

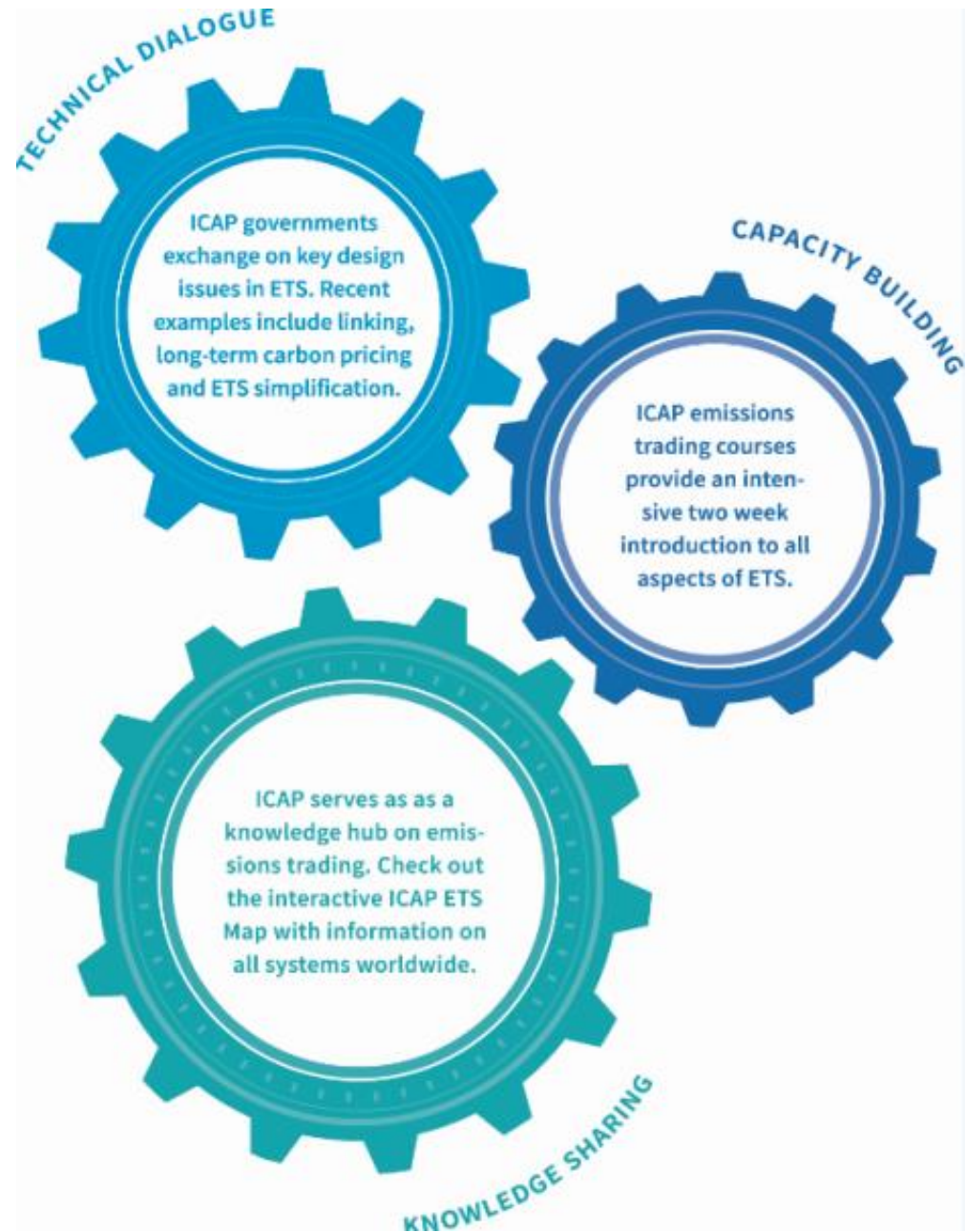
Carbon prices and carbon pricing: Developments and increasing its role

*Lina Li, ICAP Secretariat
24th November 2020*

About ICAP

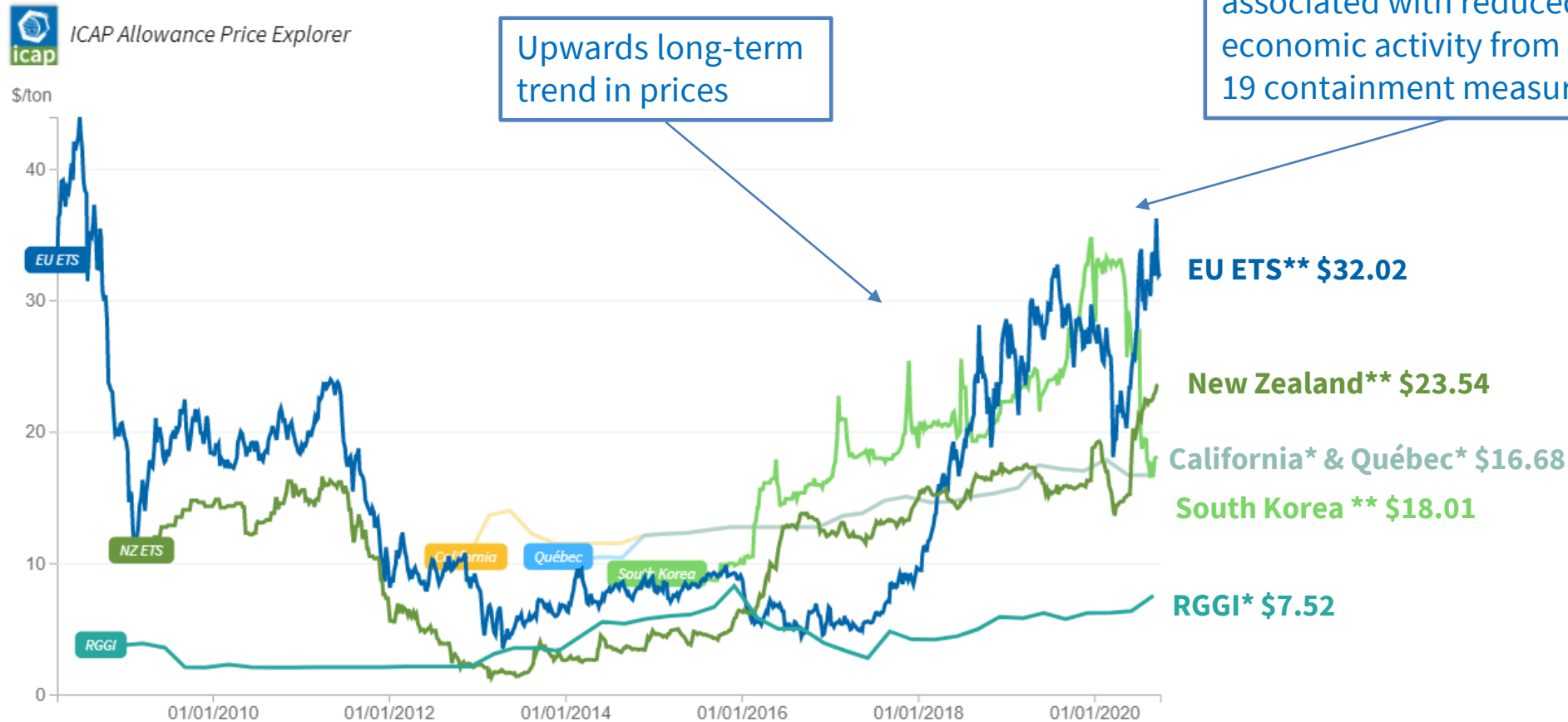
An international **forum** of **36 national & subnational** governments to **exchange** knowledge and experiences on emissions trading systems (**ETS**)

