

事例発表 タイ

タイにおける企業環境管理

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タイにおける環境管理は、産業開発の開始直後に実施されるようになり、規制および自主的活動を含めた環境管理の様々な段階を経てきた。

タイの企業環境管理 (CEM) はすでに始まっている。CEM は通常、「企業の社会的責任 (CSR)」として実施される。タイで、環境管理の初期段階において CEM を最初に採用したのは、多国籍大企業である。

現在、CEM は国内で広く採用され、実施されているが、依然として大企業に限られている。中小企業 (SME)の大半は、CEM を実施するに至っていないが、多国籍大企業の支援を受ける一部企業において実施され始めている。一般的に、こうした支援はサプライチェーンシステムを介して提供されている。

CEM の実施をより多くの工場に広めるため、CEM の奨励、支援、施行に関する政策を実施すべきである。拡大生産者責任 (EPR)やグリーンサプライチェーンの政策、その他の自主的政策および実施政策などが提案されており、産業部門での CEM 促進に向けて検討が可能である。さらに重要なこととして、企業環境管理を成功させるためには、法的措置の統一、産業界の自主性、および社会の認識が求められる。

Corporate Environmental Management in Thailand

C. Qwanruedee

Assistant President, Thailand Environment Institute

In Thailand, environmental management has been taken into the actual practices shortly after the emergence of industrial development. Thailand has gone through various stages of environmental management including enforcement and voluntary.

Corporate Environmental Management (CEM) in Thailand has already started. The implementation of CEM is usually applied through the application of Corporate Social Responsibility (CSR). During the initial stage in Thailand, multinational and large corporate is the first group to adopt the application.

At present, even the application of CEM is more widely adopted and practiced in the country, the application is still limited in large corporate. In Small and Medium Enterprises (SMEs) group, most of the entrepreneurs do not take CEM into their account yet; however, CEM is started to be adopted in the group with an assistant from multinational and large corporate. Generally, the assistant is being given through the supply chain system.

In order to broaden the application of CEM to more factories, numbers of policies for encouraging, supporting and enforcing CEM should be implemented. Extended Producer Responsibility (EPR), greening supply chain, and other voluntary and enforcing policies are some suggested policies, which can be considered for promoting CEM in industrial sector. More importantly, integration of law enforcement, voluntary of industry and public awareness are required in order to be succeed in Corporate Environmental Management.

Corporate Environmental Management in Thailand

Dr. Qwanruedee Chotichanatawewong
Assistant President
Thailand Environment Institute

Profile of Thailand



- **Economics**

- Lower middle income industrial developing nation

- **GDP: 223 Billion USD**

- GDP per capita: 9,100 USD

- GDP of industry sector: 45%

- GDP of service sector: 45%

- GDP of agricultural sector: 10%

- **Growth Rate**

- 5% in 2006

Profile of Thailand

- **Environment**

- **Air Pollution**

- Important sources: Vehicles & Factories

- **Wastewater**

- Important sources:

