



可持续城市能源规划与低碳城镇化

Sustainable City Energy Planning and Low-carbon Urbanization

朱玲

高级研究员

zhuling@ccera.org.cn

全联新能源商会低碳减排专业委员会



报告内容/contents

- 可持续城市、低碳城镇化相关概念
- 可持续城市能源规划的内涵
- 可持续城市能源规划与低碳城镇化
- 几点建议

- Sustainable city、low-carbon urbanization
- The connotation of sustainable city energy planning
- Sustainable city energy planning & low-carbon urbanization
- Suggestions

可持续城市、低碳城镇化相关概念

Concepts



中国低碳减排

□ 可持续城市 Sustainable city

概念：指经济增长、社会公平、具有更高的生活质量和更好的环境的城市。

Refers to the economic growth, social equity, with higher quality of life and a better environment in the city.

□ 低碳城镇化 Low-carbon urbanization

概念：用低碳经济理念来引领城镇化，即低碳城镇化，就是要在城镇化进程中以低能耗、低污染、低排放、高效率、高产出为特征来进行低碳城市的规划设计与建设。

Low-carbon urbanization means that with a low-carbon economy concept to guide urbanization, in the process of urbanization with low power consumption, low pollution, low-emission, high efficiency, high output as the characteristics to conduct low-carbon urban planning, designing and building.

