



International Carbon
Action Partnership

EMISSIONS TRADING WORLDWIDE: Status, trends, MRV

*Stephanie La Hoz Theuer, Senior Project Manager, ICAP Secretariat
NASA CMS Policy Speaker Series - 16 July 2020*

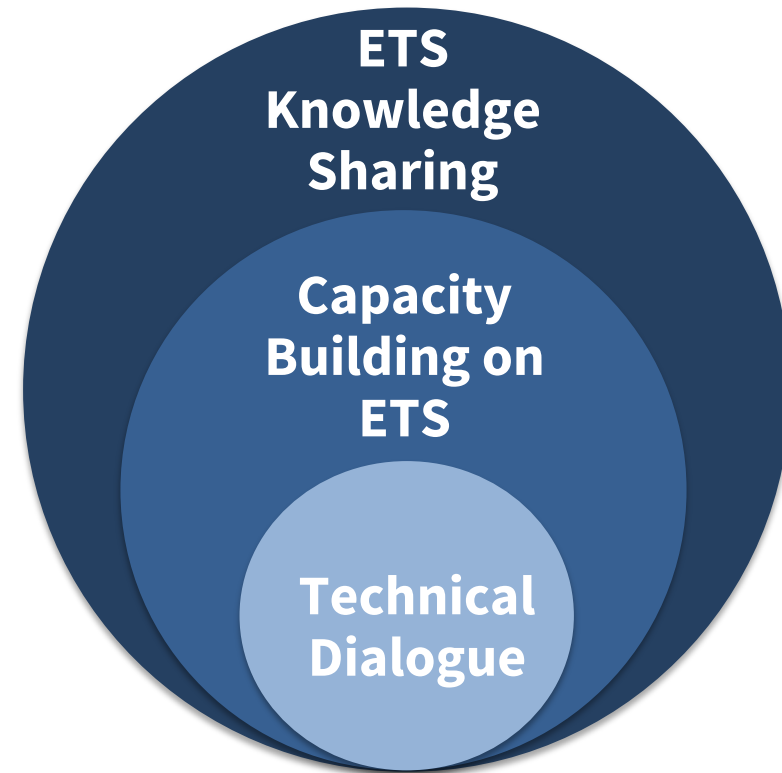
Outline

- **About ICAP**
- **Quick primer on emission trading systems**
- **ETSs around the world**
- **MRV and data**

About the International Carbon Action Partnership




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



ETS (or ‘cap-and-trade’) in a nutshell

The basics

-  1. Regulator sets cap on greenhouse gas emissions, issues allowances
-  2. Allowances sold in auctions and/or allocated for free. Tradable.
-  3. Regulated entities MRV emissions and surrender allowances. Enforcement.

