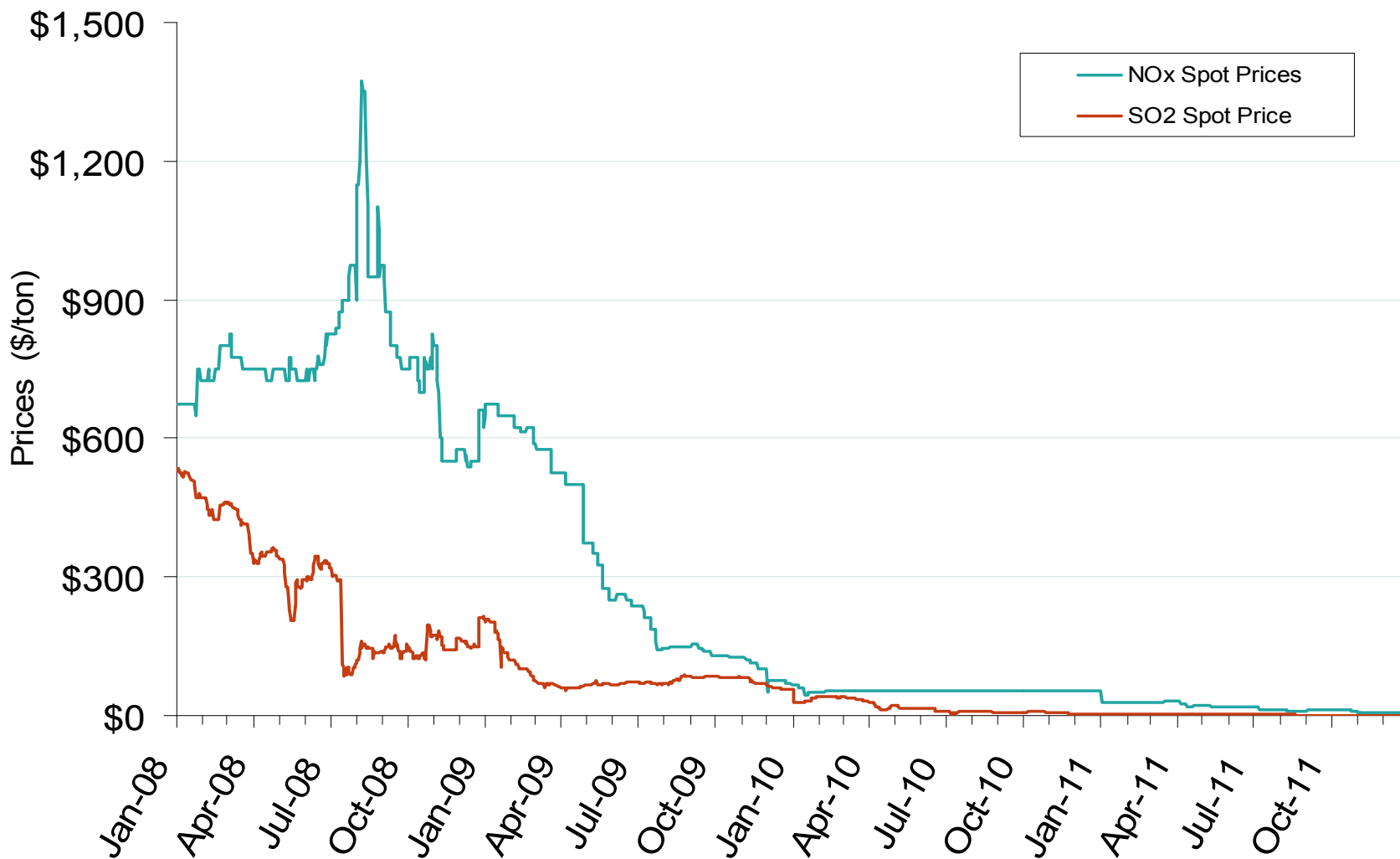


## SO2 Allowance Spot Prices and NOx Allowance Spot Prices



# Collaborative Greenhouse Gas (GHG) Programs

## Collaborative Regional GHG Programs:

- Three North American groups with goals to lower regional GHG emissions were initiated by state Governors.
- 32 U.S. states, D.C., eight Canadian provinces, and six Mexican states are Participants or Observers.
- Observer jurisdictions do not commit to group GHG reduction goals, but participate in proceedings should they opt to join later. RGGI Observers are not on its Board.

