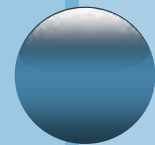


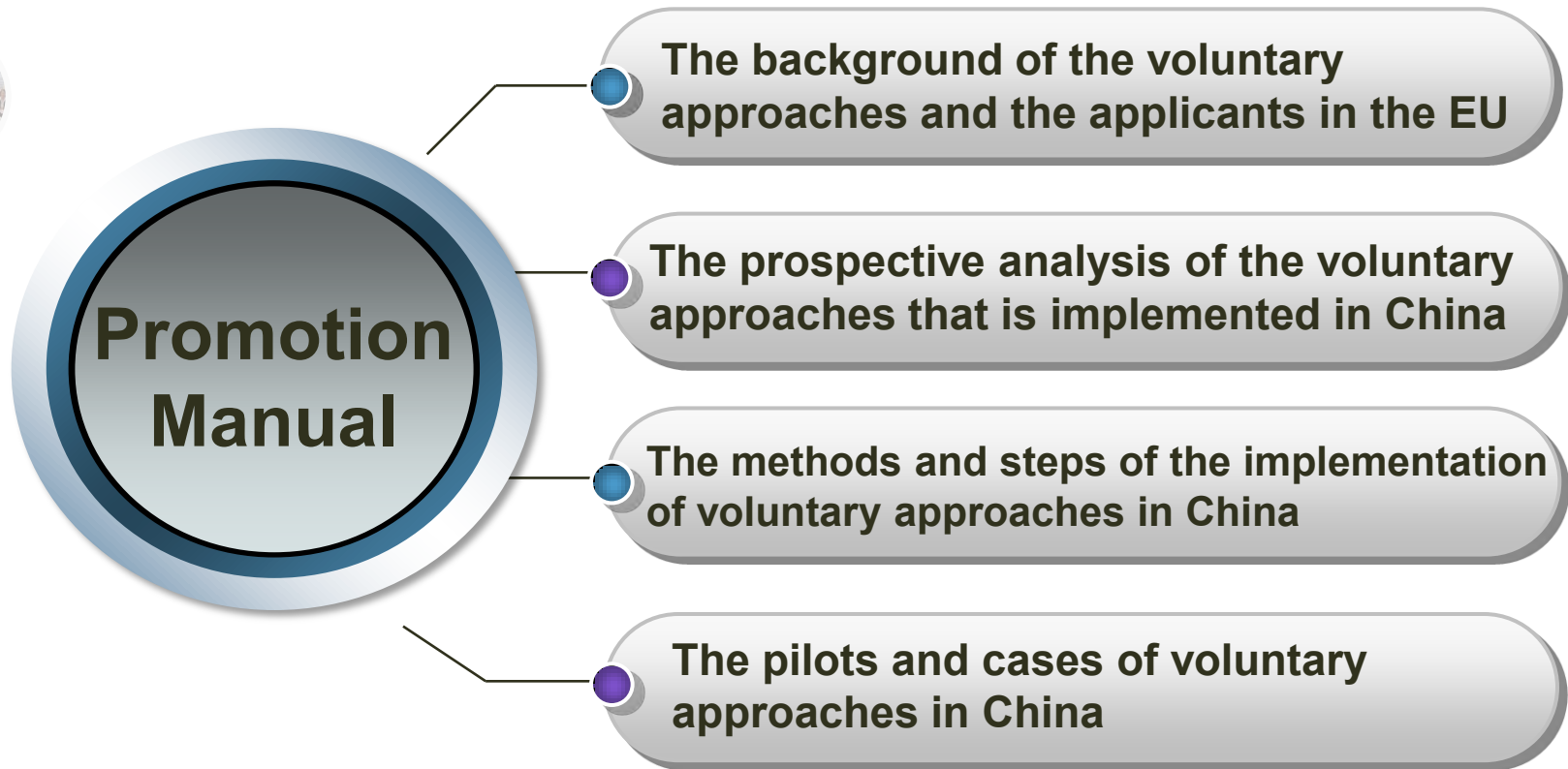


# The Pilot Study of Demonstration Voluntary Approaches for Industrial Environmental Management in China.



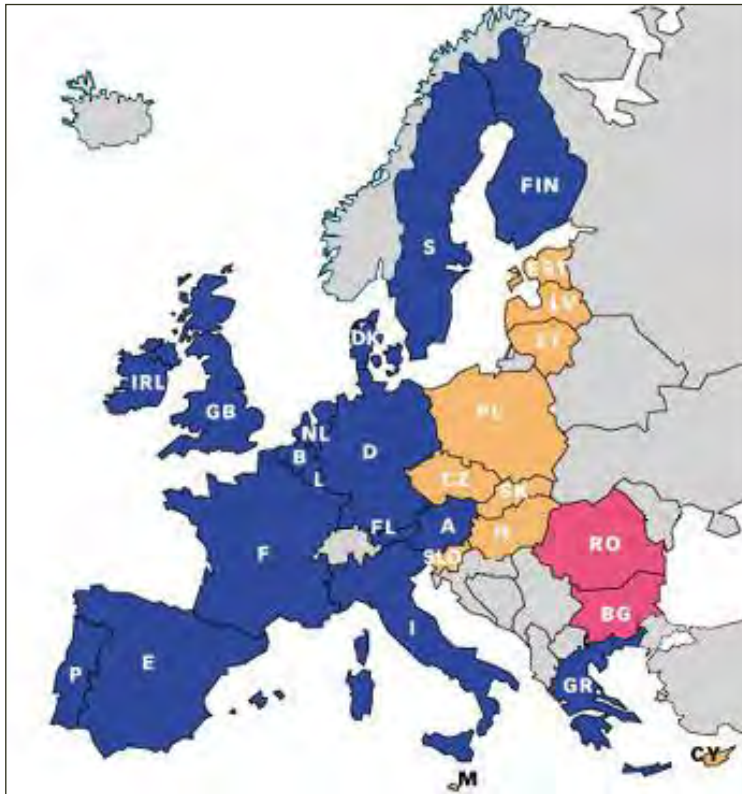


# Content Framework





# The background of the voluntary approaches and the applicants in the EU



## Background

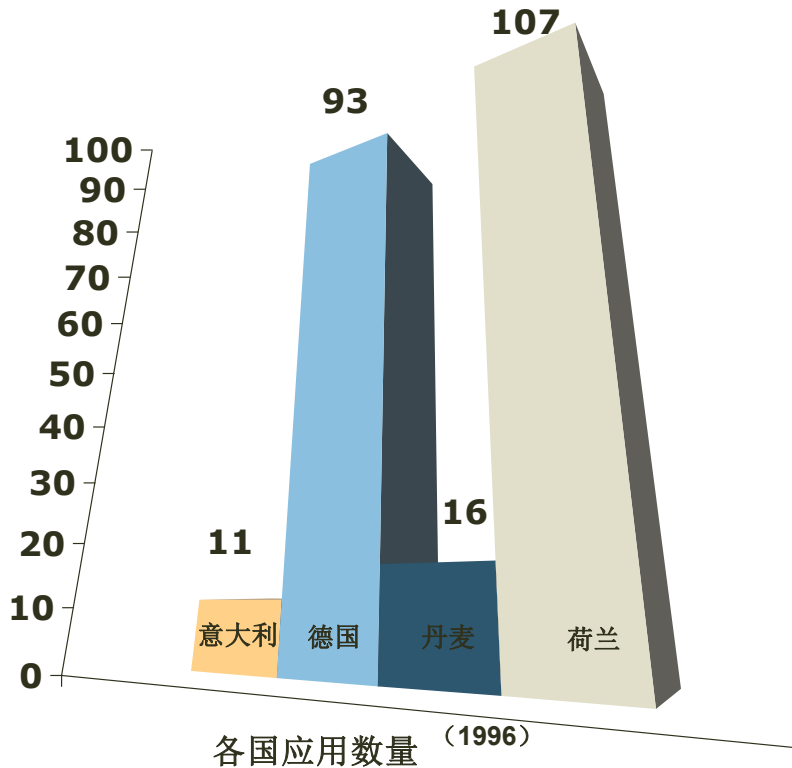
- One of the many environmental policies
- The inevitable demand of the historical development
- Mix with the traditional means
- Solve specific environmental issues
- Significant effect
- ... ..



# The background of the voluntary approaches and the applicants in the EU



## The connotation of the voluntary approaches



## 1. The definition of the voluntary agreement

- Commitments or agreements between enterprises and government departments
- Objectives, tasks and schedule

## 2. Characteristics of the voluntary approaches

- Flexibility, applicability, low cost, taking the energy-saving and environmental protection into account, improve the relationship between business and government

