



# Analysis on CP Promoting System and Its Results in China



**China National Cleaner Production Center**

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# Core-objective is.....

**Introducing**

**Cleaner  
Production  
Promting  
Systym**

**WHAT**

**A Results of  
Promoting CP in  
China**

**HOW**

**Issues and  
recommendations**

# 1. CP Promoting System



**Regulatory System**

**Administrative System**

**Technical Supporting System**

**Education and Training System**



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# Introducing

❖ In 1993, the first CP project “Promoting CP in China” was initiated by the World Bank in China

❖ After nearly two decades, China has formed an all-round promoting system for CP





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# Regulatory System

## Forming process of China Cleaner Production policy

1989-1992



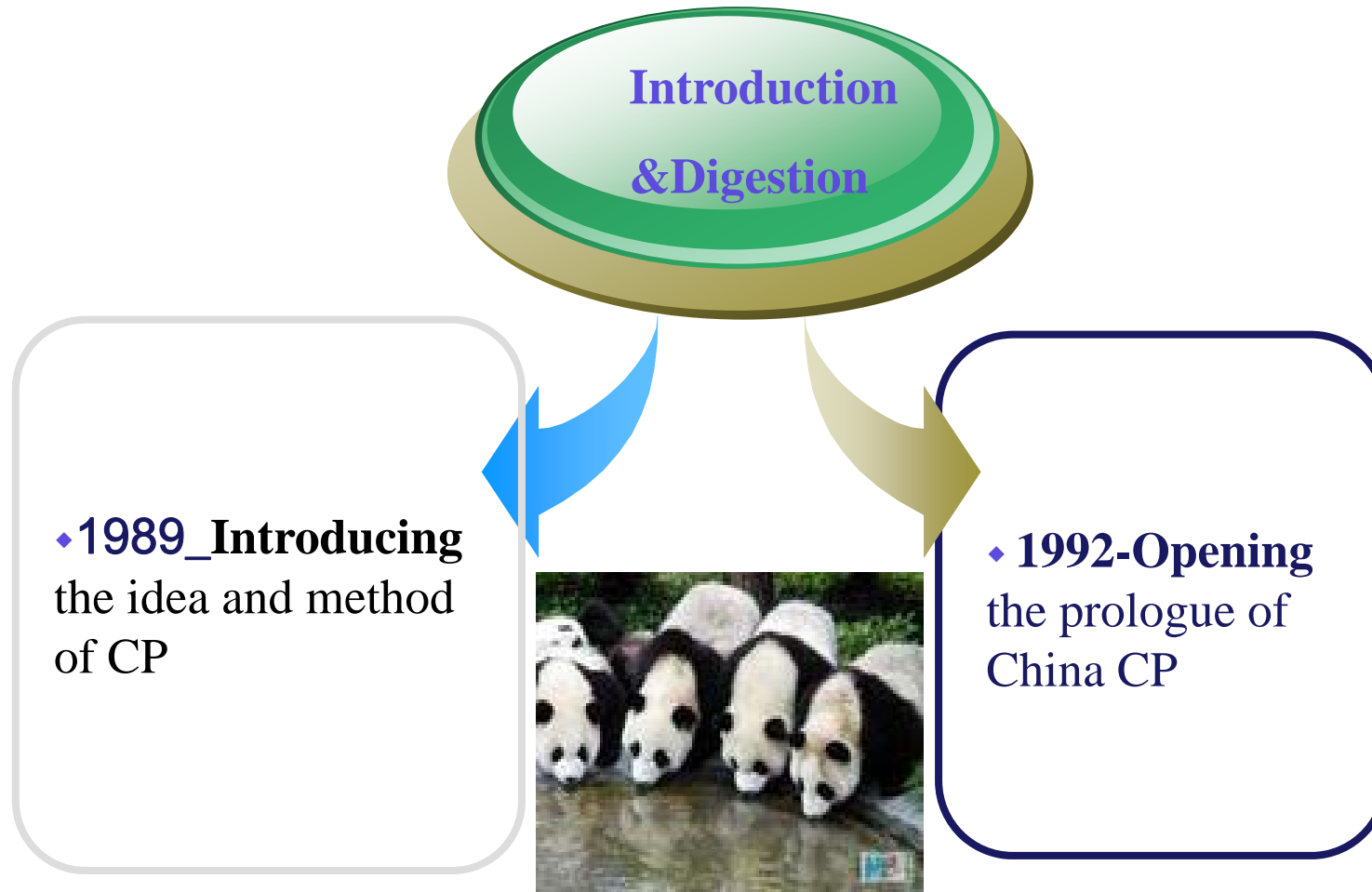
1993-2002



2003-



# Regulatory System





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# Regulatory System

October, 1993

- The second conference of prevention and control of national industry pollution
- Determining the strategic position of CP

March, 1994

- The China Agenda 21 Century
- Promoting the CP technology

Legislation

April, 1997

- The Some suggestions on implementation of CP
- Incorporating CP into the environmental management

June, 2002

- The CP Promotion Law of People's Republic of China
- Integrating CP in the related laws

