



**Emissions Trading in China and Europe:**  
Taking Stock, Thinking Ahead, Looking Beyond  
Shenzhen, 13 December 2017

# 跨区域**碳市场**与国际合作

— *Working Together: International Cooperation on ETS Implementation*

**柴麒敏 Chai Qimin, 傅莎 Fu Sha**

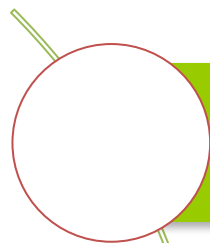
**International Cooperation Department, NCSC, NDRC**

**2017.12.13**

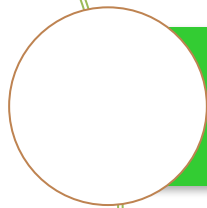
国家应对气候变化战略研究和国际合作中心  
National Center for Climate Change Strategy and International Cooperation (NCSC)

# 跨区域碳排放权交易体系政策

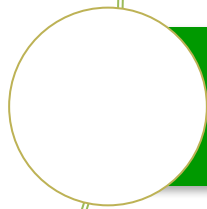
## Emerging Linked Market for ETS



Role of Carbon market in global climate governance? And in other governance (trade, finance)?



Is it necessary for inter-regional linkage? Pros and cons to China?



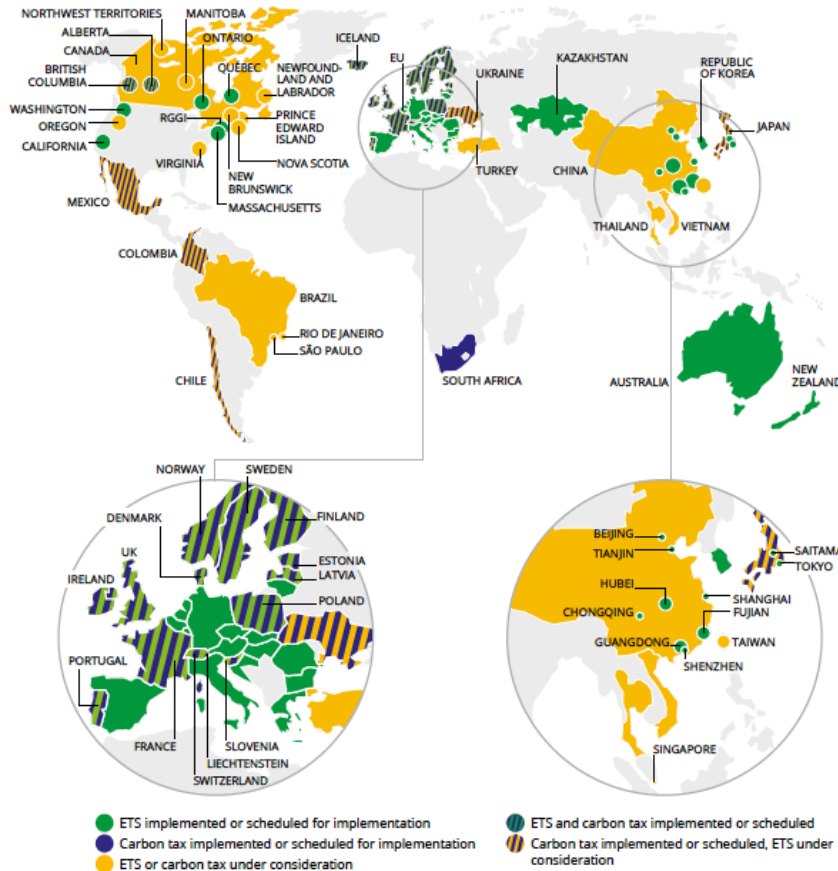
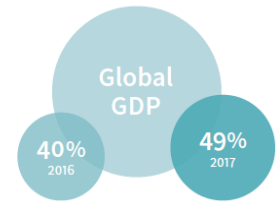
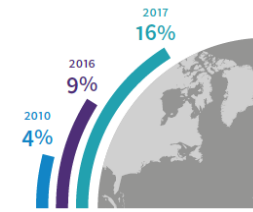
Synergy with other development strategies? South-South Cooperation, Belt and Road Initiative, Energy Revolution, Innovation of Development Path?



Roadmap for cross-regional interoperability and international cooperation in Carbon market? Technical solutions? Strategy?

