

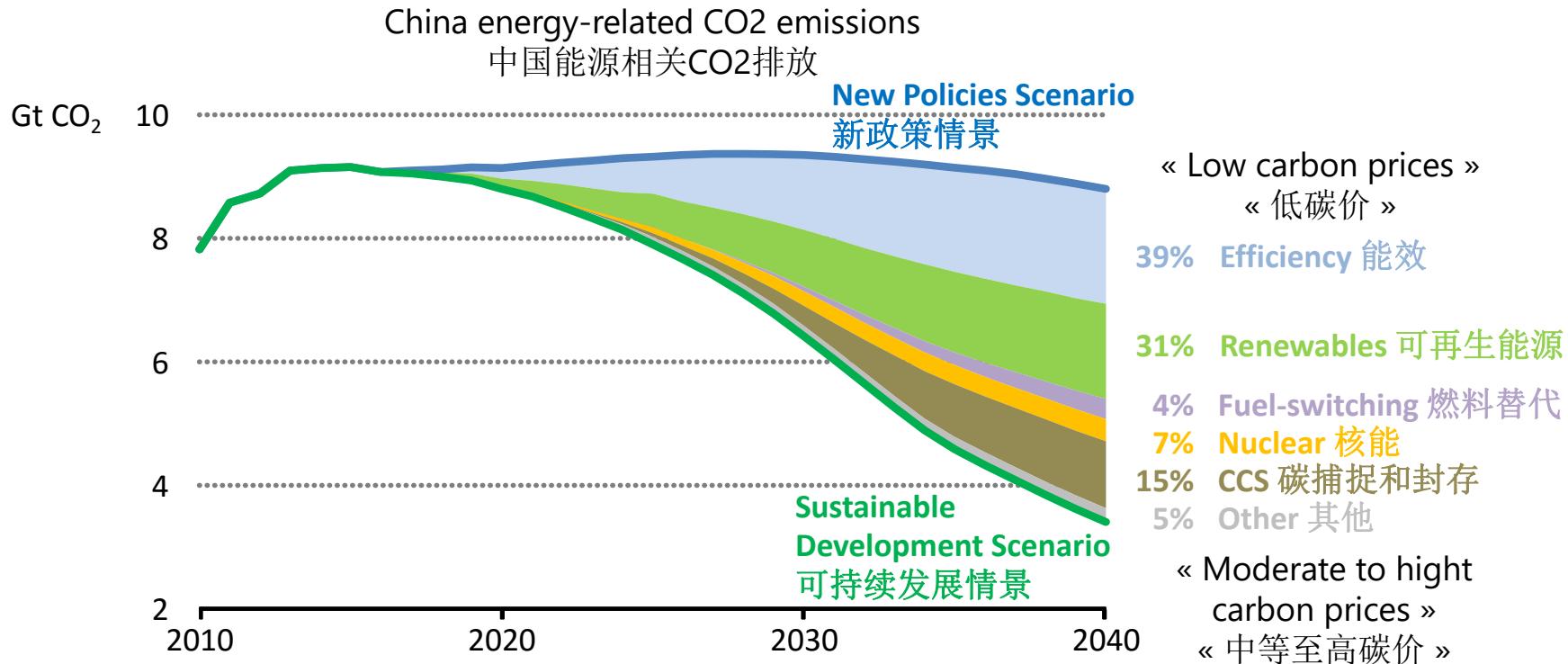


Carbon pricing and sustainable energy transition

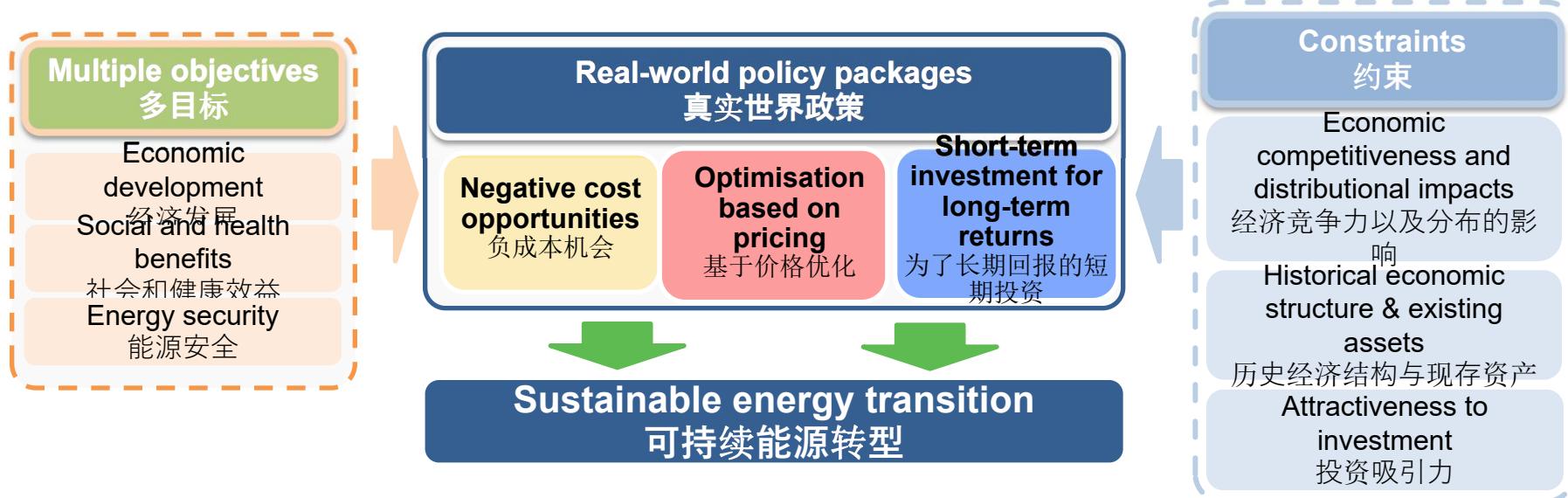
碳价与可持续能源转型

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Carbon pricing policies play a key role in promoting low carbon technology development but also in encouraging energy efficiency for achieving the steep decline in emissions seen in the Sustainable Development Scenario.
碳价政策在促进低碳技术发展中起关键作用，同时也鼓励提高能源效率来实现可持续发展情景中排放急剧下降。



Supporting markets and infrastructure

支持市场和基础设施

Carbon Pricing
碳价

Energy efficiency Support
支持能效提高

Air quality regulations
空气质量监管

Fossil fuel phase-down
化石燃料逐步下降

Renewables support
支持可再生能源

A broad basket of policies is relevant for energy transition: policy overlaps and interactions need to be taken into account for effective implementation

与能源转型相关的一揽子政策：需要考虑政策间重叠和相互作用才能有效实施

... but real-world policymaking is more challenging!

但是制定真实世界政策更有挑战性！



A broad basket of policies is relevant for energy transition: policy overlaps and interactions need to be taken into account for effective implementation

与能源转型相关的一揽子政策：需要考虑政策间重叠和相互作用才能有效实施

**Top 10 000 Companies
Energy Conservation
(NDRC, MIIT, MOHURD)**

万家企业节能行动（国家发改委、工信部、住建部）

**Energy Consumption
Quota Trading (NDRC)**

用能权交易（国家发改委）

**Energy
Demand
能源需求**

**Green Certificates (NEA)
绿色证书（国家能源局）**

**Electricity Sector Reform
(NEA)**

电力部门改革（国家能源局）

**Energy Supply
能源供应**

**Renewable curtailment
(NEA)**

弃可再生能源（国家能源局）

**Feed-in-tariffs (NEA)
上网电价补贴（国家能源局）**

National ETS (MEE)

