



Working Group on Implementation of Chairman's 2008 Initiative Regarding Emission Reduction Credits

March 20, 2008

Chairman's Initiative

- Re-evaluate NSR and RECLAIM programs focusing on:
 - Stabilizing credit prices
 - Encouraging clean technologies
 - Ensuring efficient use of credits

Workplan

- Establish working group
- Evaluate NSR and RECLAIM trading markets
- Develop concept paper based on findings of evaluation
- Present concept paper and recommendations to Board on proposed rule amendments to Regulation XIII and XX
- Initiate rulemaking with Board approval

RECLAIM Background

- NO_x and SO_x facilities emitting ≥ 4 tons/year
- Each facility is issued an initial allocation of RECLAIM Trading Credits (RTCs)
- Facility's allocation of RTCs is reduced overtime

RECLAIM

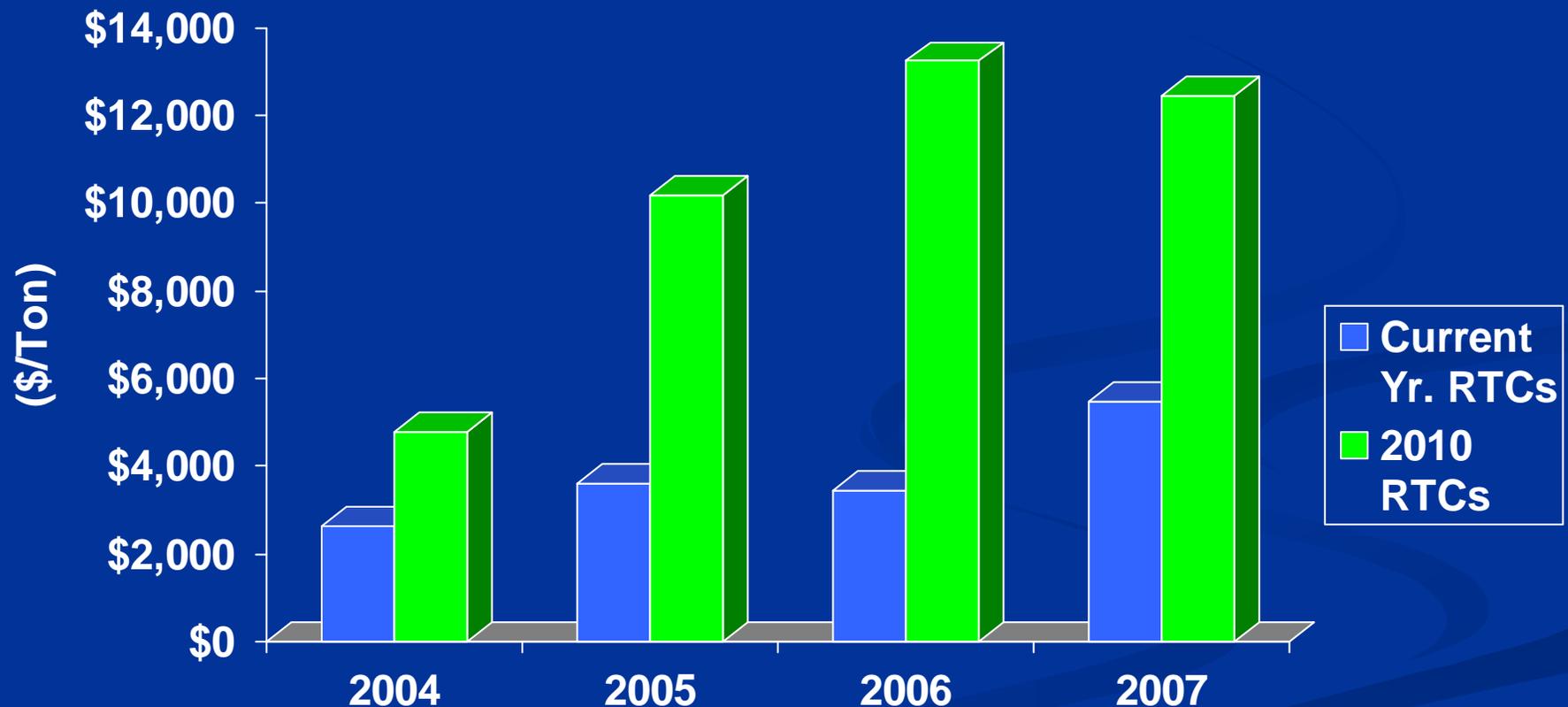
Initiative Scope and Objectives

- Evaluation of RECLAIM market to assess potential issues with RTC trading
- Scope limited to RTC trading
 - Price
 - Future supply
- Ensure sufficient safeguards are in place
- Maintain pressure to encourage emission reductions

Discrete RTCs

- Discrete RTCs used primarily at reconciliation
- Discrete RTCs below SCAQMD program review threshold of \$15,000 per ton
 - In 2006 discrete 2010 NO_x RTCs were \$13,200
 - Same year discrete NO_x RTCs <\$6,000
 - All discrete SO_x RTCs <\$4,500