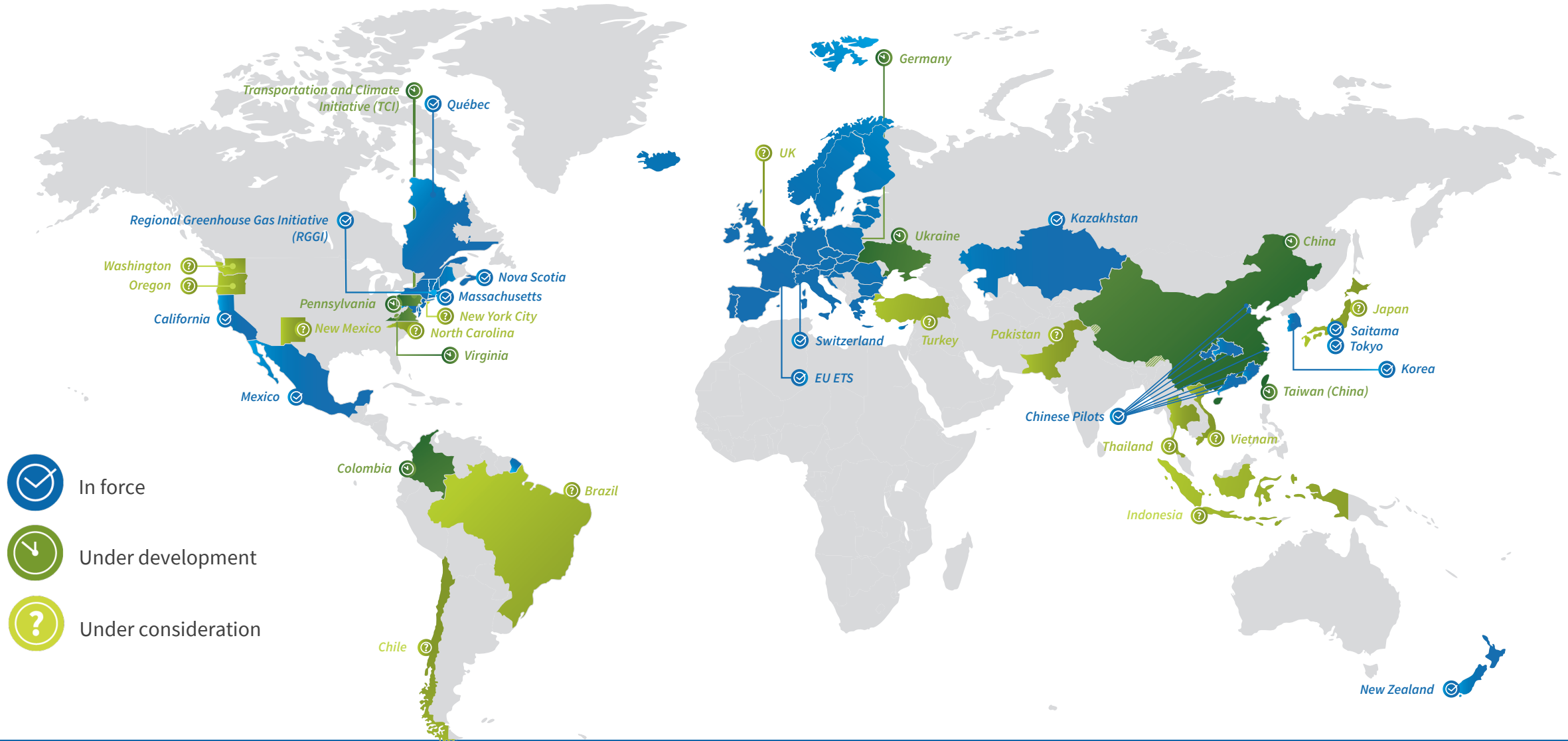
Political economy



- Many systems allow for “offsets”, which are extra units generated outside of the system

ETS around the world

ETSs worldwide...



... and in North America

Regional Greenhouse Gas Initiative (RGGI)

New Jersey adopted legislation in 2019 to establish an ETS and rejoined RGGI at the beginning of 2020.

- Connecticut
- Delaware
- Maine
- Maryland
- Massachusetts
- New Hampshire
- New Jersey
- Rhode Island
- Vermont

