



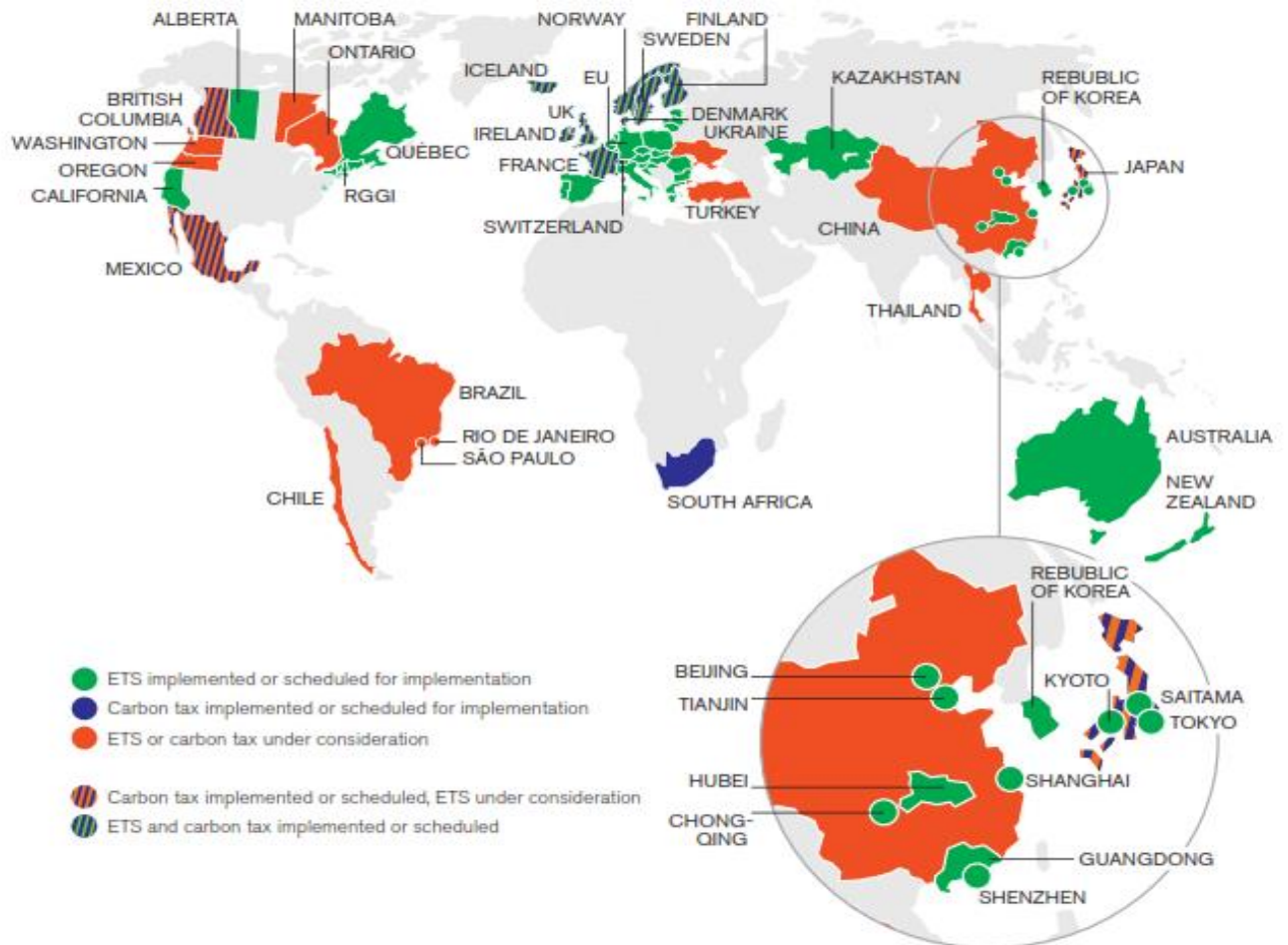
## **Overview of regional, national and sub-national emissions trading schemes (ETS) and crediting approaches.**