## 3. Type of the voluntary approaches

- Consultative voluntary approaches, unilateral commitment approaches, etc.



# The background of the voluntary approaches and the applicants in the EU

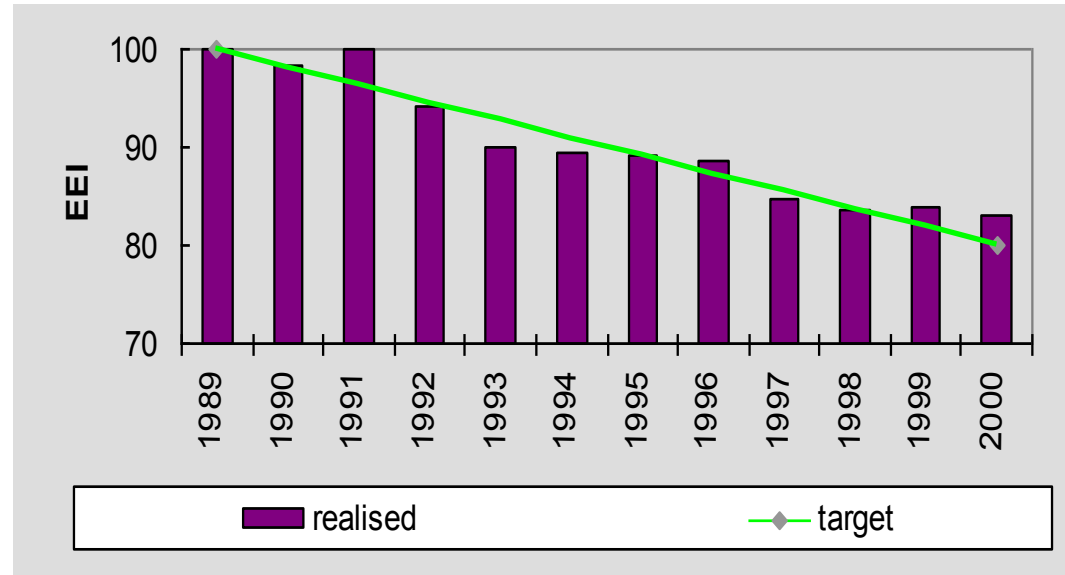


## Target sectors (enterprises)

Dutch steel industry, including two Iron and Steel Company: One is Hoogovens Staal Company, The other is Nedstaal Company.

## The implementation period and the target of the approaches

The late 1980s, the Dutch steel industry signed a voluntary approaches of 10 years with the management, formulating the long-term approaches target of 20% energy saving, with a base year 1989.



## The results of the approaches implementation

The steel industry's energy consumption in 1989 (the base year) is 61.2 PJ while in 2000 the energy consumption was 58.1 PJ. The effectiveness of long-term voluntary approaches is to improve the energy efficiency by 17% (the basic target), with a total energy saving of 79.8 PJ; In pollutants emission reduction, compared to 1989 the base year, in 2000 CO2 emissions is reduced by 854,000 tons. The total reduction of the CO2 emissions during the implementation period is 5.8 million tons.

