



International Carbon  
Action Partnership

# EMISSIONS TRADING WORLDWIDE

*Infographics*

*Status Report 2019*

 **1/8** of the global population lives under an ETS in force.

**8%** of global GHG emissions are covered by an ETS



Jurisdictions making up **37%** of global GDP are using emissions trading

## From Local to Supranational

27 jurisdictions are implementing 20 ETSs across scales



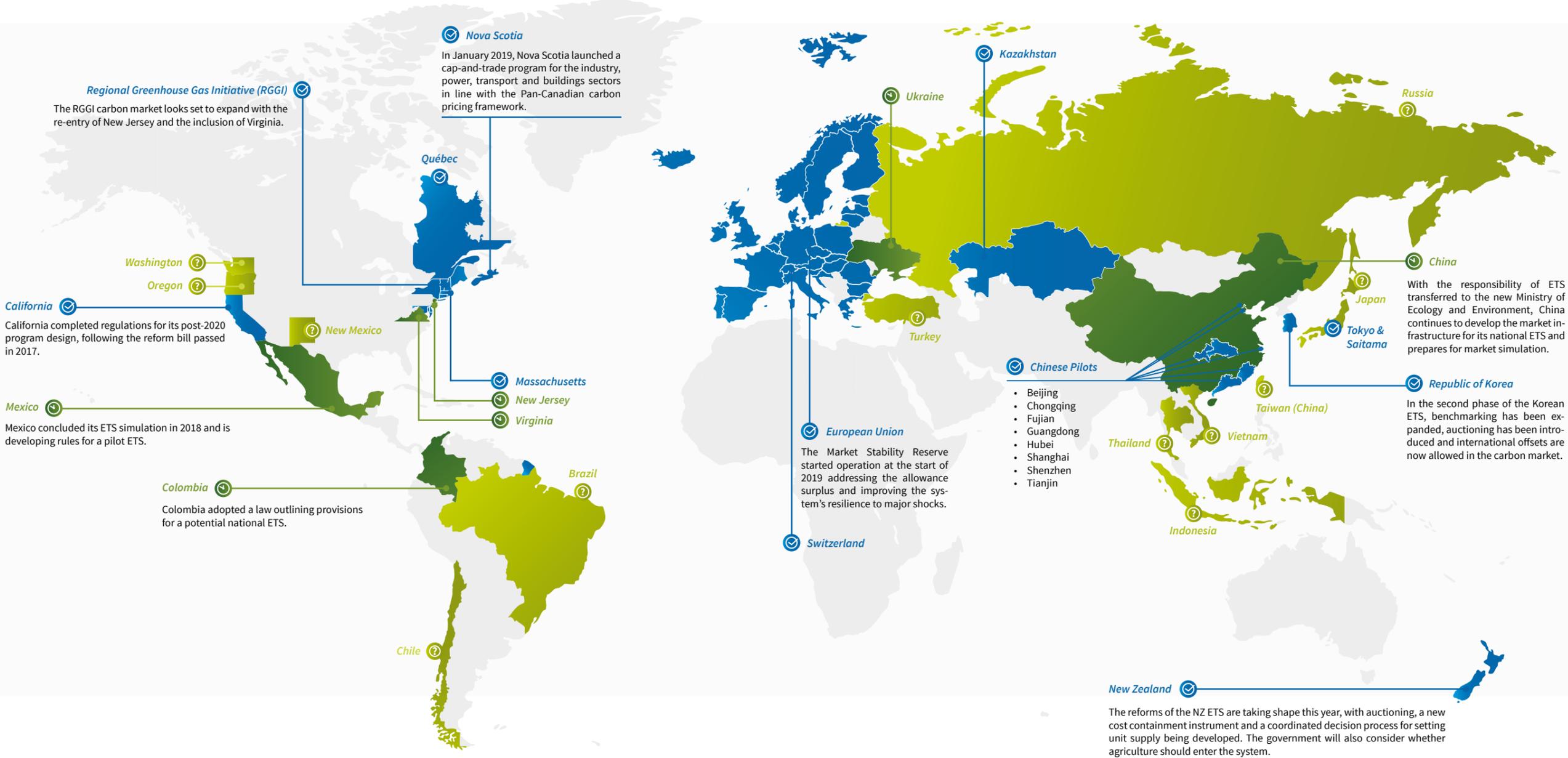
# EMISSIONS TRADING WORLDWIDE

The state of play of cap-and-trade in 2019

The ICAP ETS world map depicts emissions trading systems currently in force, scheduled or under consideration. There are now 20 systems covering 27 jurisdictions with an ETS in force. Another six jurisdictions are putting in place their systems that could be operating in the next few years, including China and Mexico. 12 jurisdictions are also considering the role an ETS can play in their climate change policy mix, including Chile, Thailand and Vietnam.