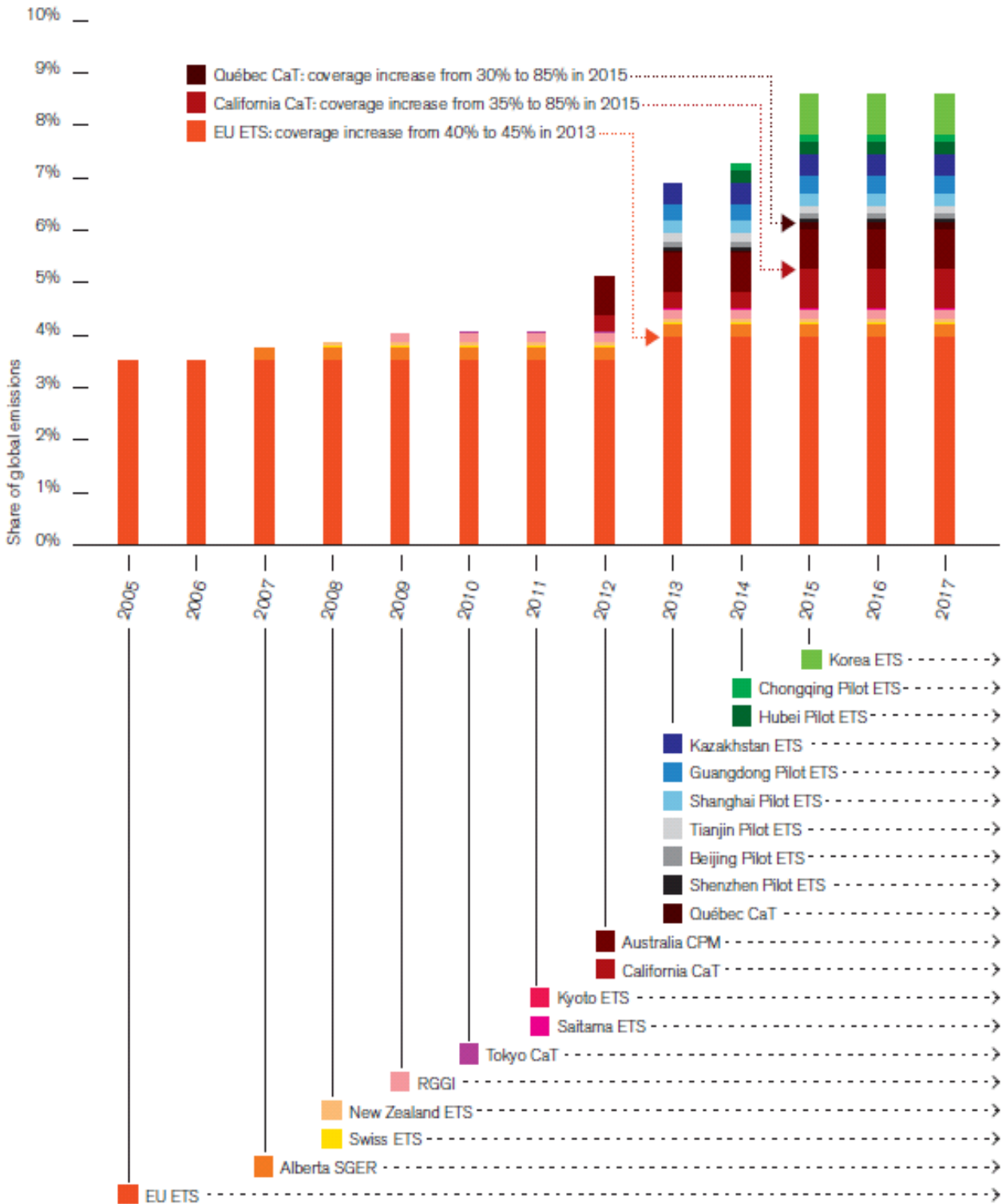
**(Extracts from World Bank Report on the State and Trends of Carbon Pricing 2014)**

Carbon pricing systems are now in operation in sub-national jurisdictions of the United States (US) and China. Whilst overall progress at the national level in China and the US may take some time, it is notable that the world's two largest emitters are now home to carbon pricing instruments.