## 1.1 Regulatory System

### ❖ Rules & Regulations



### ◆ Compulsory CP audit system

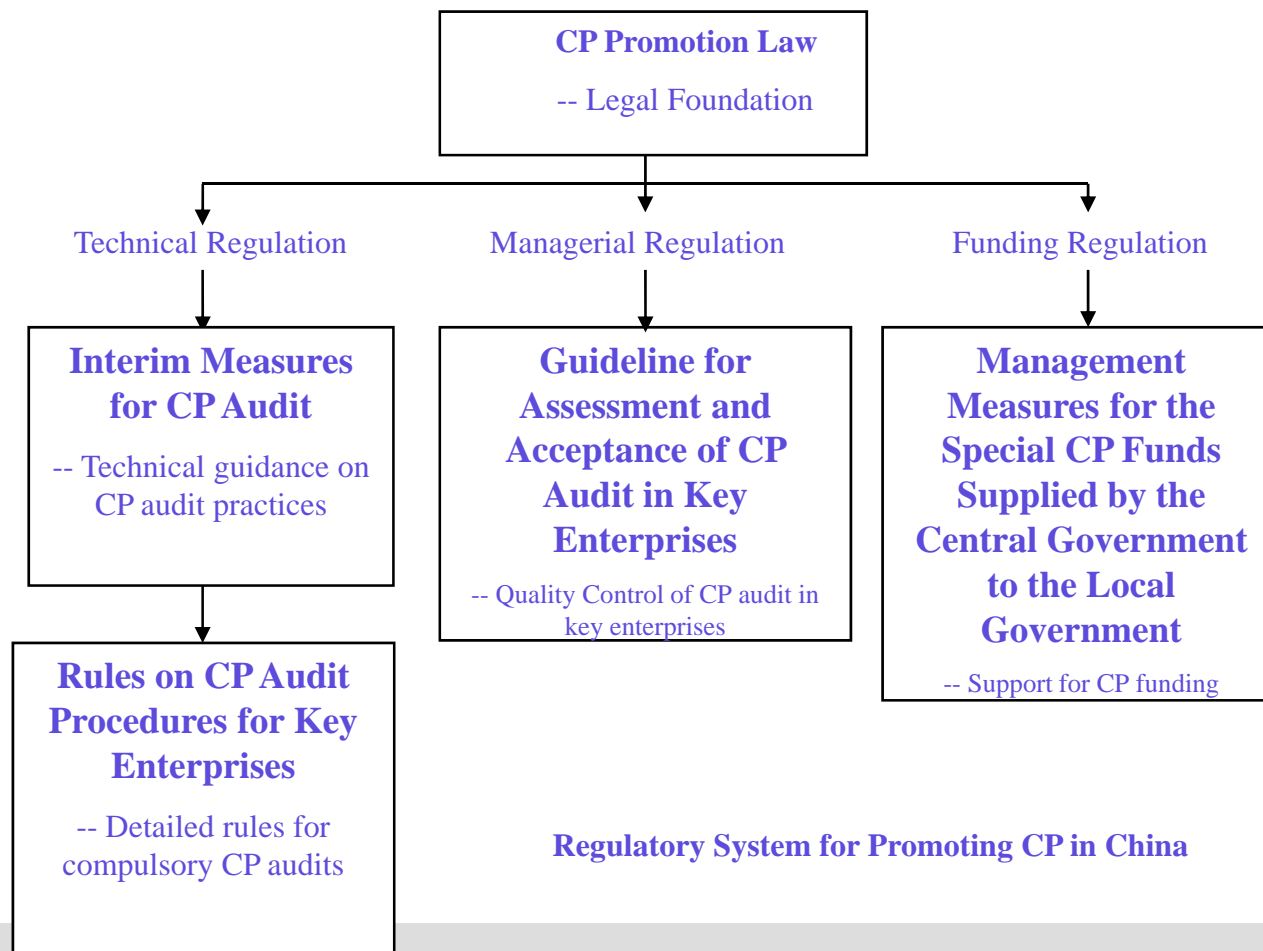
### ◆ Assessment and acceptance system of CP audit for key enterprises

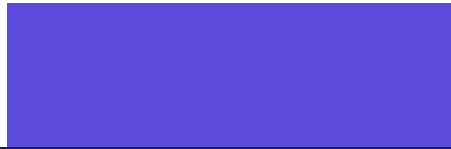
### ◆ CP standard system



# 1.1 Regulatory System

- ❖ The general regulatory system from promoting CP in China has been described





## 1.1 Regulatory System

### ❖ CP Promotion Law is just fitting for the national situation of China

- ◆ Defining the specific responsibilities of each governmental body at national and local levels
- ◆ Making detailed description on the implementation of CP and encouraging measures

## 1.1 Regulatory System

### ❖ Different from developed country





## 1.1 Regulatory System

### ❖ One of the CP Promotion Law strong points

The law requires **two categories** of enterprises carry out CP audit

Enterprises cover those enterprises that exceed the national or local discharging standards or exceed the total volume control targets for pollutants set by the relevant local people's governments and those enterprises that use toxic and hazardous materials in production or discharging toxic and hazardous substances.

## 1.1 Regulatory System

### Technical Regulations

#### Interim Measures for CP Audit

Putting forward specific requirements audit  
Providing detailed procedures  
Bring **compulsory CP audit**

#### Rules on CP Audit Procedures for Key Enterprises

**Key Enterprises**  
Key Enterprises that should carry out  
**compulsory CP audit**

## 1.1 Regulatory System

### Managerial Regulations

#### ❖ **Guideline for Assessment and Acceptance of CP Audit in Key Enterprises**

- ◆ The Guideline stipulates **two-step procedure**, the first step is the **assessment** of the CP audit and the second one is the **acceptance** of the CP audit
- ◆ The Guideline helps the environmental administrations control and monitor the quality of compulsory CP audit at a higher level, and guarantees the real effectiveness of the CP audits



## 1.1 Regulatory System

### Funding Regulations

#### ❖ Management Measures for the Special CP Funds Supplied by the Central Government to the Local Government

- ◆ **The key industrial** :petrochemical, metallurgy, chemistry, light industry, textile and building materials
- ◆ **The small sized enterprises** :with less than 2000 employees, or with less than RMB 300 million yuan (about USD 44 million) of the sales, or with less than RMB 400 million yuan (about USD 59 million) of the total assets



## 1.1 Regulatory System

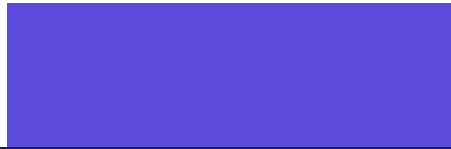
### Funding Regulations

- ❖ **The Special CP Funds will be allocated in the term of subsidy for the following CP projects:**
  - ◆ All the CP projects focusing on the source reduction of pollutants, including improving the product design, using nontoxic raw materials and cleaner or renewable energies, and applying advanced low-material-consumption technologies and equipments
  - ◆ All the CP projects reducing pollutants from the process control, such as updating the production lines, improving management level and strengthening the on-site monitoring
  - ◆ All the CP projects that reuse or recycle all the waste materials, water and energy.
  - ◆ All the CP projects that apply mature CP technologies and processes, which are appropriate for demonstration and dissemination
  - ◆ Other CP projects that can be demonstrated and promoted.