## Western Climate Initiative (WCI):

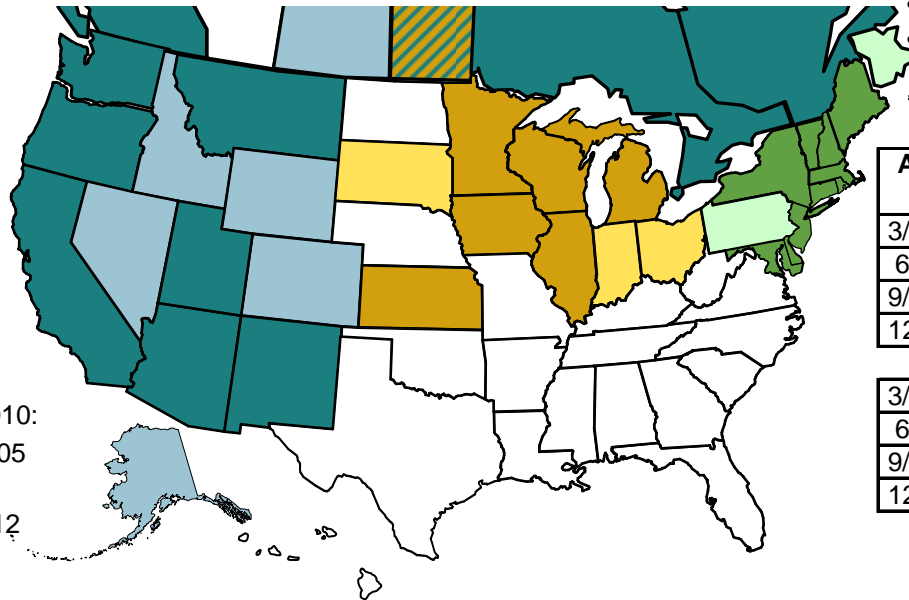
- Created February 2007
- Partners: 7 states, 4 provinces; Observers: 5 states, 2 provinces
- Market Design introduced July 2010:
  - 15% CO<sub>2</sub> reduction below 2005 levels by 2020
  - Phase I to take effect Jan 2012

## Midwest Greenhouse Gas Reduction Accord (MGGRA):

- Established November 2007
- Participants: 6 states, 1 province; Observers: 3 states, 1 province
- Preliminary design recommendations issued Dec 2008: 15 - 25% reductions by 2020, 60 - 80% by 2050

## Regional Greenhouse Gas Initiative (RGGI):

- Compliance period began Jan 1, 2009
- Participants: 10 states; Observers: 1 state, D.C., 3 provinces
- Market-based cap-and-trade effort to reduce power-sector CO<sub>2</sub> emissions
- 10% CO<sub>2</sub> reduction by 2018 covers over 200 plants
- One allowance is the right to emit 1 ton of CO<sub>2</sub>
- Annual RGGI cap is 188 million tons



RGGI Auction Data

Auction Date	Vintage Year	Clearing Price	Offered (M)	Sold (M)
3/10/2010	2010	\$2.07	40.7	40.7
6/9/2010	2010	\$1.88	40.7	40.7
9/10/2010	2010	\$1.86	45.6	34.4
12/1/2010	2010	\$1.86	45.6	24.8

3/10/2010	2013	\$1.86	2.14	2.09
6/9/2010	2013	\$1.86	2.14	2.14
9/10/2010	2013	\$1.86	2.14	1.31
12/1/2010	2013	\$1.86	2.14	1.17

- Participant in WCI
- Observer to WCI
- Participant in MGGRA
- Observer to MGGRA
- Participant in RGGI
- Observer to RGGI
- Participant in MGGRA & WCI

Updates at: <http://www.ferc.gov/market-oversight/mkt-electric/overview/elec-ovr-ghg.pdf>

Notes: Kansas is a MGGRA participant and WCI observer. Ontario and Quebec are Partners to WCI and Observers to RGGI; Ontario is also an observer to RGGI.

