



## Using Financial and Market-based Mechanisms to improve Energy Efficiency in Buildings in China

使用融资手段和市场机制改善中国建筑物的能源使用效率

### Introduction to the Project

项目介绍

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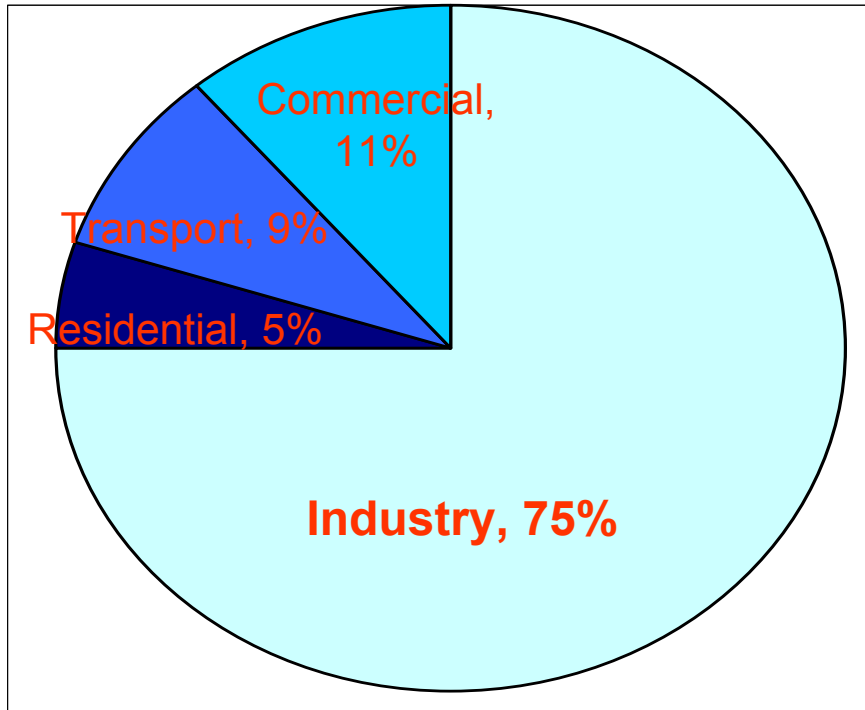
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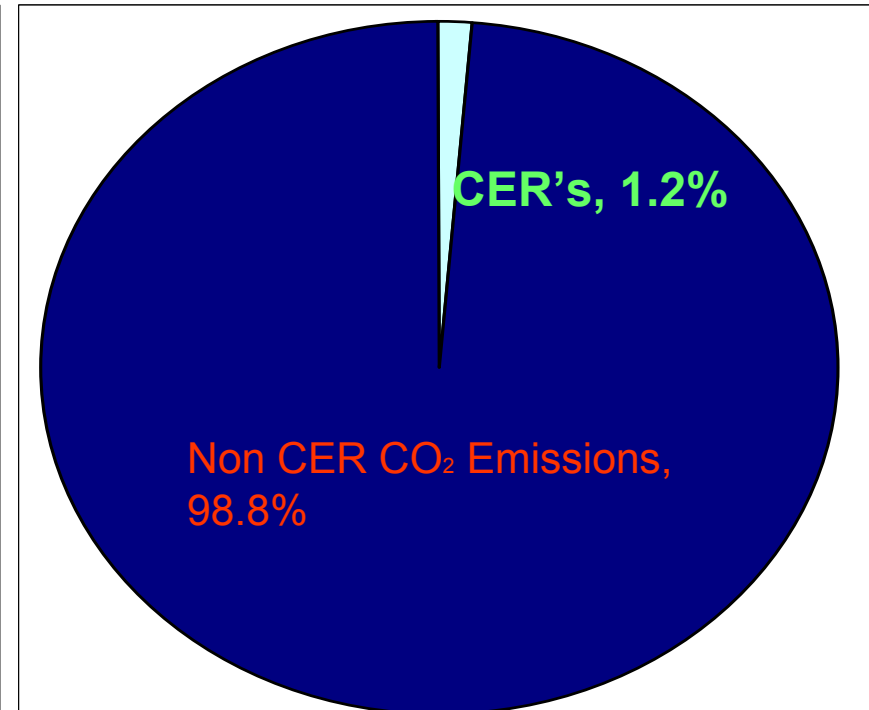


## What about the other 99%?

至于另外**99%**的能源消耗...