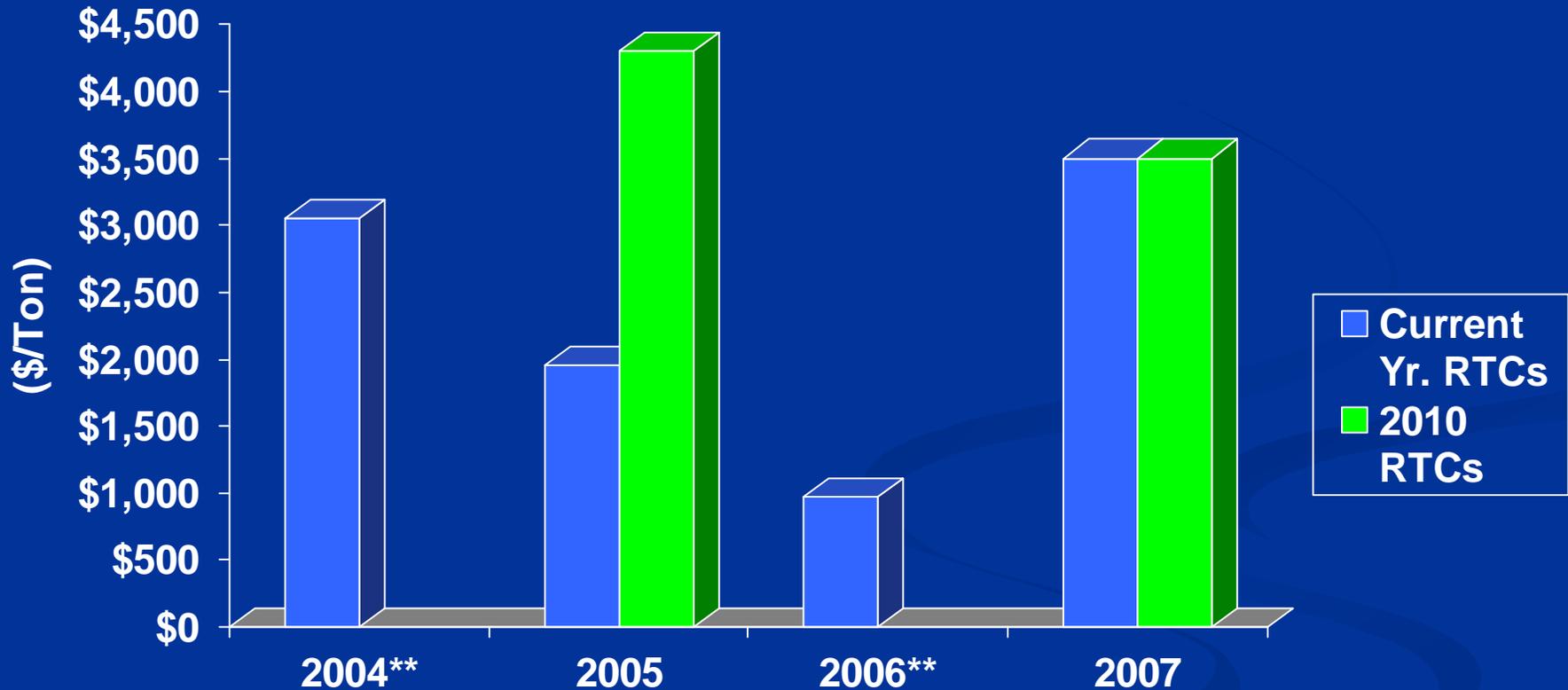
Cost of Discrete Year NOx RTCs*



*2004 and 2005 are total averaged cost (discrete year + IYB RTCs)

Note: Program review thresholds of \$15,000/ton per SCAQMD Rule 2015(b)(6), and \$36,430/ton per California H&SC §39616(f)