Sources: regional initiatives - [www.rggi.org](http://www.rggi.org), [www.midwesternaccord.org](http://www.midwesternaccord.org), [www.westernclimateinitiative.org](http://www.westernclimateinitiative.org), Point Carbon, analyst reports, trade press

January 2012

## Collaborative Greenhouse Gas Programs

### National Energy and Environment Update:

- Three bills have been introduced in the House to limit federal GHG regulation, including the Clean Air Transport Rule. Senator Rockefeller (D-WV) plans to re-introduce his legislation to delay rules at least 2 years.

### The EPA introduces the Transport Rule

- The Transport Rule would replace the Clean Air Interstate Rule (CAIR) that was vacated by the U.S. Court of Appeals for the District of Columbia Circuit in 2008.
- The Rule would apply to fossil fuel fired electric generating units (EGUs) with a nameplate capacity of greater than 25 MW producing electricity for sale in the 31 covered states and DC.
- Emission limits would be set on a state-by-state basis.
- The Transport Rule significantly limits or bans interstate trading of allowances. Some intrastate trading will be allowed.
- The EPA expects the to finalize the Transport Rule in late Spring of 2011. The first phase of reduction would be required by early 2012 and the second phase by early 2014.

### RGGI Auctions:

- Auction 10 conducted on December 1, 2010 raising \$48 million for energy efficiency, renewable energy, and other consumer-benefit programs in participating states.
- Participant states are: CT, DE, ME, MD, MA, NH, NJ, NY, RI, VT.
- RGGI has raised over \$768 million to date.
- The number of potential RGGI bidders has dropped from 82 in Auction 1 to 49 in Auction 10. The Ratio of bids to supply has fallen from 4.1 to 0.57 over the same period.
- Both current and future allowances cleared at \$1.86 per allowance, the mandated floor price.
- Auction 11 is scheduled for March 9, 2011.

### CA referendum to suspend GHG law defeated:

- The “California Jobs Initiative,” or proposition 23, was defeated with approximately 59% of the vote.

### GHG trading begins 2011 with light trading:

- Little interest in 2012 NOx allowances due to the Transport Rule’s exclusion of existing allowances. Interest is expected to increase as the probability of Congress blocking EPA’s action increases.
- Tight supply seen in CA GHG markets.

### EIA finds energy-related CO<sub>2</sub> emissions down 7% in 2009:

- Energy-related CO<sub>2</sub> emissions fell 7%, or 405 million metric tons.
- EIA attributes the drop to declines in per capita GDP, reduced energy intensity in the economy, and increased use of natural gas and wind generation.
- Energy consumption fell 4.8%, led by a 9.9% fall in industrial use.
- EIA predicts CO<sub>2</sub> emissions will rise 1.3% in 2011.

### Western Climate Initiative (WCI) Market Design Launch:

- WCI unveiled plans for a market-based, multi-sector, cap-and-trade program (July 27):
  - Phase I to take effect Jan 2012
  - Phase II to begin 2015; will cover 90% of regional emissions
- Participants include:
  - Partners: AZ, British Columbia, CA, Manitoba, MT, NM, Ontario, OR, Quebec, UT, WA
  - Observers: AK, CO, ID, KS, NV, Saskatchewan, WY, Yukon
- Some coal-dependent states, such as AZ and UT, will not participate in phase I.
- WCI will use quarterly auctions in a sealed-bid, single round auction format. Minimum prices for allowance bids will be announced in advance of the first quarterly sale of permits.
- WCI may accept RGGI and MGGRA allowances as offsets.

**Abbreviations:** CO<sub>2</sub> – Carbon dioxide (emissions); EPA – U.S. Environmental Protection Agency; GHG - Greenhouse Gases; MGGRA – Midwest Greenhouse Gas Reduction Accord; RGGI – Regional Greenhouse Gas Initiative; SF<sub>6</sub> – sulfur hexafluoride