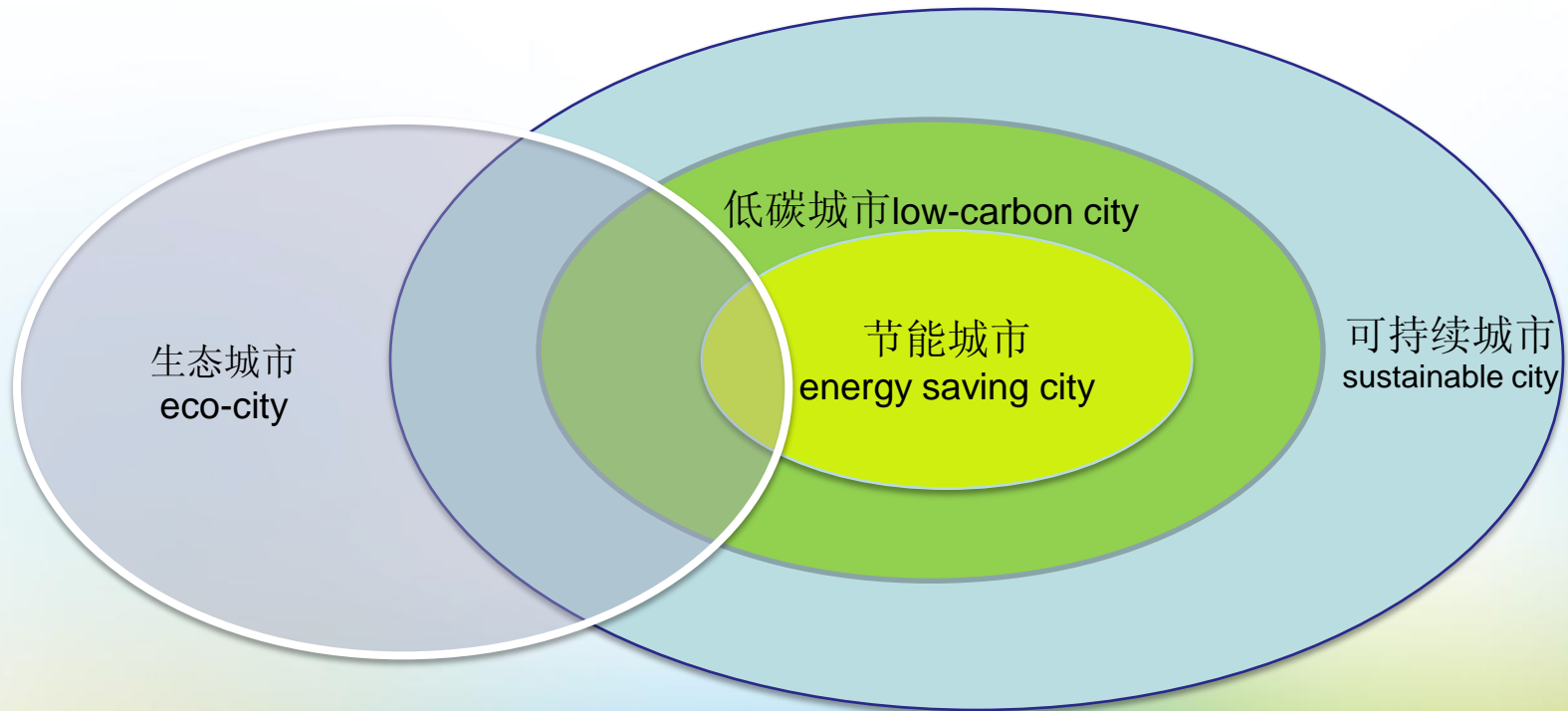
可持续城市、低碳城镇化相关概念 Concepts



中国低碳减排

低碳城市与可持续城市及相关概念的相互关系

The relationship between low-carbon city and sustainable city



可持续城市能源规划的内涵

The Connation of Sustainable City Energy Planning



中国低碳减排



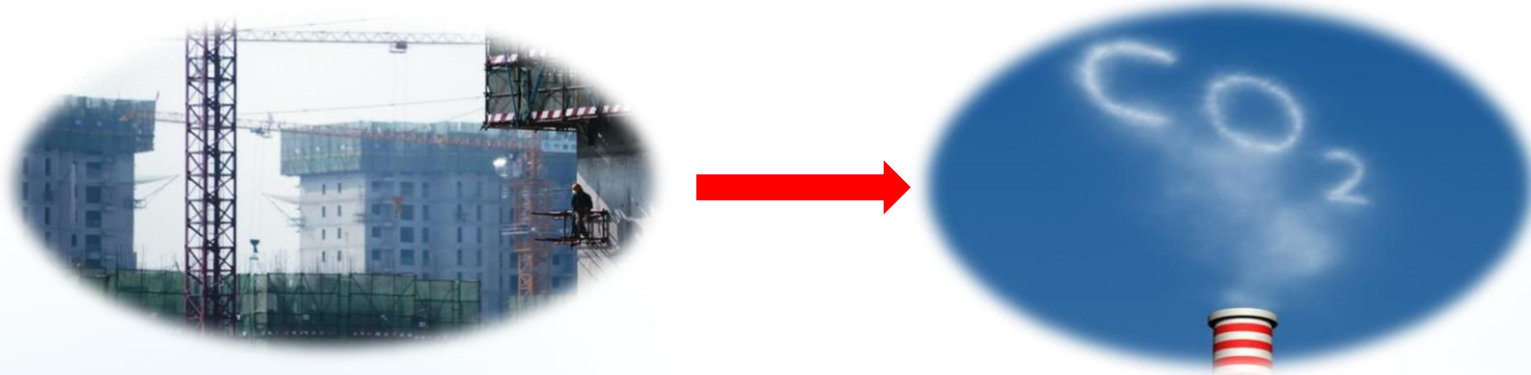
可持续城市能源规划与低碳城镇化

Sustainable City Energy Planning and Low-carbon Urbanization



中国低碳减排

中国城镇化与碳排放 Urbanization and carbon emission



- 我国城镇化正处于快速发展的进程中，并且这种态势还将会保持一段较长时间。China's urbanization is in the process of rapid development, and this trend will remain for a longer period.
- 生产、建设性能耗和碳排放是广大城镇能耗和碳排放快速增长的主要原因，并占到了全国城镇总能耗和碳排放的80-90%。The majority of urban energy consumption and carbon emission getting rapid growth are due to their production and construction, and accounting for 80-90% of national urban energy consumption and carbon emission.
- 在此背景下，中国城镇化应走低碳城镇化路线，并应进行可持续能源规划。
At the background, china's urbanization should be low-carbon urbanization, and implement sustainable energy planning.

