



EU-CHINA LOW CARBON CITIES JOINT STUDY

中欧低碳城市联合研究

rglancy@iuc-na.eu

gfabri@iuc-asia.eu

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ONLINE EXCHANGE SESSION BETWEEN CHINESE AND EUROPEAN EXPERTS

REASON FOR THE STUDY 1: 低碳城市框架

LOW CARBON CITY FRAMEWORK

Aspect	China 中国	EU 欧盟
City membership 参加城市	<i>'13th Five-Year Greenhouse Gas Emission Control Plan'</i> expanded of Low Carbon Pilots to 100 cities <i>十三五规划中, 参加温室气体排放控制试点城市扩展至100个</i>	Currently 10,287 cities 目前有 10,287 个城市参加
Ambition 目标	Targets involve emissions peaking by 2020, 2025 or later 计划于2020/2025/稍后到达排放高峰	Reduction target for 2020: 20% Reduction target for 2030: 40% 2020年: 减少20%排放量 2030年: 减少40%排放量

REASON FOR THE STUDY 2: 低碳城市转型 LOW CARBON TRANSITIONS IN CITIES

- A comparison between similar Chinese and EU cities/regions to determine any similarities in low carbon transition challenges and opportunities
中国与欧盟城市/地区的对比，寻找低碳转型时挑战与机遇的相似性
- Good Practices and Key Projects in the EU cities/regions have been selected as reference to define the Policy Recommendations
已选择欧盟城市/地区的良好做法和关键项目作为定义政策建议的参考

Typology 城市类型	China 中国	Europe 欧洲	
Port Cities 港口	Ningbo 宁波	Hamburg 汉堡	Rotterdam 鹿特丹
Industrial Cities 工业城市	Wuhan 武汉	Essen 艾森（德）	Bilbao 毕尔包
Regions 地区	Jiangsu 江苏	Barcelona 巴塞罗那	Liverpool 利物浦

EUROPE'S INSTITUTIONAL MECHANISM AND POLICY FRAMEWORK FOR LOW CARBON DEVELOPMENT 欧洲低碳发展的体制机制和政策框架

• EU 2030 Framework 2030 欧盟框架

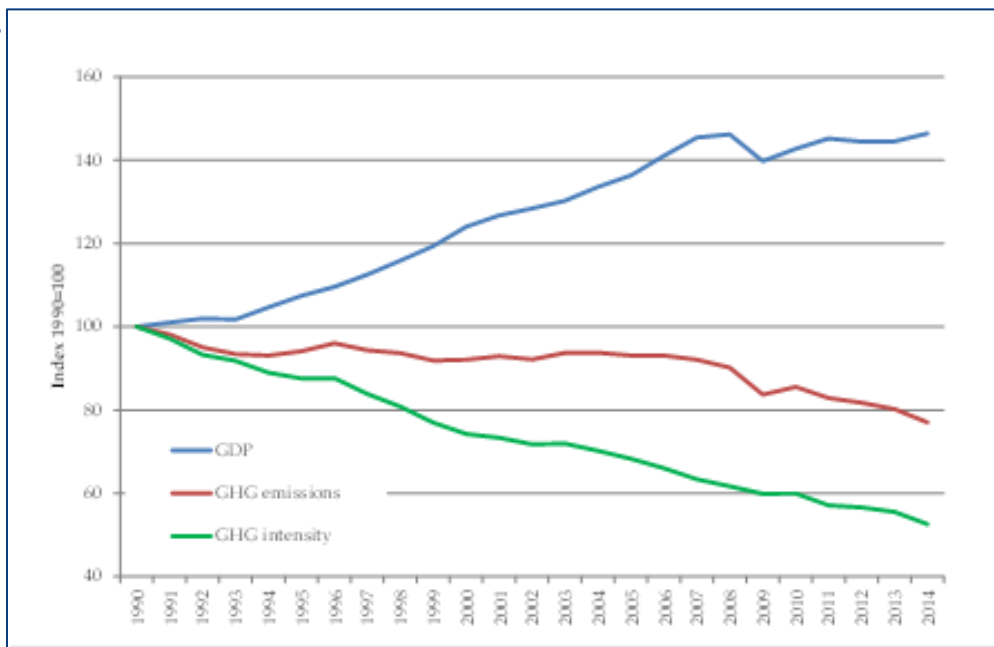
- 减少 40% GHG reduction
- 32% renewables 可更新
- 32.5% energy efficiency 能源效率
- ETS 排放交易体系
- National targets 国家目标