## 1.2 Administrative System

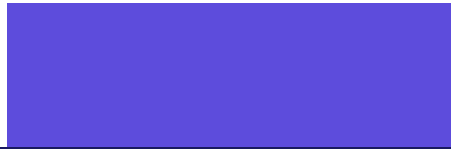




## 1.2 Administrative System

### ❖ National Development and Reform Commission (NDRC)

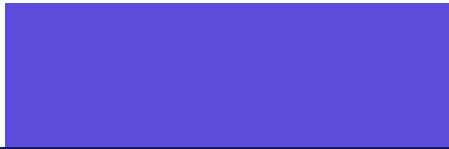
- ◆ Organizing the drafting of the CP Promotion Law
- ◆ Issuing the Interim Measures for CP Audits jointly with MEP
- ◆ Publishing the three CP Technology Inventories
- ◆ Publishing the CP evaluation indicators system
- ◆ Initiating a project of CP demonstrative Cities
- ◆ Organizing a large number of activities and campaigns



## 1.2 Administrative System

### ❖ Ministry of Environmental Protection (MEP)

- ◆ Publishing the Rules on CP Audit Procedure for Key Enterprises
- ◆ Publishing the Guideline for Assessment and Acceptance of CP Audits in Key Enterprises



## **1.2 Administrative System**

### **❖ Promoting the process of pollution reduction**

**Implementing CP**

**Electricity: 3.69 billion kWh  
Coal: 7.04 million tons  
Water: 380 million tons  
Wastewater: 60,462,646,700 tons  
COD :95,000 tons,  
SO2 :71,000 tons  
Atmospheric emissions from boiler  
Dust**

**Achieving obvious environmental  
and economic benefits**

## 1.2 Administrative System

### ❖ Promoting the process of pollution reduction

Figure 1 reflects trends of economic benefits through the implementation of Cleaner Production program from 2004 to 2007

unit : million

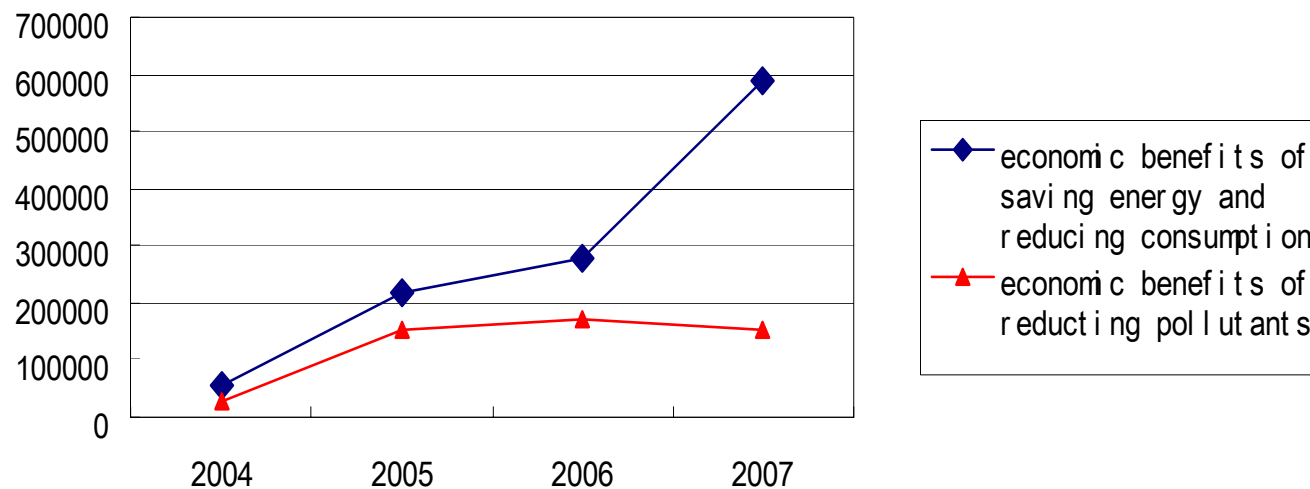
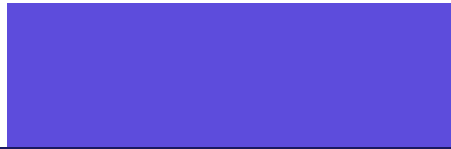


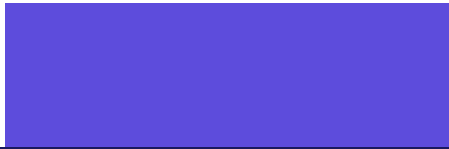
Fig. 1 implementing cleaner production program of economic situation for 2004-2007



