# 中国建筑节能激励政策研究初探 Outline of incentive policy study to promote building energy efficiency in China

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#### 主要内容 Outline

- 中国实施建筑节能激励政策的背景
- Background of establishing incentive policy on BEE in China
- 中国实施建筑节能激励政策的考虑
- Consideration of establishing incentive policy on BEE in China
- 关于今年建筑节能激励政策研究课题的思路
- Scheme of incentive policy study on BEE this year

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# 背景 Background

- 建筑节能已经成为我国的关键节能领域
- BEE has become the key energy efficiency field
  - ◆当前的形势 Current situation
    - ■建筑能源服务水平 Service level
    - ■建筑能耗 Building energy consumption
    - ■季节性矛盾 Seasonal energy shortage
    - ■建筑节能潜力 Potential of BEE
  - ◆未来建筑能耗将不可遏制地快速增长
  - ◆ Building energy consumption will surely increase rapidly in the future

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# 背景Background

- 节能激励政策是推动建筑节能工作的有效途径
- Incentive policy is the effective measure to promote BEE
  - ◆涉及的利益群体多,分散性强
  - ◆ Many sectors are involved
  - ◆国外的经验
  - ◆ International experiences
  - ◆基于市场的节能机制
  - ◆ Energy mechanism based on market
  - ♦引导节能型的生活方式
  - ◆ Lead energy efficient lifestyle

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# 背景Background

- 在中国已经具备了可能性
- Feasibility exists in China
  - ◆节能标准
  - ♦ Energy efficiency standards
  - ♦能效标识
  - ◆ Energy efficiency lable
  - ◆财税政策改革
  - ◆ Innovation of finance & tax system

#### 中国实施建筑节能激励政策的考虑

Consideration of establishing incentive policy on BEE in China

- 用能环节
- Energy use influencing factors
  - ◆建筑物
  - ◆ Building
  - ◆建筑设备及家用电器
  - ◆ Equipments and appliances
  - ◆系统(能源系统,整个建筑物)
  - ◆ System issue (energy system, the whole building)
  - ◆新增,改造
  - ◆ New or retrofit

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#### 中国实施建筑节能激励政策的考虑

Consideration of establishing incentive policy on BEE in China

- 利益群体 Sectors involved
  - ◆开发商 Developer
  - ◆生产商 Manufacture
  - ◆设计人员 Designer
  - ◆销售人员 Sale
  - ◆物业公司 Estate management sector
  - ◆节能服务公司 ESCOs
  - ◆消费者 Consumer
  - ◆(公用事业部门) Public utility
  - **♦** .....

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#### 中国实施建筑节能激励政策的考虑

Consideration of establishing incentive policy on BEE in China

- 激励政策的基础
- Incentive policy base
  - ◆机制 Mechanism (macro policy environment)
  - ◆强制性标准 Compulsory standards
  - ◆强制性标识 Compulsory lable
  - ◆自愿性标识 Voluntary lable
  - ◆能耗评估与审计 Energy evaluation and audit
  - ◆能效分级体系 Energy rating system

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# 中国实施建筑节能激励政策的考虑

Consideration of establishing incentive policy on BEE in China

- 激励政策类型
- Type of incentive policy
  - ◆长期性激励、管理性激励
  - ◆ Long-term incentive, management incentive
  - ◆补贴、减免税、加速折旧、低息贷款...
  - ◆ Subsidy, tax reduction, accelerated depreciation, lower-interest loan ...

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# 中国实施建筑节能激励政策的考虑

Consideration of establishing incentive policy on BEE in China

- 资金来源
- Funding sources
  - ◆ 国家财政税收
  - ◆ Governmental finance revenue
  - ♦ 附加电费
  - ◆ Wires charge ◆ 能源税
  - ◆ Energy tax ◆ 碳税
  - ◆ 碳税 ◆ Carbon tax
  - ◆ 国际资金
  - ◆ International capital
  - **.....**

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# 中国实施建筑节能激励政策的考虑

Consideration of establishing incentive policy on BEE in China

- 激励原则
- Principle for incentive
  - ◆基于性能
  - Based on performance
  - ◆基于成本
  - ◆ Based on cost
  - ◆二者兼有
  - ♦ Both

#### 中国实施建筑节能激励政策的考虑

Consideration of establishing incentive policy on BEE in China

- 设计 Design
- 实施 Implement
- 监管 Supervision and management
- 评估 Evaluation

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#### 中国实施建筑节能激励政策的考虑

Consideration of establishing incentive policy on BEE in China

- 目标定位: 节能目标, 市场目标
- Goal orientation: energy saving, market
- 谁来参与哪个环节?
- Who will participant in Which part?
- 谁来鉴定节能性能,谁来判断是否应该激励
- Who identify the energy efficiency performance?
   And who judge whether it should gain incentive?