A regularly updated, interactive version of the ICAP ETS map with detailed information on all systems is available at: [www.icapcarbonaction.com/ets-map](http://www.icapcarbonaction.com/ets-map)

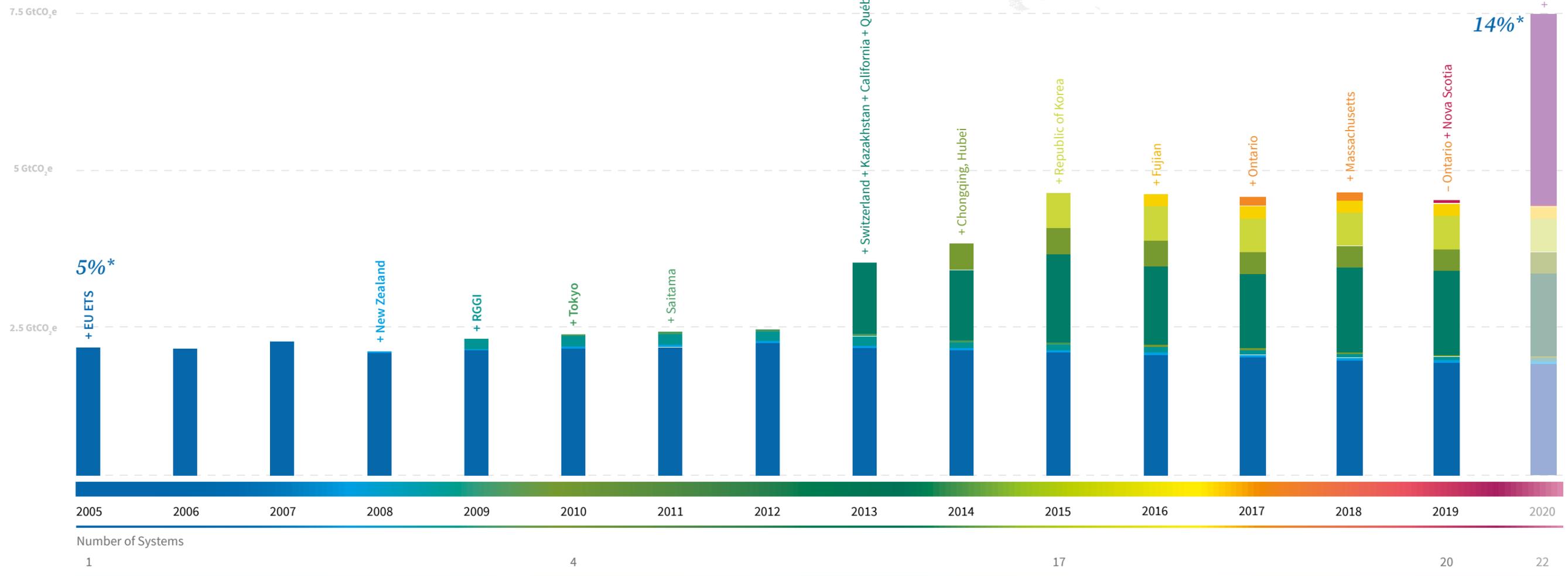
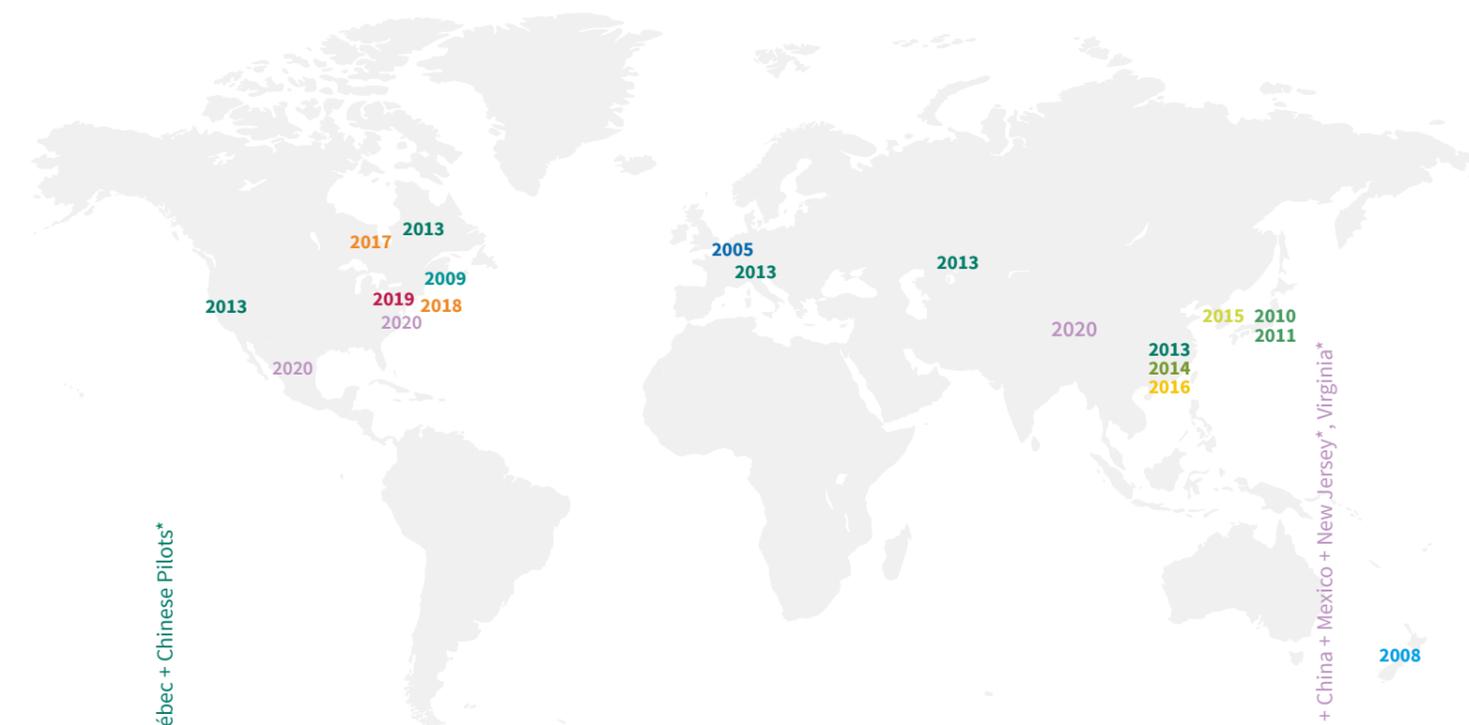
-  ETS in force
-  ETS scheduled
-  ETS considered



