Managing Ammonia Emissions

Breakout Group #2

Are there other important sources of NH_3?

- Catalytic converters?
- Dairy farms
- Combustion, e.g. forest fires
- Bidirectional exchange: Crops, turf

Is 20-30% Decrease in Agr NH_3 Practical?

- It may have additional costs. Technically possible but problem with implementation
- Tighter cycling between crop and animal (systems approach)
- Don’t put extra regulation on manure compared to chemical fertilizer

How to decrease uncertainty in dry deposition?

- Need more measurements of dry deposition over a variety of ecosystems.
- Need to recognize bidirectional transport.

Do current models simulate short-range dispersion and deposition near ground?

- Not very well in short range.
  - Less than 50 miles
  - Regional models don’t have good resolution locally.
- Need models with short-range resolution to evaluate and implement control strategies

Are observations suitable for model verification and evaluation?

- No national network as we have with NOx and SOx

Should there be a combined NO_y and NH_x standard?

- Yes, we don’t want to trade one for the other.

Must take a systems approach

- Water and Air
- NOx and NH4
- Other policies
  - Air, water, ethanol subsidies