- Share **best practice** & learn from each others' experiences
- Facilitate **linking** of carbon markets
- Explore the **role** of carbon pricing in climate policy



Allowance price developments over the last 10 years

Quick recovery of allowance price impacts from covid-19 first wave

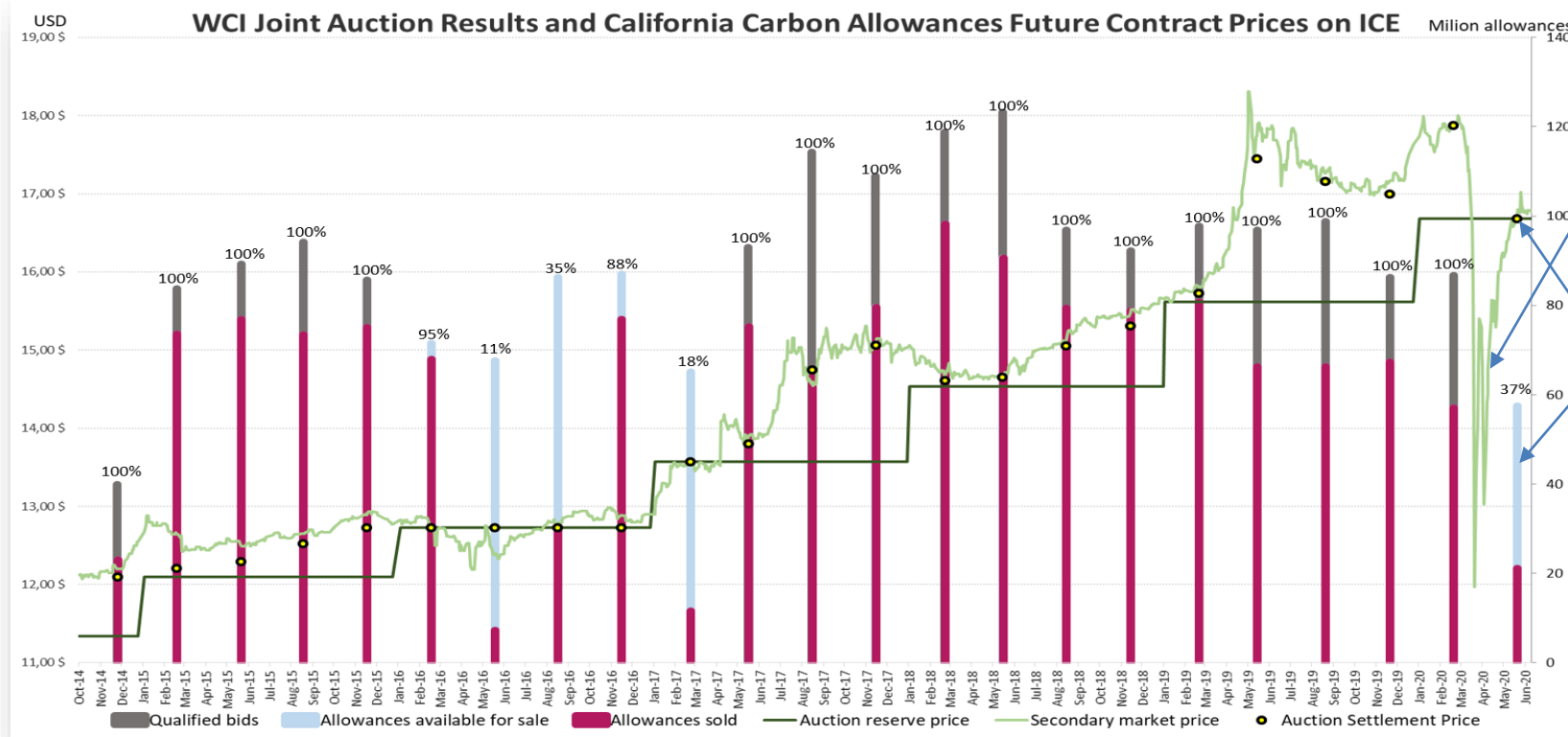


* Auction price

** Market price

A closer look, WCI auction and secondary market

Market stability mechanisms are an important feature of all established markets



Short term decline in secondary market prices.

Allowances withheld from the market due to the auction reserve price.

Auction settles at reserve price and secondary market recovers.

