



*Pacific NorthWest
Economic Region*

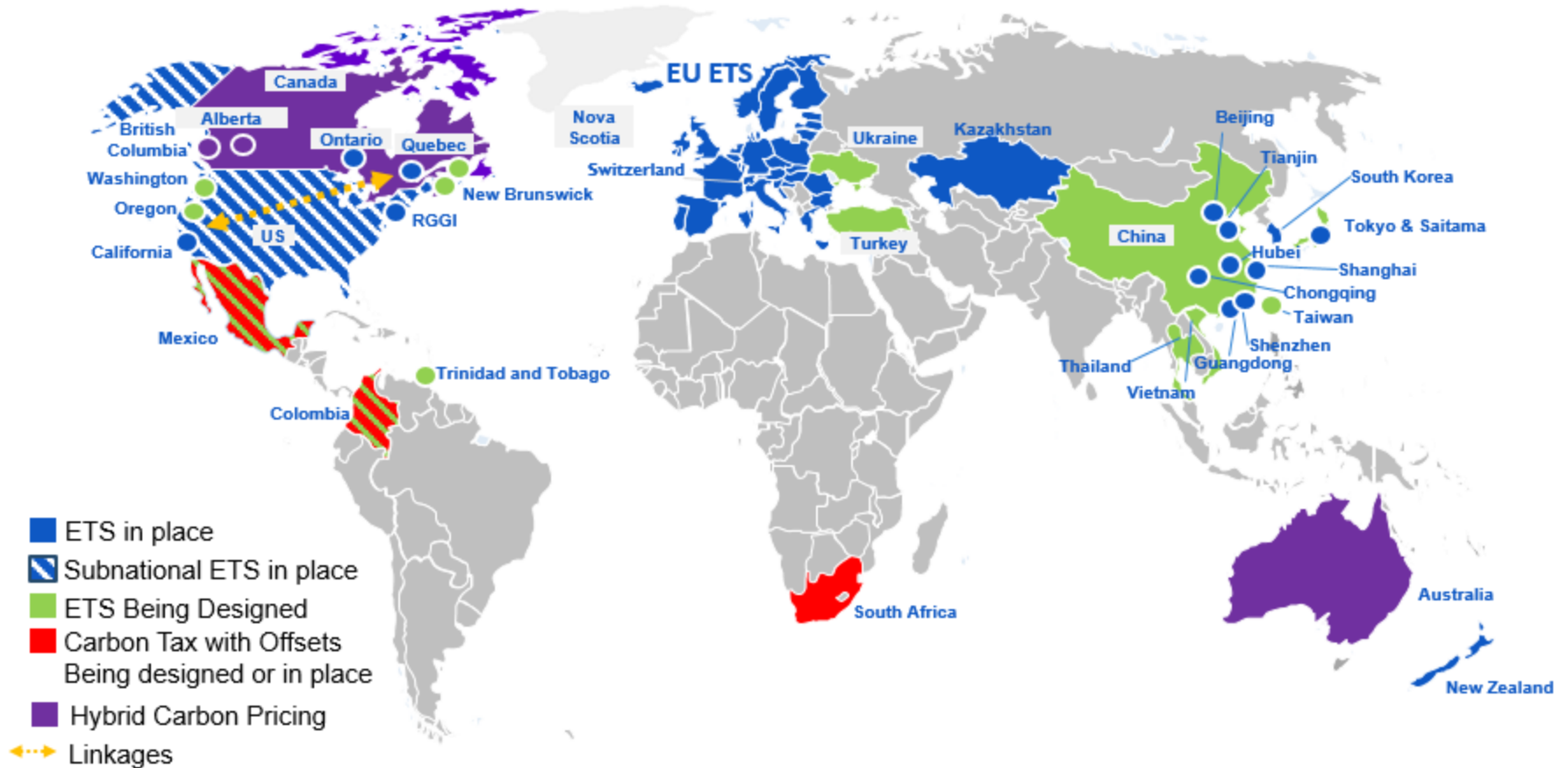
REGIONAL CARBON PRICING STRATEGIES



BLUE PLANET
ENERGY LAW

July 2017

Bulk of World Economy Subject to Price on Carbon



Source: [IETA](#)



Basic Carbon Price Frameworks

- **Cap and Trade**
 - California/Quebec (linked – WCI Market)
 - Ontario (WCI Market – Linkage pending)
 - Oregon (proposed – WCI Market & Linkage anticipated)
 - RGGI, EU-ETS, China, Japan, etc.
- **Output-based Pricing System**
 - Washington
- **Tax Systems**
 - BC – Levy on transportation & fuels (revenue neutral)
- **Combo Tax/Output-based Pricing Systems**
 - Alberta
 - Pan-Canadian Backstop