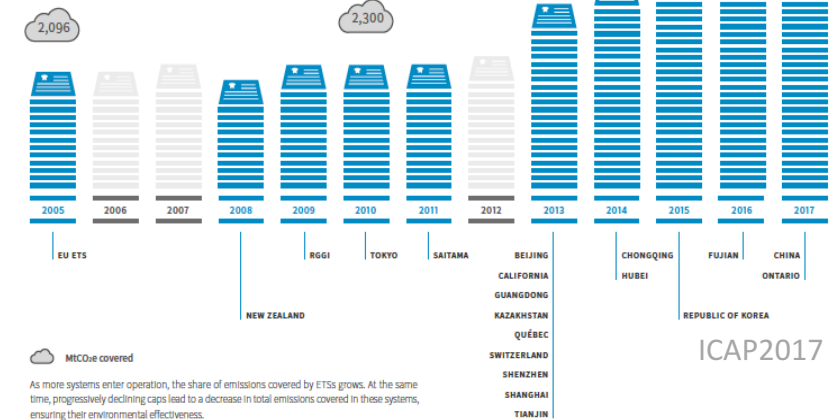
# 全球碳市场发展迅速

## Emerging Global Carbon Market



Global carbon market transactions totaled about 6.17 billion tons (4.96 billion tons in the EU) in 2015, with total transactions of about **€ 48.35 billion** (€ 37.46 billion in the EU)

Once the Chinese national ETS is implemented, this will expand the emissions covered by carbon pricing to between 20 to 25 percent of global GHG emissions.



By the end of 2017, **42 countries** and **25 countries jurisdiction areas** have adopted carbon pricing mechanisms, covering about **50% of GDP** and **8 billion tons** of carbon dioxide equivalent, accounting for about **15%** of global annual emissions.

- ✓ The countries and regions that have started their carbon markets include China which launched carbon trading pilots in seven provinces and municipalities and Fujian, the United States which has RGGI covering California, Washington and the eastern ten states, Quebec, Ontario, British Columbia, Alberta in Canada, Tokyo, Kyoto and Saitama Prefecture in Japan, as well as the European Union, Switzerland, New Zealand, South Korea, Australia, Chile (T), Colombia (T).
- ✓ Canada, Mexico, Colombia, Chile, Kazakhstan, Singapore plans to carry out national carbon emissions trading system.

# 区域市场覆盖范围和碳价水平

## Coverage of Regional Markets and Level of Price

**INTERNATIONAL CARBON PRICING INITIATIVES**

<p style="font-size: 24px; color: orange;"><b>81</b> NDCs</p> <p>include carbon pricing (domestic and/or international)</p>	<p style="font-size: 24px; color: orange;"><b>55%</b></p> <p>of global GHG emissions are covered by these NDCs</p>
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**REGIONAL, NATIONAL AND SUBNATIONAL CARBON PRICING INITIATIVES**

<p style="font-size: 24px; color: orange;"><b>42</b></p> <p>NATIONAL jurisdictions with carbon pricing initiatives</p>	<p style="font-size: 24px; color: orange;"><b>25</b></p> <p>SUBNATIONAL jurisdictions with carbon pricing initiatives</p>	<p style="font-size: 24px; color: orange;"><b>47</b></p> <p>CARBON PRICING INITIATIVES implemented or scheduled for implementation</p>
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**COVERING ANNUAL GLOBAL GHG EMISSIONS OF**

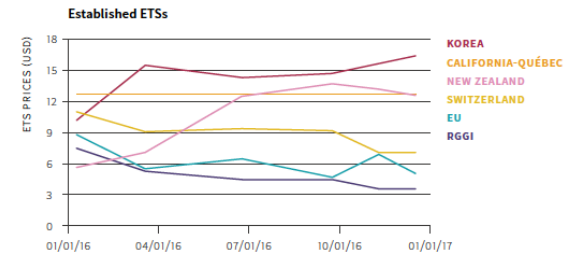
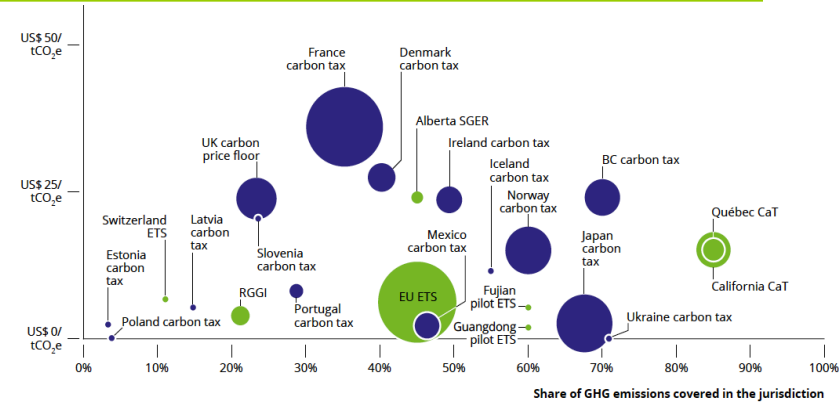
**8 GtCO<sub>2</sub>e = 15%**