- Household: 14 million m³/day
 - Factory: 7 million m³/day

- **Solid Waste: 92% collection capacity**

- Increasing

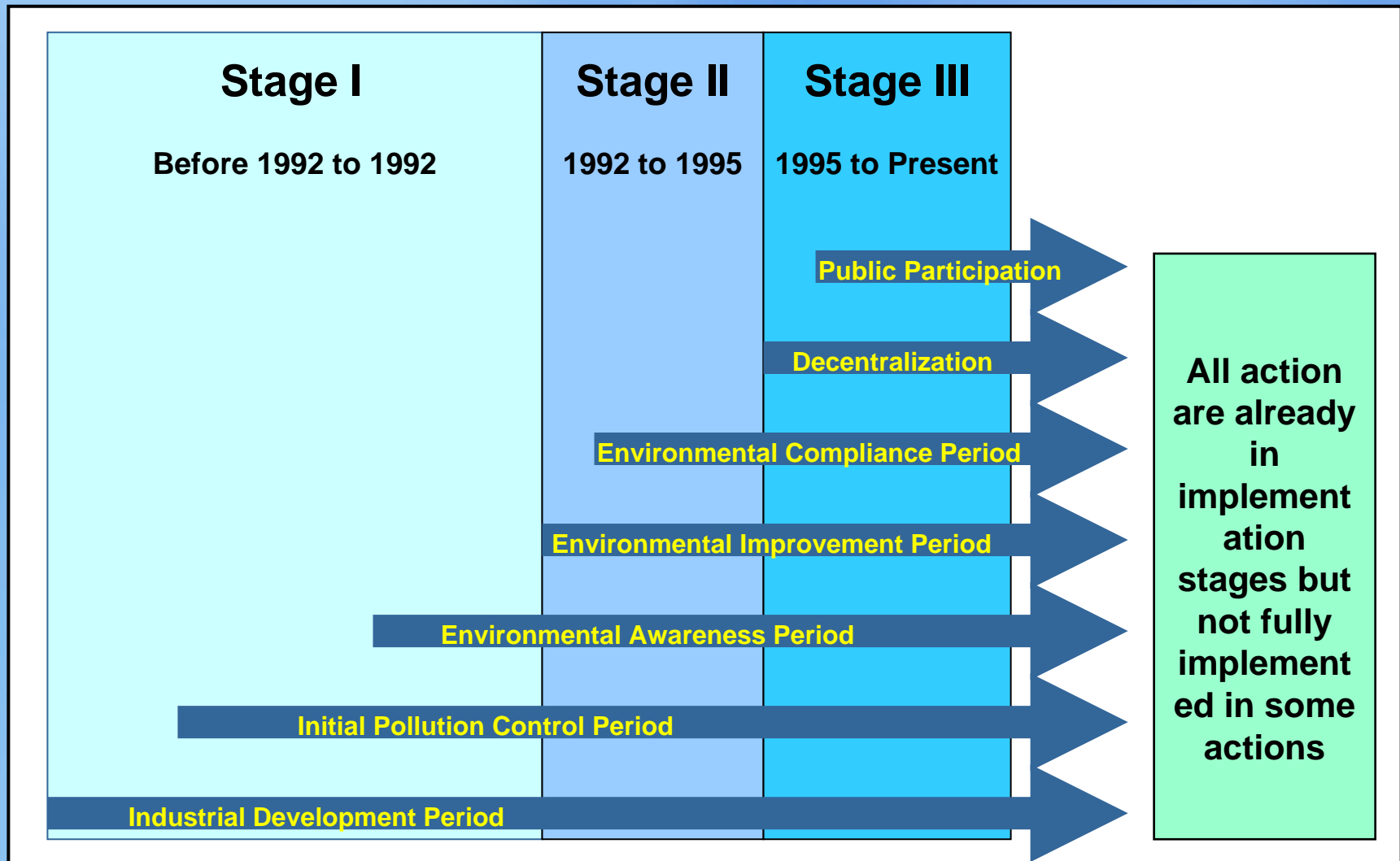
- 1993: 30,600 ton/day
 - 2002: 39,200 ton/day

- Generation rate in Bangkok

- 1 kg/capita/day



Environmental Management in Thailand



Policies Related to Emission and Pollution

- 1st stage
 - Only command and control
 - Lacking of participation
- 2nd stage
 - Not yet sustainable
 - Not yet full collaboration of parties
- 3rd stage
 - More sustainable
 - Require more collaboration from all parties
 - Require stronger enforcement, voluntary and public awareness including EPR and greening supply chain

Policies Related to Emission and Pollution



- **Thailand is implementing**
 - End-of pipe Treatment
 - Standard
 - Self Regulation
 - Self monitoring report
 - Voluntary Approach
 - Economic Instruments
 - Fee
 - Permit

2 Case Studies of Good Voluntary Initiated by Business Sector

- **Food Production Sector**
 - **Case study: Chareon Pokphand Foods (CPF) PCL.**
- **Automobile Sector**
 - **Case study: Toyota**