Cost of Discrete Year SOx RTCs*



*2004 and 2005 are total averaged cost (discrete year + infinite year block)

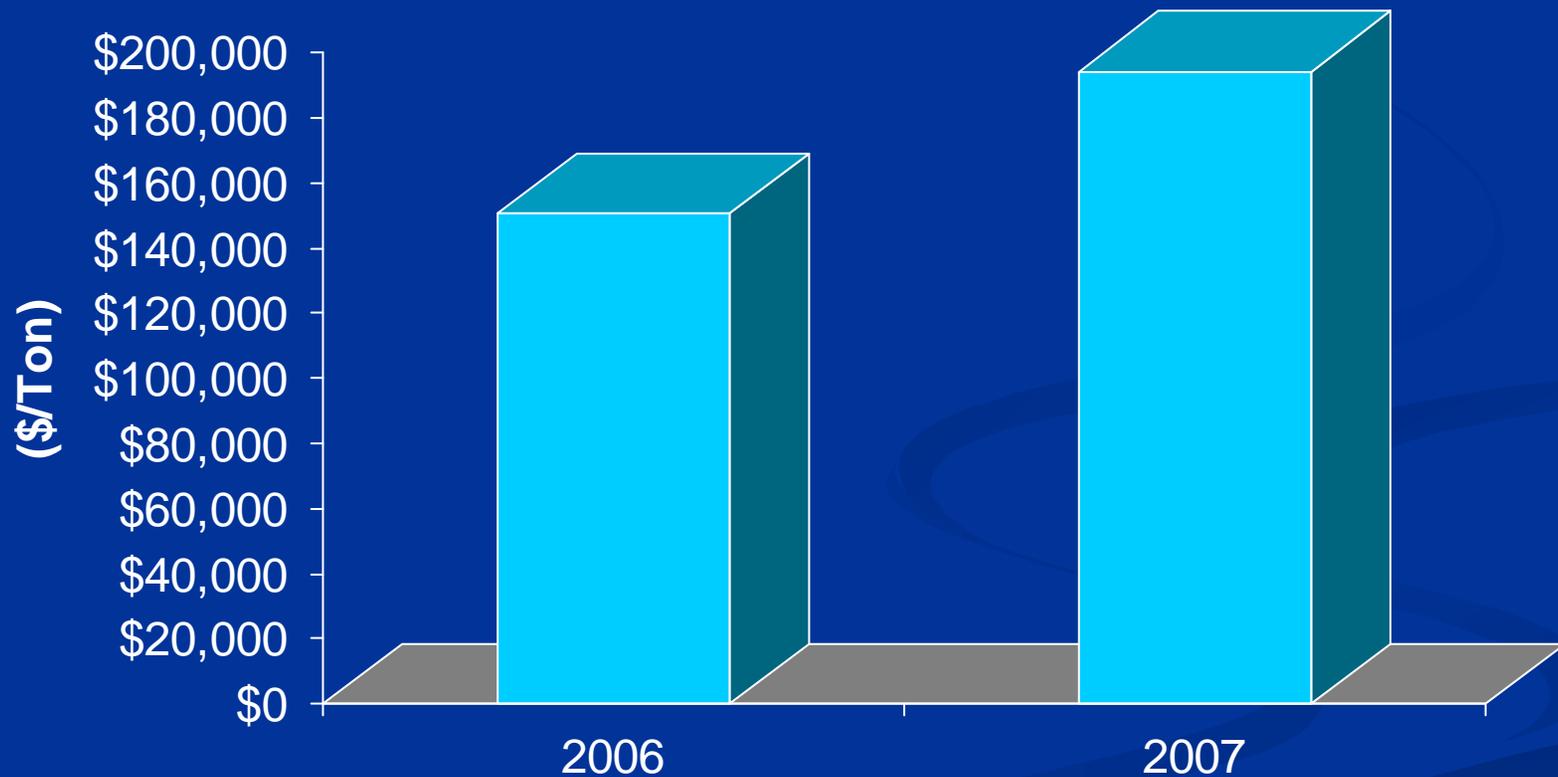
**No future year SOx RTCs traded in 2004 or 2006 for price