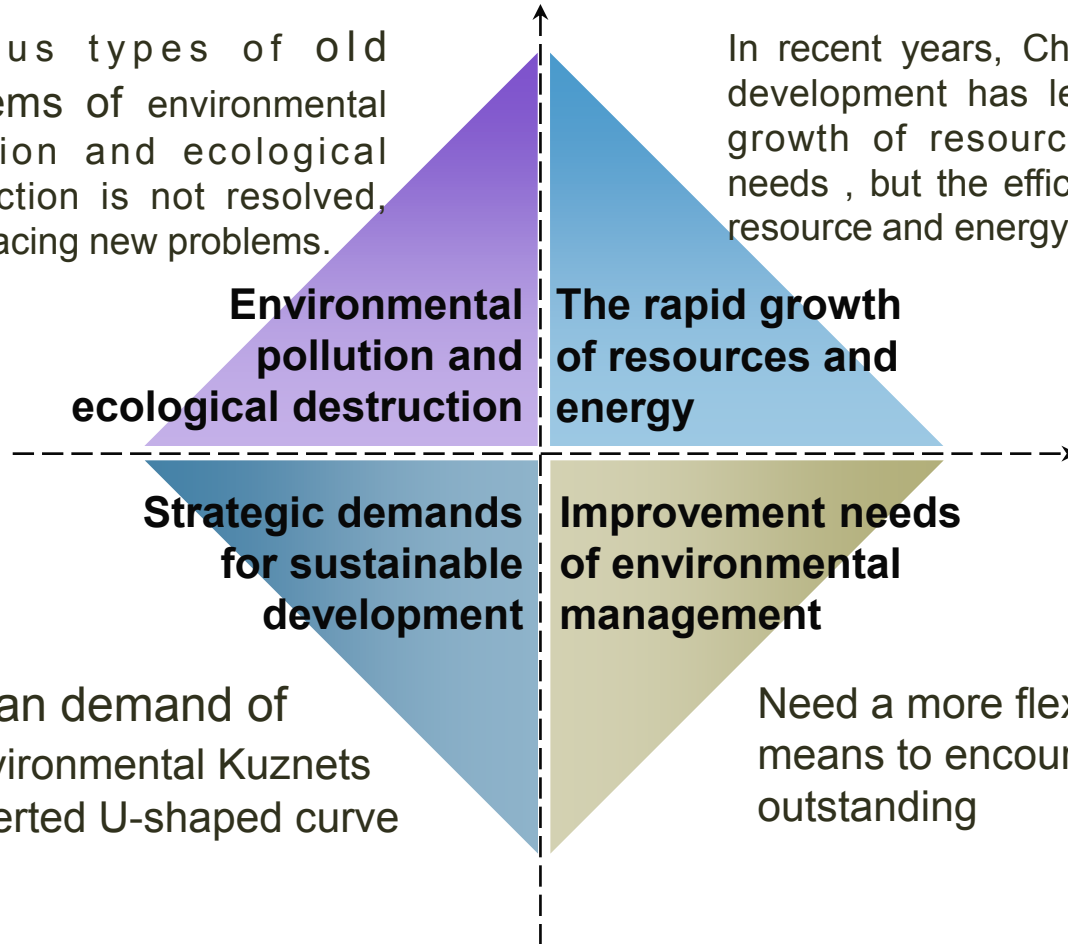


# The prospective analysis of the voluntary approaches that is implemented in China



Various types of old problems of environmental pollution and ecological destruction is not resolved, while facing new problems.

In recent years, China's economic development has led to a rapidly growth of resource and energy needs , but the efficiency of use of resource and energy is low .

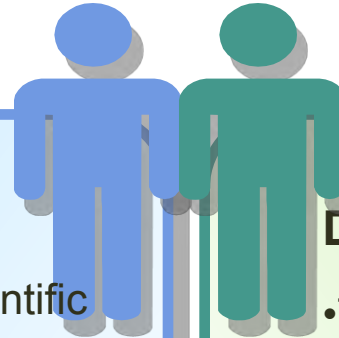


**The necessity analysis of the implementation of the voluntary approaches means of environmental management in China**





# The prospective analysis of the voluntary approaches that is implemented in China



## Advantages

- The practice of the scientific concept of development
- Changes in economic system
- Transformation of government functions
- Raising of public and corporate awareness
- Encouraged to learn the advanced experience of foreign countries
- Feasibility study and pilot viable

## Disadvantages

- The environmental quality of the enterprises need to be improved
- Inadequate supervision mechanism
- Inadequate incentives
- Implementation of the approaches may face difficulties
- The difficulties facing by new things





# The methods and steps of the implementation of voluntary approaches in China

VA	Benchmarking	EPS	EEI	Others
Conditional voluntary	whole process	$E = Q \times A$	$EEI = \frac{E_n}{E_0 \times P_n}$	Including the related concepts and tools of the energy-saving potential scanning working group, energy-saving rate, material and energy balance accounting.
Equal consultation	Analysis and comparison	The quality of programs	Intuitive expression	
Target	Identify gaps	Program acceptance	Comprehensive energy efficiency	
Measure	Prepare	The final results of the programs	Used to check and summary	

**\* Key concepts and tools**





# The methods and steps of the implementation of voluntary approaches in China



## 01 Government regulatory agencies

- Environmental Protection Agency
- Development and Reform Commission
- Economic Commission
- Other party.....

## 02 Business and industry associations

- Large industrial enterprises
- Small industrial enterprises
- Commercial enterprises
- Industry Association

## 03 Relevant third parties

- Intermediary
- Public
- NGO
- Media
- Steering Group of Experts
- .....

**“ The Related parties of voluntary approaches”**



# The methods and steps of the implementation of voluntary approaches in China



## “The steps of the implementation of voluntary approaches ”



Preparation and the signing of the approaches

The implementation of the approaches, check and summary

### [The Focus of the Promotion Manual ]

Promoting voluntary approaches means of environmental management in China, in the promotion phase it should be focused on the preparation and signing of the approaches stage. A good start is half the success.



# The methods and steps of the implementation of voluntary approaches in China



-The promoting of the **Promotion and training** Manual

- The basics
- Relevant training
- Case Study



## Planning and organization

Regulatory agencies or industrial enterprises are willing to make the appropriate organization and planning.



## Pre-preparation

on the basis of willingness, government administration and the target company can sign a preliminary letter of intent or memorandum.