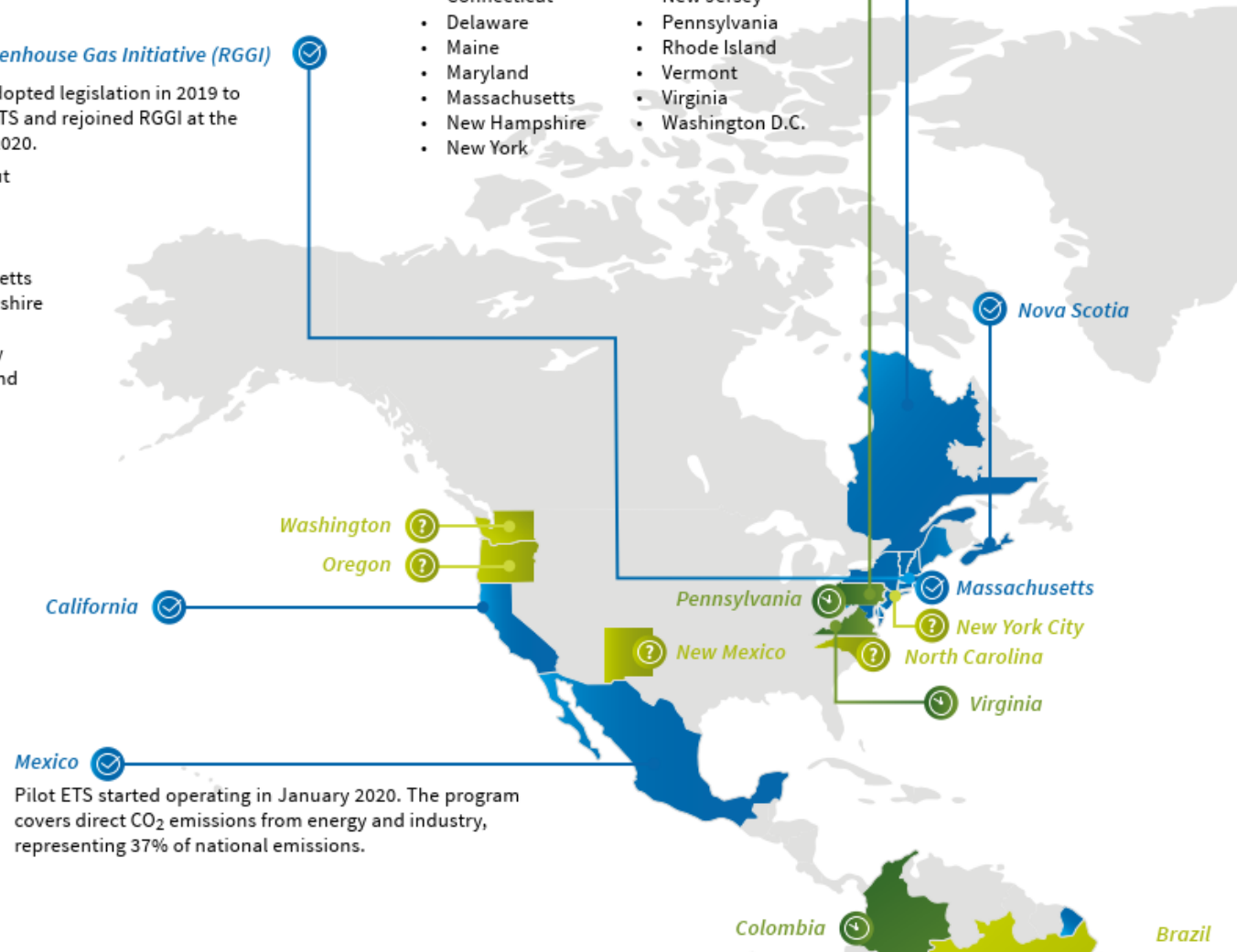
Transportation and Climate Initiative (TCI)

Several TCI participants are currently discussing a draft framework outlining basic design features for a regional transport sector ETS starting in 2022.


- Connecticut
- Delaware
- Maine
- Maryland
- Massachusetts
- New Hampshire
- New Jersey
- Pennsylvania
- Rhode Island
- Vermont
- Virginia
- Washington D.C.
- New York

