

# CLEAN AIR TASK FORCE: Introduction and Goals in CLRRTAP

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# CATF Mission and History

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We are a US-based NGO, founded in 1996

- Dedicated to restoring clean air and healthy environments through scientific research, public education, and legal advocacy
- Solely working on atmospheric issues
- Funded by foundations and individuals

# CATF Mission and History

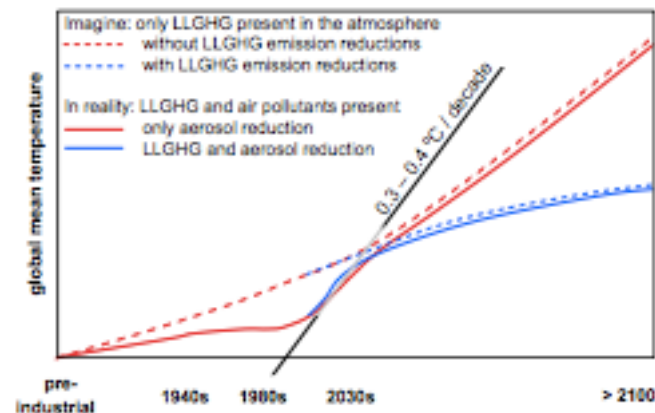
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## Evolving focus:

- Continuing focus, from beginning, on power plants
  - Early focus on SO<sub>2</sub>, NO<sub>x</sub>, Hg reductions
- Climate protection is now a major focus
- Diverse approaches: Legal & policy advocacy, Technology commercialization, Filling information gaps

# Calling Attention to Short-Lived Forcers

- CO<sub>2</sub> is the most important agent of climate change and must be addressed quickly
- Due to the long lifetime of CO<sub>2</sub> already emitted, and continued reductions of sulfate, we face steeply rising warming in the next decades. CO<sub>2</sub> mitigation cannot address this
- It is essential to mitigate short-lived forcers to address near-term steep warming



Raes & Seinfeld, 2009

# CATF in CLRTAP

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- CATF has actively worked for reductions in SO<sub>2</sub>, NO<sub>x</sub>, and PM, particularly from power plants and heavy-duty diesel engines
- We have been active in many international air pollution / climate fora over the last decade:
  - Saltsjöbaden meetings leading to TF-HTAP and on air pollution / climate links; Stockholm Env. Inst. / GAP forum meeting on air pollution / climate links; Gothenburg meeting Oct. 2009
- We have participated in TF-HTAP for several years. Our main focus is on the co-benefits to climate, human health, and the environment that may be realized through the reduction of global emissions of short-lived climate forcers
  - BC, CH<sub>4</sub>, and O<sub>3</sub> precursors
- CATF is also active in efforts at IMO to reduce shipping emissions of air pollutants and climate agents

# Our Perspective for TFIAM

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Significant co-benefits exist across efforts to clean up air pollution and mitigate climate change, but the policy world has not mobilized around these opportunities.

*Modeling efforts need to quantify these opportunities*

# Examples of Co-Benefit / Modeling Needs

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- Ozone Precursors:
  - CH<sub>4</sub> and CO in regional AQ models are typically treated as global (unchangeable) pollutants. Models need to support assessments of how global CH<sub>4</sub> / CO reduction would lower O<sub>3</sub> regionally / locally
  - Conversely, RF calculations from reductions in O<sub>3</sub> precursors will show climate co-benefit from mitigation motivated by air quality concerns

# Examples of Co-Benefit / Modeling Needs

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- Aerosol:
  - Various PM have various radiative effects, but need to be separately tracked to quantify (BC vs sulfate, nitrate, etc.)
  - Effects of gas-phase pollutants – including CH<sub>4</sub> & CO – on OH and then PM production (Shindell et al.)