A closer look, EU ETS secondary market price



ICAP Allowance Price Explorer

\$/ton

Short term decline in secondary market prices (COVID-19)

Price then quickly picked up again and stayed at high level

EU ETS

EU ETS \$32.02 (Sep 2020)

20

10

0

01/10/2019

01/01/2020

01/04/2020

01/07/2020

EU ETS MSR (in place since 2019) is a quantity-based market stability mechanism

- 1,385,496,166 allowances in circulation (May 2020)
- 24% to be placed in Market Stability Reserve
- **EU ETS MSR to reduce auction volume by over 330 million allowances between September 2020 and August 2021**
- Next announcement of TNAC: May 2021



European Commission

COVID-19 ETS Impacts

➤ On compliance deadlines

- Most major systems (EU ETS, Regional Greenhouse Gas Initiative (RGGI), Western Climate Initiative (WCI)) did not move their 2019 compliance deadlines
- Others shifted their compliance deadlines such as the Korean ETS (K-ETS), the Swiss ETS, most Chinese pilots and the Canadian federal 'backstop' output-based pricing system (OBPS)

➤ On policy decisions

- For example, China's national ETS, and US Transportation and Climate Initiative final MOU
- Yet significant policy development in New Zealand, Korea, Germany and the Europe Union

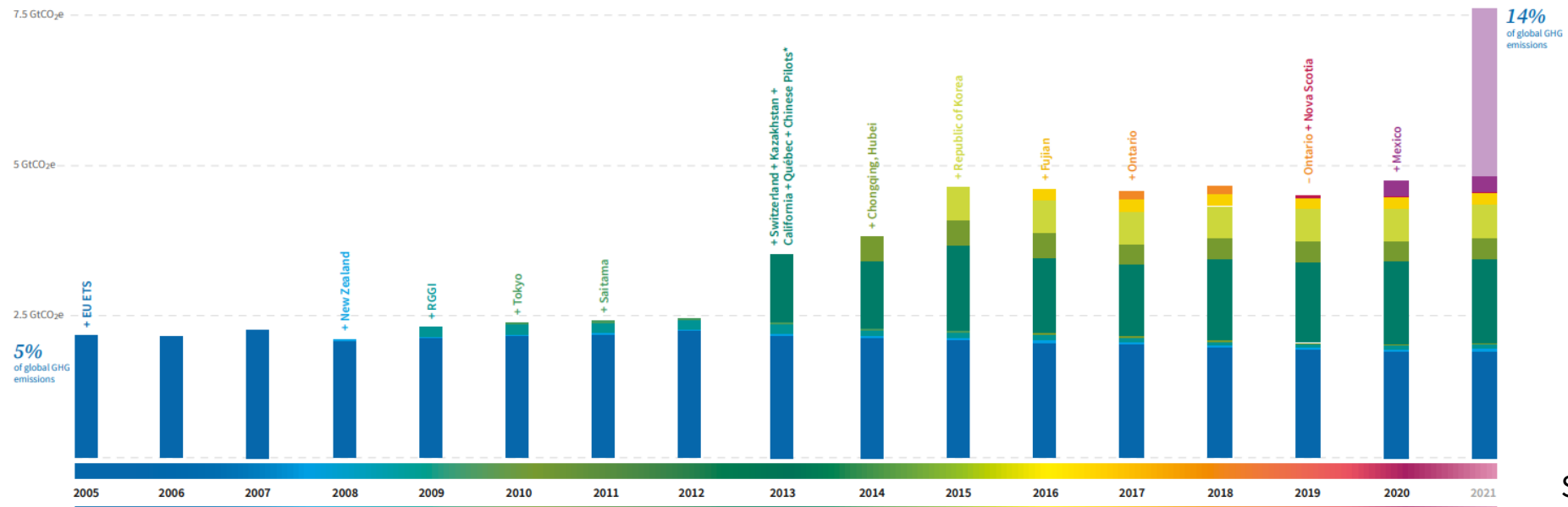
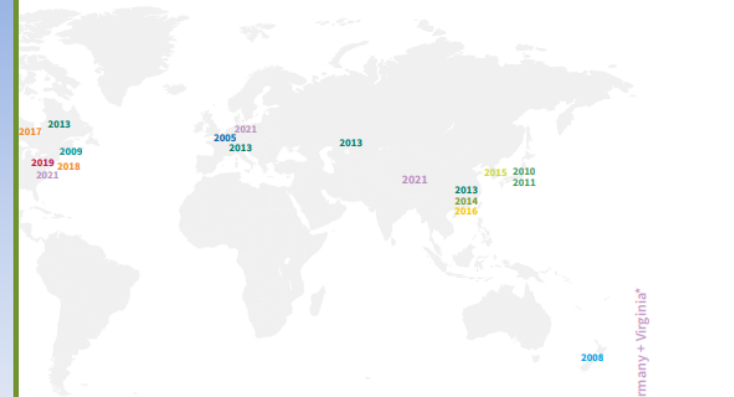
➤ On auctions

- Some auction impacts in WCI, K-ETS, EU ETS, and the Swiss ETS, with either shifted, cancelled or undersubscribed auctions (demand was short of auctioned volume or non-existent)

Proliferation of carbon pricing worldwide

Global expansion of emissions trading over time

- **21 ETS systems** in force with **another 24** under development or consideration
- New additions will soon **triple the share** of global GHG emissions covered by ETS since the launch of the EU ETS