• EU Green Deal 绿色新政

- Carbon neutral 2050 零排放

• Cities 城市

- EU CoM 欧盟市长公约
- ESIF 欧洲结构与投资基金
- Green Capital 绿色首都

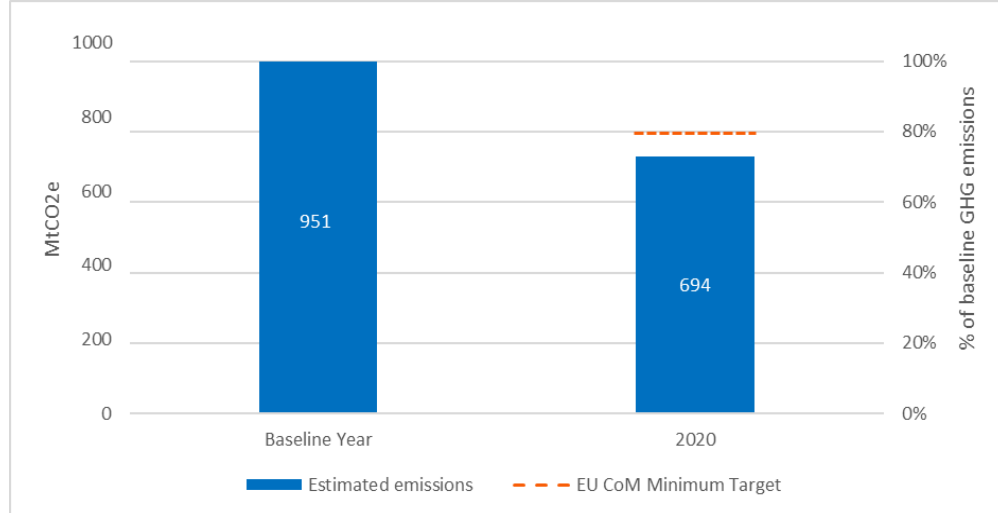


* REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL Climate action progress report, including the report on the functioning of the European carbon market and the report on the review of Directive 2009/31/EC on the geological storage of carbon dioxide

EU POLICY FRAMEWORK: SUSTAINABLE ENERGY AND CLIMATE ACTIONS PLANS (SECAPS) 欧盟政策框架：可持续能源和气候行动计划

1. Cities commit to reducing GHG emissions at least as ambitious as the EU Nationally Determined Contribution (40% by 2030) and set goals for adapting to climate change
2. In many cases, SECAP development is supported by Covenant Teritorial Coordinators' - regional entities helping constiuent cities and communities

1. 城市承诺减少温室气体排放，至少达到与欧盟国家设定的目标（2030年40%），并设定适应气候变化的目标



2. 在许多情况下，本计划的发展得到帮助当地城市和社区的区域实体之支持

* Figures taken from the 'Covenant of Mayors in figures: 8-year assessment'

COMPARISON OF LOW CARBON CITY PROGRAMMES: 低碳城市计划比较

Main challenges faced by Chinese cities 中国城市面临的许多挑战:

- “**weak data baselines 弱数据基准线**”
- “**poor capacity building 能力建设差**”
- “**The quality of emissions data must be strengthened to provide a robust foundation to deliver results 必须加强排放数据的质量，为取得成果奠定坚实的基础**”
- “**emphasizing slogans but neglecting implementation 强调口号，但忽视执行**”
- “**have not yet understood or recognized the relevance of the peaking target to their provincial or municipal strategic perspectives 尚未理解或认识到峰值目标与其省或市战略观点的相关性**”