**PRICES IN THE IMPLEMENTED INITIATIVES**

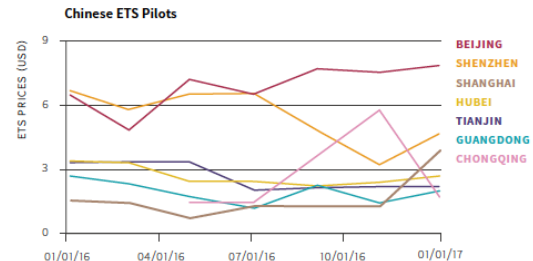
**US\$1-140/tCO<sub>2</sub>e**

Three quarters of the emissions covered are priced <US\$10/tCO<sub>2</sub>e

<p>Carbon pricing revenues raised by governments in 2016 were</p> <p style="font-size: 24px; color: orange;"><b>US\$22 billion</b></p> <p><i>Lower compared to US\$26 billion in 2015</i></p>	<p>Annual value of carbon pricing initiatives in 2017 is</p> <p style="font-size: 24px; color: orange;"><b>US\$52 billion</b></p> <p><i>Higher compared to the value of US\$49 billion for 2016</i></p>
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Prices for California-Québec, the EU, RGGI and Switzerland are the clearing prices from auction, whereas prices in New Zealand and Korea are the secondary market prices.



Prices in the Chinese pilots represent secondary market prices. For Chongqing, regular trading only started in August, one trade at CNY 10 (USD 1.45) on 17 March 2016.

# 《巴黎协定》 第六条市场机制

## Article 6 of Paris Agreement



### Sustainable Development Mechanism (SDM, new CDM)

International Transferred Mitigation Outcomes (ITMO, regional linkage) -2018COP24



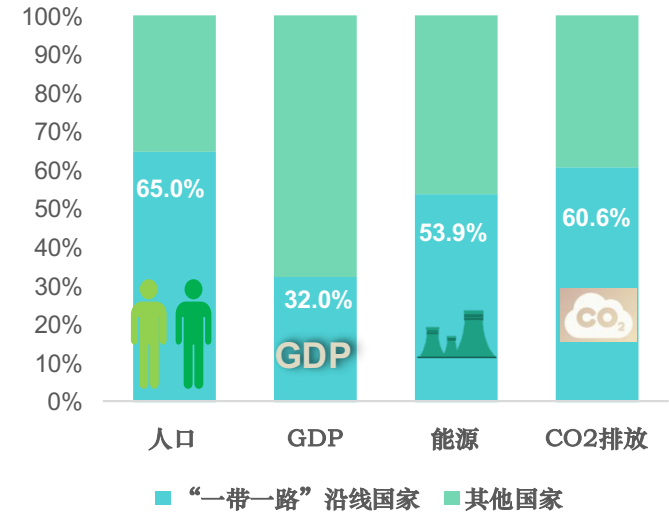
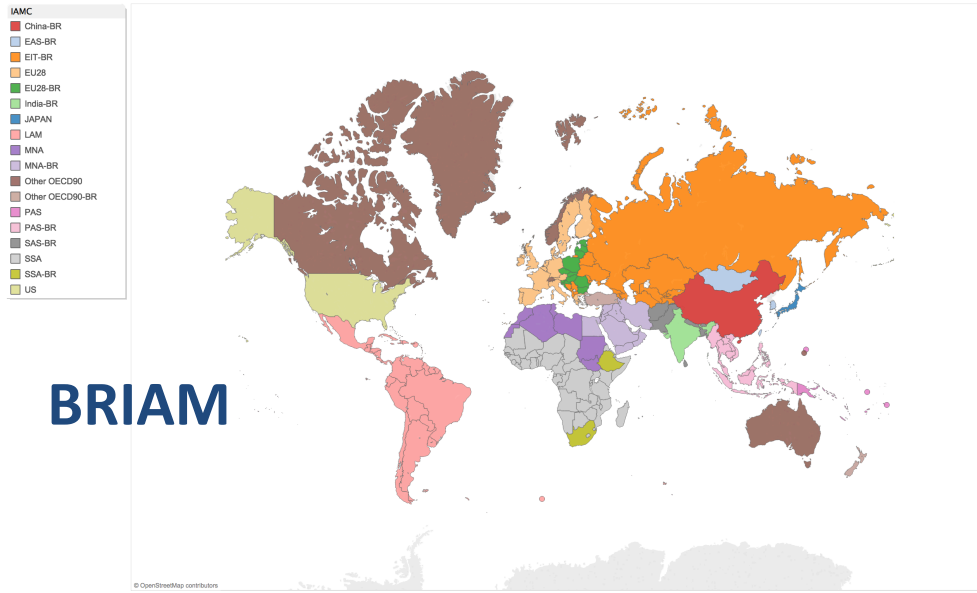
**Article 6.2** Parties shall, where engaging on a voluntary basis in cooperative approaches that involve the use of **internationally transferred mitigation outcomes** towards nationally determined contributions, promote sustainable development and ensure environmental integrity and transparency, including in governance, and shall apply robust accounting to ensure, inter alia, the avoidance of double counting, consistent with guidance adopted by the Conference of the Parties serving as the meeting of the Parties to this Agreement.