## The initial intention



## Survey of Willingness

- Purpose
- Object
- Form
- Points and content
- Summary

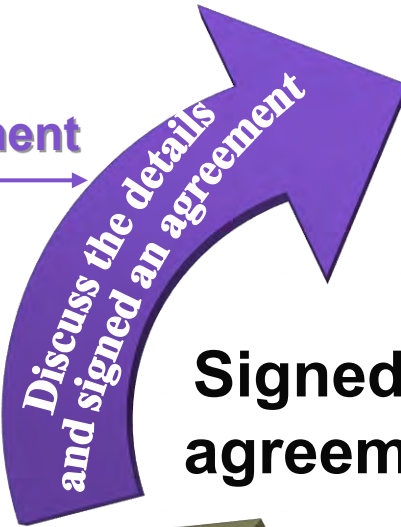


# Methods and procedures implemented by the voluntary approaches



## Signed an agreement

Agreement of all parties to consult on the details of the agreement, determine the measures of the management side, the goal of the agreement, period, the implementation-side measures and other related content.



**Signed an agreement**



## List of measures

Listed the list of energy saving through survey, the site visits, benchmarking contrast, process analysis and other methods to the enterprise.



## potential scan

Establish the Working Group of saving potential scan, do the EPS work to all lists, to find an acceptable degree of the highest energy saving measures.