Pew Centre on Climate Change



UNFCCC CDM Expected Annual CER's, 2007

IPCC – Few buildings-related CDM projects expected during first commitment period. 18 out of 156 buildings related CDM & JI projects registered in pilot phase, but only 5 out of 301 buildings-related CDM & JI projects registered now.

根据IPCC的数据，在第一个承诺阶段，预期中的与建筑相关的CDM项目并不多。在156个相关的CDM和JI项目中，在试验阶段被注册的项目只有18个，而在与建筑有关的301个CDM和JI项目中，注册的项目却只有5个。



## Why is building energy efficiency so important?

建筑物节能为什么如此重要？

- Building energy use already accounts for 40% of total energy use  
在全部的能源消耗中，建筑物能耗已经占到了**40%**
- By 2015, half of the world's construction will take place in China  
到**2015**年，中国的土地上将建有世界上**一半**的建筑物
- High percentage of new building stock  
所以说，中国在建筑市场中具有很大的潜力





## What can be done?

### 我们能够做什么？

**Governments worldwide including China, have introduced various mechanisms to encourage energy efficiency. Two main categories:**

包括中国在内的世界各国政府已经引进不同的制度来鼓励提高能源使用效率。这种鼓励机制包括两种类型：

- **Legislation and regulation**

法律和法规

- **Building regulations – during construction**

建筑规程 – 建设过程中的管理规定

- **Operational regulations – e.g. temperature limits in China**

操作规程 – 比如说在中国对室内温度的限制

- **Financial mechanisms**

融资手段

- **Grants and subsidies**

补贴

- **Taxes**

税收

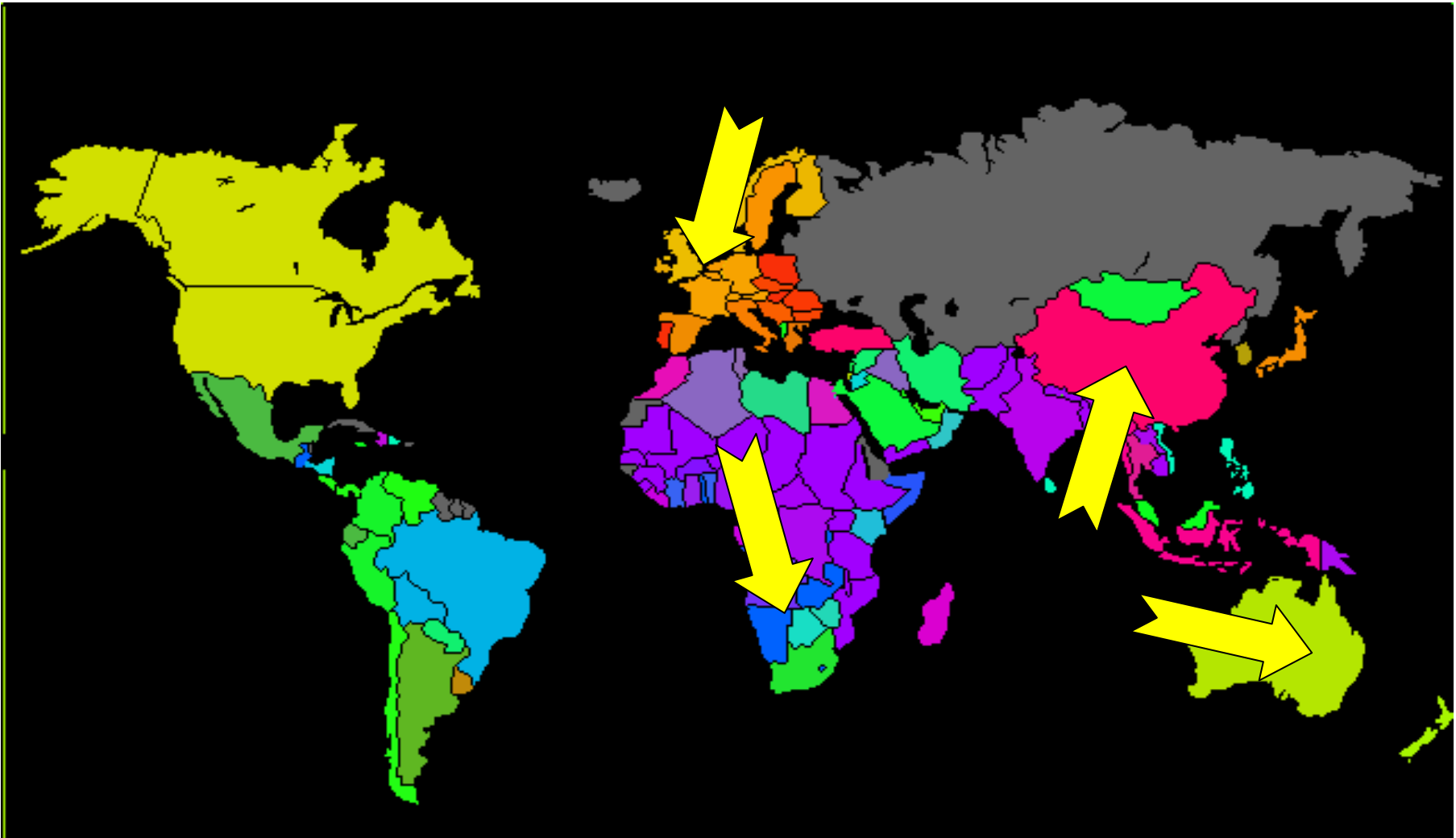
- **Market forces, e.g. trading mechanisms**