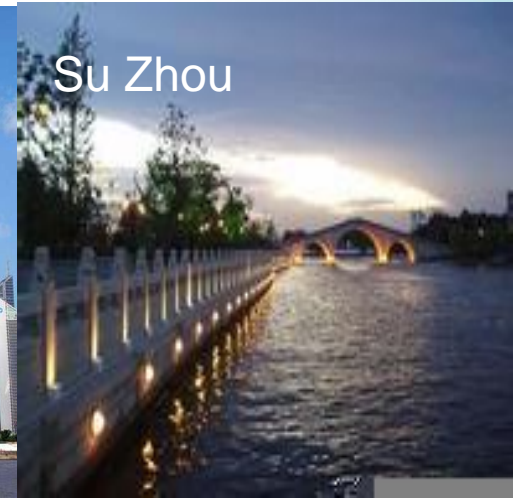
可持续城市能源规划与低碳城镇化

Sustainable City Energy Planning and Low-carbon Urbanization



中国低碳城镇发展进入全国试点阶段 Low-carbon urban development in China is in pilot period

- 第一批低碳试点城市：天津、重庆、深圳、厦门、杭州、南昌、贵阳、保定（8个） The first batch of national pilot low-carbon cities: Tianjin, Chongqing, Shenzhen, Xiamen, Hangzhou, Nanchang, Guiyang, Baoding(8)
- 第二批低碳试点城市：北京、上海、石家庄、秦皇岛、苏州、淮安、镇江、宁波、温州等（27个） The second batch of national pilot low-carbon cities: Beijing, Shanghai, Shijiazhuang, Qinhuangdao, Suzhou, Huaian, Zhenjiang, Ningbo, Wenzhou...(27)





□ 可持续城市能源规划要点

Essential of sustainable city energy planning

- (1) 构建可持续城市能源指标体系: 衡量能源系统, 指导能源规划

Building energy index system for sustainable city: measure energy system, guide energy planning

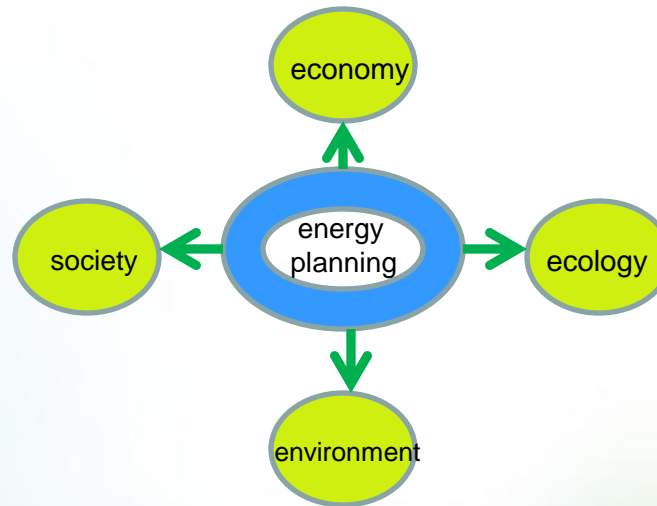
一级指标	二级指标	三级指标
城市能源可持续发展指标	驱动力指标	人均GDP
		人口密度
	压力指标	人均能源消耗量状态指标
	状态指标	人均可供消消费的能源量
		清洁能源使用率
		可再生能源比重
	影响指标	基础设施投融资
		GDP总量
	响应指标	能源建设运行管理