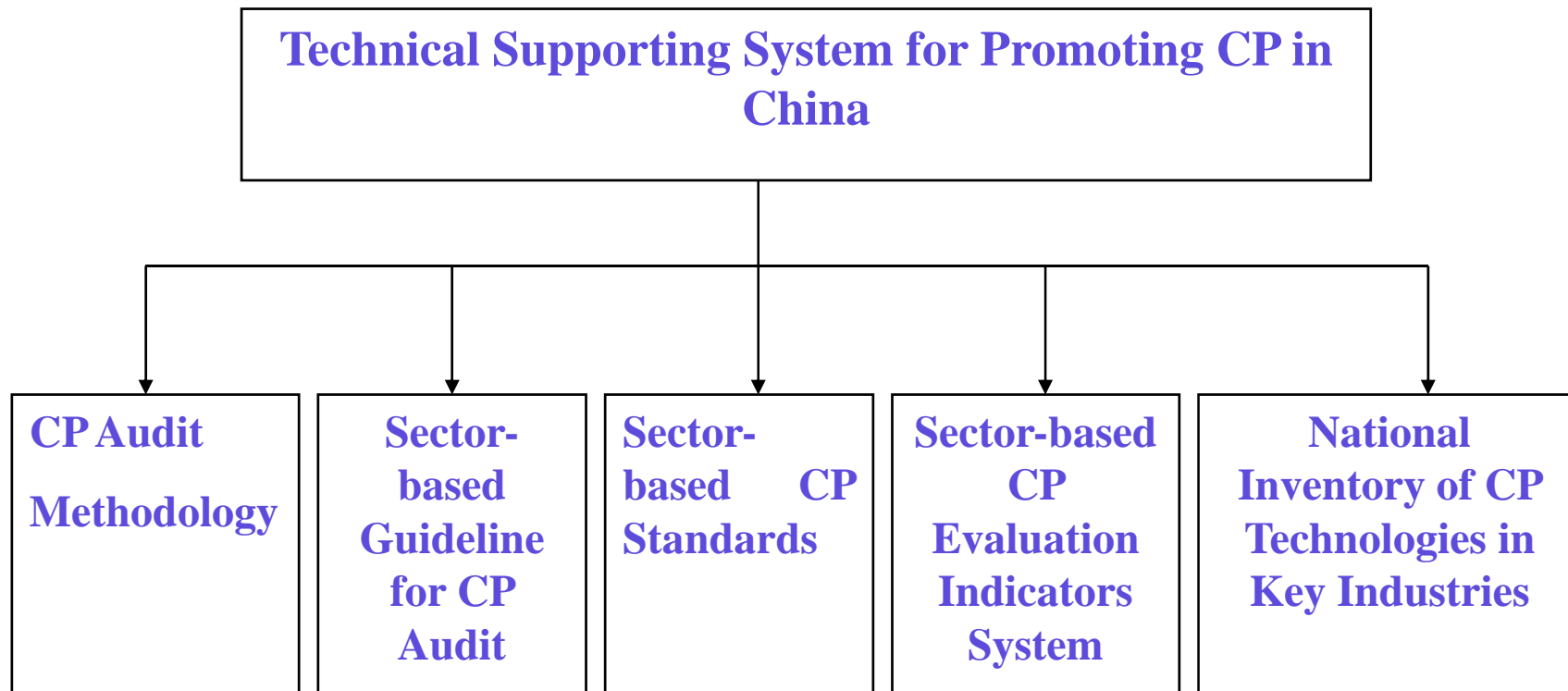
## 1.2 Administrative System

### ❖ Ministry of Industry and Information Technology (MIIT)

- ◆ Preparing and organizing the implementation of CP promotion policies in industries and information technology industry
- ◆ Participating in drafting CP Promotion Planning



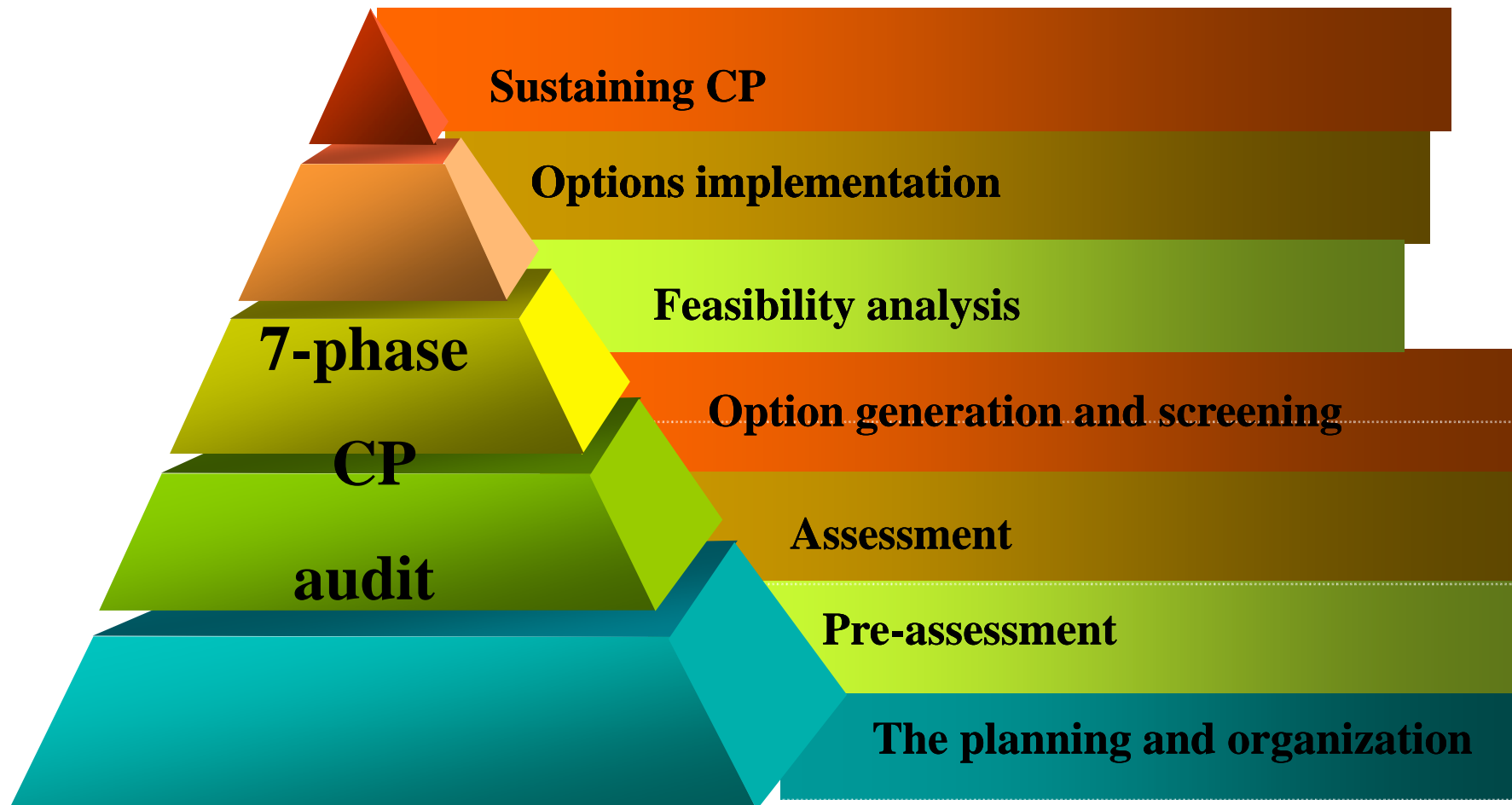
## 1.3 Technical Supporting System



**Chart 3 Technical Supporting System for Promoting CP in China**

## 1.3 Technical Supporting System

### CP Audit Methodology

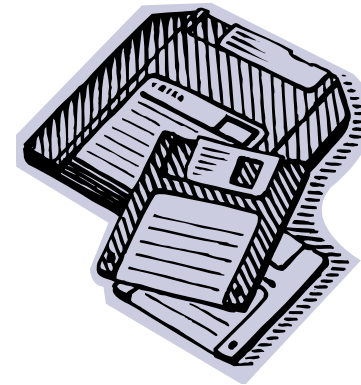




## 1.3 Technical Supporting System

### CP Audit Methodology

**The updated methodology has three major characteristics**



- ◆ **Compulsory CP audit**
- ◆ **CP audit aims at compliance of emission standards**
- ◆ **CP audit put focuses on the generation of mid/high cost options**

## 1.3 Technical Supporting System

### Sector-based Guidelines for CP Audits

#### In 1990's

- **Chemical raw materials**
- **Silk dyeing**
- **Electroplating**
- **Brewing**

#### Now

- Nearly 100 sectors**
- **Hotels**
  - **Fertilizer**
  - **Steel**
  - **Petroleum refining etc..**

## 1.3 Technical Supporting System

### Sector-based CP Standards

#### 3 levels

- **International advanced level**
- **Domestic advanced level**
- **The general level**

#### 6 categories

- **Production process and equipment**
- **Resources and energy utilization**
- **Products**
- **Pollutants generation**
- **Wastes reuse and recycling**
- **Environmental management**

