrative power by creating a balance between supervision and local autonomy without prejudicing the ability of localities to make decisions to act in accordance with their needs; strengthen and increase the capacity of localities to manage their own budget and personnel, including being more self-reliant based on more locally collected revenue.

8.1.7 Encourage local administrative bodies to play a greater role in providing local public services, by taking into consideration the necessity and suitability according to the locality's potential, including local people's needs, as well as expanding services to cover improvement of the people's quality of life, connected to and integrated with community and other levels of plans in the area.

8.1.8 Speed up the transfer of functions from central authorities to local administrative bodies in line with the law on planning and procedures for the devolution of power to local administrative bodies, including suitable allocation of revenue for each type of locality.

8.1.9 Support the integrated provincial management system of provincial governors through a process of drawing up a development plan for provinces and provincial groups and budget planning for provinces and provincial groups, so that provinces and provincial groups may set development strategies and directions for future development of the area in line with government policies for economic and social development, potential of the area and the needs of the people.

8.2 The Law and Justice

8.2.1 Ensure law observance and enforcement that is proper, timely, fair and applicable to all; promote the provision of knowledge of laws affecting the public and business sector; enhance the efficiency of protection of people's rights and freedoms; and promote legal aid.

8.2.2 Bring laws up to date in line with society's changes and needs, including establishment of an "agency for law reform" and an "agency for reform of the justice system," pursuant to the provisions of the Constitution of the Kingdom of Thailand to improve and develop the country's laws and justice system.

8.2.3 Enhance and develop all areas of the justice work process, in particular crime prevention and the creation of fairness in society; development of a criminal justice system that follows the rule of law; use of forensic science tools and principles; facilitation of access to justice and public participation in the dispensation of justice, for example, development of a community justice system and provincial justice system; development and establishment of an alternative justice process (which is a process to delay punishment, such as performing community service) parallel with the mainstream justice system; and developing a system and operational methods for the rehabilitation of criminals as appropriate to target groups; and develop a database and information technology system for the justice process.

8.2.4 Reinforce justice in the southern border provinces by focusing on the development of laws and justice work process that are compatible with the local area, culture and way of life; strictly enforce the law, remove the conditions of injustice and develop an efficient system to evaluate evidence of wrongdoing.

8.3 Enhance people's opportunities to receive extensive, correct, fair, and timely information from government authorities and other public media.

Respected Speaker of Parliament,

The Government is determined to seriously implement the fundamental policy approach of the state, and wishes to point out that the government policies just announced will serve as a guideline for action over the next four years, based on the urgency of resolving the country's problems, and for administration of state affairs according to the provisions in Chapter 5 of the Constitution of the Kingdom of Thailand on the fundamental policy approach of the state. Moreover, so that the Government may administer state affairs in accordance with the provisions of the Constitution of the Kingdom of Thailand, and, through policy implementation, achieve the objectives set forth, the Government shall improve or determine the work approach of government agencies, strengthen the management system, propose legislative bills, and undertake every action that is pertinent to efficient state administration and achievable in practice to benefit the country's development, and thus considered also to be this Government's policy on administration of state affairs.

Respected Speaker of Parliament,

The Cabinet's formulation of the policy on the administration of state affairs described rests on the basis of facts according to the realities of the country, and continuity with past events, including an analysis of the new economic, social, political and administrative environments, and the changing world situation. After this policy statement is delivered, the Government will expedite concrete implementation by drawing up details of an action plan, comprising a national administrative plan, an action plan for each government agency, and a legislative enactment plan to serve as reference and guidelines for further work.

The Government wishes to further inform the public that it is fully committed to democratic rule with the King as Head of the State, and considers the Constitution of the Kingdom of Thailand to be a vital foundation for putting in place a national administrative system that would bring about security and enhance democratic principles that are correct and acceptable to the people of the country. The present Constitution is the first one to have been approved by the people in a referendum. But since there remain many differences of opinion, this Government will support a study to review the provisions of the Constitution so that amendments may be made to truly conform to democratic principles and to enhance the country's administration at an appropriate time later.