Note: Program review thresholds of \$15,000/ton per SCAQMD Rule 2015(b)(6), and \$26,230/ton per California H&SC §39616(f)

Infinite Year Block (IYB) RTCs

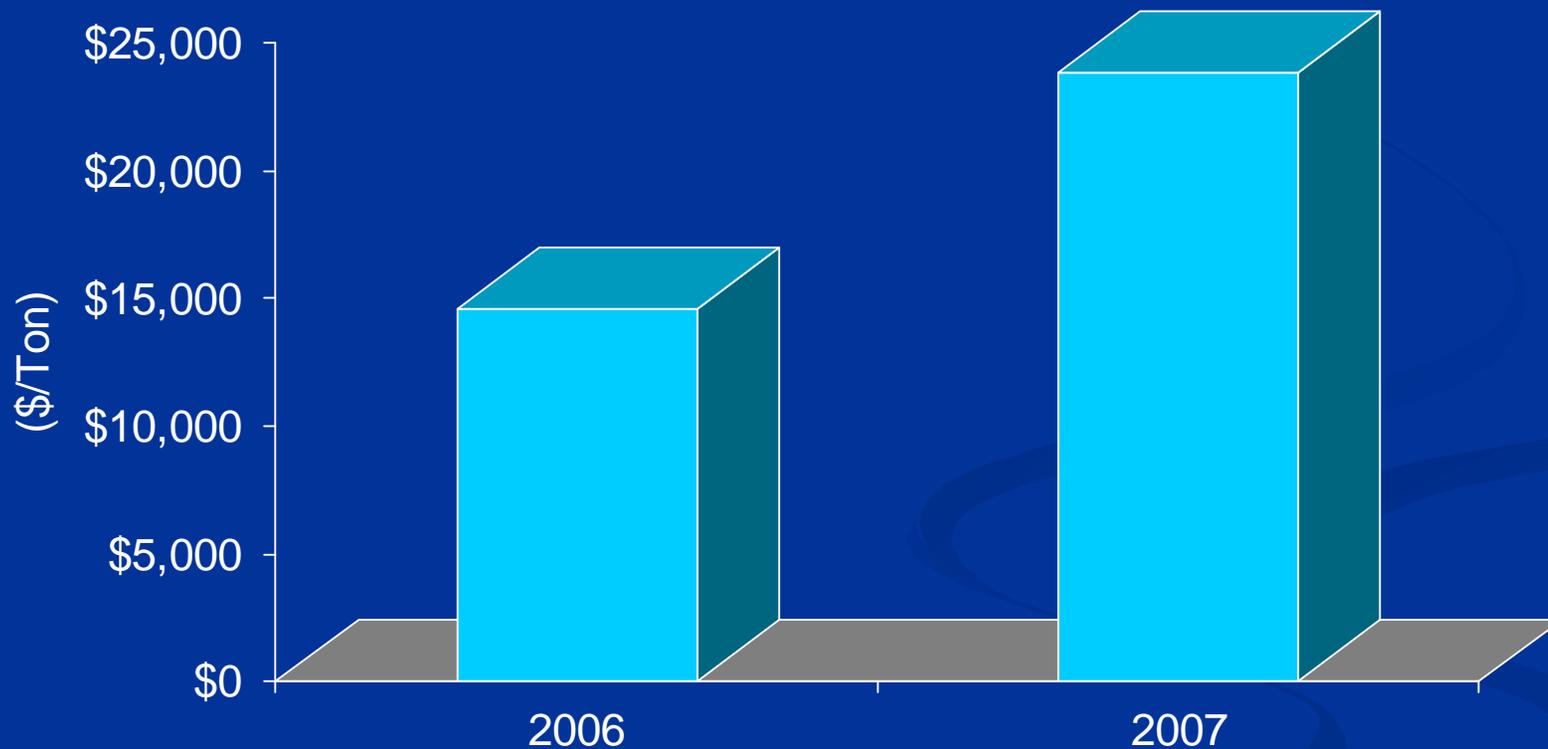
- Infinite Year Block (IYB) generated primarily from equipment shutdowns
- Price of IYB RTCs below program review threshold of \$546,500
 - Price of 2007 NO_x IYB RTC ~\$195,000
 - Price of SO_x IYB RTCs <\$25,000
- Investors currently hold <10% of IYB RTCs
- Increased investor participation in IYB Market

