



# **Status of Climate Change Negotiations and U.S. Policy Development (related to Agriculture)**

**Climate Change, Agriculture, and Trade:  
Promoting Policy Coherence**

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# Treatment of land in current international agreements

- UN Framework Convention on Climate Change
  - Annex I and Non-annex I countries
    - Non-binding aims to reduce emissions by sources and enhance removals by sinks
- Kyoto Protocol
  - Annex I
    - Must address agriculture, and three specific forest activities: afforestation, reforestation, and deforestation
    - Can also add additional activities: cropland management grazing land management, and forest land management
  - Non-Annex I: Specific activities allowed in the CDM (afforestation and reforestation) NOT avoiding deforestation

# Treatment of land looking forward to Copenhagen...

- Ad hoc Working Group on the KP
  - Extend current treatment
  - Modify, but keep current structure
  - Move toward comprehensive accounting for lands
- Ad hoc Working Group on Long-term Cooperation
  - Developed
  - Developing
    - Much focus on how to address deforestation

# Options for addressing the land use sectors under the new agreement

- Developed countries (US)
  - KP construct, W-M construct, UNFCCC construct
- Allow developing countries to:
  - Take meaningful mid-term action consistent with capabilities;
  - Provide offsets
    - National systems
    - Activities and projects
- Create a fund to support developing country efforts
  - Based on tons reduced/avoided
  - Based on needs and capabilities

# GHG Emissions by Sector in 2000

Country/Region (Mt CO <sub>2</sub> )	% from Energy	% from Agriculture	% from Forests
World (43,058)	62.7%	13.3%	17.7%
U.S. (6,442)	<b>93.3%</b>	6.9%	-6.3%
China (4,711)	67.3%	<b>22.1%</b>	-1%
India (1,555)	67.5%	<b>24.1%</b>	-2.6%
Brazil (2,313)	13.9%	23.7%	<b>59.3%</b>
Indonesia (3,068)	10.9%	4.1%	<b>83.5%</b>
EU-25 (4,709)	<b>82.1%</b>	10.5%	-0.4%

# Domestic Legislation

- H.R. 2454 -- Passed the House on June 26, 2009
- **Titles I and II:** Clean energy and energy efficiency provisions. Establish a renewable electricity standard, energy efficiency programs and standards for transportation, buildings, lighting, appliances
- **Title III:** Establishes a cap and trade system for GHGs
- **Title IV:** Addresses competitiveness issues and the transition to a clean energy economy
- **Title V:** Establishes a domestic program for agriculture and forestry offsets

# HR 2454 -- GHG Offsets

- 2 billion tons of offsets can be used for compliance:
  - 1 billion from domestic sources, 1 billion from international sources
- Lower value for international offsets
  - beginning in 2018, 1.25 offset credits would be required to be surrendered for each ton of emissions compliance
- Agriculture and forestry offsets program to be administered by USDA
- EPA to administer all other types of domestic offsets, as well as international offsets
- Early offsets from programs starting after January 2001

# HR 2454 -- Key Components of USDA and EPA Domestic Offset Provisions

- Initial project type eligibility list after 1 year
- Additional project types within 2 years
- Application of standardized methodologies for:
  - Additionality;
  - Baselines;
  - Permanence;
  - Quantification of project credits; and
  - Leakage
- Third party verification is required

# HR 2454 -- Initial List of Domestic Agriculture and Forestry Offset Project Types

- Altered Tillage Practices
- Continuous Cropping (winter cover)
- Reduce Fertilizer Use
- Animal Management/Dietary Modification
- Afforestation or Reforestation
- Urban Tree-Planting and Maintenance
- Improved Forest Management
- Improved Manure Management
- Reduced frequency/duration of flooding of rice paddies
- Reduced organic soil emissions
- Peatland/wetland management
- Grassland conservation
- Avoided forest conversion
- Agroforestry

# HR 2454 – International Offsets

- International offsets eligibility
  - Developing country
  - Must be Parties to a multilateral or bilateral Agreement which ensures that U.S. offset requirements are met
- Types of international offsets
  - Project-based
  - Sector-based
  - Clean Development Mechanism
  - Reduced deforestation

# Evaluating the Costs and Benefits of Climate Change Policy to Agriculture

- Three main issues:
  - Production costs : energy and fertilizer inputs
  - Offsets/incentives: GHG reduction potential
  - Renewable energy: Wind, bioenergy
- Agriculture is energy intensive:
  - Fertilizer and fuel costs account for 50-60 percent of variable costs of production for corn;
  - Because of higher personal transportation expenditures, rural households are more likely than urban households to feel the pinch of increased gas prices.
- The costs will be considered against the potential benefits from offsets and renewable energy markets
- Lastly, by doing nothing, there will be a cost as well from the effects of warming.