The Government reassures the National Assembly, the body charged with overseeing state administration, that the Government will administer the country with integrity, honesty, and determination for the country to achieve the same level of prosperity as civilized countries, foster equality in a more balanced society, and ensure that the Thai people are proud of being Thai, truly with the benefit and happiness of the Thai people as its basis.

Thank you.

SUMMARY OF THAILAND'S STRATEGIC PLAN ON CLIMATE CHANGE B.E. 2551-2555 (2008-2012)

Thailand's Climate Change Challenges

1) Impacts on natural resources

Thailand's economic base depends heavily on its natural resources. Its main sources of income are derived from tourism, exports of agricultural products and processed agricultural products and food industry, for instance. Consequently, there is an urgent need to sustain growth, taking into account the expected climate change impacts on natural resources. In addition, a majority of population in Thailand work in the agricultural sector and still face poverty and poor quality of living. Climate change poses threats that can result in significant changes in natural resources, impacting population who depend heavily on these resources. Often, this population sector has very limited capacity to adapt to changes, rendering them the most vulnerable to climate change impacts.

2) Energy demand challenges

Thailand is in a developing stage and one of its main development goal is poverty eradication and improvement of the quality of life among its population. Government policy has therefore remained focused on ensuring and sustaining economic growth in various sectors. This has inevitably brought about a continuous increase in energy demand during the past decades, and it is projected that energy demand will continue to grow for many years from now. Data in 2003 show that the energy sector plays a major role in accounting for 56.1% of Thailand's total greenhouse gas emission. The obvious challenge for Thailand is therefore to mitigate its greenhouse gas emission without sacrificing its economic growth.

Past implementation relevant to climate change

To an extent, pressure on natural resources and energy demand does not present a new problem for Thailand. Past efforts have dealt with promoting better management and conservation of natural resources in various sectors and promoting energy security, with and without linking them directly to climate pressure and greenhouse gas emission reduction. These efforts can be briefly summarized below.

1) Adaptation

1.1) Water resource management and the agricultural sector

- The Royal Projects on the development of water resources for cultivation, for preserving water sources and streams and for water drainage from low-lying areas to extend land areas for cultivation
- The Royal Projects on agriculture to conduct studies, research and experimentation of plant and animal species suitable for the nature of the local areas
- The Royal Projects to plant vetiver grass for topsoil preservation
- The projects by the Ministry of Agriculture to promote agricultural product and market improvements

- The projects by the Ministry of Agriculture to build capacity for local agricultural communities
- The projects by the Ministry of Agriculture to research drought-resistant plant and animal species
- The projects by the Ministry of Agriculture to construct dams and irrigation systems
- Integrated water resource planning for surface and ground water by the Ministry of Natural Resources and Environment
- The projects by the Ministry of Natural Resources and Environment to promote participation by local administration agencies and local communities to manage water resources at the river region level
- The projects by the Ministry of Natural Resources and Environment to build capacity to improve water resource efficiency in the agricultural sector and water resource conservation

1.2) Coastline protection

- The Royal Projects to expand mangrove forests for coastline protection and restoration and preservation of coastline ecosystems
- Strategic plan on coastline protection by the Ministry of Natural Resources and Environment
- The projects by the Ministry of Natural Resources and Environment to promote participatory planning in the sustainable management of wetlands
- The projects by the Ministry of Natural Resources and Environment to promote conservation and restoration of maritime resources
- The projects by the Ministry of Natural Resources and Environment to install artificial coral reefs to relieve the intensity of subsurface waves and coastline deterioration
- The projects by the Ministry of Natural Resources and Environment for protection and restoration of maritime habitats
- Coastline land use planning and management by the Ministry of Natural Resources and Environment

1.3) Natural disaster management

- The Royal Projects for relief of flooding
- The Royal Projects to construct dams and water reservoir
- The Royal Projects to plant vetiver grass to prevent soil erosion
- The establishment of the National Committee on Water Policy for flood and drought crisis relief

- The establishment of the Information Center on Environmental Disasters under the Ministry of Natural Resources and Environment

- The establishment of the National Disaster Relief Center under the Ministry of Information, Communications and Technology

1.4) Restoration and conservation of biological diversity and forest resources

- The Royal Projects to renew forested land in key areas such as upstream and reservoir areas