Cost of Infinite Year Block NOx RTCs



Note: Program review threshold of \$546,500/ton per California H&SC §39616(f)

Cost of Infinite Year Block SOx RTCs



Note: Program review threshold of \$393,444/ton per California
H&SC §39616(f)

RECLAIM

Future Considerations

- NOx shave fully effective 2011
- SOx shave to be adopted and implemented
- Potential market impacts of investor holdings of IYB RTCs
- Consideration of shutdown RTCs to AQMD bank
- Other?

Regulation XIII Background

- Applies to new, modified, and relocated sources
- Requires BACT
- Emission offsets required
 - Offset ratio of 1.2 to 1
 - Priority reserve
 - Rule 1304 Exemptions

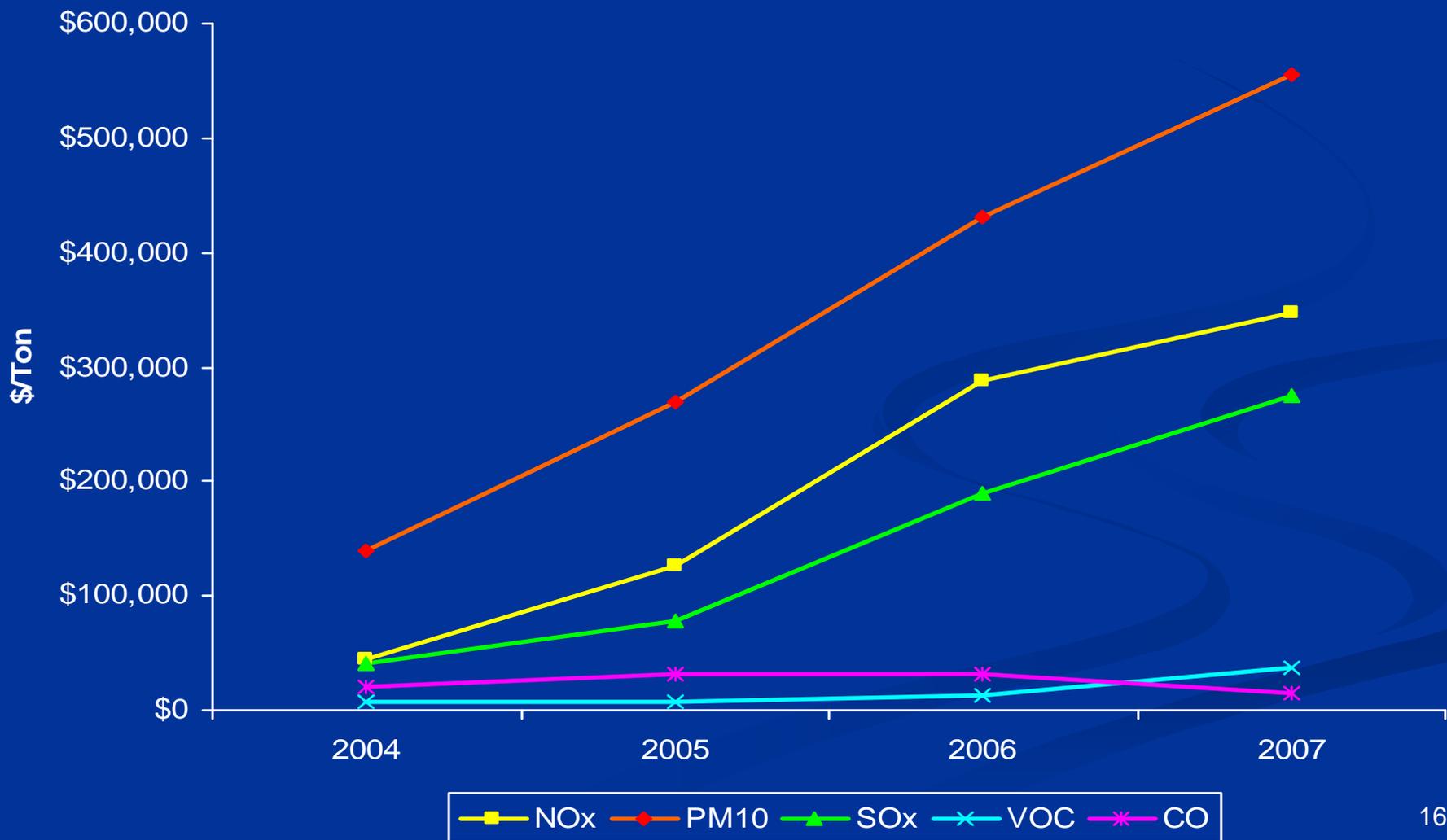
New Source Review (NSR) Initiative Scope and Objective

- Evaluation of NSR to assess potential issues with ERC generation and use
- Ensure economic growth in the region and ability to modernize is not restricted by:
 - low availability of ERCs and
 - high costs of ERCs
- Consideration of EPA and CARB approval issues
- Maintain BACT requirement

NSR Market

- Price of ERCs have increased significantly, while availability has decreased (last 7 years)
 - PM10 ERC price increased by 20 times
 - NOx ERC price increased by 2 times
- ~70% of NOx and PM10 ERC holders are permitted facilities
- ~35% of VOC ERC holders are permitted facilities

NOx, PM10, and SOx ERC Prices



ERC Generation

- Potential Generation
 - Shutdowns
 - Over Control
 - Process Changes
 - Equipment Modifications
- Actual Generation
 - All ERC generation is from shutdowns

Limitations of Generating ERCs

- Excludes permitted stationary sources that received offsets from:
 - Priority reserve
 - Sources previously exempted from providing offsets
 - Community Bank
- BACT discounting – increasing stringency
- Generation based on actual emissions
- No federally-approved mobile source credit generation protocols for Reg XIII use