# Methods and procedures implemented by the voluntary approaches

Management side, the  
business side and the  
middle square

Supervision and  
inspection and  
summary

**Other  
content**

**The parties  
of the  
agreement**

**Agreement  
target**

Energy  
conservation  
and emission  
reduction  
targets

**Agreement**

**Responsibilities  
and  
obligations**

**Duration of  
the  
agreement**

Incentives  
involved

**Energy saving  
and Emission  
reduction  
measures**

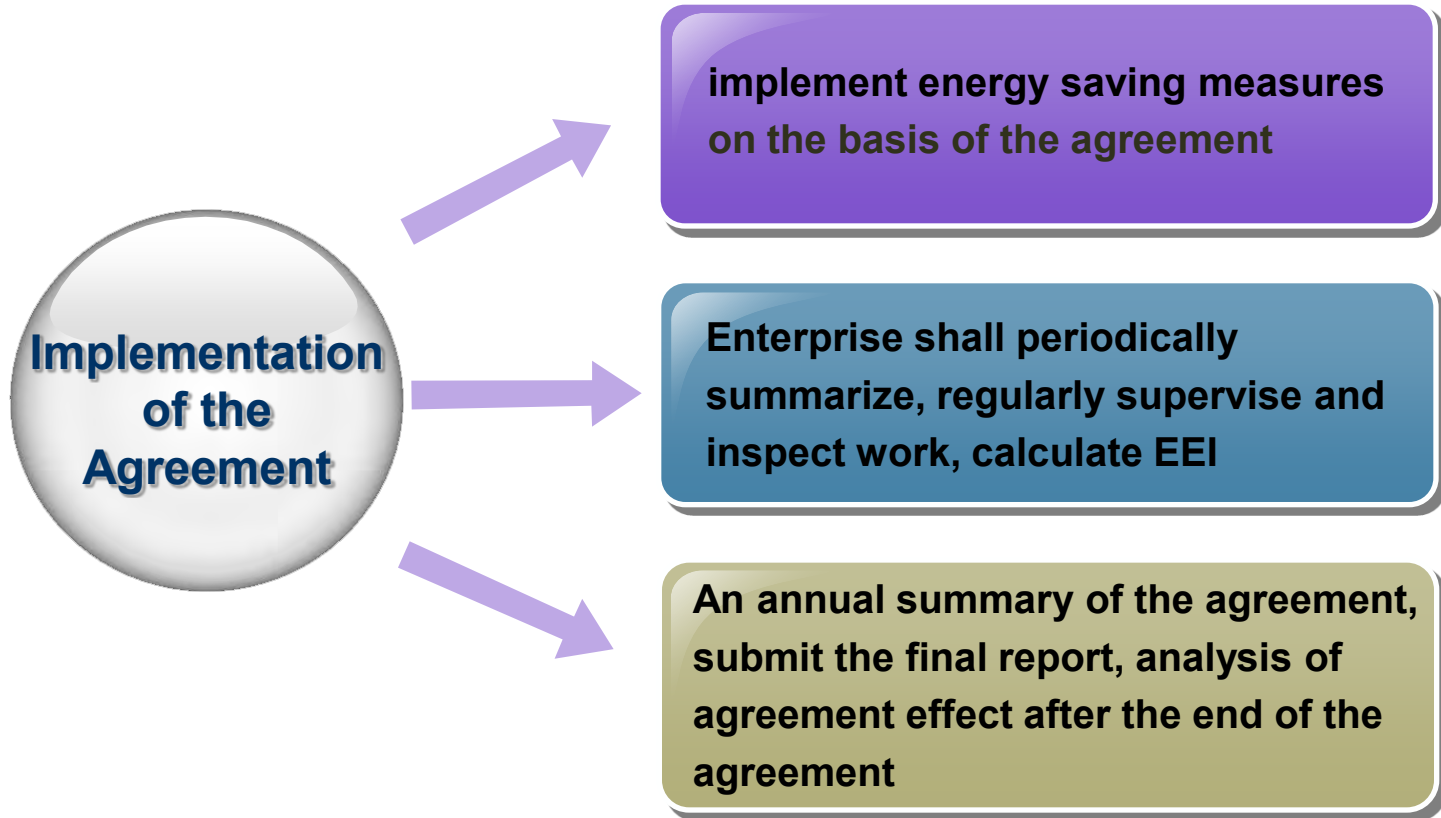
Short-or  
medium-and  
long-term

Should be explicit





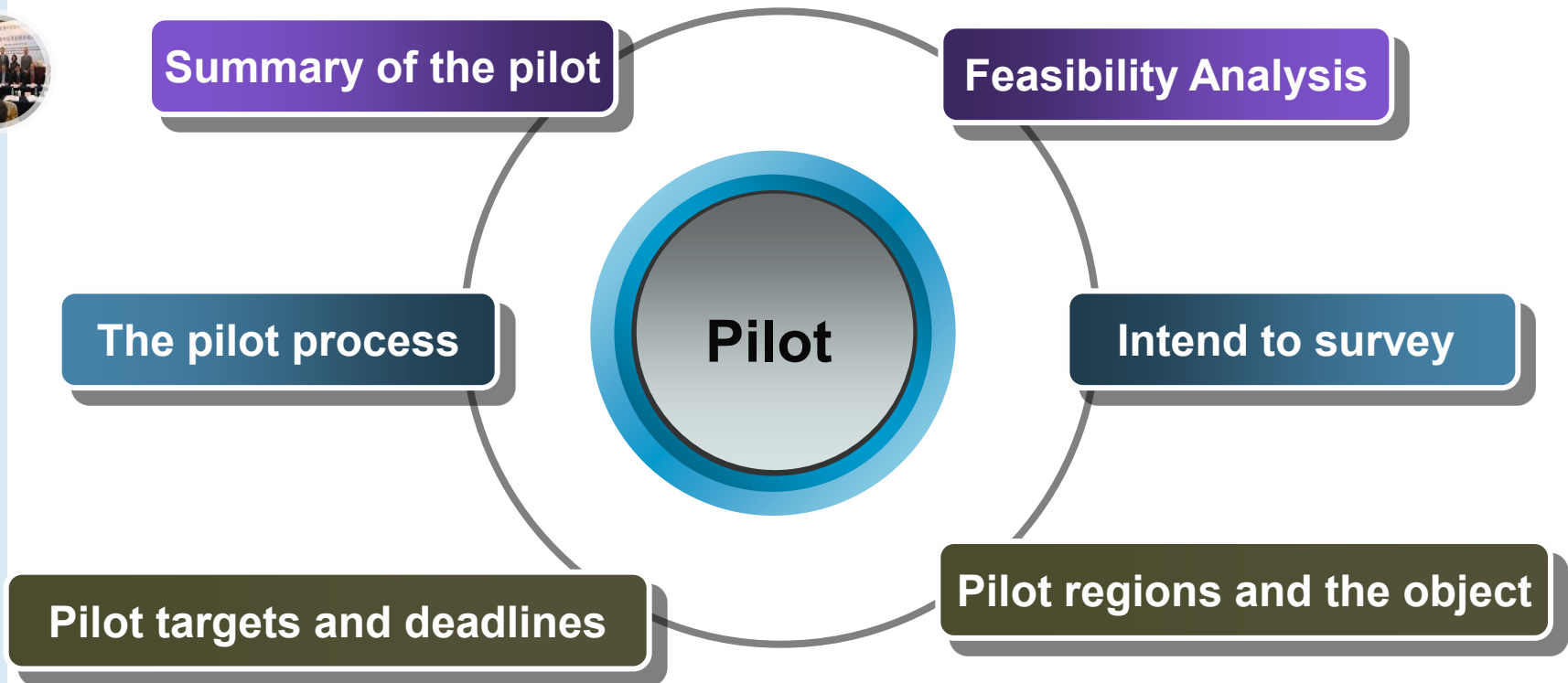
# Methods and procedures implemented by the voluntary approaches