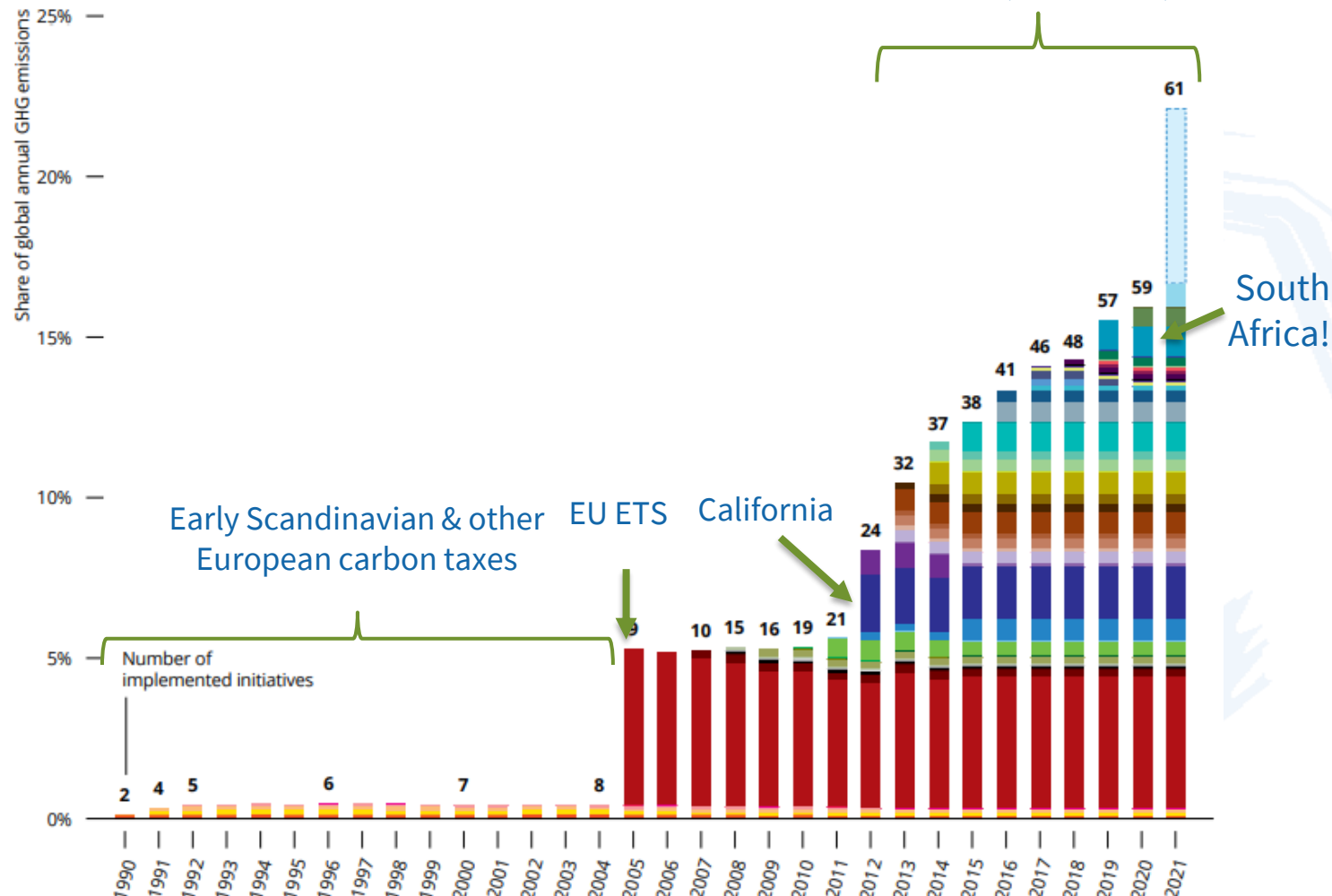
* Beijing, Guangdong, Shanghai, Shenzhen, Tianjin

*Virginia aims to join RGGI by 2021

Source: ICAP, 2020

Proliferation of carbon pricing worldwide

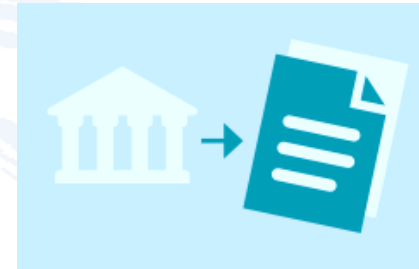
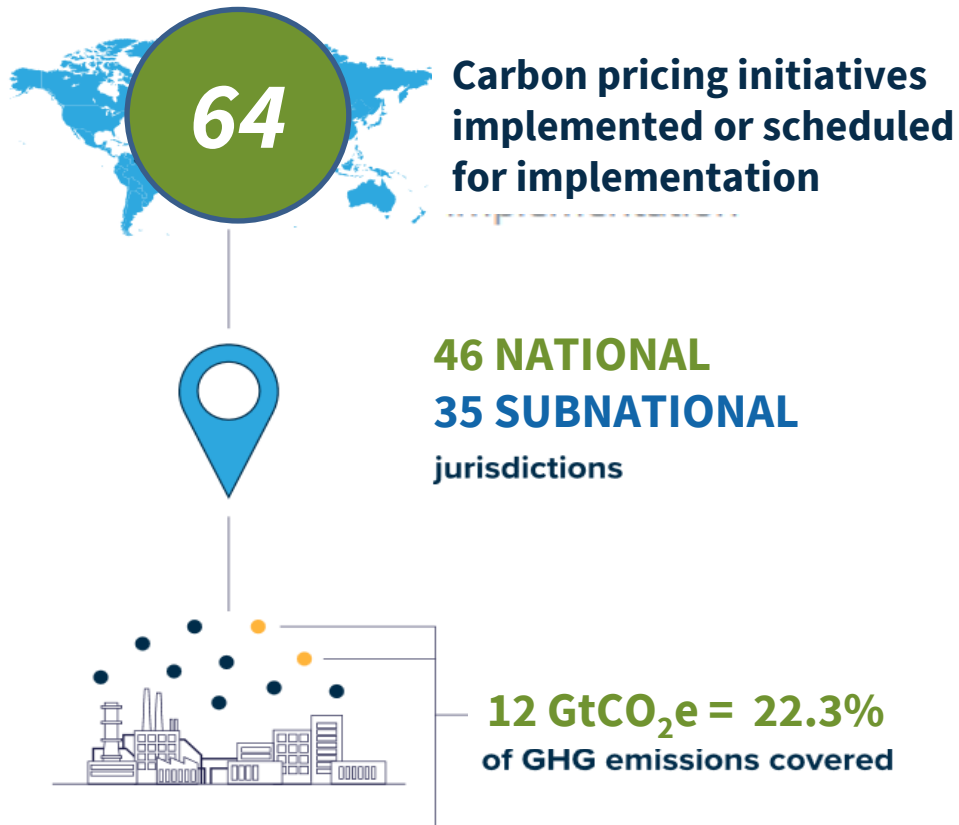
Rapid global expansion of carbon pricing, first to Asia, then also Latin America (and Africa!)