□ 可持续城市能源规划要点 Essential of sustainable city energy planning



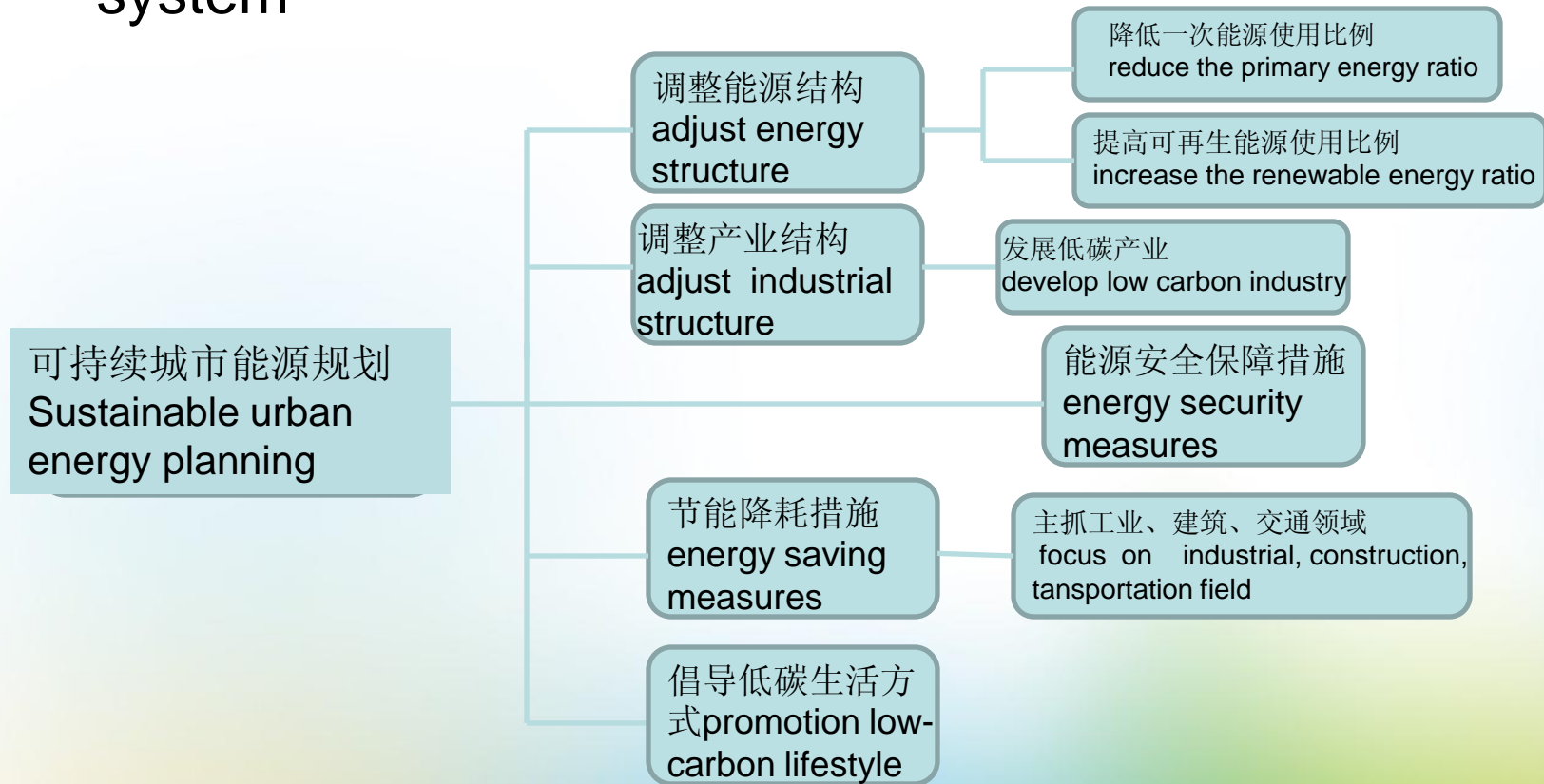
中国低碳减排

- (2) 可持续城市能源规划是一个多目标、多价值决策过程，需要综合统筹（经济、社会、生态、环境）。Sustainable energy planning requires integrating comprehensive factors :economic, social, ecological, environmental.



- (3) 注重城市能源供应可持续的同时，还应注重提高低碳能源使用比例。Improving the utilize proportion of low-carbon energy should get the same value with sustainable urban energy supply.

□ 可持续城市能源规划 How to plan the sustainable energy system





□ 目前能源规划现状 Current status of energy planning

- 1、多从能源部门行业角度出发，没有综合统筹城市经济、居民生活水平、生态环境等因素的影响；

Usually viewed from energy department, did not integrate urban economy, living standards, ecologic environment and other factors;

- 2、注重能源系统可持续化的同时，没有重视能源低碳化的转变；

Made much of energy system sustainable, but not value the low-carbon energy transition;

- 3、没有重视与城镇体系的空间结构相结合

Did no value the combination of energy planning and spatial structure of urban system.

□ 低碳城镇化的可持续能源规划 sustainable energy planning for low-carbon urbanization

- 1、能源规划应结合城镇开发规划同步制定 Energy planning should be combined with the urban development planning and synchronous planning.
- 2、应比常规的能源规划设立更优先的战略目标 Should establish a higher priority strategic objectives than conventional energy planning.
- 3、应与城镇体系的空间布局结构相结合 Should combine with the spatial layout of the urban system.
- 4、应注重低碳规划、低碳产业、低碳生活、低碳观念等低碳因素 Pay attention to low-carbon factors.
- 5、应加强生态、环保理念在能源规划中的地位 Should strengthen the status of ecological and environmental concept in the energy planning.
- 6、应考虑进城农民的就业和他们对能源品级（清洁能源）的接受度 Should consider the employment of migrant farmers and their acceptance of energy grade (clean energy).



Thank you !