1st Case Study of Good Voluntary Initiated by Food Production Sector

- **Initiated by Corporate**
 - **Chareon Pokphand Foods (CPF) PCL.**
 - **Largest food company in the ASEAN**
 - Livestock and Agriculture
 - Invested in Thailand and around the world
 - Total sale in 2005: 3,200 million USD (113,374 million Baht)
 - **Business includes**
 - **Pig farm**
 - Selling raw pork and cooked pork (Sausage e.g..)
 - Selling pigs and pig breeders

1st Case Study of Good Voluntary Initiated by Food Production Sector



- **Initiated from Problems**
 - Poverty
 - Lacking of land ownership
 - Lacking of knowledge
 - Draught
- **Collaboration of**
 - Local agricultural cooperation
 - Department of Agricultural Extension
 - Local government
 - Bangkok Bank

1st Case Study of Good Voluntary Initiated by Food Production Sector



- **Purposes of the project**
 - Develop integrated agriculture for increasing incomes
 - Form effective management system in agricultural cooperation
 - Preserve fertility of lands and prevent slash and burn agriculture
- **Coverage of the project**
 - Nong wa, Chachoengsao province
 - 495 acres

Details of the Project

- **General Information**
 - Started in 1977
 - **50 farmers jointed 10-year contract**
 - After 10 years what they get?
 - Land 9.5 acres
 - House
 - Farm (30-pig capacity)
- **Pig farm (Breeding farm)**
 - Breeding and raising pig to 18 kg (8 weeks) and send to a central farm
 - **Contract farming with CPF**
 - **Income:**
 - 7,500 Baht/month (During debt period: first 10 years)
 - 20,000 Baht/month