- **60+** implemented initiatives by 2021
- Almost **25%** of global annual GHG emissions covered

Source: World Bank, 2020

Carbon pricing – key figures (as of 2020)



More than **14,500** registered crediting projects to date, generating almost 4 billion tCO₂e of cumulative carbon credits

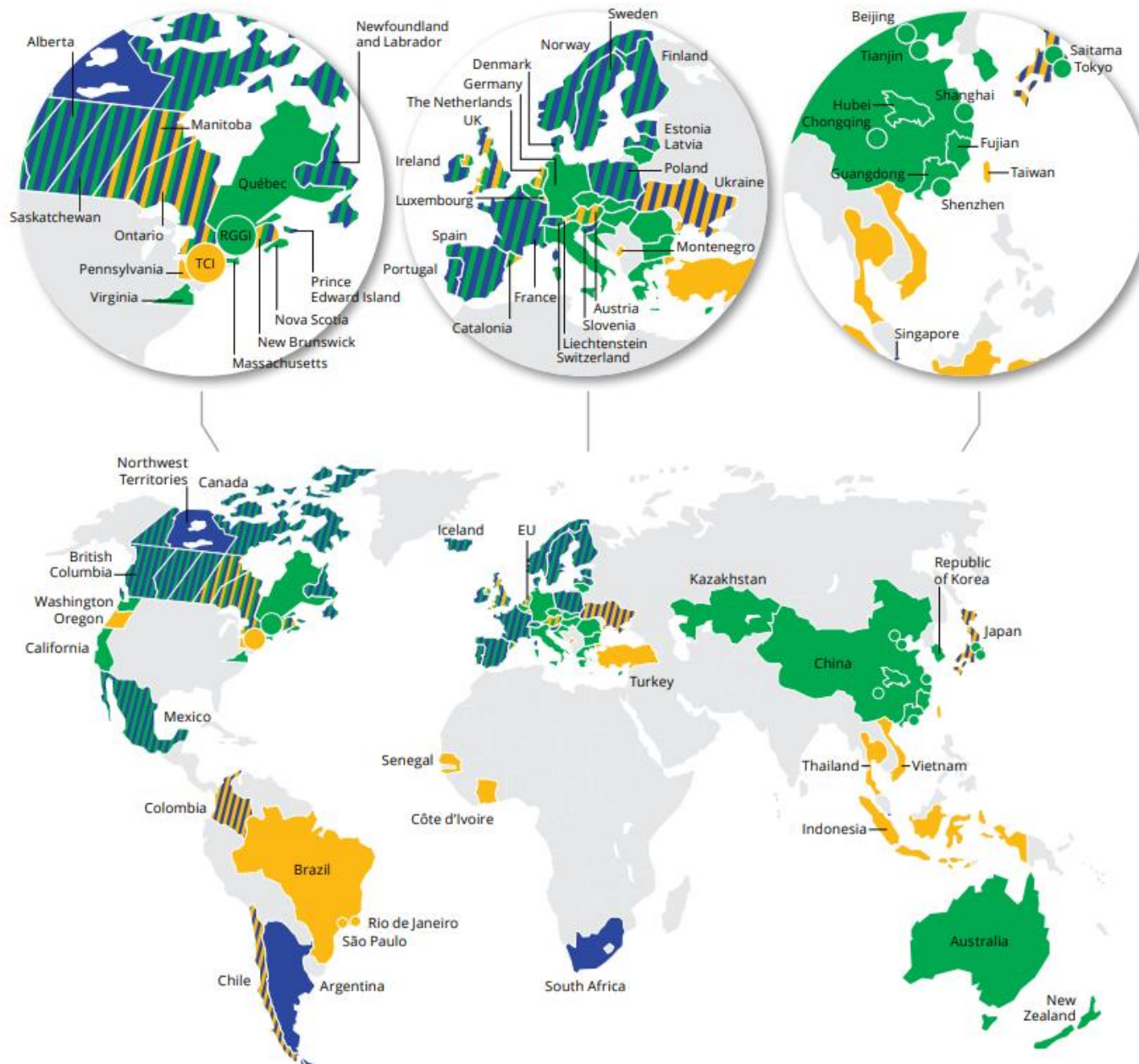


US\$44 BILLION
Raised in carbon pricing revenues in 2019

Source: World Bank, 2020

Carbon pricing worldwide

- Carbon pricing initiatives implemented, scheduled for implementation and under consideration (ETS and carbon tax) around the world



- ETS implemented or scheduled for implementation
- Carbon tax implemented or scheduled for implementation
- ETS or carbon tax under consideration
- ETS and carbon tax implemented or scheduled
- Carbon tax implemented or scheduled, ETS under consideration
- ETS implemented or scheduled, ETS or carbon tax under consideration
- ETS and carbon tax implemented or scheduled, ETS or carbon tax under consideration

Source: World Bank, 2020

Carbon Pricing is also advancing in the Global South & in emerging economies

ETS



Mexico



Chile



Chinese Pilots

- Beijing
- Chongqing
- Fujian
- Guangdong
- Hubei
- Shanghai
- Shenzhen
- Tianjin

