

# What's Happening Worldwide with Carbon Taxes and other Greenhouse Gas Initiatives

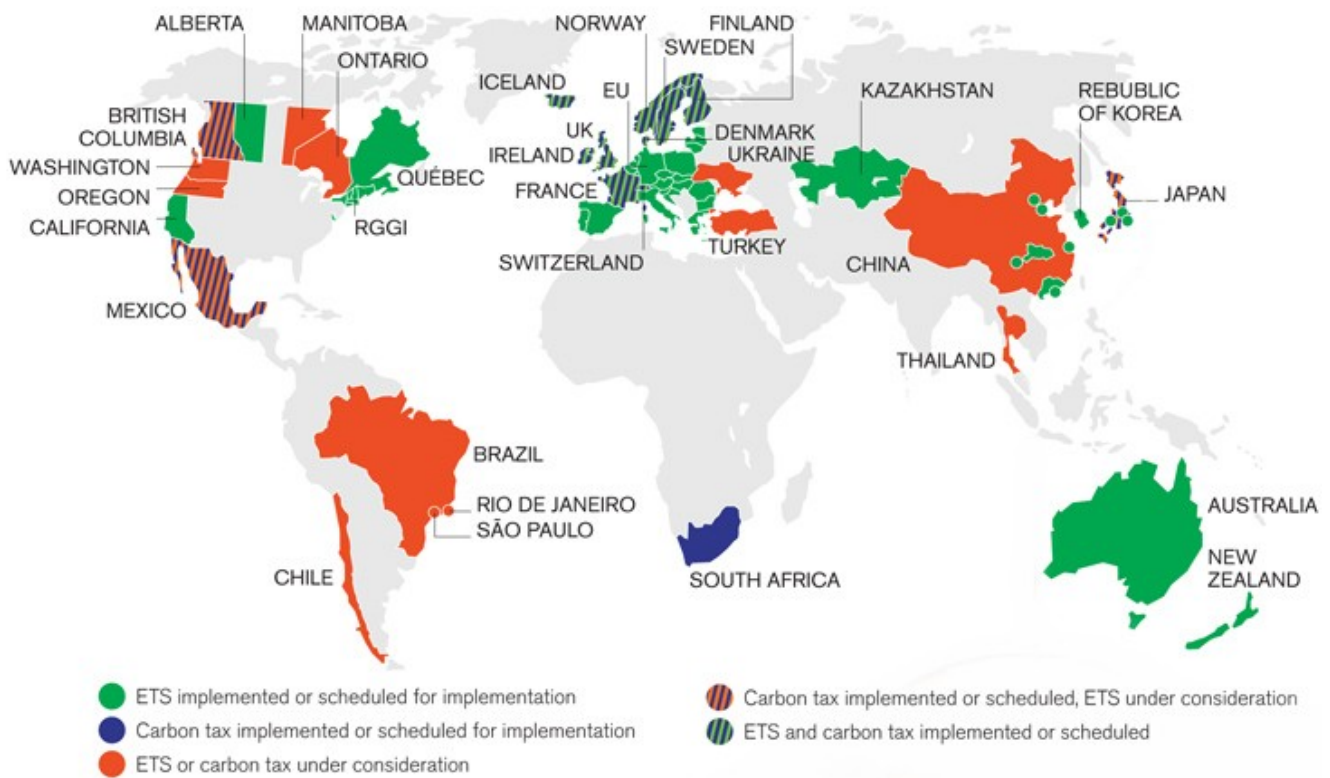
We are often asked what China is doing to reduce emissions. It is often assumed that the answer is nothing. However, information gathered from three World Bank reports [1, 2, 3] indicate that governments around the world **are** taking action, China included:

In 2014, about 40 national and over 20 sub-national jurisdictions have already implemented or scheduled emissions trading schemes or carbon taxes. Together, these jurisdictions account for more than 22 percent of global emissions. Many more countries and jurisdictions are advancing preparation for pricing carbon. Together, these represent almost half of global Greenhouse Gas (GHG) emissions [4]. See the map below to find out where [5].

Here's the breakdown of what these countries are doing:

- 14 countries and one sub-national jurisdiction (BC, Canada) are implementing or have passed legislation for a direct carbon tax.
- 18 countries are taking steps to be in a state of “carbon pricing readiness” by 2016-2020.
- 35 countries (incl. 28 in the EU) and 20 subnational jurisdictions have adopted emissions trading (ETS) programs.

Looking at it slightly differently, only two out of the ten of the largest economies in the world do NOT have a carbon price: the United States and Russia [6]. \*Note this includes California, which has an ETS, accurately as the world's 10<sup>th</sup> largest economy instead of India [7].



## Countries with a Carbon Tax [1]

- A carbon tax is a form of explicit carbon pricing directly linked to the level of carbon dioxide emissions.
- While a maximum level of emission reductions is not guaranteed, a carbon tax is a cost-effective economic instrument
- Fourteen countries are implementing or have passed legislation on a direct carbon tax.
- One sub-national jurisdiction (British Columbia) has been implementing a carbon tax since 2008.