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# 中国实施建筑节能激励政策的考虑

Consideration of establishing incentive policy on BEE in China

- 激励政策是个巨大的系统工程
- Incentive policy is a huge system project
- 中国还有许多基础性工作要做
- Many fundamental work need more efforts in China
- 从现在开始建立激励政策框架
- Begin to establish the scheme of energy efficiency incentive policy

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# 今年的研究内容

Scheme of incentive policy study on BEE this year

- EF支持《中国建筑节能激励政策研究》课题
- The project of "Study on China's incentive policy to promote building energy efficiency" was supported by Energy foundation
- 今年的课题内容
- Project content in this year
  - ◆ "新型墙体材料改造基金"的评估
  - ◆ Evaluation on "Innovative wall material Fund"
  - ◆ 贯彻实施强制性建筑节能标准的监督方案研究
  - ♦ Study on the supervising scheme of implementing compulsory BEE standards
  - ◆ 建筑节能激励政策研究
  - ◆ Study on incentive policy to promote BEE
  - ◆ 节能产品激励政策研究(相关单位完成)
  - ◆ Study on incentive policy of efficient products

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# 今年的研究内容

Scheme of incentive policy study on BEE this year

- "新型墙体材料改造基金"的评估
- Evaluation on "Innovative wall material Fund"
  - ◆建议至少继续保留1~2年
  - ♦ Maintain for at least of 1~2 years
  - ◆结合财税体制改革,在法规和管理办法方面进行合理调整
  - Make reasonable adjustment combining the innovation of finance & tax system
  - ◆尽可能支持建筑节能
  - ◆ Support BEE as possible

#### 今年的研究内容

Scheme of incentive policy study on BEE this year

- 强制性建筑节能标准的监督方案研究
- Study on the supervising scheme of implementing compulsory BEE standards
  - ◆必须是国家级强制性的,并让各地方政府高度重视
  - National compulsory, support from local government
  - ◆4个环节都抓,并注重过程抽查
  - ◆ Each process, spot-check
  - ◆各方共同参与,明确责任
  - ◆ All involved, definite duty
  - ◆惩罚性措施
  - ◆ Punishment measure

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#### 今年的研究内容 Scheme of incentive policy study on BEE this year ● 建筑节能激励政策研究 • Study on incentive policy to promote BEE ☆ 严寒 基于区域、建筑类 Severe Cole 型、用能特点、当 28 Based on region. 寒冷 Cold building type, Severe Cold 夏热冬冷 energy using characteristics. Cold Winter local technical condition 夏热冬暖 国家发展和改革委员会能源研究所

#### 今年的研究内容

Scheme of incentive policy study on BEE this year

- 建筑节能激励政策研究
- Study on incentive policy to promote BEE
- ◆北方传统采暖区的住宅和中小公共建筑
  - ◆ Residential building and small public building in the traditional heating region
  - ◆过渡区和南方地区的住宅和中小公共建筑
  - ◆ Residential building and small public building in transitional and south region
  - ♦所有的大型公共建筑
  - ◆ All large pubic buildings

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#### 今年的研究内容

Scheme of incentive policy study on BEE this year

- 北方传统采暖区的住宅和中小公共建筑
- Residential building and small public building in the traditional heating region
  - ◆采暖是耗能主体(约70%~80%)
  - ◆ Heating energy consumption is most
  - ◆保温隔热和包括末端的供热系统改造是关键问题
  - ♦ Insulation and heating system retrofit are the key issues
  - ◆但热改难以推行是主要障碍,且近期内不易解决
  - ◆ Major barrier is the "meter heating" problem
  - ◆对小区进行示范激励
  - May establish incentive demonstration to community building

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#### 今年的研究内容

Scheme of incentive policy study on BEE this year

- 过渡区和南方地区的住宅和中小公共建筑
- Residential building and small public building in transitional and south region
  - ◆夏季有空调,冬季部分有采暖,并且没有热改障碍,进 行节能激励的基础较好
  - ◆ Demand of cooling in summer and heating in winter, without "meter heating" problem, has good condition for incentive policy
  - ◆关键的激励措施是建筑能效标识制度,依靠市场驱动。
  - ◆ Key measure is building energy efficiency label and rating system, driven by market

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# 今年的研究内容

Scheme of incentive policy study on BEE this year

- 所有的大型公共建筑
- All large pubic buildings
  - ◆空调供冷能耗是能耗主体,能源浪费问题非常突出。
  - ◆ Cooling energy is most, with large energy waste
  - ◆ 关键政策措施是"能源定额管理"和阶梯能源价格,进行 严格的能耗评估、评审,并推动ESCOs的节能改造。
  - ◆ Key measures: energy ration management, ladder energy price, energy audit and evaluation, retrofit by ESCOs
  - ◆难点是如何辨别其是否节能,建议出台能耗汇报和能效 分级制度。
  - ◆ How to identify the energy performance? Energy reporting and energy efficiency rating system

# 今年的研究内容

Scheme of incentive policy study on BEE this year

- 建筑物和能源系统
- 建筑物和能源系统 Building & energy system Efficient buildings
- 系统与构件
- System & component
- 政府机构节能 EE Governmental agency
- 长期激励与短期项目
- Long-term & management program
- 鼓励性与限制性激励
- More encourage or more rigorous
- 理想的实施效果分析
- Study on theoretical implementation results