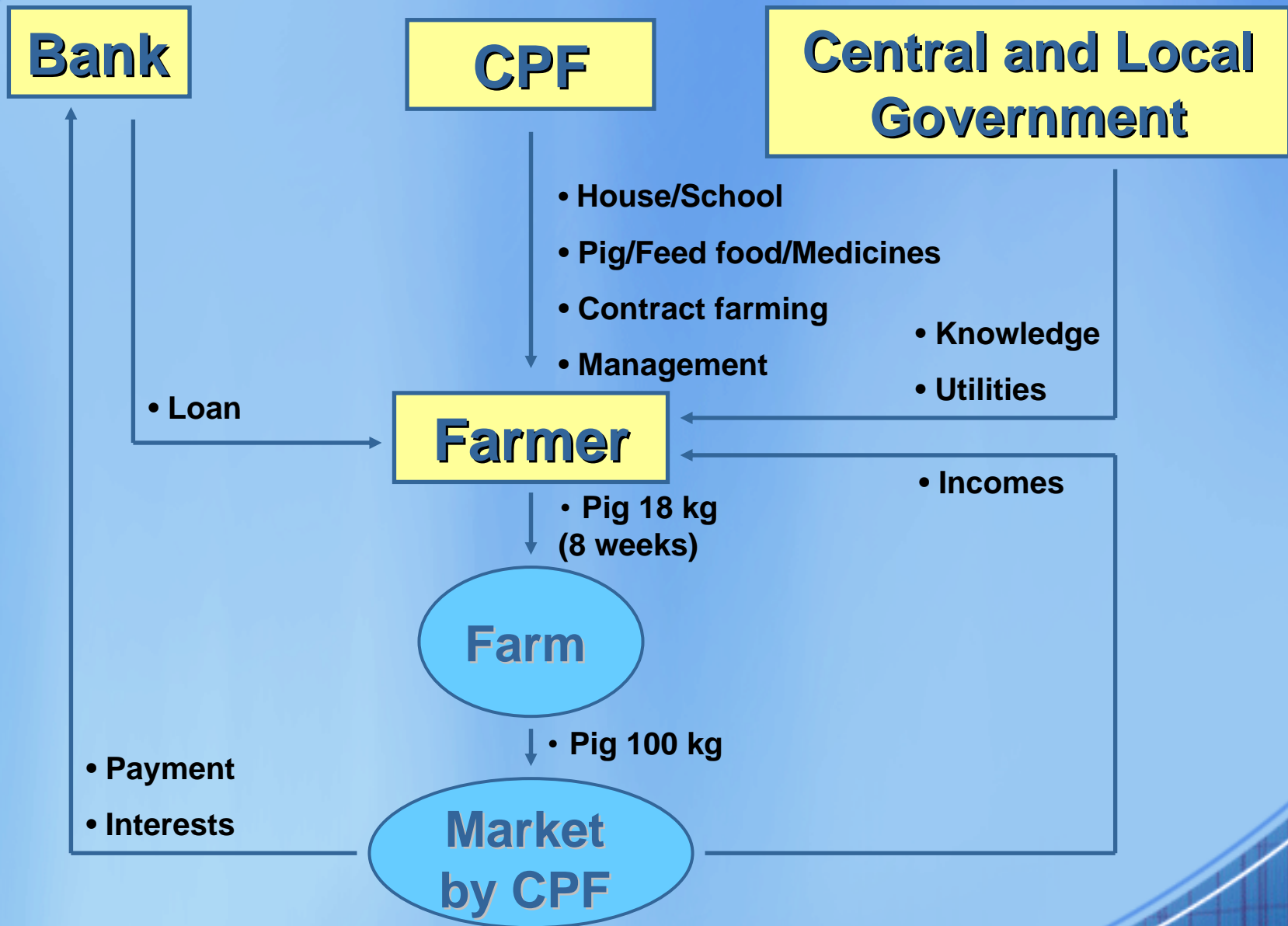


Details of the Project

- **Contract System**

- CPF is a collateral security guarantee for the loan
- Guarantee price
- Providence of inputs for pig farm
- Setting up a cooperative (CPF provide training as well)
 - Farmers in the community own stocks of the cooperative
 - Manage by farmers

Flow Chart of the Project



Environmental Management

- **Zero waste**
 - **Biogas** production from **excrement**
 - **Sludge** from biogas production used for **soil enrichment**



Outcomes

- **Economic**
 - Jobs security
 - Better quality of life
 - More incomes
 - Supplementary jobs (Growing mango)
- **Environment**
 - Pollution reduction
 - Increasing resources