Carbon pricing requires policy choice

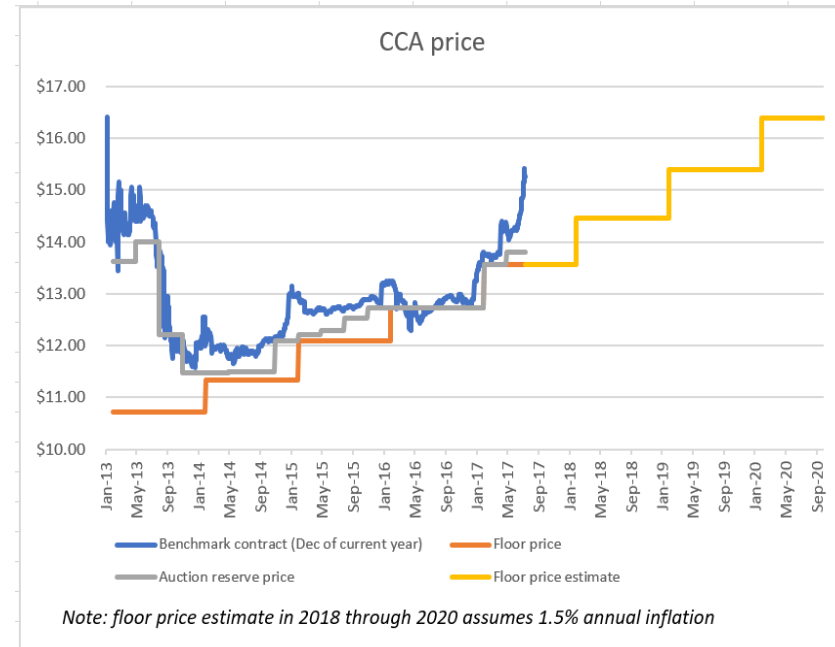
- **What sectors/thresholds?** Economy wide? Transportation and heating fuels? Just major emitters, or small emitters as well?
- **Revenue Neutral or Revenue Source?** Targeted use of funds for carbon reduction? Supporting other important priorities, like education? Environmental Justice issues?
- **Trade competitiveness:** What will a carbon price do to your jurisdiction? How do you protect energy intensive, trade-exposed industries?
- **Offsets:** Should they be allowed? What types? What limitations? Jurisdictional?
- **Link or stand alone:** Join with other markets? Regional? National? International?

-No one right answer!



California: Back in the done column

- Western Climate Initiative (WCI) Cap and Trade system initiated 2013
- Economy-wide application (phased in); **threshold 25,000 tons CO₂e**
- Initial free allocation of allowances to certain energy-intensive, trade exposed industries
- Linked with Quebec 2014; Ontario linkage anticipated
- Pre-2020 regulatory certainty achieved June 2017 ([Cal Chamber v. ARB](#))
- Post 2020 regulatory certainty achieved with 2/3 Supermajority vote passage of [AB 398](#), July 10 2017
 - *Reduces use of offsets to 4 percent through 2025, 6% through 2030; 50% offsets local*
 - *Particulate emission issue (somewhat unique to California)*



Projected Floor Price (5% plus inflation@1.5%)	2020	US\$16.39
	2022	US\$18.60
	2025	US\$22.46
	2030	US\$30.78



BC: Revenue-Neutral Tax (for now)

- Initiated 2008 at **CAD\$10/ton**; currently **CAD\$30/ton**; expected to increase to **CAD\$50** by 2022
- Limited to fossil fuels – not industry wide
- Originally Revenue Neutral with other taxes reduced; unclear whether other tax reductions will keep pace with new revenue generation
- Offsets for government application, not general market



Oregon: C&T on its way! (we think)

- [SB 1070](#) (pending) : Oregon Clean Jobs Bill:
Directs DEQ to create “Cap & Invest” market-based program “in a manner necessary to enable this state to pursue linkage agreements with market-based programs in other states or countries.”
- Targets: 20% below 1990 levels by 2025; 45 percent by 2035; and 80 percent by 2050.
- Threshold: **25,000 CO2E/year**, Economy-wide
- Offsets: **8% limit** (Offset types/limitations TBD)
- Broad support in legislature for February 2018 session



Washington State: Uncertainty reigns

- Failed cap and trade legislation 2015 and 2016
- Failed carbon tax ballot initiative in 2016
- **Clean Air Rule** in lieu of Cap and Trade
 - Compliance **Threshold**: 100,000 Tons in 2017, dropping down to 70,000 tons by 2035
 - Covers in-state nonmobile sources, petroleum product producers and importers, and natural gas distributors (~70 **emission sources**) – about 2/3 if in-state GHG emissions
 - “Emission Reduction Units” based on industry targets
 - extra-jurisdictional allowances/offsets considered for compliance use
 - ***Subject to significant legal challenges***
- Four separate tax proposals before legislature in 2018
- Another carbon-tax ballot initiative on the way?
- ***Cap and Trade as an alternative?***



Alberta: Why not both?