**Article 6.4** A mechanism to contribute to the mitigation of greenhouse gas emissions and support sustainable development is hereby established under the authority and guidance of the Conference of the Parties serving as the meeting of the Parties to this Agreement for use by Parties on a voluntary basis. It shall be supervised by a body designated by the Conference of the Parties serving as the meeting of the Parties to this Agreement, and shall aim:

- To promote the mitigation of greenhouse gas emissions while fostering sustainable development;
- To incentivize and facilitate participation in the mitigation of greenhouse gas emissions by public and private entities authorized by a Party;
- To contribute to the reduction of emission levels in the host Party, which will benefit from mitigation activities resulting in emission reductions that can also be used by another Party to fulfil its nationally determined contribution; and
- To deliver an overall mitigation in global emissions.

# 欧亚低碳共同体：融入“一带一路”战略

## Eurasian Community: Green Value in “OBOR”



Belt Road countries accounts for more than **two-thirds, one-third, 50% and 60%** of world's total populations, GDP, energy consumption and carbon emissions respectively.

This region covers many **emerging economies** with the most growth potential, the **Middle East and other oil-exporting countries**, small island developing states and the least developed countries which are the most **vulnerable** areas for climate change.

**66 countries** (except Uzbekistan, Syria and Palestine) have submitted NDCs and more than **three-quarters of countries** have greenhouse gas emission reductions targets. But more than 40% of the contributions are conditional.



# 长期关注全球市场发展

## Roadmap for Global ETS

- ***Carbon market international cooperation is an important basis for deepening global climate governance:***
  - ✓ Carbon market interconnection is the main mechanism to promote the free circulation of low-carbon elements and reduce green trade barriers.
  - ✓ Carbon market interconnection is to guide the transformation into the low-carbon global economy, increase the global low-carbon investment and employment, and promote globalization and regional economic integration process (in response to the risk that some individual countries exit the Paris Agreement).
  - ✓ Carbon market interconnection an important platform for improving and enriching the structure of global climate management and promoting the participation of non-state entities such as enterprises, cities and non-governmental organizations and sharing low-carbon benefits.
- ***Role of carbon market international cooperation in China's foreign policy:***
  - ✓ Form the world's largest carbon finance market; by occupying the absolute superiority of the scale and volume and mechanism to explore, enhance China's right to speak and set the rules in the green financial sector and lead the global green investment wave
  - ✓ Make full use of the South-South Cooperation Climate Change Fund and other multilateral financial mechanisms to build a sustainable development mechanism based on project-level (or "new clean development mechanism"); implement commitment of the South-South cooperation on climate change, reform foreign aid method, and cooperate with developing countries
  - ✓ Incorporate "The Belt and Road" and "the 'Go Globally' Strategy" to promote international green capital and capacity cooperation, technical standards and business model of the benign output
  - ✓ Boost internationalization of the CNY and gradually establish the international financial status of CNY in the field of carbon finance

# 长期关注全球市场发展

## Roadmap for Global ETS

### Phase I (2017-2020): Regional Carbon Market Connection Research and Pilot

Focusing on research and exchange-based multi-bilateral activities and capacity building, stimulate the connection of MRV, trading and accounting rules, and market regulation. Pilot emission reduction transactions of South-South cooperation projects in developing countries such as East Asia and Africa.

### Phase II (2020-2030): "Green Silk Road" Carbon Market Connection

Focus on encouraging the Belt and Road countries to carbon market, realize the connection of emission registry, quota allocation, compliance transactions and other basic elements of carbon market. Build upon the European and China carbon market, to gradually form a Europe-Asia cross-region carbon trading platform and carbon market.

### Phase III (After 2030): Global Carbon Market Connection and Cooperation

Further develop China's leadership in climate governance, further improve the global carbon market cooperation mechanism, and promote the interconnection and deep integration of regional carbon markets in Europe, Asia, Africa, Americas and other areas.





# Thanks for Your Attention!

Dr. Fu Sha

Email: [fusha216@outlook.com](mailto:fusha216@outlook.com)