In addition, the increase in discussions between these two countries shows promise at global level. Progress across the globe is steady. A total of eight new carbon markets opened their doors in 2013 alone. With these new joiners, the world's emissions trading schemes are worth about US\$30 billion. China now houses the second largest carbon market in the world, covering 1,115 megatons of carbon dioxide equivalent (MtCO<sub>2</sub>e), after the EU ETS with its 2,084 MtCO<sub>2</sub>e cap in 2013. Carbon taxation is also gaining ground. New carbon taxes were introduced in Mexico and France this past year. In North America, Oregon and Washington are searching for the right carbon pricing options, joining first-movers California, Québec and British Columbia in concerted efforts to tackle climate change.

Regional, national, and sub-national emissions trading schemes and crediting approaches continue to develop at pace, despite the dire state of the international carbon market. This report by the World Bank presents key characteristics of the main schemes (Figure 1 to Figure 4) and then considers the detail of notable developments in each one over the past year.

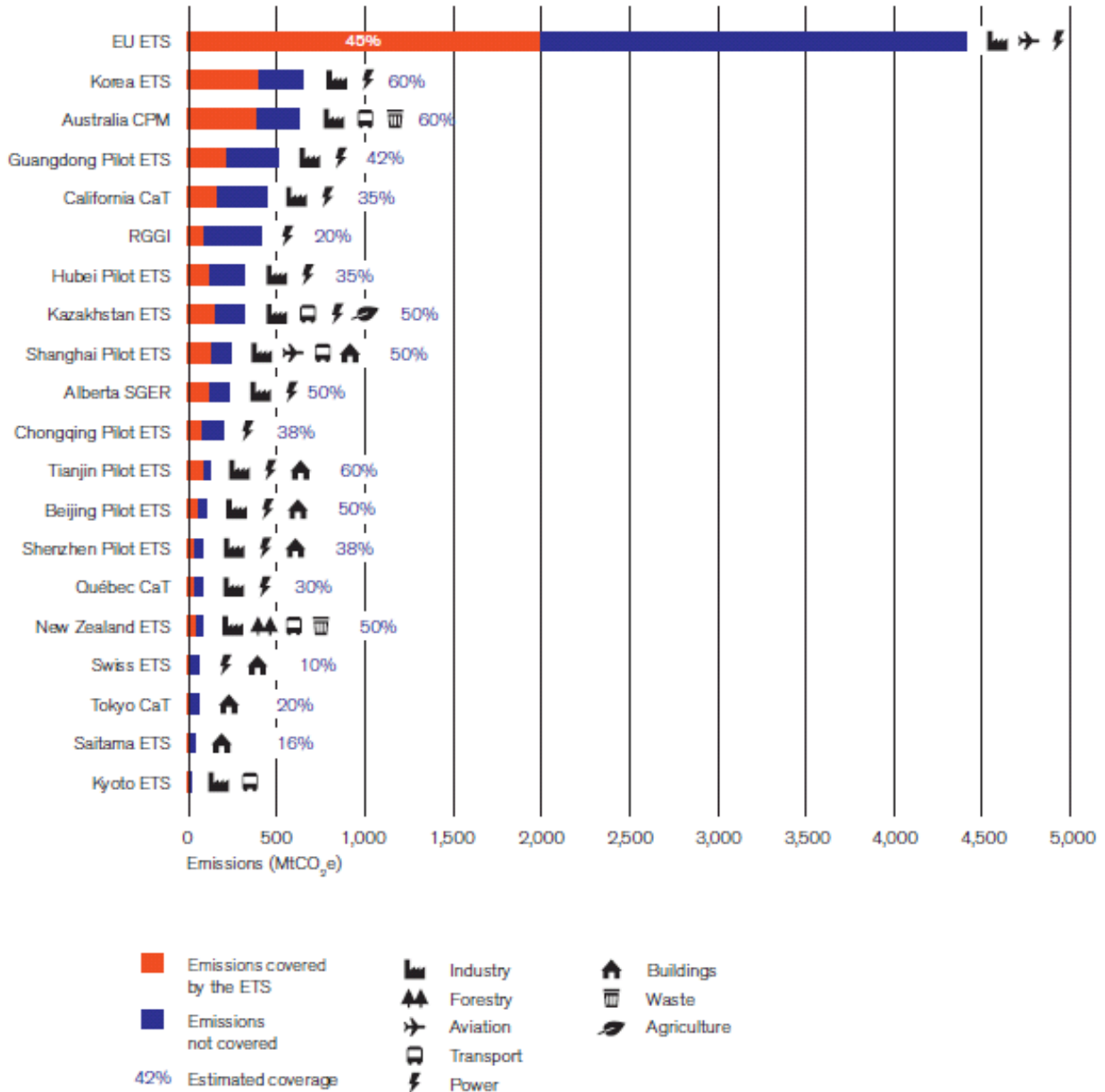




84 Only the introduction or removal of an ETS is shown. Emissions are as a share of global emissions in 2010. Annual changes in global, regional, national, and sub-national GHG emissions are not shown in the graph.

**Figure 1. Regional, national and sub-national emissions trading schemes**

and their share of global emissions.



Note 1: Symbols stand for the sectors covered. Blue bars represent emissions. Orange bars indicate how much of the total emissions are covered by the ETS. Some schemes could cover more sectors than shown in the figure due to the way liable entities are defined. The total emissions covered by the Kyoto ETS are not provided as it is a voluntary ETS.

**Figure 2. Regional, national and sub-national emissions trading schemes and their scope**

Jurisdiction	Free allocation		Purchase allowances		Other mechanisms or comments
	Bench- marking	Grand- fathering	Auction	Fixed	
EU ETS	●	●	●		● Grandfathering for process emissions only (< 1% of allowances) Rest is benchmarking