- The Royal Projects to expand moist forests as buffer zone to prevent wildfires

- Integrated management of biological diversity and forest resources for resource conservation and sustainable resource use

- Integrated natural resource and environmental management plan by the Ministry of Natural Resources and Environment

2) Mitigation

2.1) Management of carbon sources

The priority is greenhouse gas mitigation in the energy sector with active measures by the Ministry of Energy to promote supply and use of renewable and alternative energies in electricity generation and transport and to promote energy efficiency in the residential, commercial and industrial sectors, including

- Establishment of market mechanisms to promote the use of alternative energies in electricity generation (electricity generation from biogas, biomass, solar energy, etc.)

- Establishment and improvement of the supply of and the infrastructure to support the use of renewable and alternative energies in the transport sector (use of biodiesel, gasohol)

- Implementation of Clean Development Mechanism (CDM) to promote greenhouse gas mitigation in various sectors (Ministry of Natural Resources and Environment)

- Activities to promote energy efficiency in the urban residential and commercial sectors by the Ministry of Natural Resources and Environment and as laid out in the Bangkok's Strategic Plan on Climate Change

- Development of legal instruments to promote energy-efficient machinery in the industrial sector

Other activities to reduce greenhouse gas emission include:

- Activities to reduce open burning in the agricultural and waste sectors

- Waste management by shifting from open dumping to sanitary landfills and by promoting 5Rs principle (Reduce/Reuse/Recycle/Refill/Repair)

2.2) Promotion of carbon sinks

- Afforestation and reforestation projects by the Ministry of Natural Resources and Environment
- Increase of urban green space as laid out in the Bangkok's Strategic Plan on Climate Change

In recent years, an international wake to climate threats supported by strong scientific evidence has suggested that climate risks have posed more serious threats to natural resources and humankind than what was previously thought. Thailand has reviewed its past efforts to address the climate challenges and believe that a more comprehensive framework needs to be set up in order to set a clear direction towards responding directly to climate change challenges, and to promote an integrated approach of problem-solving among different sectors. In doing so, several barriers can be identified, which include:

- 1) Lack of scientific knowledge base on climate change to support policy formulation and evaluation, and decision making
- 2) Lack of public awareness
- 3) Lack of capacity among relevant agencies
- 4) Lack of clear direction and continuity towards international cooperation

The Ministry of Natural Resources and Environment (MNRE), as the national focal point of the United Nations Framework Convention on Climate Change and a focal point for climate change implementation in Thailand, has therefore formulated and launched Thailand's Strategic Plan on Climate Change B.E. 2551-2555 (2008-2012), aiming for it to be the country's first comprehensive response to climate change, to remove existing barriers to climate change implementation in Thailand, and to promote an integrated approach of problem-solving by relevant agencies in various sectors.

There are six strategies in Thailand's Strategic Plan on Climate Change B.E. 2551-2555 (2008-2012).

STRATEGY 1: Build capacity to adapt and reduce vulnerabilities to climate change impacts
Goal: Protect, conserve and add values to natural resource base, and protect, conserve and improve environmental quality and the quality of living from climate change impacts.

- Guidelines:**
- 1.1) Build capacity to assess climate change impacts
 - 1.2) Prevent and mitigate damage caused by climate change impacts on the following sectors:
 - natural resources, ecological systems, biological diversity
 - natural disaster and human settlements
 - agriculture, industry, cultural and historic sites
 - public health
 - 1.3) Build capacity to adapt to climate change in the above sectors.