# GLOBAL EXPANSION OF EMISSIONS TRADING

## GHG emissions under ETSs

The graphic depicts the worldwide growth of emissions trading over time. Systems are spreading around the world and new additions have more than doubled the share of global emissions covered by emissions trading since the launch of the EU ETS in 2005. With more systems expected in the next few years, we estimate the number of global emissions under emissions trading to increase by almost 70% in 2020 compared to 2019. Changes over time are driven by the addition of new sectors and systems, as well as by the counteracting trend of declining caps in many systems.



\*of global GHG emissions

\* Beijing, Guangdong, Shanghai, Shenzhen, Tianjin

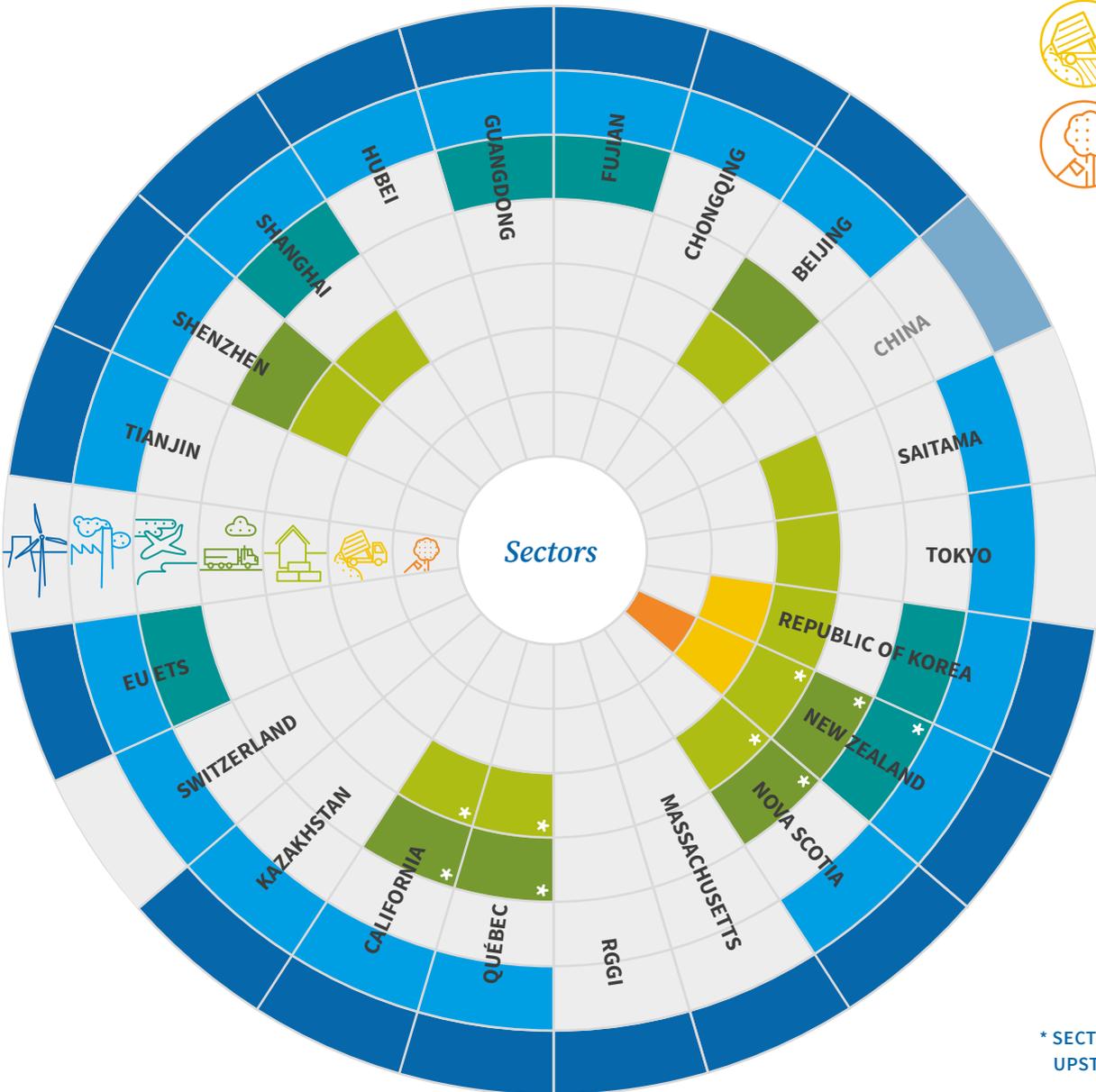
\*Virginia and New Jersey aim to join RGGI by 2020

# SECTOR COVERAGE

## Sectors included in emissions trading across systems

The graphic shows sectors (types of economic activity) included in emissions trading across all systems in force, as well as the point at which those emissions are regulated. Only sectors covered by at least one ETS are included.<sup>1,2</sup>