Swiss ETS	●	●	●		● Grandfathering for process emissions only, rest is benchmarking
California CaT	●	●	●	●	● Allowances must be resold at auction
RGGI			●		
Alberta SGER					● Other mechanism: crediting (earning emission allowances after reductions made)
Québec CaT		●	●	●	
KAZ ETS		●			
Australia CPM	●	●		●	
NZ ETS	●	●		●	
Tokyo, Saitama and Kyoto CaT					● Other mechanism: crediting (earning emission allowances after reductions made)
Beijing Pilot ETS	●	●			
Chongqing Pilot ETS	○	○	○	○	○ No information available at this moment
Guangdong Pilot ETS	●	●	●		
Hubei Pilot ETS	●	●	●		
Shanghai Pilot ETS	●	●			
Shenzhen Pilot ETS	●				
Tianjin Pilot ETS	●	●			
Korea ETS	●	●			

Note: The table shows how the allowances are distributed in each ETS.

**Figure 3. Regional, national and sub-national emissions trading schemes and their allocation approaches**

Areas of development in 2013	Scope	Allocation approaches	Competitiveness Considerations	Use of offsets	Price stabilization mechanisms	Performance and effectiveness	MRV and registry	Linking to other schemes
EU ETS	●	●	●	●	●	●	●	●
Swiss ETS		●						●
California CaT		●	●	●		●		●
RGGI	●					●		
Alberta SGER	●			●	●			
Québec CaT						●		●
KAZ ETS	●	●		●	●	●	●	●
Australia CPM	●		●		●	●		●
NZ ETS	●	●		●		●		
Japan (various)		●						●
China pilots	●	●		●	●	●	●	●
Korea ETS	●	●	●	●	●	●	●	

Note: Orange dots indicate that a notable development occurred in that area over the past year. Only these areas are covered in the following sections. Additional background information can be found in the Mapping Carbon Pricing Initiatives, Developments and Prospects, 2013 report.<sup>28</sup>

**Figure 4. Regional, national and sub-national emissions trading schemes and their areas of development in 2013**

Source: World Bank (2014) State and Trends of Carbon Pricing. World Bank Group.

[http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2014/05/27/000456286\\_20140527095323/Rendered/PDF/882840AR0Carbo040Box385232B00OUO090.pdf](http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2014/05/27/000456286_20140527095323/Rendered/PDF/882840AR0Carbo040Box385232B00OUO090.pdf)