**42 sectors CP standards(2008)**

## 1.3 Technical Supporting System

### Sector-based CP Evaluation

#### Indicator System

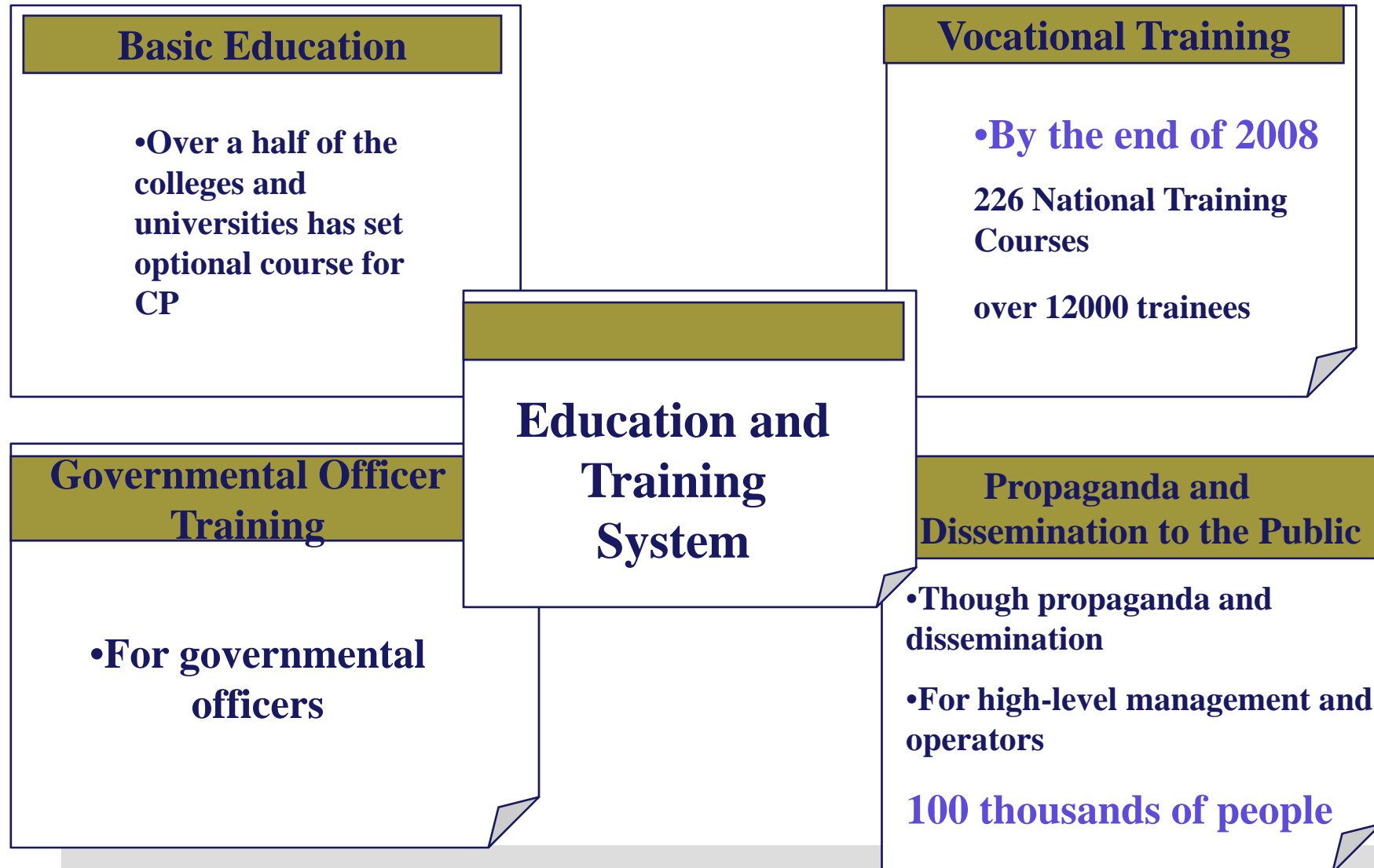
- Nitrogenous fertilizer
- Electroplating
- Steel
- Battery
- Pulp and paper making
- Dying sectors  
etc(24)