国家碳市场（生态环境部）

**Climate
change
气候变化**

**GHG 2030 peaking
target (MEE)**

温室气体2030年达峰目标（生态环境部）

**Industrial re-
structure
产业结构调整**

**Air
Pollution
空气污染**

**Coal consumption cap
煤炭消费限额**

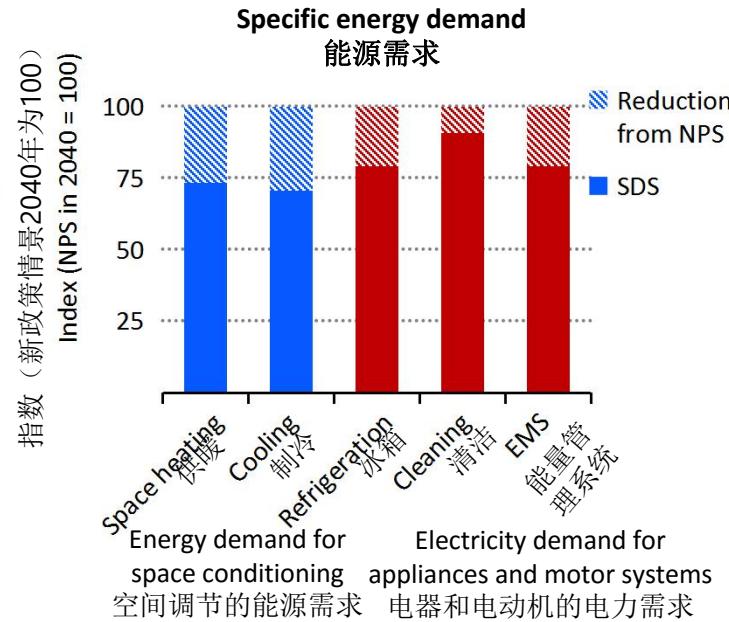
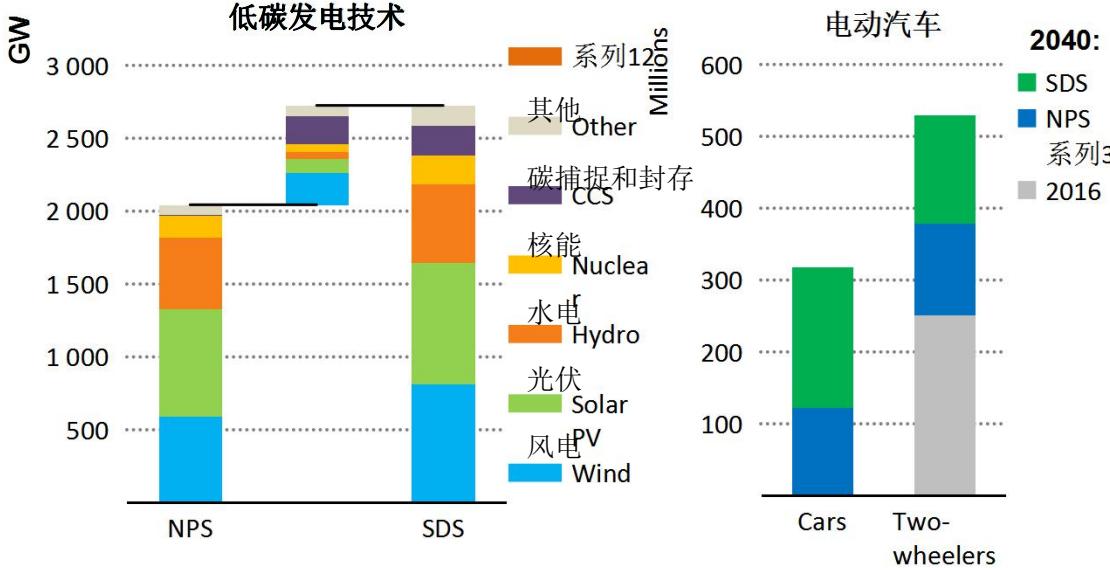
**War on Air Pollution (MEE)
大气污染防治（生态环境部）**

+

**Provincial and local plans
省区规划**

Key indicators of China's low-carbon transition in SDS

在可持续发展情景中中国低碳经济转型的关键指标



In power sector, ETS will create a carbon price incentive to accelerate switch from fossil fuel to low-carbon technology, enhance energy efficiency and encourage earlier retirement of less CO₂ efficient plants.

在电力部门，碳市场将建立碳价激励机制，以加速从化石燃料向低碳技术的转变，提高能源效率，并鼓励低CO₂效率的电厂提前退役。

Carbon pricing policies would also contribute, within a policy package, to low-carbon deployment across all sectors

碳价政策同时也将在政策组合中为所有部门的低碳部署做出贡献。

- Carbon pricing plays a critical role in the policy mix for promoting energy conservation and low carbon technology development ...

碳价在使能源部门低碳化的政策组合中起着关键作用 ...

.... but does not address all aspects of energy transition.

.... 但理解它的作用，以及它与其他政策的层次关系，可能是复杂的。

- Comprehensive policy package are needed which vary by energy sub-sector over time.
明确你想要碳市场来实现什么是至关重要的，因为它会影响设计选择。

- Future IEA work in this area:

未来国际能源署将在这方面开展工作：

- IEA **Clean Energy Transition Program** supports emerging economies in developing and implementing their low carbon strategies, including carbon pricing policies

国际能源署清洁能源转型项目支持新兴经济体发展和实施其包括碳价政策在内的低碳战略

- IEA is happy to deepen its cooperation with China on the national ETS

国际能源署愿与中国在全国碳市场上深化合作



Thank you 谢谢

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喜力



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