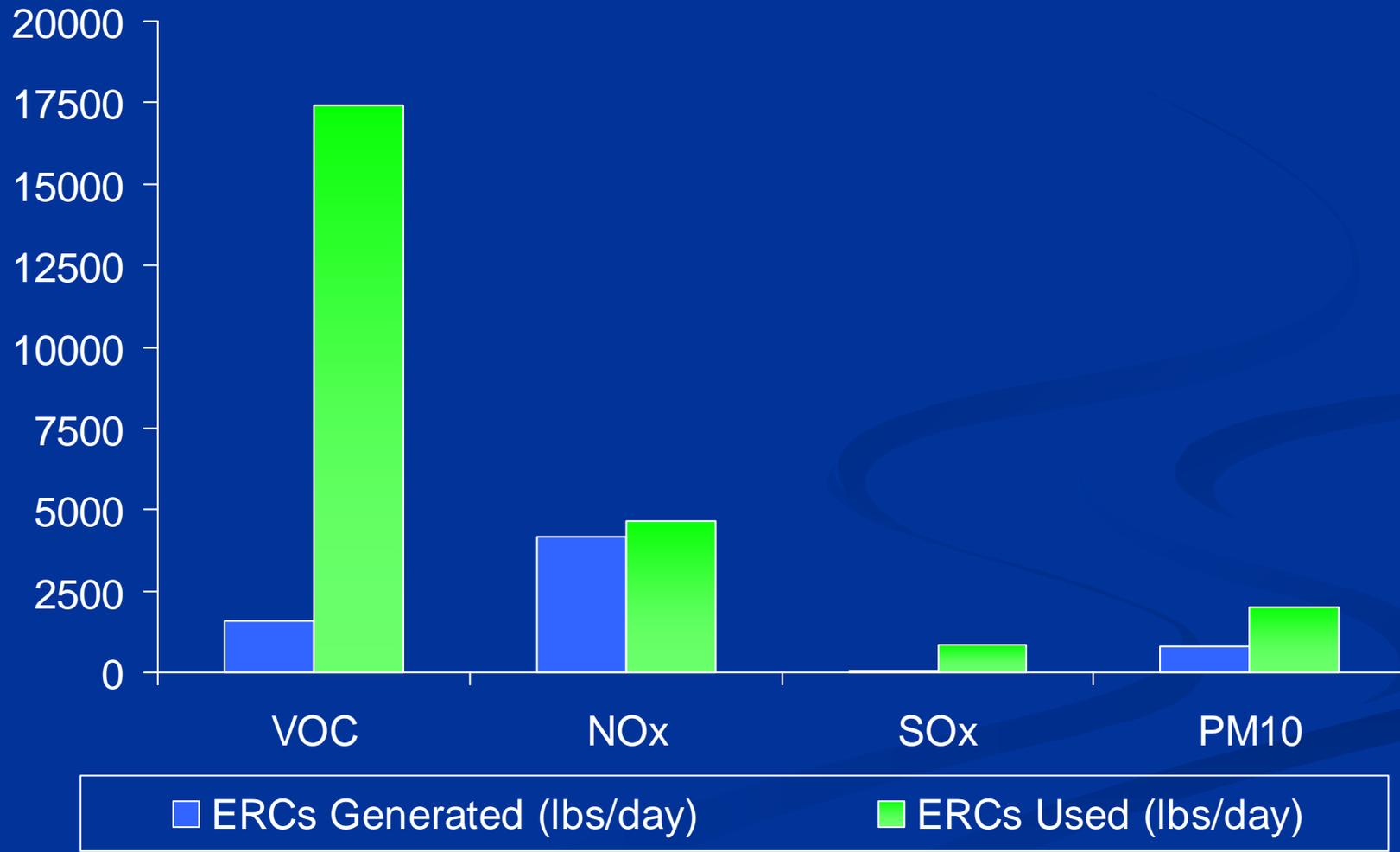
Potential ERC Use

- Offsets for NSR Compliance
 - Permitted Stationary Sources
 - Mobile Sources Associated with Permitted Stationary Source
- CEQA Mitigation
- Variance/Abatement Orders
- Inter-District Transfers