- Tax/levy on transportation/heating fuels @\$30/ton and increasing (similar to BC)
- Output-based threshold on large emitters (>100,000/tons/year) (similar to Washington State)
 - No absolute emissions cap
 - Specified Gas Emitters Regulation (“SGER”) through 2017; Large Emitters Program beginning 2018
 - CAD\$30/ton in 2018, escalating 2%/year (subject to Federal backstop discussions)
- 33 different offset protocols (Alberta-only)



Pan-Canadian Framework: Do it yourself or we'll do it for you

Pan-Canadian Framework on Clean Growth and Climate Change principles:

- Carbon pricing should be a central component
 - recognize carbon pricing policies already implemented or in development
 - Carbon pricing should be economy-wide.
 - Carbon pricing policies swiftly to minimize stranded investment and maximize reductions.
 - Carbon price increases should be predictable & gradual.
 - Carbon pricing policies should minimize competitiveness impacts and carbon leakage, particularly for emissions-intensive, trade-exposed sectors.
 - Carbon pricing policies should include revenue recycling to avoid a disproportionate burden on vulnerable groups and Indigenous Peoples.
- **Federal Backstop:** Minimum national carbon tax, starting at **CAD\$10/ton** in 2018 and rising to **CAD\$50 by 2022** (with status check in 2020).
 - Similar to Alberta system
 - Provinces with equivalent systems – whether C&T, tax or otherwise – exempt (equivalent not yet fully defined)
 - Provinces with no system will be subject to Federal backstop.



Offsets: Why they matter.

- **Actual carbon reduction at least cost** to economy and compliance entities.
- Provide **price control** for markets
- Allow **non-regulated sectors participation**
- Provide **economic development** opportunities.
- **Incent Innovation** with long-term benefit

Offsets must be:

- **Real:** The carbon reductions must have already occurred
- **Additional:** offset must represent emission reductions that are in addition to what would have occurred otherwise
- **Permanent:** offset must represent emission reductions that are non-reversible or must be sequestered for 100-years or more
- **Verifiable:** sufficient data quantity and quality must be available to ensure emission reductions can be verified by an independent third party auditor (verifier) against an established protocol
- **Quantifiable:** emission reductions represented by offsets must be reliably measured or estimated, and capable of being quantified
- **Enforceable:** offset ownership is undisputed and enforcement mechanisms exist to ensure that all program rules are followed.



Offsets: What works for your jurisdiction?

Current California Protocols

- U.S. Forest Projects
- Urban Forest Projects
- Livestock Projects
- Ozone Depleting Substances (ODS) Projects
- Mine Methane Capture (MMC)
- Rice Cultivation Projects

Current RGGI protocols

- Landfill methane Projects
- Sulfur Hexafluoride (SF₆) reduction in electric power sector
- U.S. Forest Projects (for CT and NY only)
- Building Sector Energy Efficiency Projects
- Agricultural manure management Projects



Supplemental Materials

- [*Emissions Trading Worldwide*](#) International Carbon Action Partnership (ICAP) Status Report 2017
- [*AB 398 - California Global Warming Solutions Act of 2006: market-based compliance mechanisms: fire prevention fees: sales and use tax manufacturing exemption. July 17, 2017*](#)
- [*Cal. Chamber of Commerce v. State Air Resources Bd., No. C075930, Slip. Op. at 29 \(Cal. Ct. App. Apr. 6, 2017\)*](#) (Upholding California Cap and Trade mechanism; finds that an allowance constitutes a property interest vis a vis commercial entities, but not the state).
- [Alberta Climate Leadership Plan](#)
- [BC Climate Leadership Plan](#)
- [Overview of BC Carbon Offsets](#) (IETA)
- [Overview of California Offsets](#) (IETA)
- [Oregon SB 1070](#) – Proposed Cap and Trade Legislation
- [Washington Clean Air Rule](#)
- [The Pan-Canadian Framework on Clean Growth and Climate Change](#)
- [Cal Chamber support for cap and trade](#)