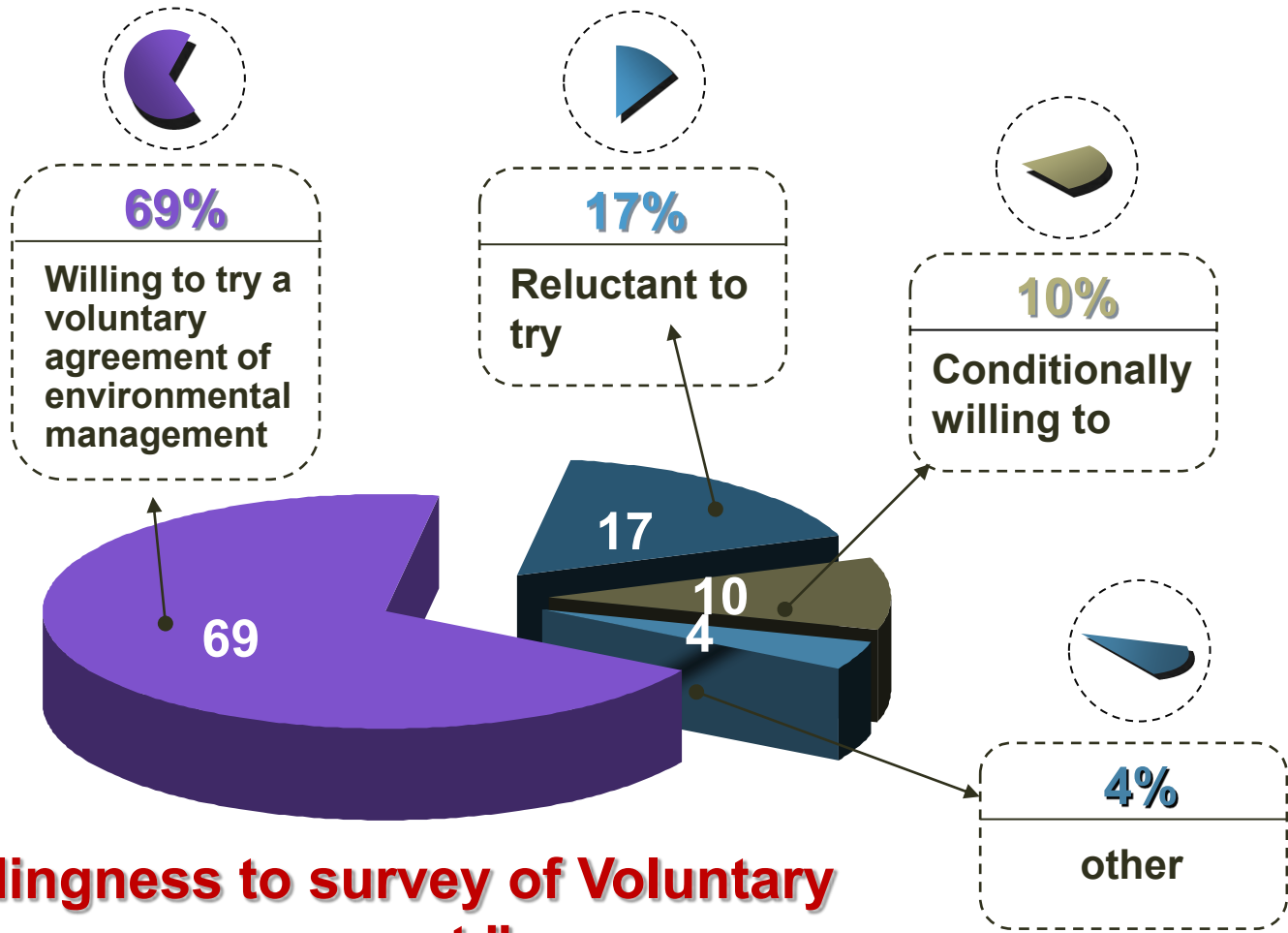


# Methods and procedures implemented by the voluntary approaches





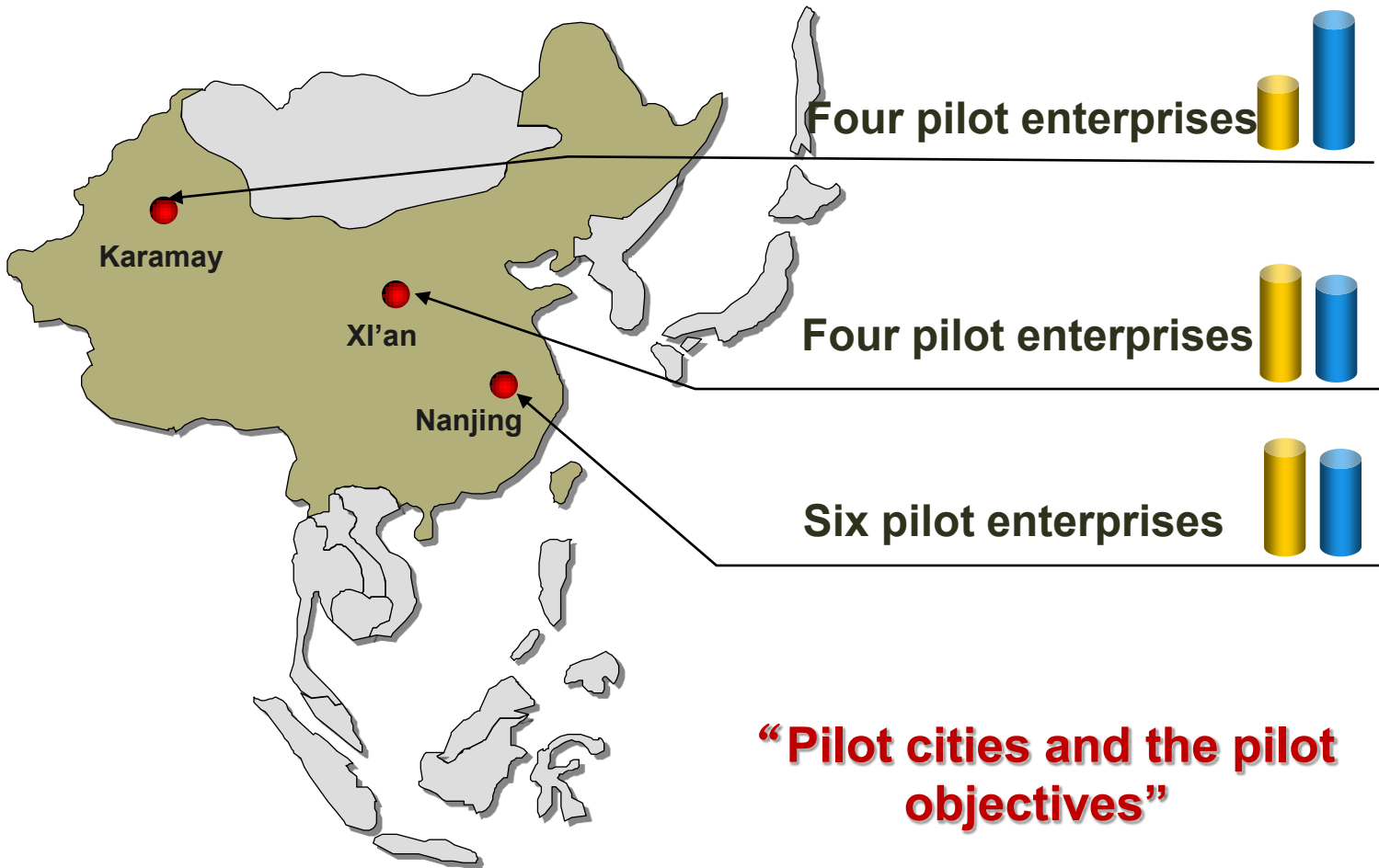
# The pilot case of voluntary approaches in China