-  POWER
-  INDUSTRY
-  DOMESTIC AVIATION
-  TRANSPORT
-  BUILDINGS
-  WASTE
-  FORESTRY



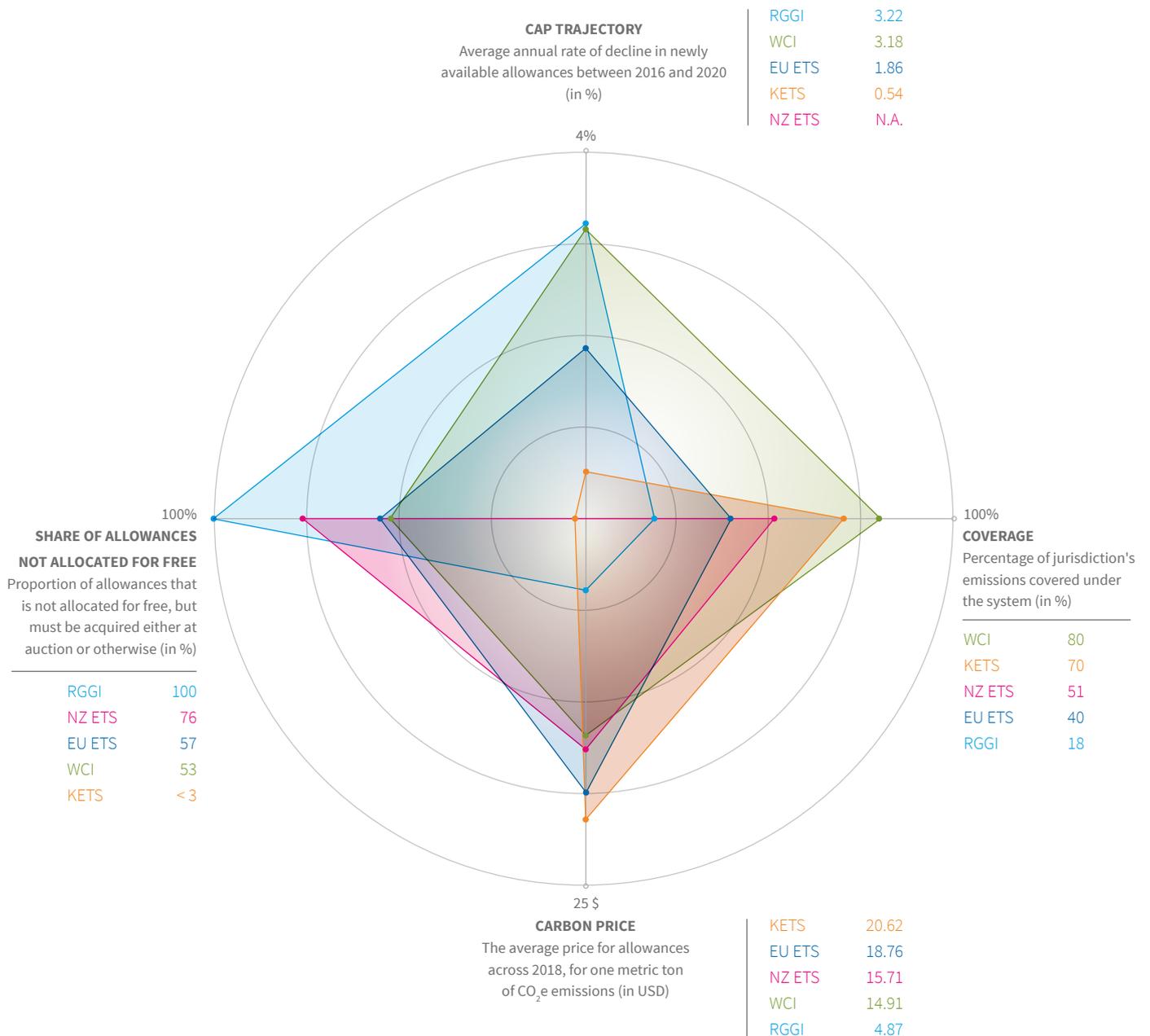
1 – Sectors are marked as covered by a system when at least some of this sector’s emissions face explicit compliance obligations. Not all of the sector’s facilities or GHG emissions must be regulated; in fact, this is rarely the case due to limits like inclusion thresholds. In addition, not all sub-sectors, gasses, or processes of a given sector may be covered. The respective factsheets provide more information on system coverage.  
 2 – Detailed definitions of each sector are provided in the disclaimer.

