

Panel Discussion: Comparing Nitrous Oxide Reduction Protocols

Karen Haugen-Kozyra, M.Sc. P.Ag.
Principal, KHK Consulting

October 4th, 2010

C-AGG/T-AGG/M-AGG Meetings
Crowne Plaza, Chicago Illinois



SUSTAINABLE
FOOD LABORATORY



- C-AGG June 16-17 Meetings
 - Interest generated
- Engagement and Sept 8th Webinar
 - Compared 3 NA protocols:
 - Winrock-American Carbon Registry
 - NERP-Fertilizer Institute
 - EPRI – Michigan State U
- Comparative Summary Table prepared
 - Handout

Background and Work to Date

- **Objectives:**
- To provide an opportunity for N₂O protocol practitioners to share their development stories, in this complex area
- To gain a mutual understanding of the basic assumptions, underlying science, scalability, implementation complexity, costs, risks and certainty for expected projects under the various protocols
- To benefit from what's been learned by each process, and discuss the areas of convergence and divergence

Webinar Objectives

- Protocol Development Teams:
 - ACR – Winrock scientists; Geo Applied Solutions -Nick Martin presenting
 - NERP – ClimateCHECK, KHK Consulting, Fertilizer Institutes; IPNI – Rob Janzen presenting
 - EPRI-MSU – Phil Robertson/Neville Millar, Adam Diamant – Adam Diamant presenting

Today's Panel

Areas of Convergence

- Include direct/indirect N emissions sources a la IPCC
- Do not include soil carbon pools
- Include organic and inorganic N sources
- IPCC guidance followed generally

Areas of Divergence

- Different 'Tiers' of Accounting – process models, empirical models
- Different accounting for N Input sources
- Complexity of implementation and data requirements

Comparison – High Level