Chinese Pilots



Colombia



South Korea



China



CARBON TAX



Mexico



Singapore



Chile

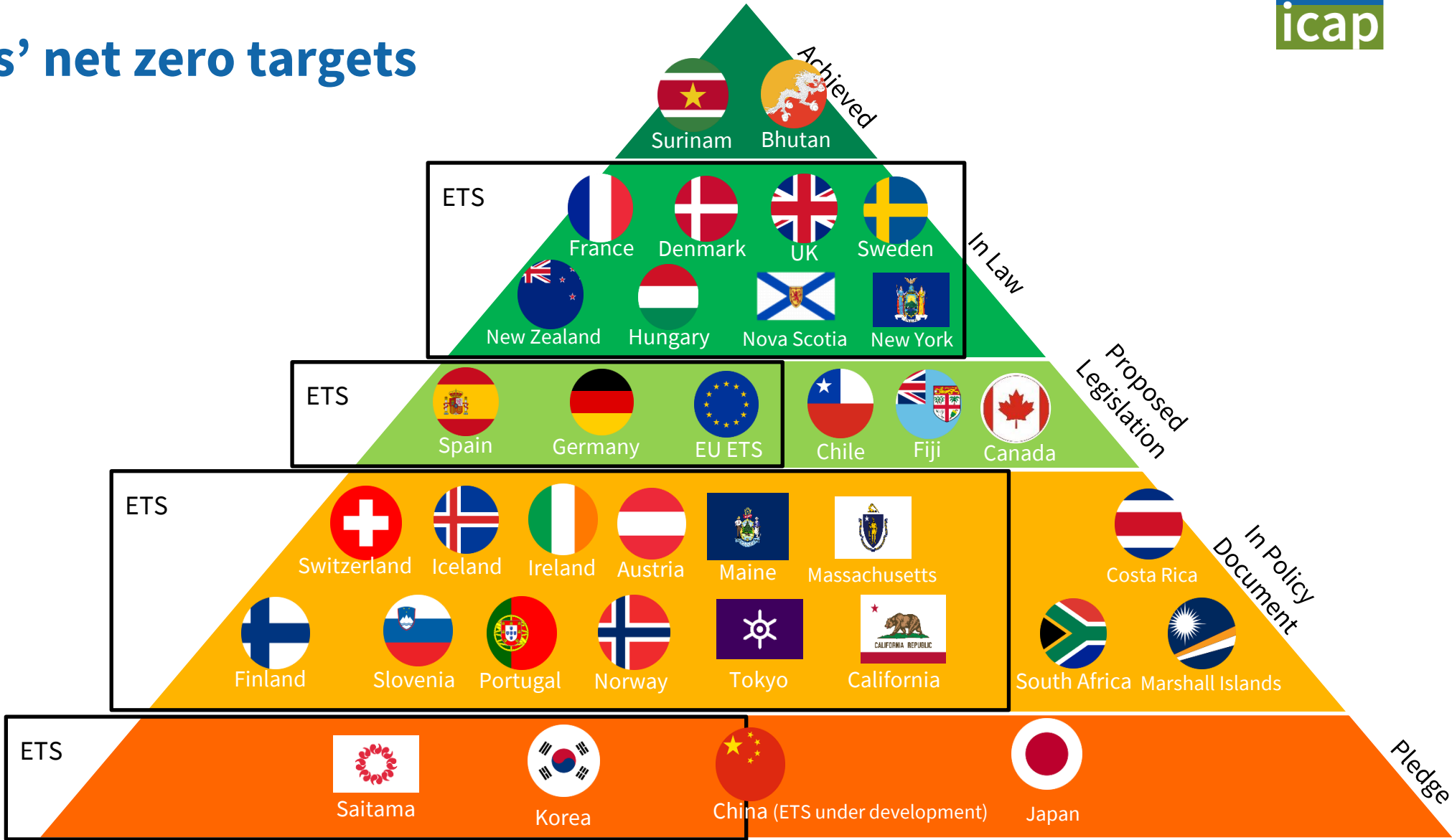


Colombia



South Africa

Jurisdictions' net zero targets



Source: Adapted from eciu.net (as of 16.11.2020), including Korea, China, California, Tokyo, Saitama, Massachusetts, Maine, New York, Nova Scotia

Takeaways and outlook

- Markets **responded** to the sharp drop in emissions, which is to be expected.
- **Market stability mechanisms** appear to have been largely effective in absorbing much of the initial shock caused by COVID-19 lockdowns, slumps in economic activity, and decreased allowance demand.
- **Middle to long term policy certainty** also contribute to the market confidence.
- Policy makers will watch their systems carefully as we face uncertain future demand due to **ongoing COVID-19 containment measures and a second wave.**
- **Political will remains strong** as increasingly jurisdictions commit to net zero reduction targets and lawmakers understand that post-virus recovery is an opportunity to accelerate a low-carbon pathway.
- **Carbon pricing** is expected to play an increasingly important role.



International Carbon
Action Partnership

Thank you!

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ICAP ETS Tools

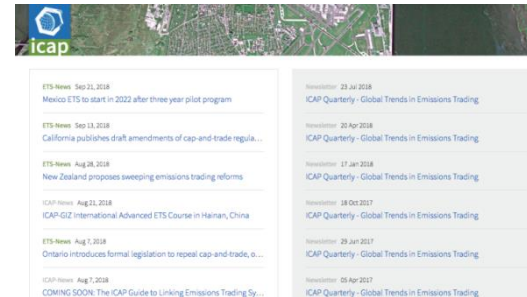
ICAP Interactive Map

→ ETS state of play worldwide
(3-monthly updates)