市场导向，比如自由贸易机制



## International precedents

国际上的先例





## Related projects in China

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- Incentive policies used internationally for building energy efficiency (ERI, 2005)  
在建筑物能效领域国际上通用的激励政策 (国家发改委能源研究所)
- Integrated Policy Assessment Model for China (ERI, 2005)  
适用于中国的综合政策评估模型 (国家发改委能源研究所, 2005年)
- The China Sustainable Energy Program's Buildings Program  
中国可持续能源项目中的建筑物分项目
- The UNDP End-use Energy Efficiency Programme  
联合国开发计划署的能源最终使用效率项目
- 'Promoting low energy buildings in China' (REEEP)  
在中国发展的"推广新低能建筑"项目(可再生能源与能源效率合作计划)
- GTZ Existing Buildings Research  
**GTZ**公司现有的建筑研究



## Partners

### 合作伙伴

- REEEP (established 2004)  
可再生能源与能源效率合作计划(2004年建立)
- Energy Research Institute of NDRC (established 1980)  
国家发改委的能源研究所(1980年建立)
- ESD Sinosphere (established 2007 through acquisition by ESD Ltd, established 1989, of Sinosphere established 1999)  
补天(北京)环境与能源咨询有限公司(由创立于1989年的ESD公司和创立于1999年的Sinosphere合并而成)



renewable  
energy  
& energy  
efficiency  
partnership



ENERGY RESEARCH INSTITUTE



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## Aims

### 目标



- Define the appropriate financial mechanisms to trigger action in the building sector in China  
使用适当的融资手段在中国的建筑业领域开展活动
- Develop a road map  
制定路线图
  - Policy and regulation requirements  
政策和法规要求
  - Identify stakeholders  
确定利益相关方
  - Activities and responsibilities  
活动和责任
  - Identify required capacity building and resources  
确定所需要的建筑能力及相关融资手段
- Increase stakeholder awareness  
增强利益相关方的意识
- Consider validity of emerging CDM and voluntary carbon sector for building energy efficiency  
考虑在建筑能效领域新出现的**CDM**和义务性碳减排措施的合法性，有效性



# Expected output and timetable

## 预期效果和时间表

Using Financial and Market-based Mechanisms to improve Building Efficiency in China																				
Activities	Lead Partner	Month																		
		J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	
1	Definition of existing mechanisms to improve building energy efficiency in China	ERI	█																	
2	Financial Mechanisms and Market-based Instruments used or under development internationally	ESD	█																	
3	Assessment of suitability of different FMs and MBIs for China	ESD/ER I							█											
4	Development of a road map for implementation														█					
5	Management, Dissemination and Networks																			
	I) Final dissemination workshop in Beijing														█					
	II) Final project report														█					

- Final report to the Chinese Government

为中国政府做的报告最终版

- Road map

路线图

- Network of key stakeholders

重要的利益相关方网络



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**Thank you!**

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