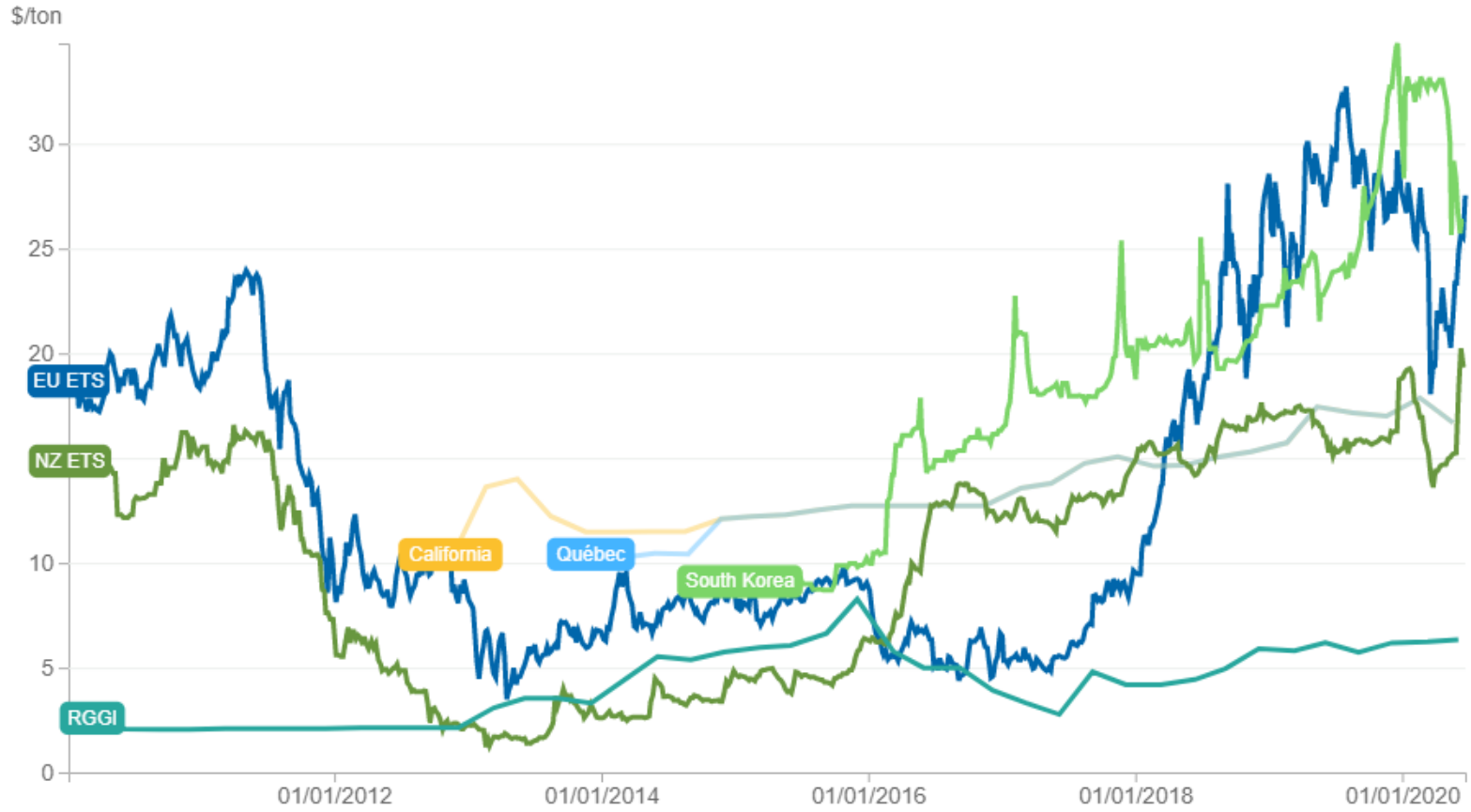
Québec

Working on a proposed reform of free allocation for 2024–2030.



Allowance prices 2010-2020 (updated June 30th)

 ICAP Allowance Price Explorer



EU ETS \$27.54**
South Korea ** \$26.30
New Zealand \$19.97**
California* & Québec* \$16.68
RGGI* \$6.34