- Examples of measures:**
- Identify hot spots vulnerable to climate change impacts
 - Promote activities such as water and forest conservation and restoration, infrastructure improvement and land use change to reduce vulnerabilities in hot spot areas
 - Assess adaptation options for hot spot areas including changing crop types, farming processes, etc.
 - Establish effective early warning systems and evacuation plans to minimize damage from extreme climate events

STRATEGY 2: Promote greenhouse gas mitigation activities based on sustainable development

Goal: Reduce greenhouse gas emission and promote clean technologies

- Guidelines:**
- 2.1) Promote greenhouse gas mitigation in the energy sector through improving energy efficiency, promoting renewable energy
 - 2.2) Promote greenhouse gas mitigation in the waste sector
 - 2.3) Promote greenhouse gas mitigation in the industrial sector
 - 2.4) Promote greenhouse gas mitigation in the agricultural sector
 - 2.5) Increase carbon sinks
 - 2.6) Develop and promote mechanisms that support clean technology development

- Examples of measures:**
- Promote use of renewable energy in power generation, transportation and industrial processes
 - Improve energy efficiency in transportation, industrial processes, commercial and residential buildings
 - Promote forest conservation, afforestation and reforestation to increase carbon sinks
 - Increase urban green space

STRATEGY 3: Support research and development to better understand climate change, its impacts and adaptation and mitigation options

Goal: Support R&D and climate change knowledge management and develop climate change knowledge base to support decision-making

- Guidelines:**
- 3.1) Build climate change knowledge for better climate assessment
 - 3.2) Build knowledge base on climate change impacts and adaptation options in relevant sectors
 - 3.3) Build knowledge base on greenhouse gas mitigation options
 - 3.4) Develop appropriate mechanisms for continuous knowledge transfer and management to support policy-making and implementation in relevant agencies

- Examples of measures:**
- Provide support for R&D activities, focusing on but not limited to, the following fields:
 - Climate science – improvement of climate modeling
 - Climate change impacts on natural resources, ecosystems, agriculture, public health and industries
 - Weather-resistant crops and improved agricultural practices
 - Application of renewable energies and energy efficiency techniques in power generation, transportation, industrial processes, commercial and residential buildings
 - Climate risk management
 - Support development of centers of excellence in climate change-related fields

STRATEGY 4: Raise awareness and promote public participation

Goal: Better public awareness and understanding of their roles in response to climate change challenges

- Guidelines:**
- 4.1) Organize public awareness campaigns and outreach activities on a regular basis
 - 4.2) Promote awareness in the educational sector
 - 4.3) Develop mechanisms to evaluate the effectiveness of campaigns and outreach activities on a regular basis

- Examples of measures:**
- Launch continuous public campaigns of climate change education
 - Encourage community participation in local planning processes to reduce vulnerabilities and adopt adaptation and mitigation options for identified climate change impacts
 - Provide public hearings of local and national plans
 - Encourage inclusion of climate change education in school curricular activities

STRATEGY 5: Build capacity of relevant personnel and institutions and establish a framework of coordination and integration

Goal: Better coordination and integration among personnel and agencies involved in climate change implementation

- Guidelines:**
- 5.1) Support continuous training and skill development relevant to climate change implementation
 - 5.2) Create mechanisms to transfer knowledge and share experience among different agencies

- Examples of measures:**
- Establish national climate change information center with linked database to the climate change centers of excellence
 - Provide continuous staff training
 - Develop standardized archiving and documentation among relevant institutions
 - Establish effective negotiation teams

STRATEGY 6: Support international cooperation to achieve the common goal of climate change mitigation and sustainable development

Goal: Build capacity of relevant personnel and agencies to create better coordination and integration to support and promote international cooperation relevant to climate change at the global and regional level

- Guidelines:**
- 6.1) Integrate climate change implementation under different international frameworks, such as UNFCCC, ASEAN and relevant bilateral and multilateral agreements
 - 6.2) Promote skill development and experience sharing among relevant agencies dealing with climate change-related international cooperation

- Examples of measures:**
- Ensure active participation in climate change conventions and conferences
 - Promote climate change cooperation among ASEAN members
 - Support the Clean Development Mechanism

The main objective of Thailand's Strategic Plan on Climate Change B.E. 2551-2555 (2008-2012) is to provide a comprehensive guideline of national responses to climate change challenges. It is essential that national-level and local-level agencies with relevant mandates develop their own action plan that corresponds to the guidelines set forth in the Strategic Plan. Thailand's Strategic Plan on Climate Change B.E. 2551-2555 (2008-2012) was approved by the Cabinet on 22 January 2008, and the Ministry of Natural Resources and Environment is now initiating the Action Plan Development Process among relevant agencies, expected to be completed this year.