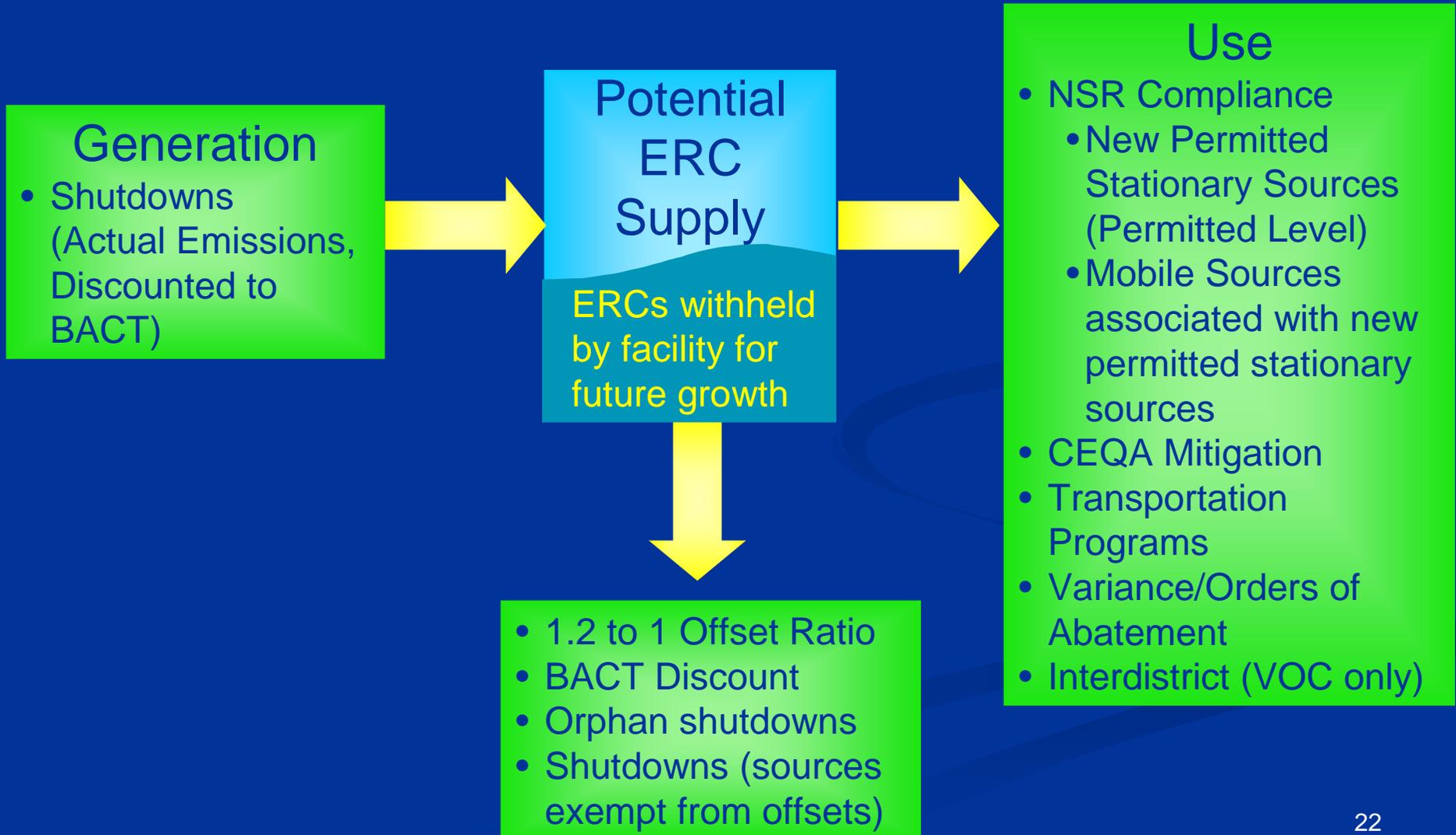
Actual ERC Use

- PM10 ERC use
 - 100% for NSR compliance
- NOx ERC use
 - 87% for NSR compliance
 - Remaining 13% for CEQA mitigation
- VOC ERC use
 - 74% for NSR compliance
 - 23% interdistrict transfer
 - 3% CEQA and orders of abatement

ERC Generation and Use (2000-2006)



ERC Generation and Uses



NSR

Future Considerations

- Mechanisms needed to ensure availability of ERCs for future economic growth and modernization
- Use of non-ERC offsets for mobile sources associated with permitted stationary sources
- Discounting at time of use
- AQMD Bank
- Credit generation – incentivizing clean technologies
- Other?

Schedule

- Establish working group February 2008
- Develop concept paper March-April 2008
- Next Working Group Meeting April 2008
- Present findings to Board October 2008