Country/Jurisdiction	Type	Year Adopted
British Columbia	Sub-national	2008
Costa Rica	National	1997
Denmark	National	1992
Finland	National	1990
France	National	2014
Iceland	National	2010
Ireland	National	2010
Japan	National	2012
Mexico	National	2012
Norway	National	1991
South Africa	National	2016
Sweden	National	1991
Switzerland	National	2008
UK	National	2013

## **International Carbon Pricing Readiness: Looking Ahead [2]**

- As countries begin to construct their 2030, 2040, and 2050 greenhouse gas mitigation scenarios, they have increasingly identified cost-efficient policies, including carbon pricing instruments, as essential elements of proposed climate action.
- Countries’ activities in this regard differ based on their unique circumstances, and range from improving “carbon pricing readiness” to designing and piloting various carbon pricing instruments.
- Carbon pricing readiness sets a foundation for the implementation of a forthcoming carbon pricing instrument.
- Some countries are simultaneously pursuing carbon pricing readiness-related activities and carbon pricing instruments. Others are at the readiness stage only.

<b>Country</b>	<b>Expected Delivery</b>
Brazil	2016
Chile	2016
China	ETS Pilots: 2014 National ETS Launch: 2018
Colombia	2016
Costa Rica	2016
India	N/a
Indonesia	Pilot MRV 2017-2018
Jordan	N/a
Kazakhstan	2014-2015
Mexico	2015-2016
Morocco	2017-2020
Peru	N/a
South Africa	2016
Thailand	2019-2020
Tunisia	N/a
Turkey	2015
Ukraine	N/a
Vietnam	2017

## Countries Pricing Carbon with an ETS [3]

- An emissions trading scheme (ETS) is an explicit carbon pricing instrument that limits or caps the allowed amount of GHG emissions and lets market forces disclose the carbon price through emitters trading emissions allowances.
- 35 countries (incl. 28 in the EU) and 20 subnational jurisdictions have adopted emissions trading programs.
- Altogether, these existing ETS mechanisms price about 4.3 GtCO<sub>2</sub> e/year, or about 8.5% of global GHG emissions.

Start Date	Country/Area
2005	EU (28 + 3)
2007	Alberta, Canada
2008	New Zealand
2009	RGGI: CT, DE, ME, MD, MA, NH, NY, RI, VT
2013	California
2013	China
2013	Kazakhstan
2015	Korea, Republic of
2013	Quebec, Canada
2013	Switzerland
2013	Tokyo

### References:

- [1] "Putting a Price on Carbon with a Tax". The World Bank. June 3, 2014. URL for PDF download: [http://www.worldbank.org/content/dam/Worldbank/document/SDN/background-note\\_carbon-tax.pdf](http://www.worldbank.org/content/dam/Worldbank/document/SDN/background-note_carbon-tax.pdf). Main article: <http://www.worldbank.org/en/programs/pricing-carbon#1>
- [2] World Bank Background Note "Carbon Pricing Readiness: Looking Ahead". The World Bank. June 3, 2014. URL for PDF download: [http://www.worldbank.org/content/dam/Worldbank/document/SDN/background-note\\_carbon-pricing-readiness.pdf](http://www.worldbank.org/content/dam/Worldbank/document/SDN/background-note_carbon-pricing-readiness.pdf). Main article: <http://www.worldbank.org/en/programs/pricing-carbon#1>
- [3] "Putting a Price on Carbon with an ETS". The World Bank. June 3, 2014. URL for PDF download: [http://www.worldbank.org/content/dam/Worldbank/document/SDN/background-note\\_ets.pdf](http://www.worldbank.org/content/dam/Worldbank/document/SDN/background-note_ets.pdf). Main article: <http://www.worldbank.org/en/programs/pricing-carbon#1>
- [4] "Statement: Putting a Price on Carbon". The World Bank. June 3, 2014. URL: <http://www.worldbank.org/en/programs/pricing-carbon#1>
- [5] "State & Trends Report Charts Global Growth of Carbon Pricing". The World Bank. May 28, 2014. URL: <http://www.worldbank.org/en/news/feature/2014/05/28/state-trends-report-tracks-global-growth-carbon-pricing>
- [6] "GDP (current US\$)". World Development Indicators. World Bank. Retrieved 1 July 2014. URL: <http://data.worldbank.org/indicator/NY.GDP.MKTP.CD>
- [7] "Widespread But Slower Growth in 2013". Bureau of Economic Analysis, U.S. Department of Labor. June 11, 2014. Retrieved June 11, 2014. URL for pdf download: [http://www.bea.gov/newsreleases/regional/gdp\\_state/2014/pdf/gsp0614.pdf](http://www.bea.gov/newsreleases/regional/gdp_state/2014/pdf/gsp0614.pdf)