

# Designing for Uncertainty: Potential Amendments to California's Cap-and-Trade Market

Dallas Burtraw

*Cap & Trade Reform and Reauthorization* The Climate Center

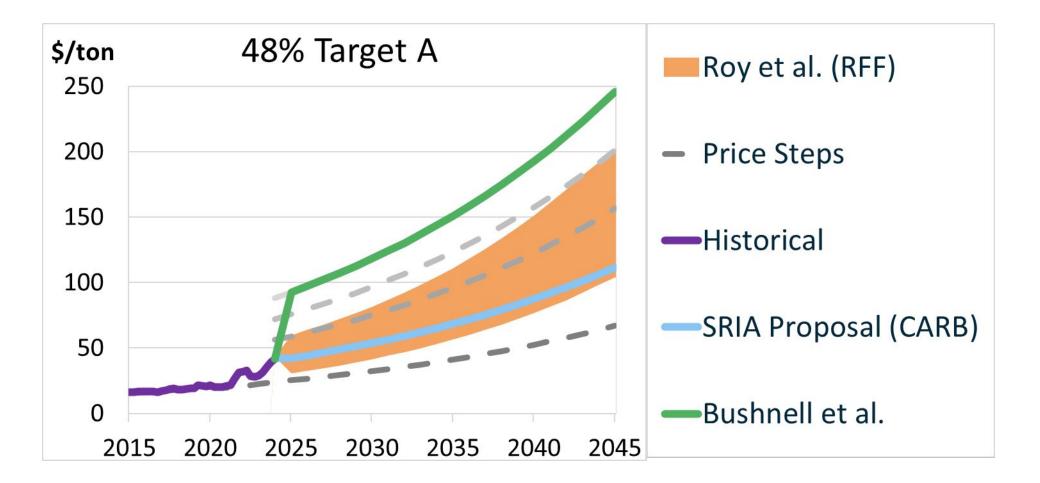
February 20, 2025



# Uncertainty is a Defining Characteristic of our Climate Challenge

- Regulations have achieved the lion's share of emissions reductions ....but emissions outcomes are inherently uncertain
- Cap-and-trade offers a numerical emissions target, plus revenue and cost effectiveness...and prices inherently respond to uncertainty
- However, the carbon market is not designed to align with regulations

#### **Allowance Price Ranges in Selected Scenario**



Roy, Domeshek, and Burtraw 2024

## **How do Regulations and Carbon Markets Interact?**

Regulatory achievements can be undermined by an emissions cap

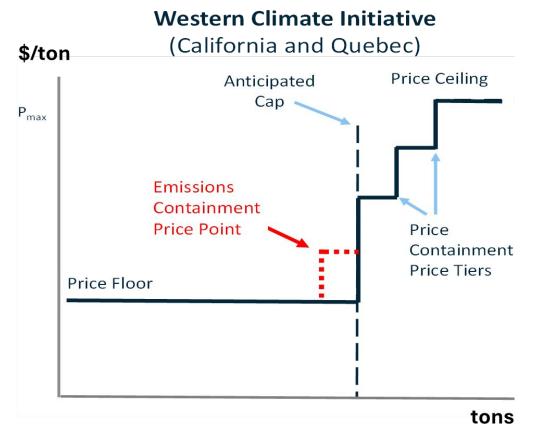
□ the waterbed effect!

- Regulations cause prices to fall and emissions to go up somewhere else!
- So,... the carbon market must accommodate regulations by reducing allowance supply when regulations are effective



"The Waterbed Effect"

#### An Allowance Supply that Responds to Prices Would Complement Rather than Lessen the Success of Regulations



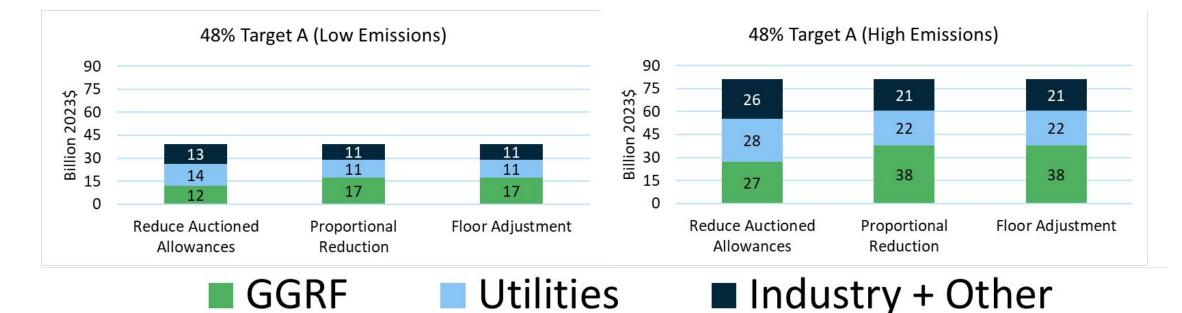


# Thank you.

- Find out more about RFF online: <u>www.rff.org</u>
- Follow us on Twitter: @rff
- Subscribe to receive updates: <u>rff.org/subscribe</u>



#### Cumulative Allowance Value Across Market Outcomes Under Different Allocation Schemes (2025–2030)



### The Financial Value of Banked Allowances (2025)



## Allowance Value Accruing to Different Interests with Delayed Scoping Plan Allowance Demand