News

→ Objective coverage on all regulatory ETS developments as they occur



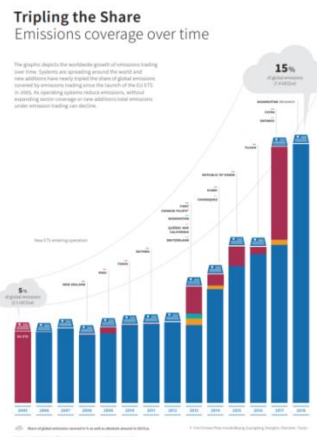
ETS briefs

→ Introduction of the basics of cap-and-trade



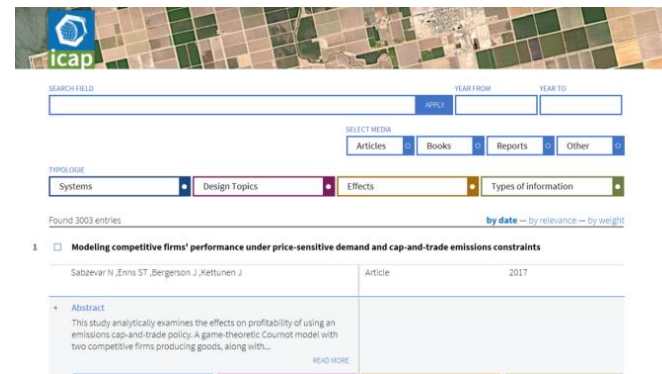
Infographics

→ Visualization of key ETS trends



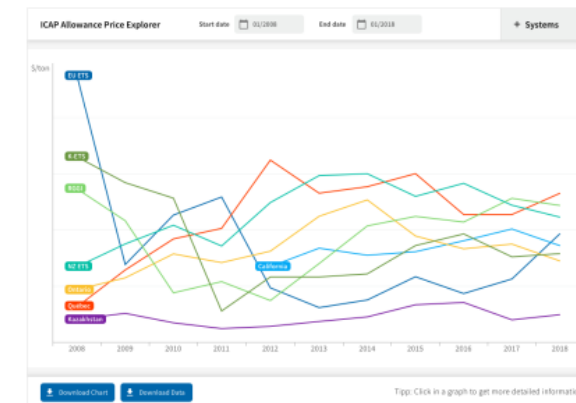
ETS Library

→ Reference database for key ETS literature

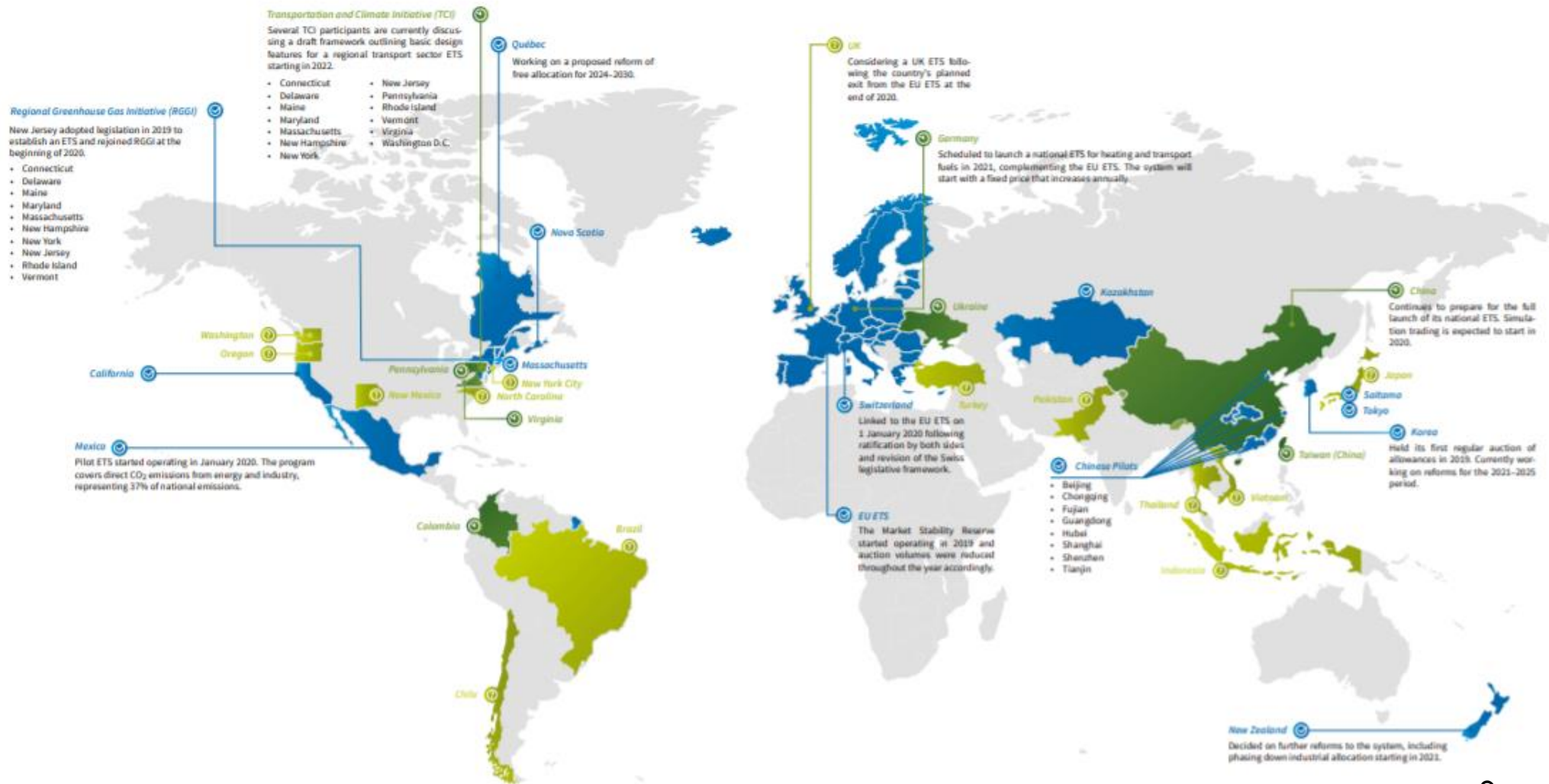


Allowance Price Explorer

→ Historical and current carbon prices worldwide



ETS is expanding as an effective and economically sensible component of climate mitigation policy.



21		In force
9		Under development
15		Under consideration

Source: ICAP Status Report 2020

ETS operates at every level

1 Supranational — 5 Countries — 16 Provinces & States — 7 Cities

EU Member States
+ Iceland
+ Liechtenstein
+ Norway

Kazakhstan
Mexico
New Zealand
Republic of Korea
Switzerland

California
Connecticut
Delaware
Fujian
Guangdong
Hubei
Maine
Maryland
Massachusetts