* Primary market price
 ** Secondary market price

Upwards long-term trend in prices, now with COVID bump

Most systems now have mechanisms to deal with unexpected shocks

Carbon neutrality targets can provide long-term anchor

#BuildBackBetter

<https://icapcarbonaction.com/en/ets-prices>

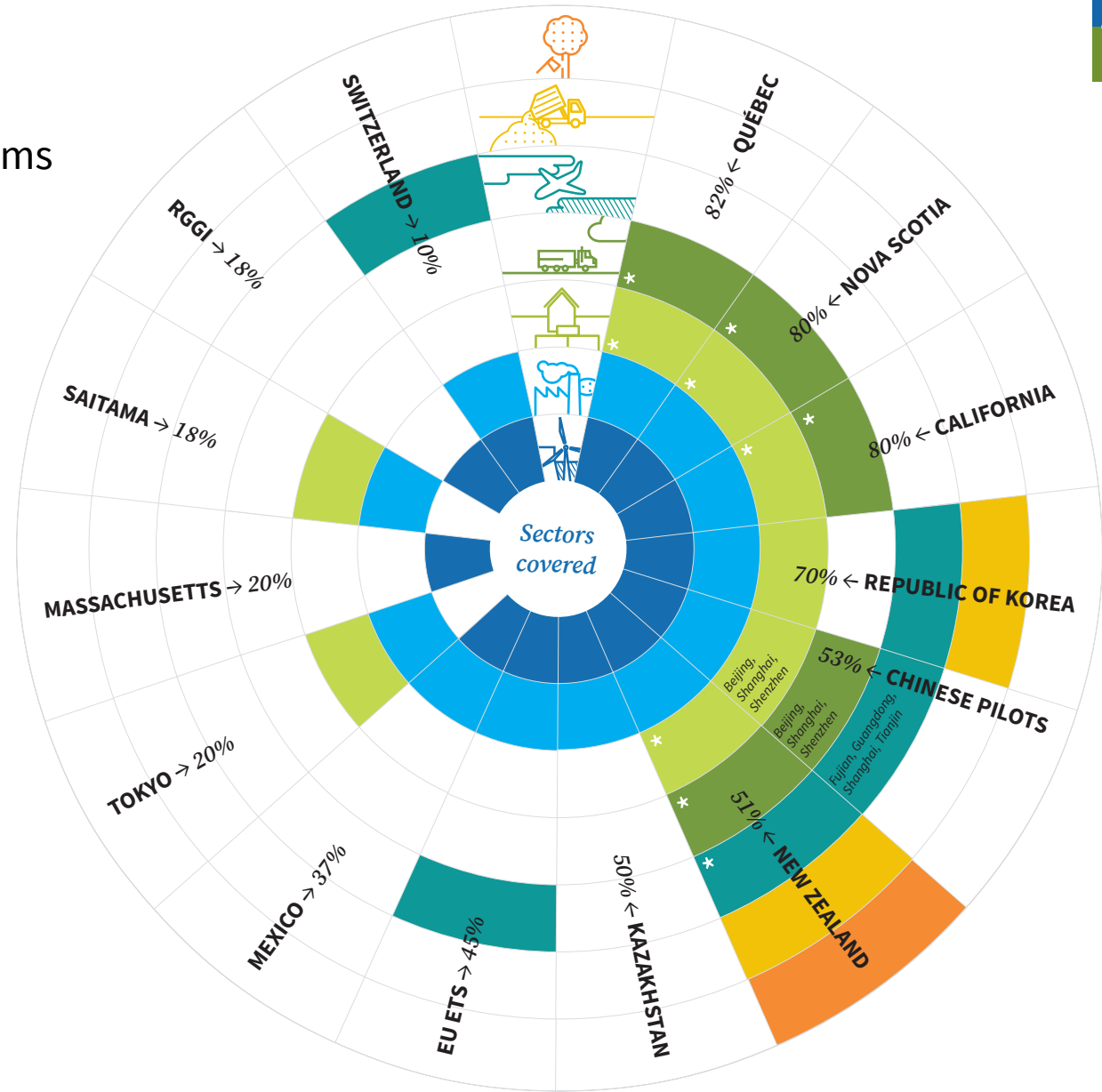
Some thoughts on MRV and satellite data

Sector coverage

Sectors covered by emissions trading across systems

-  Forestry
-  Waste
-  Domestic Aviation
-  Transport
-  Buildings
-  Industry
-  Power

Plus: offsets!
Also in
agriculture
and ozone
depleting
substances



* indicates which sector represents upstream coverage
 → Emissions coverage based on the most recent data available

MRV in ETSs

- Undertaken at **installation level**, with third party verification
 - Emissions are **tied to a specific economic agent**
 - Allowances = monetary value → **precision, comparability**
- Emissions often calculated with **activity data** (e.g. fuel use, tonnes of production), with standard emission factors
- Continuous emissions monitoring also used, eg N₂O and large emitters

Use of satellite data: a quick survey of ICAP member jurisdictions (n=7)

- Current use of satellite data: **forestry in New Zealand & California**
- **Areas of interest** in use of satellite data in ETSs:
 - ETS **offsets**, mainly **forestry**-related
 - **Land use** outcomes + supplement LiDAR data on **biomass**
 - Methods to identify and quantify **point sources** of various GHGs
(for calculation and verification of emissions data)

Opportunities & challenges for satellite data in ETSs

- In general:
 - Could be used for offsets and/or enable ETSs to expand coverage
 - Could be used for quantification and/or verification of emissions
- Facilitate MRV of **forestry, agriculture**
 - What data can be provided?
 - How precise is the data?
- MRV of **stationary sources** (e.g. combustion, process emissions, mainly methane sources?)
 - What gases, what level of precision?
 - What is the ability to ascribe emissions to a specific source?



Thank you for your attention!

stephanie.lahoztheuer@icapcarbonaction.com

www.icapcarbonaction.com

[@ICAPSecretariat](https://twitter.com/ICAPSecretariat)