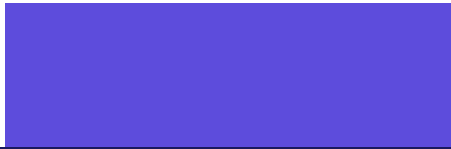
### National Inventory of CP

#### Technologies in Key Industries

- 57 CP technologies
- 56 CP technologies
- 28 CP technologies

## 1.4 Education and Training System





## 1.4 Education and Training System

### ❖ Propaganda and Dissemination to the Public

Fig 1

to

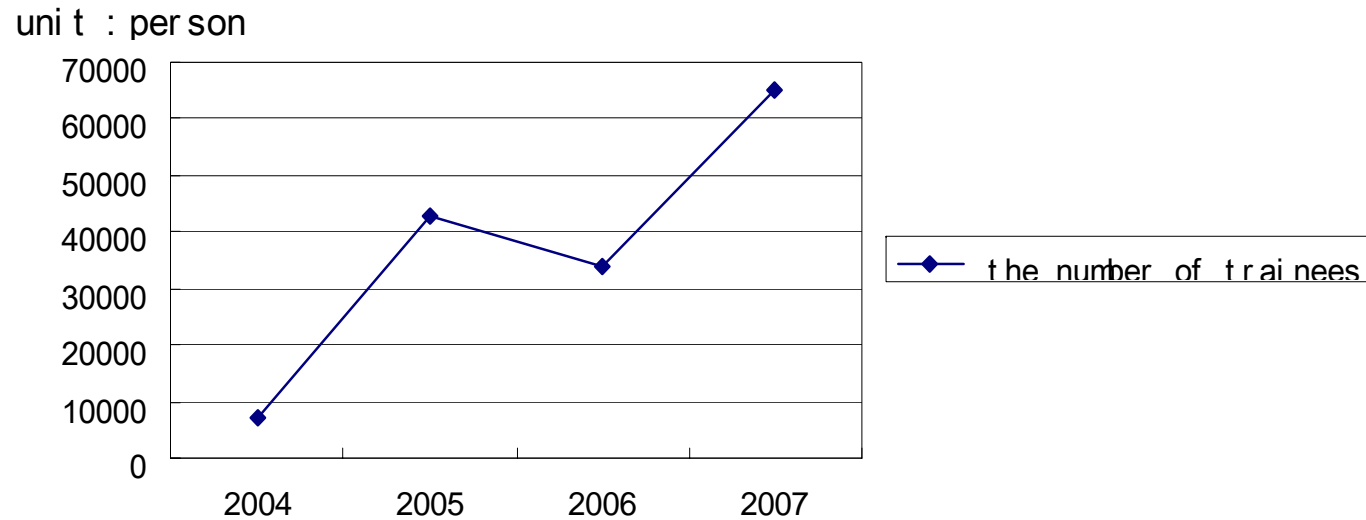
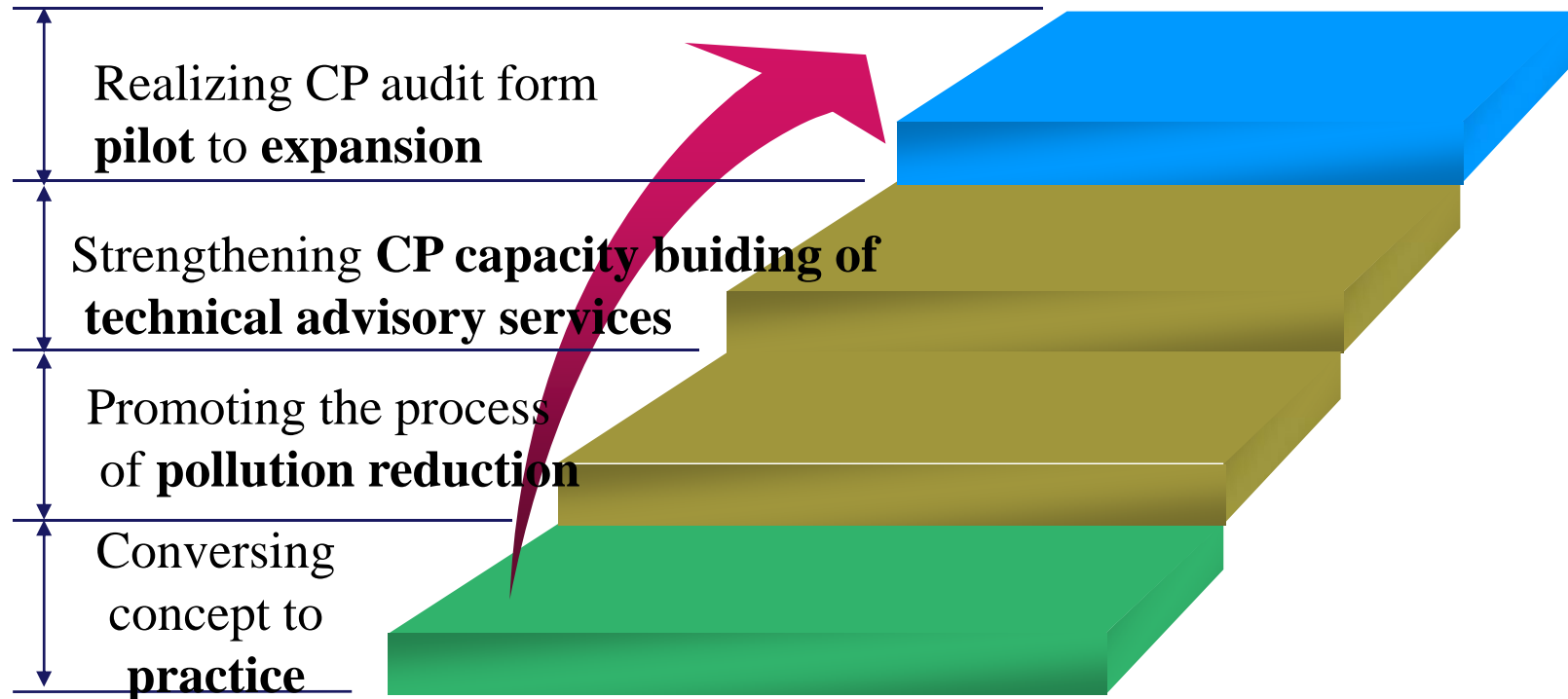


Fig. 2 training of cleaner production auditing for 2004-2007



## 2. Results of Cleaner Production Policy in China



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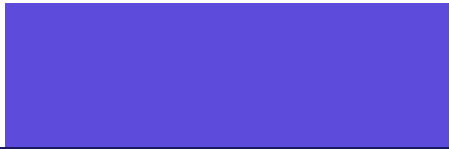
### ❖ **Conversing concept to practice**

- ★ **Proposing the concept of CP later and setting up pilot in a few enterprises—Awareness of CP is still relatively vague**



- ★ **Cleaner Production Promotion Law(2002)  
determining the legal status of CP and promoting the  
compulsory CP audit of key enterprises—Awareness of CP has  
improved**





## **2. Results of Cleaner Production Policy in China**

### **❖ Promoting the process of pollution reduction**

**Implementing CP**



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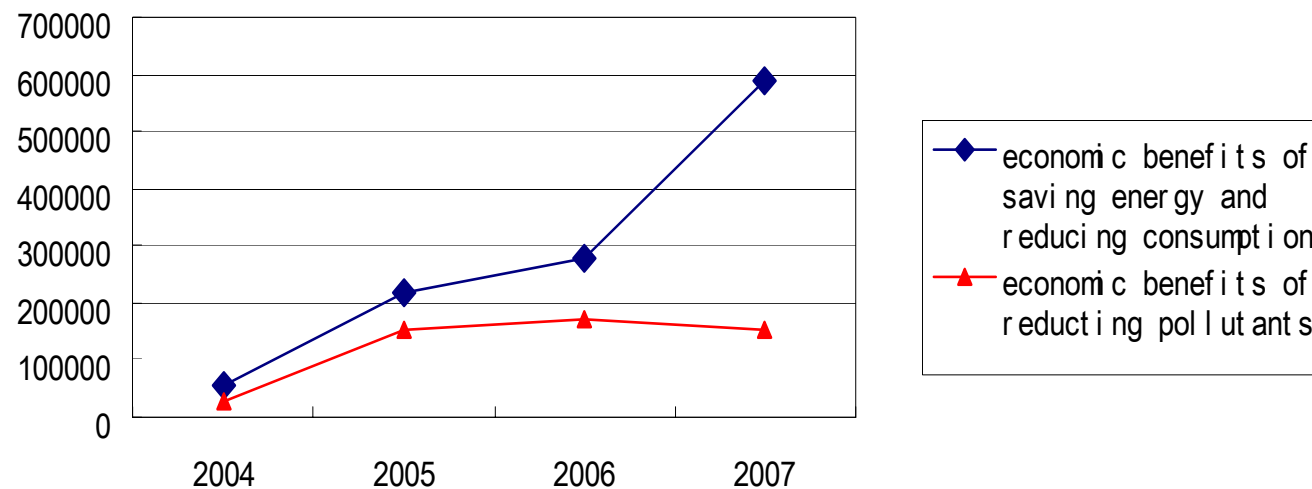
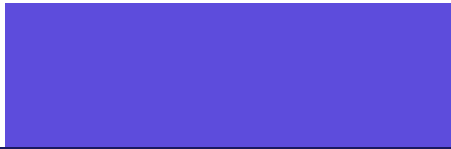