**“willingness to survey of Voluntary agreement”**



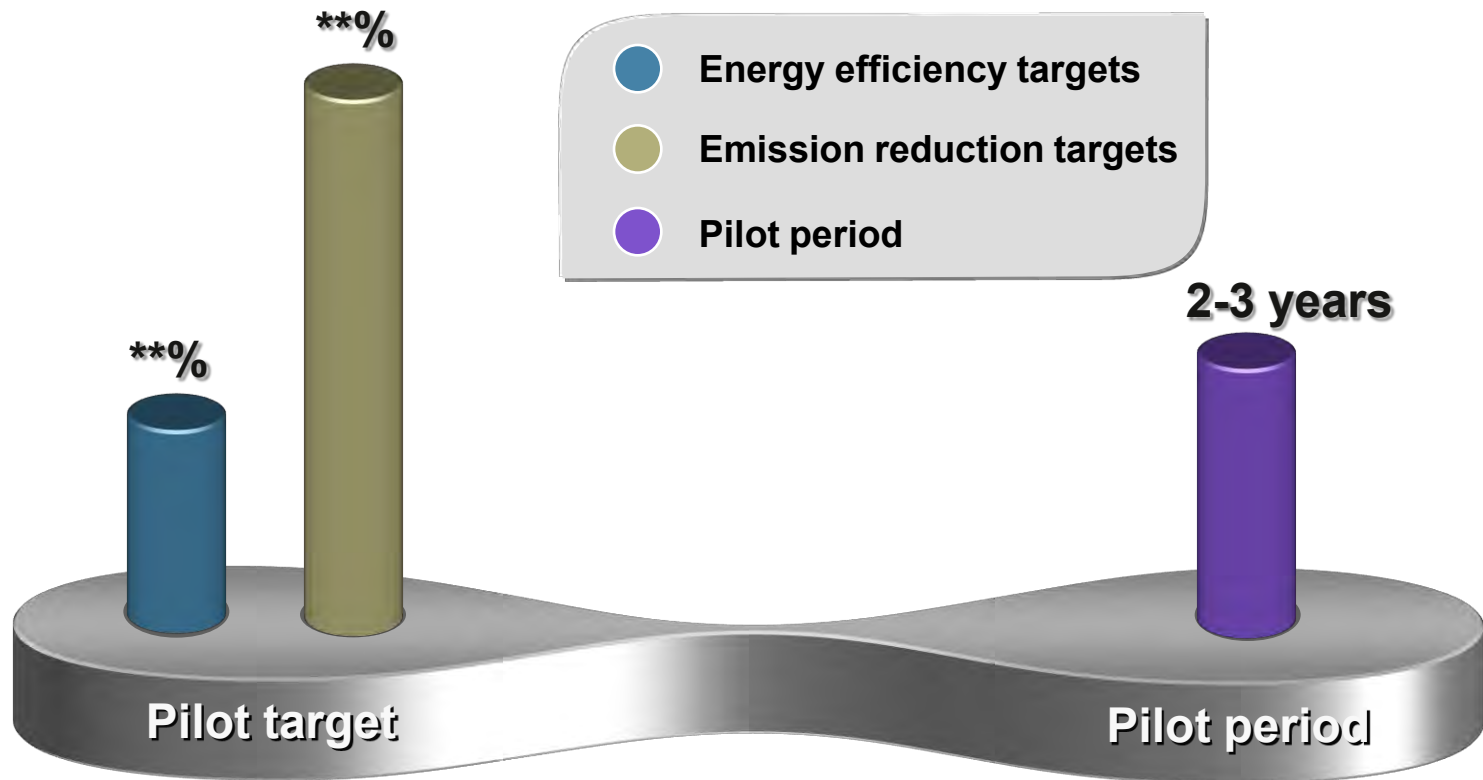
# The pilot case of voluntary approaches in China



**“Pilot cities and the pilot objectives”**



# The pilot case of voluntary approaches in China



**Pilot target and Pilot period**



# The pilot case of voluntary approaches in China



## • Implementation of the Agreement

The effect of the agreement have begun to appear

## • Implementation of the Agreement

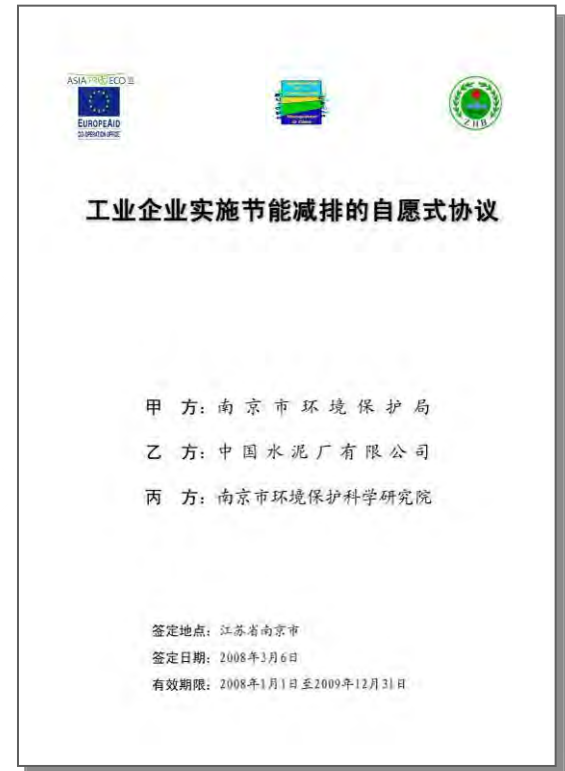
The smooth implementation of various measures