These are challenges that have been largely solved (or improved) in the EU

Covenant of Mayors context 这些挑战在欧盟《市长公约》中已基本解决（或改进）

COMPARISON OF CITIES 城市比较

港口城市：中国宁波、欧洲汉堡及鹿特丹

Comparison of Port Cities Ningbo in China and Hamburg and Rotterdam in Europe



Good Practices and Key Projects in Hamburg

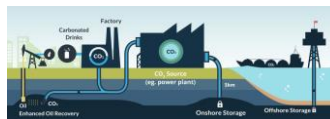
- NEW 4.0 Project North German Energy Transition
- Energy Bunker
- Green Procurement Guideline
- Eco-Partnership
- SmartPORT
- HafenCity



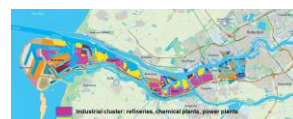
Energy Bunker



HafenCity



Carbon Capture and Storage



Industry Cluster

Good Practices and Key Projects in Rotterdam

- Port of Rotterdam Digitalization
- ROAD: Carbon Capture and Storage project (CCS)
- The Rotterdam Industry Cluster
- The Heat Roundabout

COMPARISON OF CITIES 城市比较

多层次治理：中国江苏省与欧洲巴塞罗那及利物浦地区

Comparison of multi-level governance regions Barcelona and Liverpool in Europe are compared with Jiangsu Province



Good Practices and Key Projects in The Province of Barcelona

- Aggregated implementation and monitoring of SEAPs in the province
- Catalonia: a cluster and science parks hotspot
- Barcelona Smart City Strategy
- The Maker District Pilot Project
- The Super Block programme



The Maker District

Good Practices and Key Projects in Liverpool City Region

- Offshore wind projects at Liverpool Bay
- Green Infrastructure at Wirral Waters
- Alder Hey Children's Hospital
- Cammell Laird
- Clarke Energy



Wirral Waters



Alder Hey Hospital

COMPARISON OF CITIES 城市比较

面临工业衰退的城市：中国武汉与欧洲埃森及毕尔包

Comparison of cities facing industrial decline Wuhan and two EU cities, Essen and Bilbao



Good Practices and Key Projects in Essen

- Essen Climate Agency
- Brownfield development
- The Ampacity Super Conductor Project
- Ruhr fast cycleway



Ampacity Super Conductor



Fast cycleway

Good Practices and Key Projects in Bilbao

- Abandoibarra renewal project
- Bilbao Metropoli 30
- Bilbao Urban and Cities Design
- Navacel
- City-lab



Navacel



Urban City Design

POLICY IMPLICATIONS 政策影响

	Outcome	Proposal
Low Carbon City Programmes 低碳城市计划	Issues around data baselines, capacity building and peak emissions roadmapping have been addressed in EU CoM and with associated resources	Creating a 'Covenant of Mayors' type of process in China based on the learnings from working with EU cities and utilising the multi-level governance approach
City-to-city cooperation 城市间合作	High level of relevance in the challenges faced by Chinese cities and solutions being developed by EU cities (based on small sample size)	Developing a 'solution based' exchange programme where solutions developed in EU cities can be shared thematically with Chinese cities

RECOMMENDATIONS 建议

1. Explore partnerships between the EU and Chinese cities reviewed in this study on the specific Chinese city policy objectives and EU city solutions.

探讨本研究所检视的欧盟与中国城市之间的伙伴关系，探讨中国城市的具体政策目标和欧盟城市解决方案。

2. Consider expanding the initiative to a more formal programme, developing thematic options for Chinese cities to prioritise in cooperation with specific cities/solutions in EU cities.

考虑将倡议扩大成更正式的方案，并为中国城市制定专题选择，优先考虑与欧盟内特定城市/解决方案合作。

3. Review the EU Covenant of Mayors processes and resources to determine what elements could be valuable to implement as part of the Chinese Low Carbon Cities Pilot Project.

审视《欧盟市长公约》进程和资源，确定具体要素作为中国低碳城市试点项目的部分实施内容将会很有价值。

4. Consider how 'multi-level governance' could support Chinese cities in their transition to low carbon economies

考虑"多层次治理"如何支持中国城市向低碳经济转型