Fig. 1 implementing cleaner production program of economic situation for 2004-2007



## 2. Results of Cleaner Production Policy in China

### ❖ Strengthening regional CP of technical advisory services

★ Training courses of national CP aud



★ Building more than 300 industries or local Cleaner Production centers

## 2. Results of Cleaner Production Policy in China

### ❖ Strengthening regional CP of technical advisory services

Figure 2 reflects the number of staff received CP training from 2004 to 2007

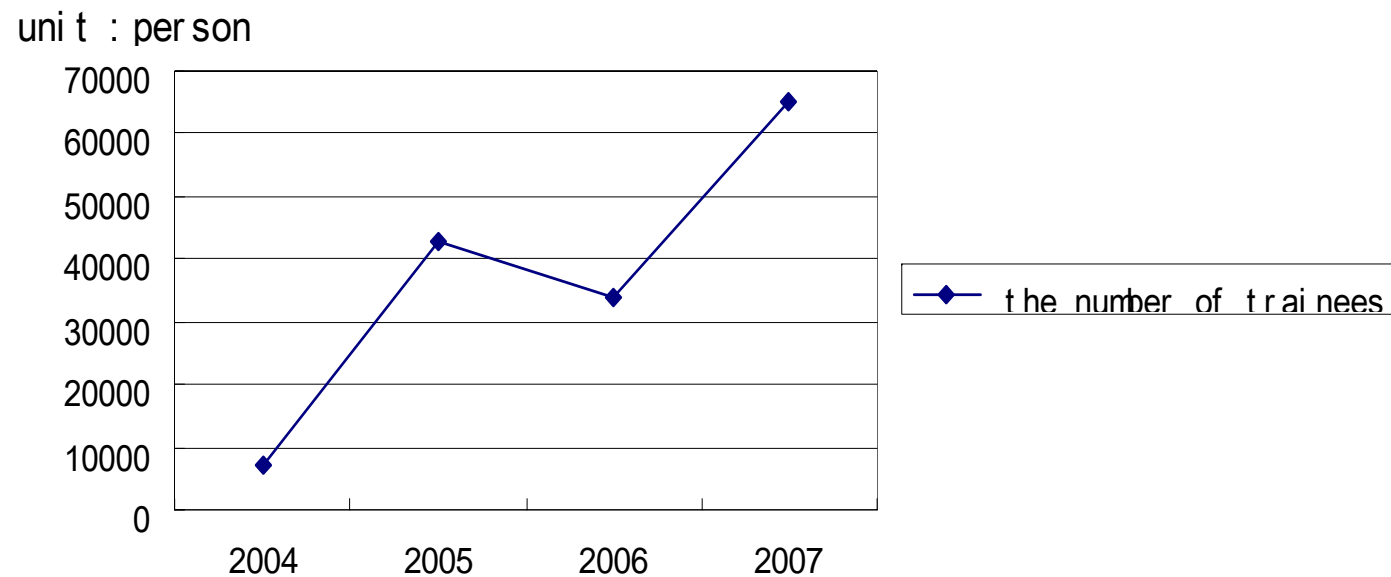
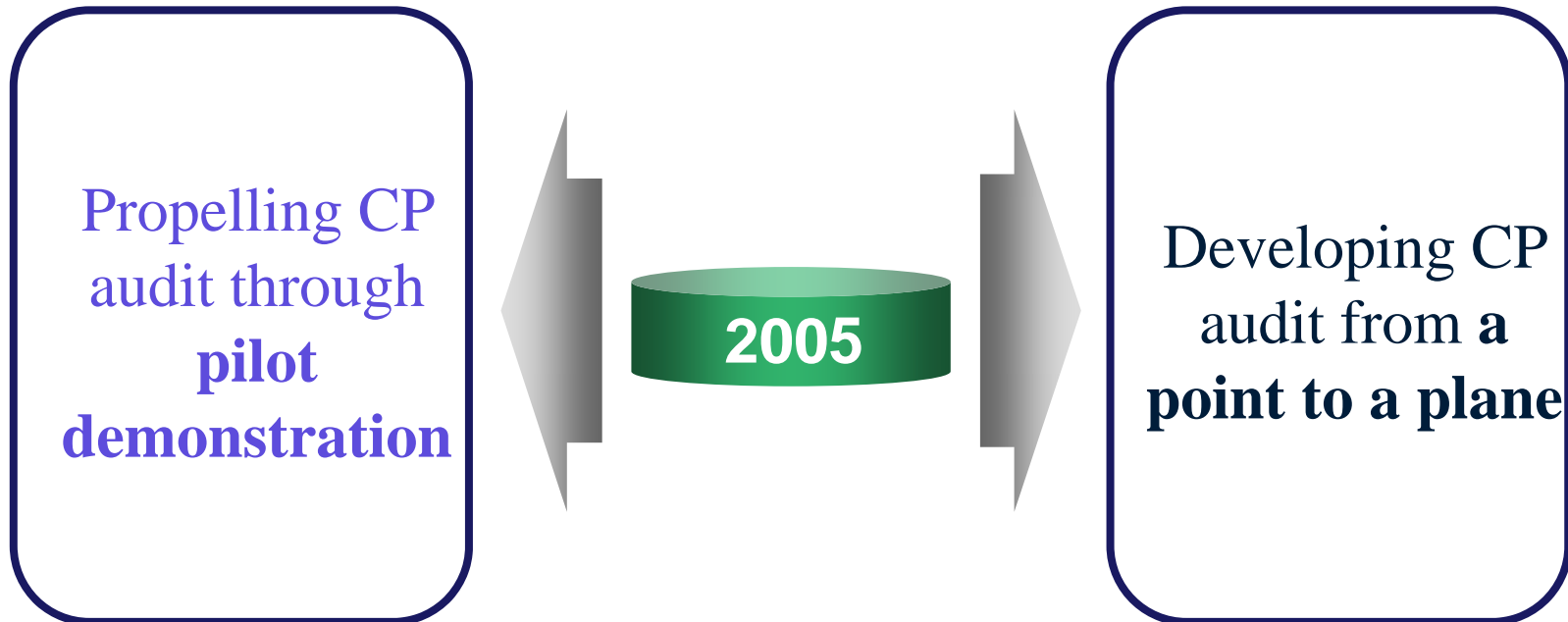