# DIFFERENT SHAPES OF CAP-AND-TRADE

*A comparative look at key metrics from carbon markets*

- EU ETS European Emissions Trading System
- KETS Korean Emissions Trading System
- NZ ETS New Zealand Emissions Trading Scheme
- RGGI Regional Greenhouse Gas Initiative
- WCI Western Climate Initiative

This graphic shows five well-established systems along four key metrics. The cap reduction pathway indicates the average yearly decline between 2016 and 2020 in the number of allowances. The coverage shows the share of the jurisdiction's economy that falls under the ETS. The carbon price is the average allowance price per metric ton of CO<sub>2</sub> across 2018 in each of the systems. The share of allowances designates allowances that are not allocated for free, e.g. those that must be acquired in auctions.



# AUCTIONING REVENUE

— 20,000

## Funds raised by emissions trading systems

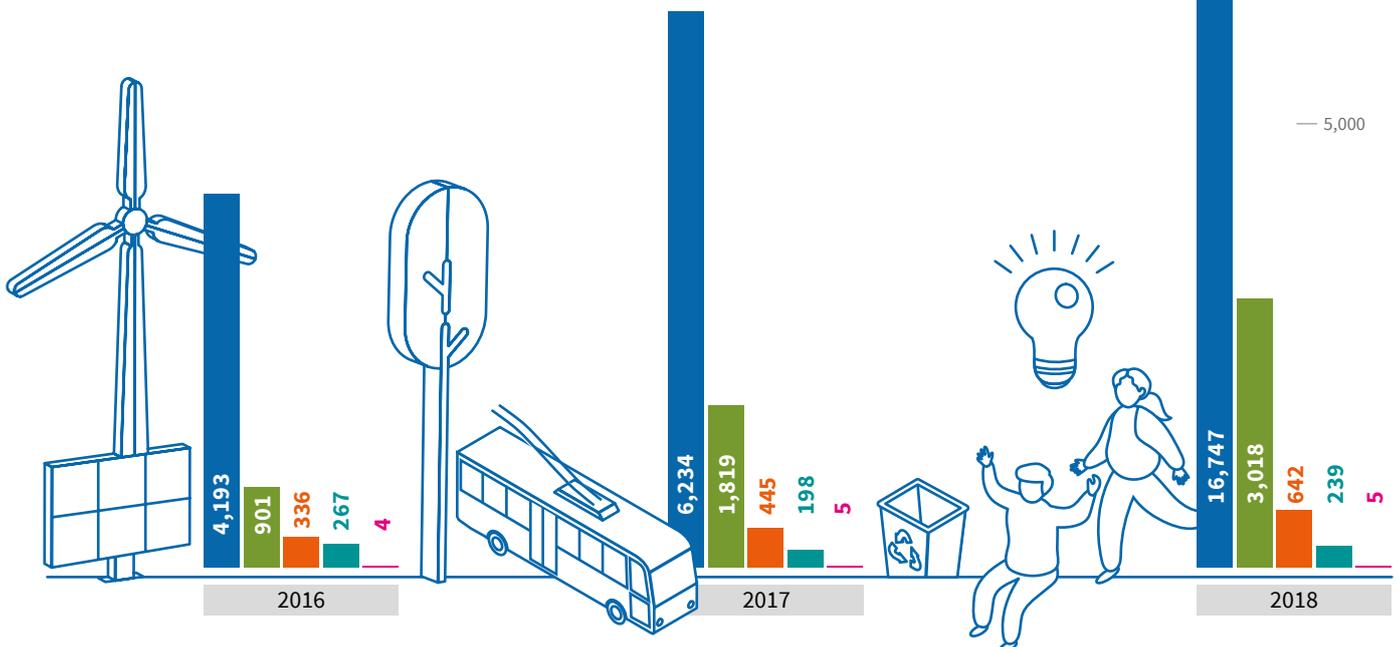
Auctioning allowances can generate public revenue that can be used in different ways depending on the priorities of the jurisdiction. Jurisdictions have tended to use auctioning revenue to fund additional climate programs, including energy efficiency and renewable energy programs. Auctioning revenue has also helped disadvantaged and low-income groups. The amount of revenue generated depends on many

factors, including the size of the jurisdiction, the ETS coverage, the number of auctioned allowances and the carbon price. By the end of 2018, systems worldwide have raised over USD 57 billion, with revenue spent on different purposes such as renewable energy, innovation, compensation for disadvantaged groups, and the general budget.