## • Train—EPS—Consult—Sign the agreement

Preparation and signing of the agreement

## • Feasibility of the sky

Feasibility study  
The Survey of willingness  
Key enterprises

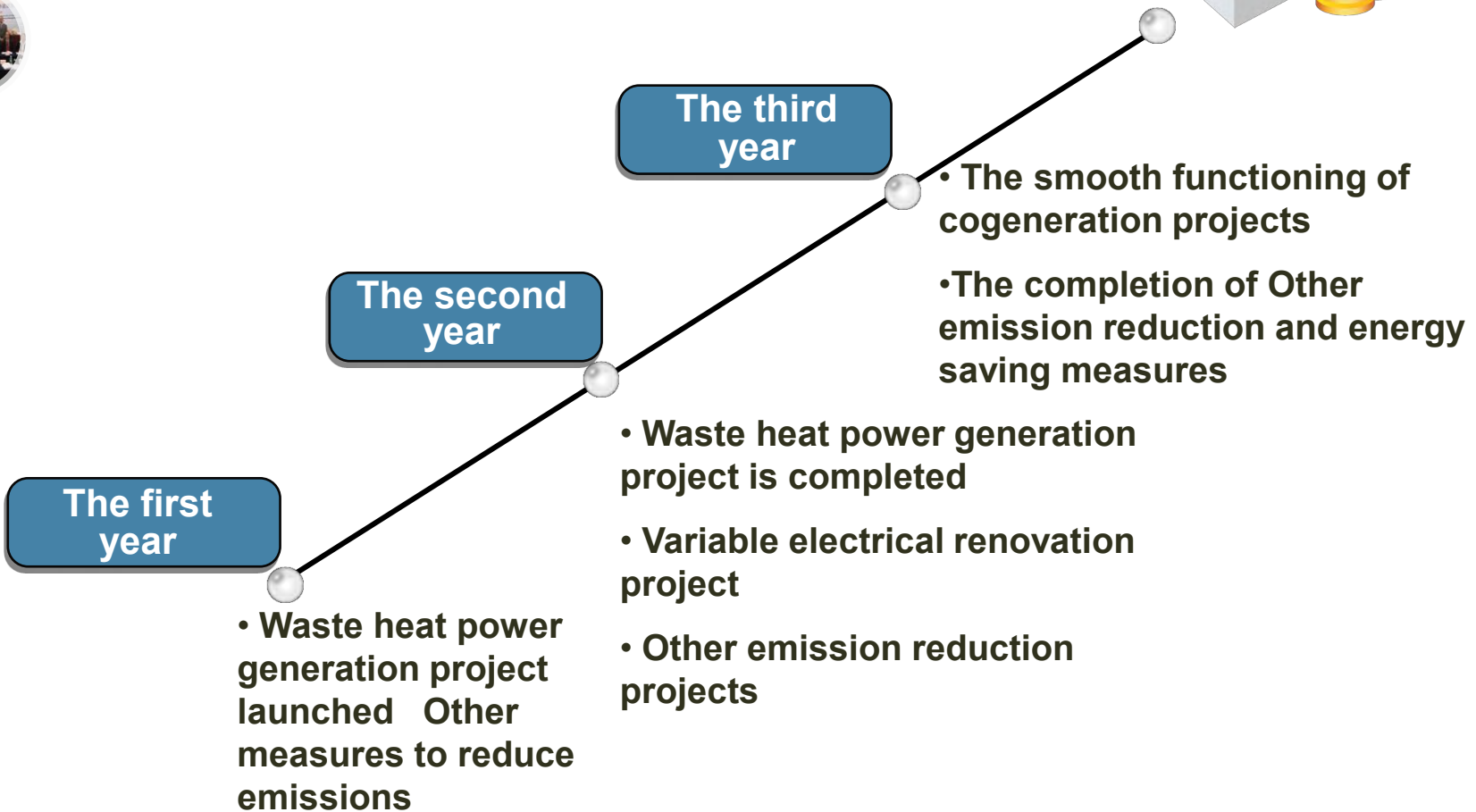




# The pilot case of voluntary approaches in China



## “Implementation of the Case of the Chinese cement plant”



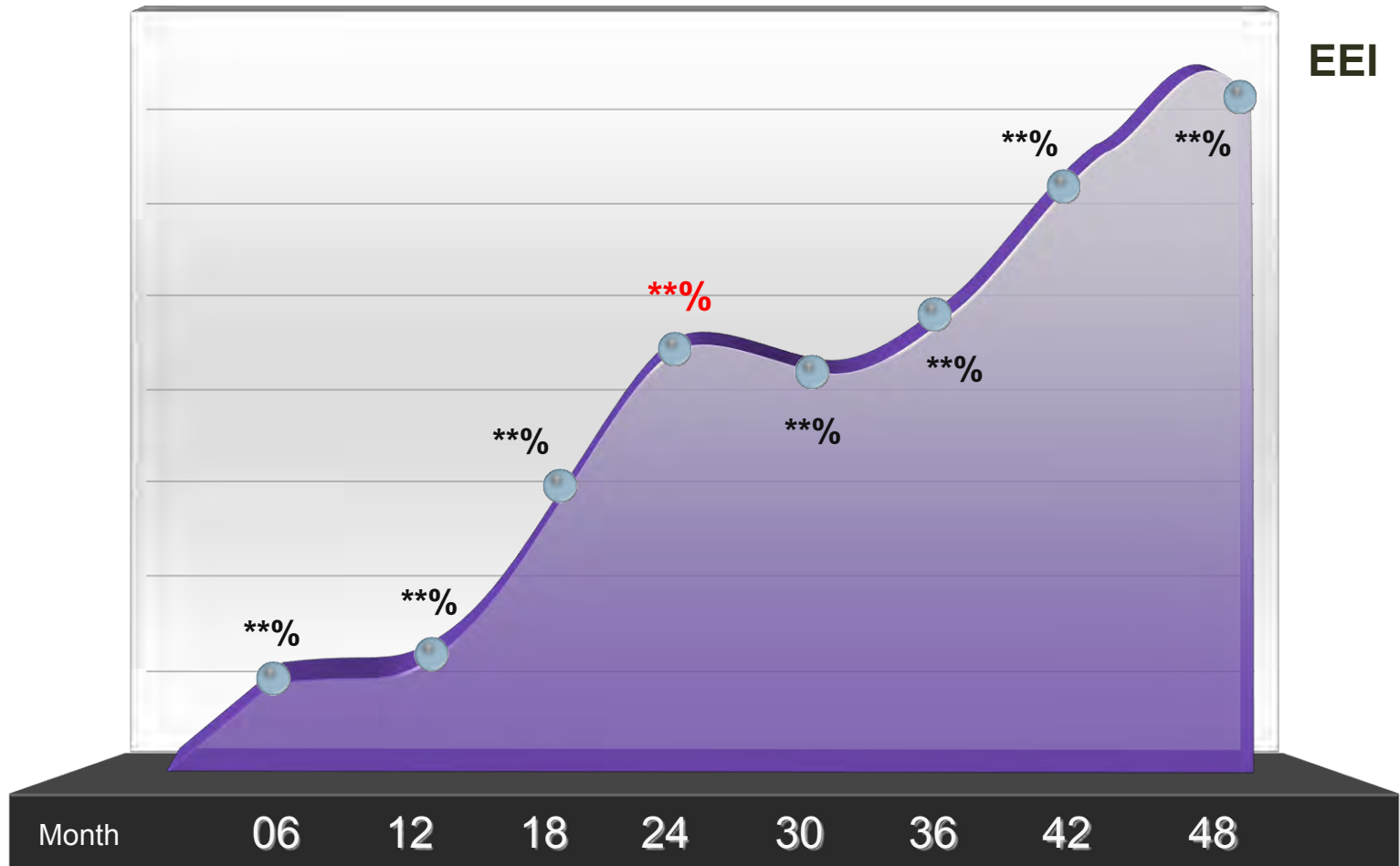




# The pilot case of voluntary approaches in China



Possible changes of EEI index in the implementation period of the voluntary agreement of the pilot enterprises





# Thank You!