Fig. 2 training of cleaner production auditing for 2004-2007



## 2. Results of Cleaner Production Policy in China

### ❖ Realizing CP audit form pilot to expansion



## 2. Results of Cleaner Production Policy in China

### ❖ Realizing CP audit form pilot to expansion

Figure 3 reflects the condition of the key enterprises' clean production

audit

unit : number

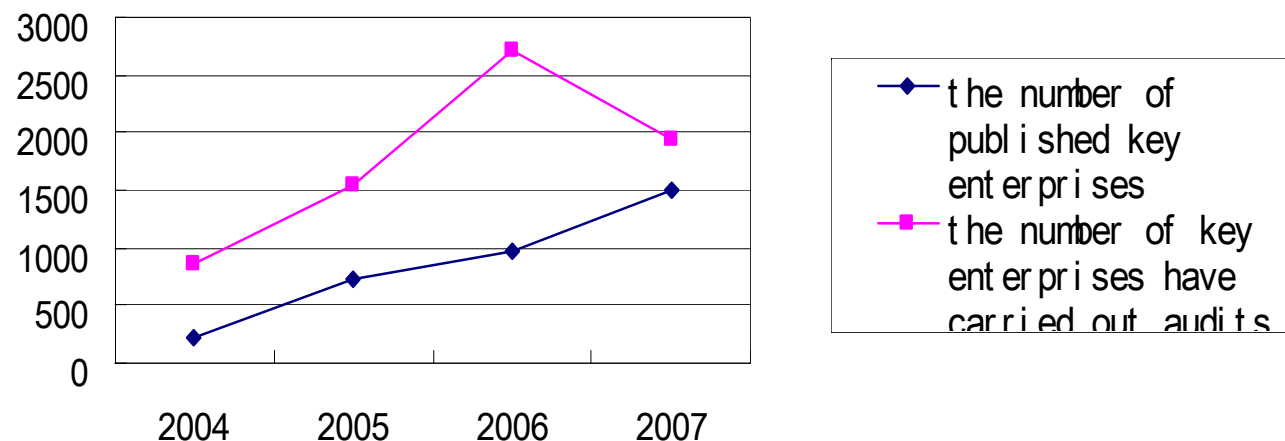
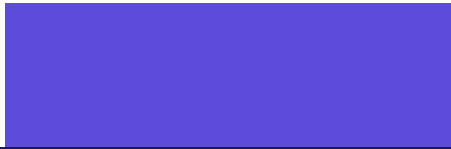
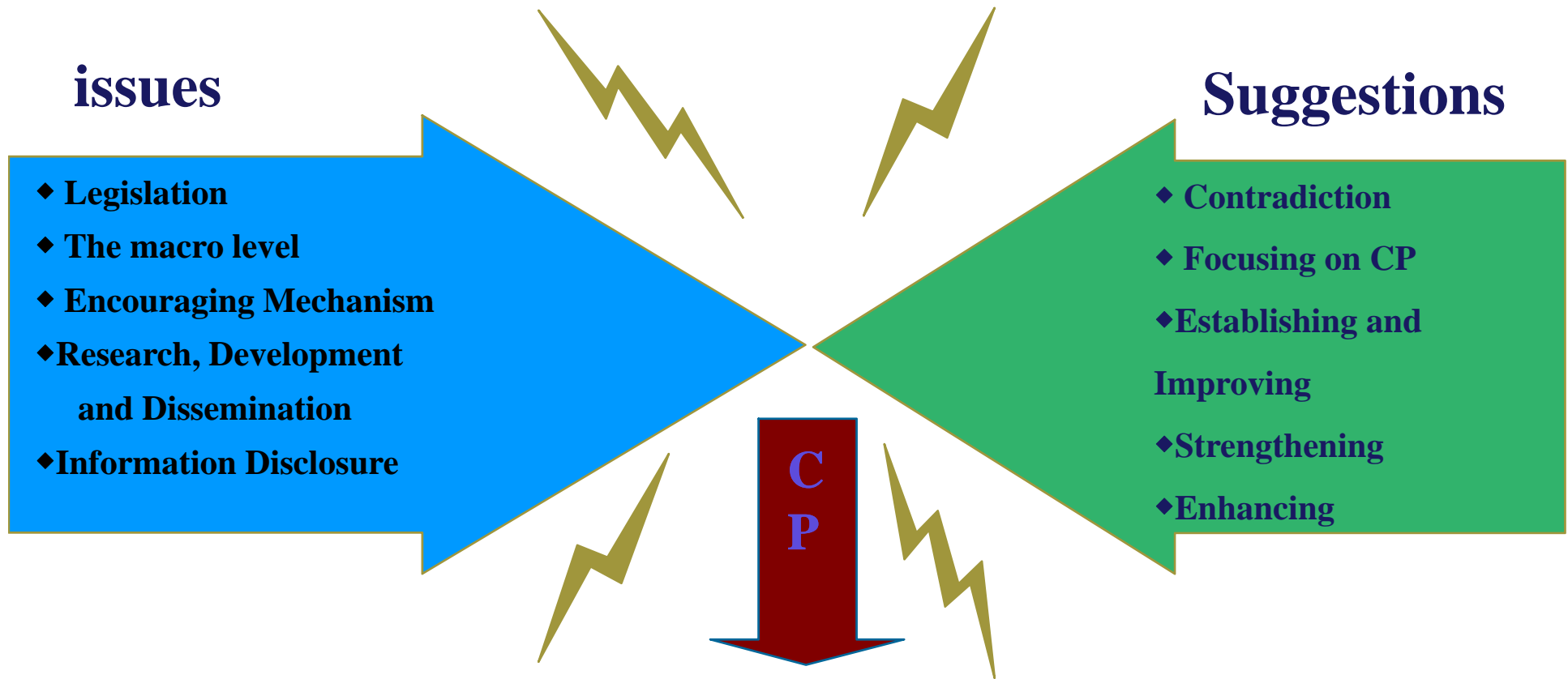


Fig. 3 Cleaner production audit work of key enterprises for 2004-2007



### 3. Existing Issues and Counter Measures Recommended



Finding a cleaner development road

CNCPC



*Thank you for your attention*