By the end of 2018, systems raised **\$57.3 billion** a total of **in auction revenue.**

- EU
- CALIFORNIA
- QUÉBEC
- RGGI
- SWITZERLAND

All values in million USD

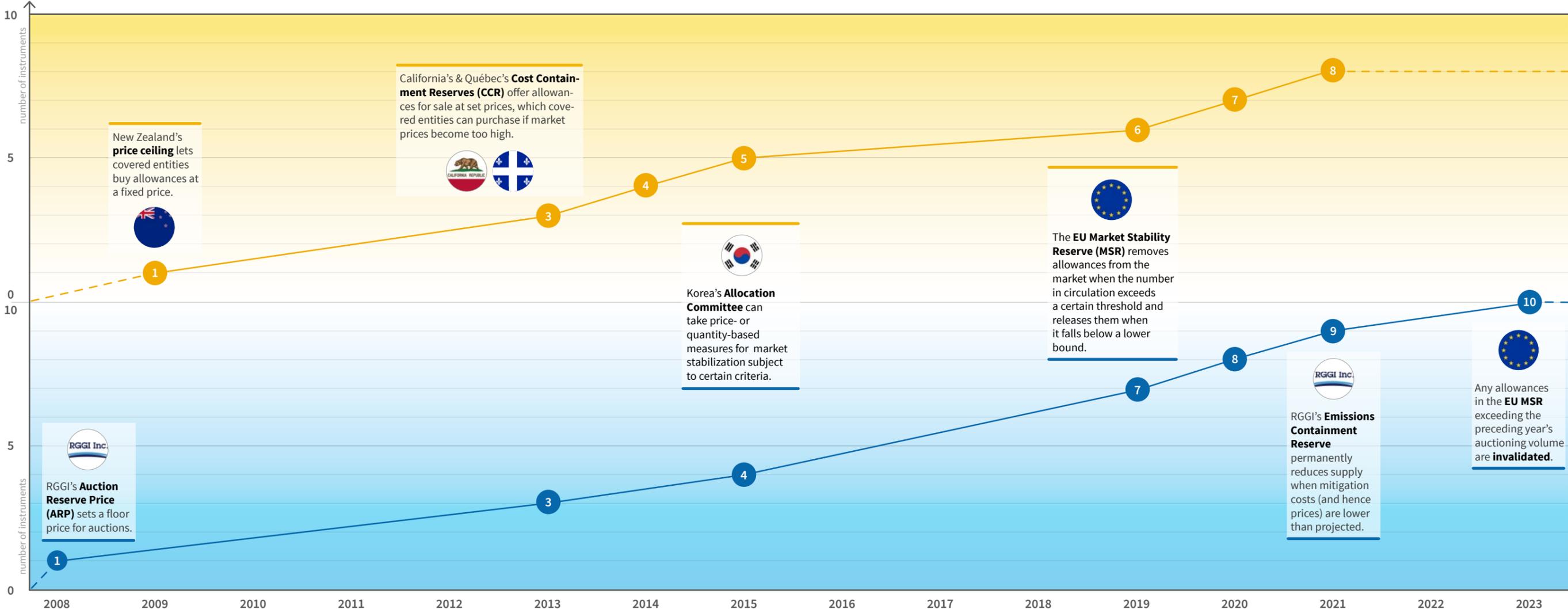


# GROWING STABILITY

## The spread and diversification of market stability instruments

This graphic shows the different types of market stability instruments operating in emissions trading systems around the world. These come into play when allowance prices or the number of allowances in circulation go below or above a certain level.

**MARKET STABILIZATION AT THE UPPER BOUND:**  
Measures that ensure that the costs of the program remain manageable by intervening in case of high prices or scarcity of allowances.



**MARKET STABILIZATION AT THE LOWER BOUND:**  
Measures that seek to ensure the environmental integrity and stringency of the ETS by intervening in case of low prices or a surplus of allowances.

 California & Québec ARP  
 Chinese Pilots experiment with market stability provisions  
 RGGI CCR  
 Massachusetts & Korea ARP  
 Nova Scotia CCR + ARP  
 California price ceiling

# IMPRINT

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