New Hampshire
New Jersey
New York
Nova Scotia
Québec
Rhode Island
Vermont

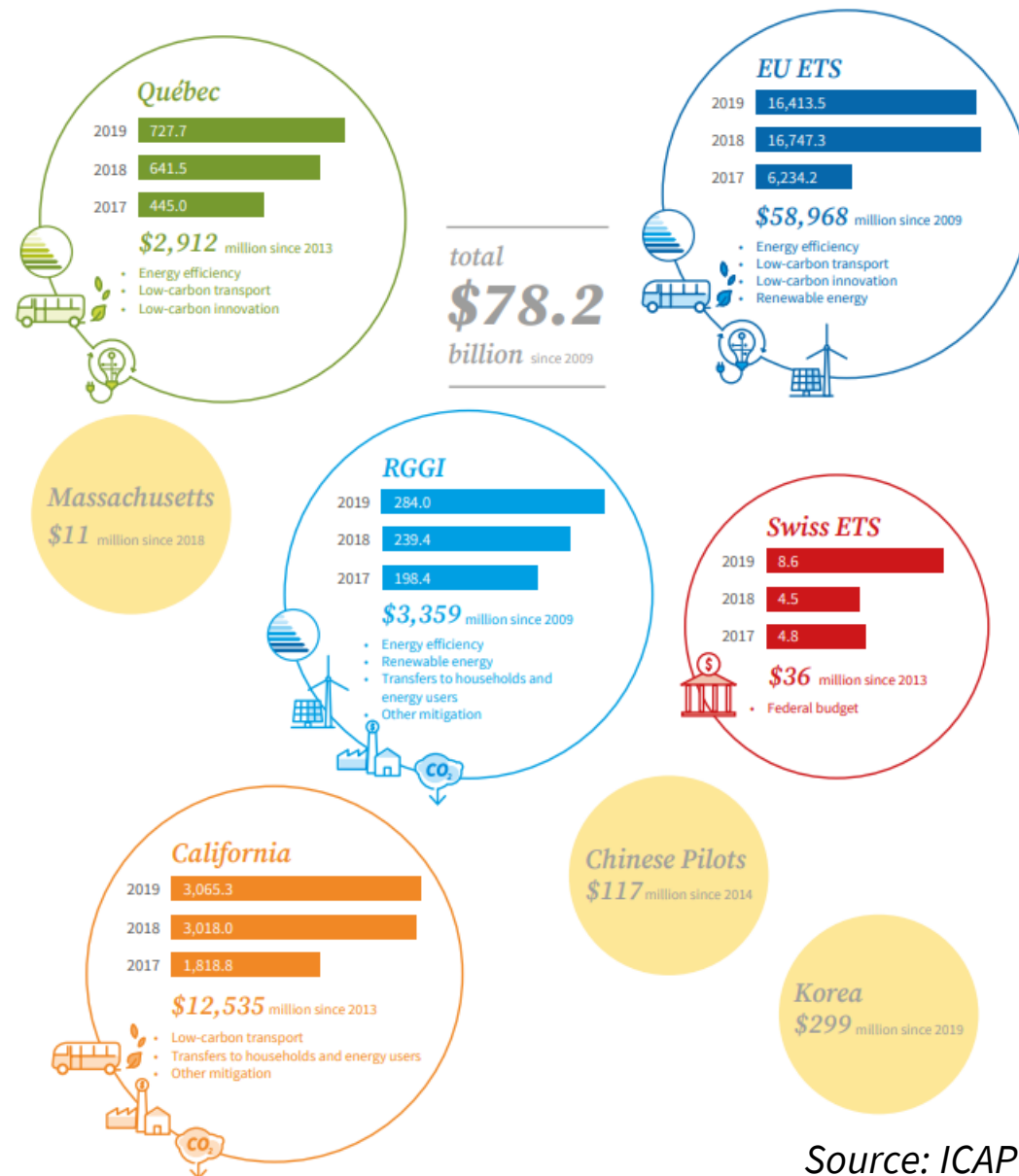
Beijing
Chongqing
Saitama
Shanghai
Shenzhen
Tianjin
Tokyo

Jurisdictions making up **42%** of global GDP are using emissions trading

9% of global GHG emissions are covered by an ETS

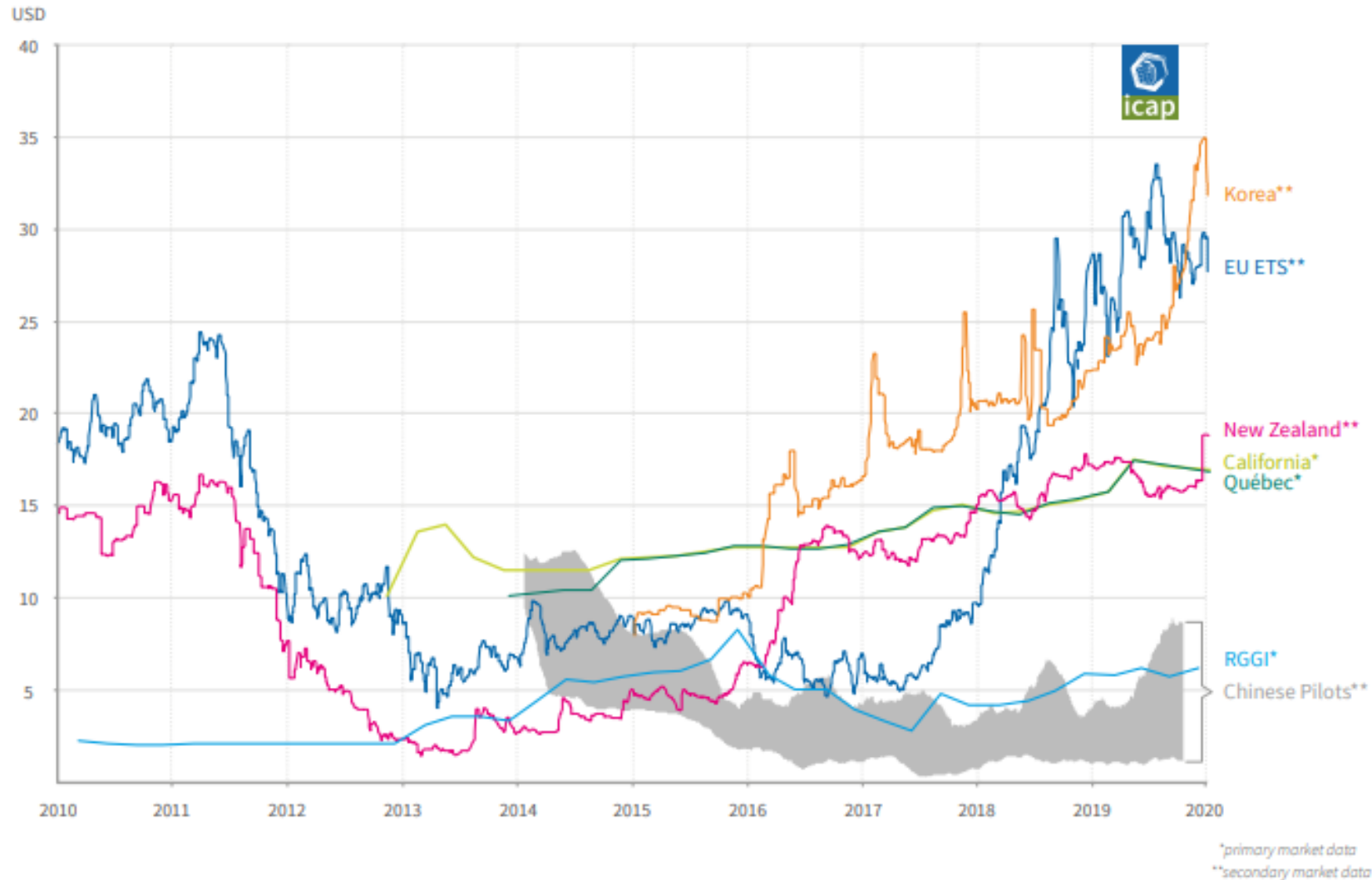
Almost 1/6 of the global population lives under an ETS in force

ETS as a source of revenue



Source: ICAP Status Report 2020

Evolution of primary and secondary market prices in the 2010s



Source: ICAP Allowance Price Explorer