Voluntary Initiative Promotion

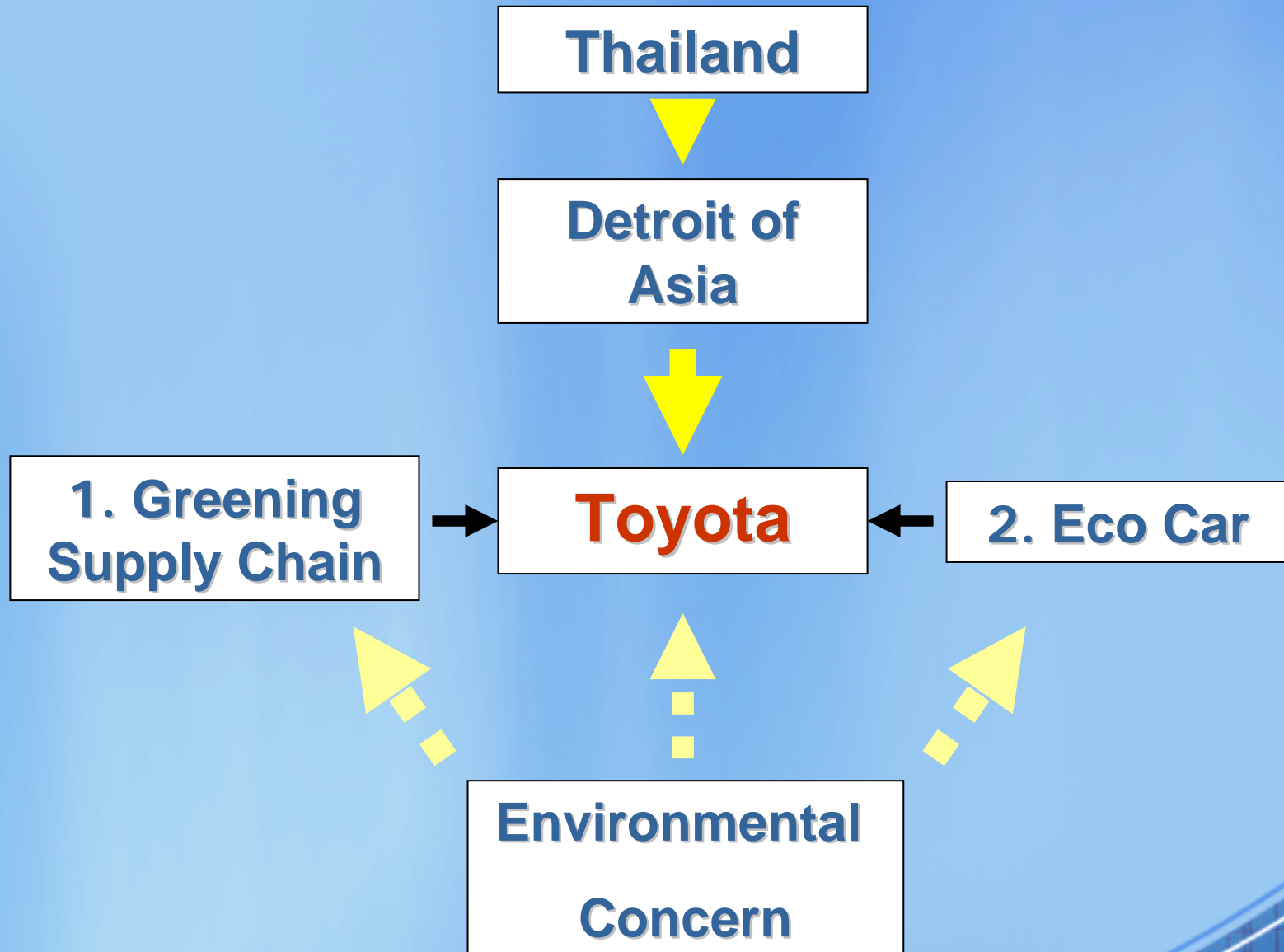
CPF case

- Started 30 years ago when
 - No regulation
 - No mandatory
- Study to answer
 - ***What*** is a ***mechanism*** driving the project?
 - ***How*** CPF ***makes*** the project ***work*** and
 - ***How*** CPF ***maintains*** the program?

Voluntary Initiative Promotion

- Tools will be used
 - *Interview* and *Questionnaire* with *Private sector*
 - *Consultation* with *Governmental sector*
- Use answers for
 - **Come up with *Policy Simulating the Mechanism***
 - ***Disseminate the policy* in *Food companies* in Thailand**

2nd Case Study of Good Voluntary Initiated by Automobile Sector



2nd Case Study of Good Voluntary Initiated by Automobile Sector

1. Greening Supply Chain

- Supplier: total number 153 companies
- Assist suppliers to achieve environmental standard (ISO 14001)
 - Win-Win Solution
 - Supporting activities
- ISO 14001 certified
 - 37 companies in 2002 (25%)
 - 146 companies in 2005 (95%)

2nd Case Study of Good Voluntary Initiated by Automobile Sector

2. Eco Production

- Concern not just only energy efficiency
- Take environmental aspect into account
 - Use recyclable materials in cars
 - Started to use recycled materials in cars
 - Minimize the use of toxic chemicals (In production line)
 - Stop using Substance of Environmental Concern
 - Hilux Vigo
 - Yaris (Will be dine by the end of 2007)
 - Emission standard
 - Energy efficiency

Voluntary Initiative Promotion

Toyota case

- Study to answer
 - **How** Toyota **help suppliers** improving their **environmental management** through supply chain system?
 - **How** Toyota **incorporates Eco concept** in a car production line?

Voluntary Initiative Promotion

- Tools will be used
 - *Interview* and *Questionnaire* with *Private sector*
 - *Consultation* with *Governmental sector*
- Use answers for
 - Come up with ***Policy Simulating the Greening Supply Chain***
 - Come up with ***Policy Simulating the Eco Production***
 - ***Disseminate*** a policy for ***Greening supply Chain*** in ***Car companies*** in Thailand
 - ***Disseminate*** a policy for ***Eco Production*** for ***every car produced*** in Thailand

**Thank You
for
Your Attention**