

Cost Containment in a Cap and Trade Program

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NATIONAL COMMISSION
ON ENERGY POLICY



BIPARTISAN POLICY CENTER

Factors that could affect CO2 prices

- Availability of technology
 - Now vs. future
- Weather and fuel market developments
- Policy design issues (e.g., offset eligibility and availability)
- Emission market behavior



Table: Allowance Price Comparison (2005 \$/tCO₂e)

	2015	2020	2025	2030	2035	2040	2045	2050
1) EPA Reference								
ADAGE	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
IGEM	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2) S. 2191								
ADAGE	\$29	\$37	\$48	\$61	\$77	\$98	\$125	\$159
IGEM	\$40	\$51	\$65	\$83	\$106	\$135	\$173	\$220
3) S.2191 w/ Low International Action								
ADAGE	\$27	\$35	\$44	\$56	\$72	\$92	\$117	\$149
IGEM	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
4) S.2191 w/ Unlimited Offsets								
ADAGE	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
IGEM	\$11	\$15	\$19	\$24	\$30	\$39	\$50	\$63
5) S.2191 w/ No Offsets								
ADAGE	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
IGEM	\$77	\$98	\$126	\$160	\$205	\$261	\$333	\$425
6) S.2191 Constrained Nuclear & Biomass								
ADAGE	\$39	\$49	\$63	\$80	\$101	\$129	\$164	\$208
IGEM	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
7) S.2191 Constrained Nuclear & Biomass, and CCS								
ADAGE	\$55	\$69	\$88	\$112	\$142	\$181	\$229	\$290
IGEM	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
8) S.2191 Constrained Nuclear & Biomass, and CCS + Beyond Kyoto + Natural Gas Cartel								
ADAGE	\$55	\$70	\$88	\$112	\$142	\$180	\$228	\$288
IGEM	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
9) Alternative Reference								
ADAGE	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
IGEM	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
10) S.2191 Alt. Ref.								
ADAGE	\$22	\$28	\$36	\$46	\$59	\$75	\$95	\$121
IGEM	\$35	\$45	\$57	\$73	\$93	\$118	\$151	\$193

Price Cap

- Unlimited additional allowances at specific ceiling price
- Provides the price protection, simplicity and transparency
- Controversial because it raises concerns about emissions over the cap
- But are concerns about the price cap mechanism itself, or about the level of the price cap (or both)?



Allowance Reserve Auction

- Limited number of additional allowances made available at a specific price.
- Implemented through a special auction of allowances borrowed from future years.
- The initial trigger price is the minimum bid.
- Example: Limit of 500 million additional allowances/year available at an auction starting at \$25/allowance.
- 3 potential outcomes:
 - No sales (e.g., if allowance market price < \$25)
 - Sales less than the 500 million limit at \$25
 - Sales at the 500 million limit above \$25

