

# Understanding Carbon Cost Management Strategies

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Environment and Public Works  
Minority Staff Briefing

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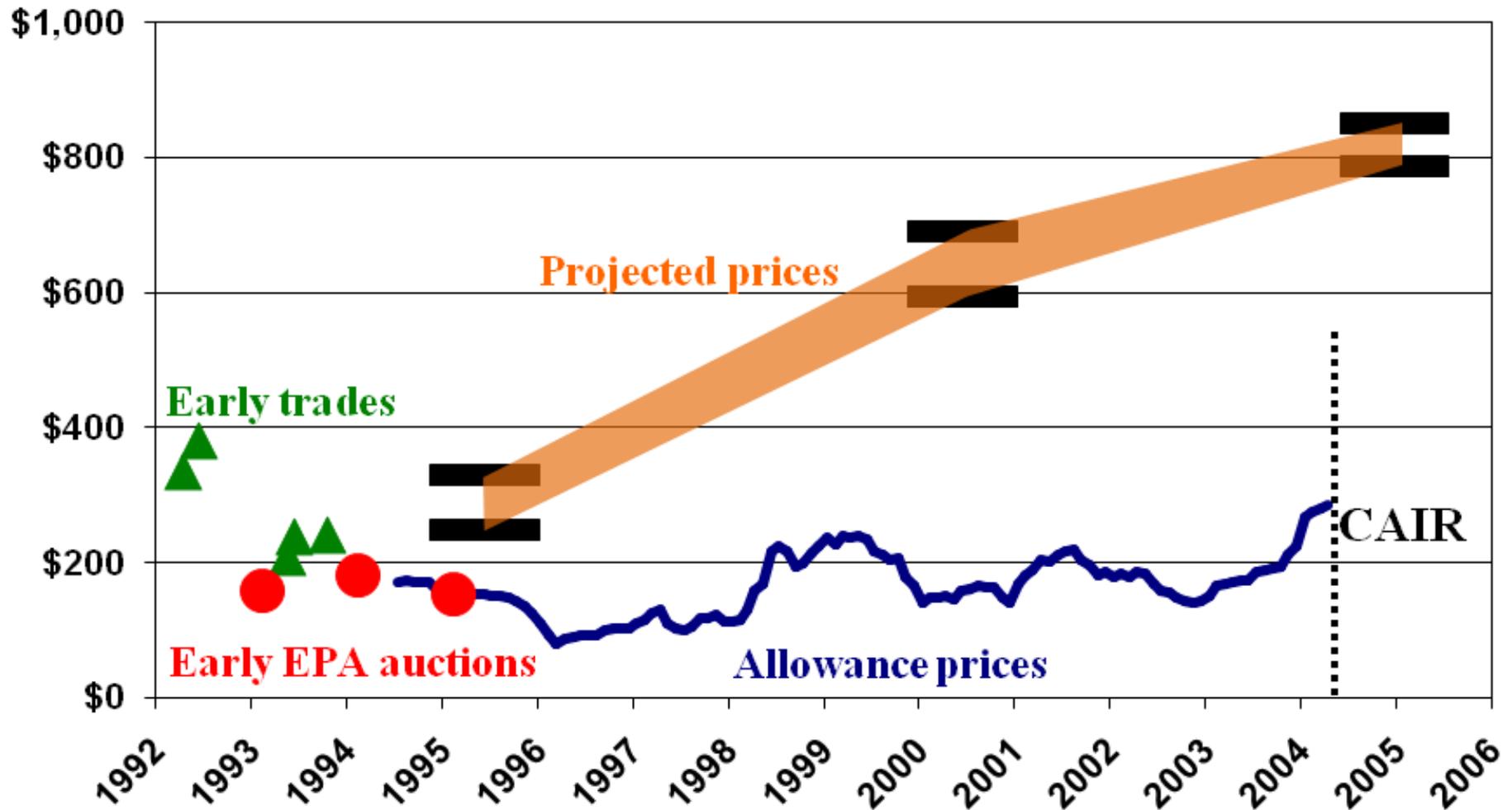


# What is Cost Management?

- Refers to the market price of allowances
- An important distinction
  - Structural Imbalance *versus* Price Volatility
  - Structural Imbalance
    - Containing allowance prices that might rise above or fall below politically acceptable levels
  - Price volatility (short-term variability in prices)
    - Due to temporal change in supply and demand

# Bargain Prices for SO<sub>2</sub> Allowances

## SO<sub>2</sub> Allowance Prices (2004\$/ton)



# Price Volatility in the EU Emissions Trading Program

## Historic CO<sub>2</sub> Allowance Prices in the EU



Source: Point Carbon

# Why do we care about cost management?

- Prices too high
  - A sign that caps are too restrictive given politically acceptable costs
- Too low
  - May not send a high enough price signal to bring forth needed technology and conservation
  - Could indicate market manipulation in allowance auction/market
- Too volatile
  - Needless short term economic dislocations and loss of clear price signal upon which to form solid expectations and make investment decisions
  - Volatility raises option value of waiting on new investments

# How do we manage costs?

## Use a CO<sub>2</sub> tax/fee

- Not subject to structural cost issues or cost volatility issues

## Ramp-down emission caps

- Begin with modest caps and gradually decrease them over time

## Concern about high price spikes

- Use a price ceiling “safety valve” (sell additional allowances)

## Concern about high and low price spikes

- Add a price floor (minimum price auction – reduces supply)
- Combination is a price collar (ceiling and floor)
  - Protects against price spikes, guards against market manipulation and preserves incentives for investment in clean technology
  - Allows regulation to adjust to new information in market price

# The Effect of a Loose Price Collar (SSV)

## Historic CO<sub>2</sub> Allowance Prices in the EU



Source: Point Carbon

# Other mechanisms to contain costs

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- Offsets
- Allowance banking and borrowing
- Allowance reserve (quantity limited)
- Triggering programs (borrowing and offsets)
- Carbon market board