



Climate Change Legislative Update and Outlook

The Role of Agriculture and Forestry in a Reduced Carbon Economy

July 29, 2009



Welcome!

Introductions and Objectives

Ernie Shea
25x'25 Project Coordinator



Webinar objectives:

- **Give an overview of the American Clean Energy and Security Act**
- **Examine what we know and what we don't know about the costs and benefits of pending legislation**
- **Discuss the outlook for climate legislation in the Senate**



Session Leaders

- **Dave Grossman**, senior consultant, David Gardiner & Associates
- **Jeffrey Frost**, 25x'25 carbon advisor
- **Bill Hohenstein**, director, USDA Global Change Program Office
- **Ernie Shea**, 25x'25 project coordinator



Webinar Procedures

- **Lines will be muted during presentations (*96) to minimize background noise**
- **For presenters and Q&A, unmute by pressing *6**
- **Will take questions following each presentation and also at the end of the session**
- **To ask a question, either press *6 to unmute or use the comment feature to submit a written question**



Overview of H.R. 2454

The American Clean Energy and Security Act

Dave Grossman
Senior Consultant, David Gardiner &
Associates





Climate & Energy Legislation Update

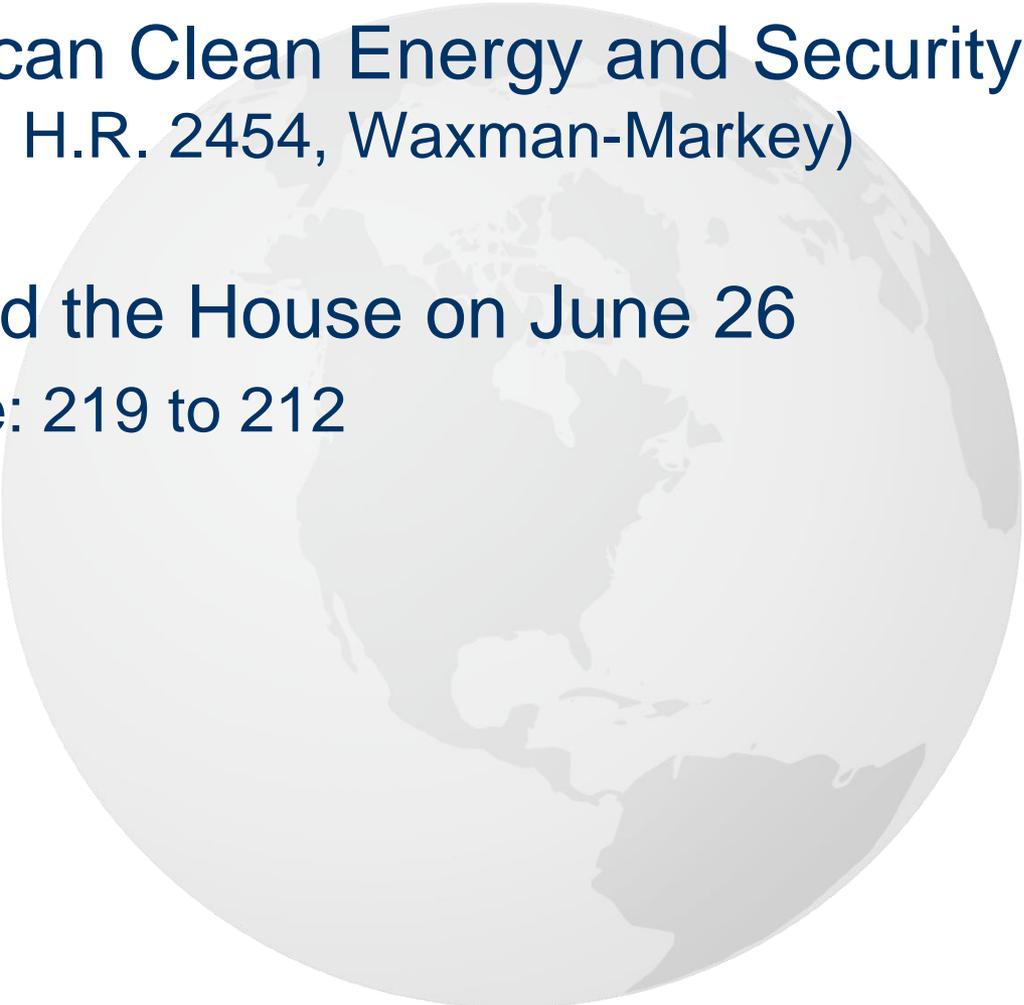
25x'25 Webinar
July 29, 2009



David Gardiner
& Associates, LLC

Dave Grossman
Senior Consultant
David Gardiner & Associates

H.R. 2454 (ACES)



- American Clean Energy and Security Act (ACES, H.R. 2454, Waxman-Markey)
- Passed the House on June 26
 - Vote: 219 to 212

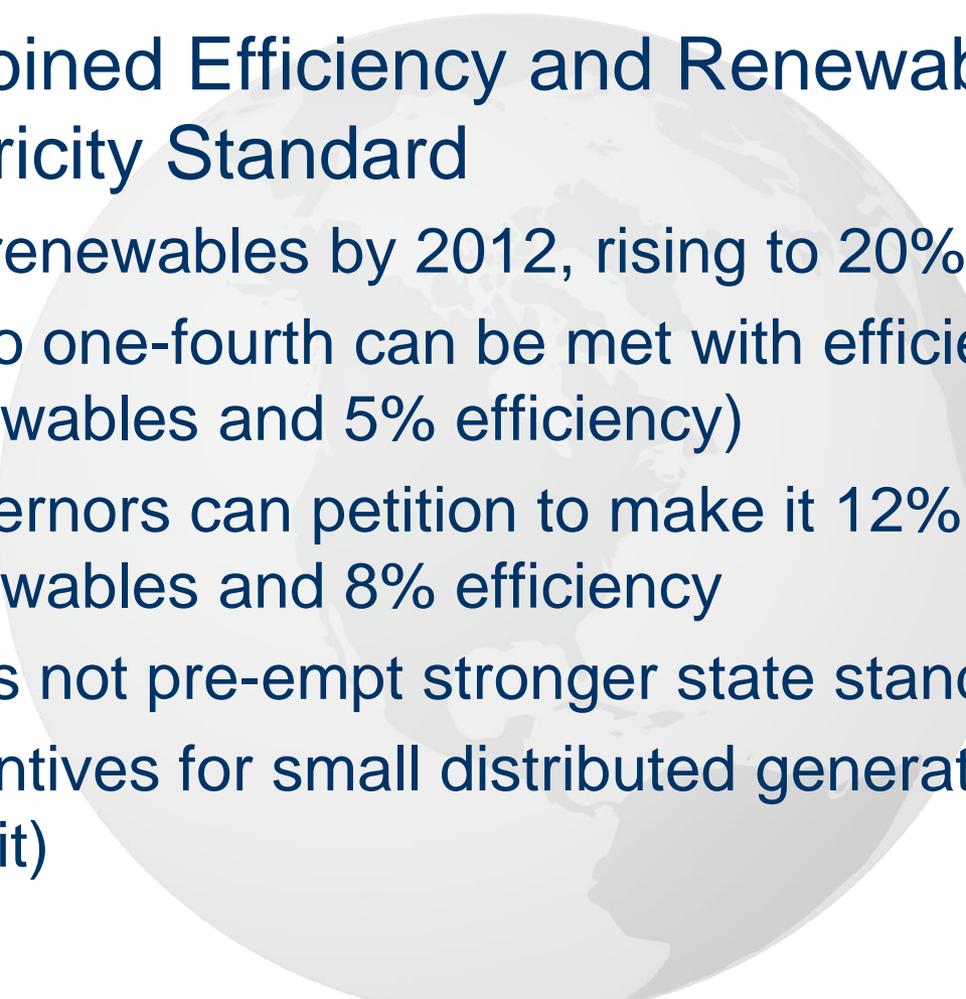
Titles



Not just a climate cap-and-trade bill:

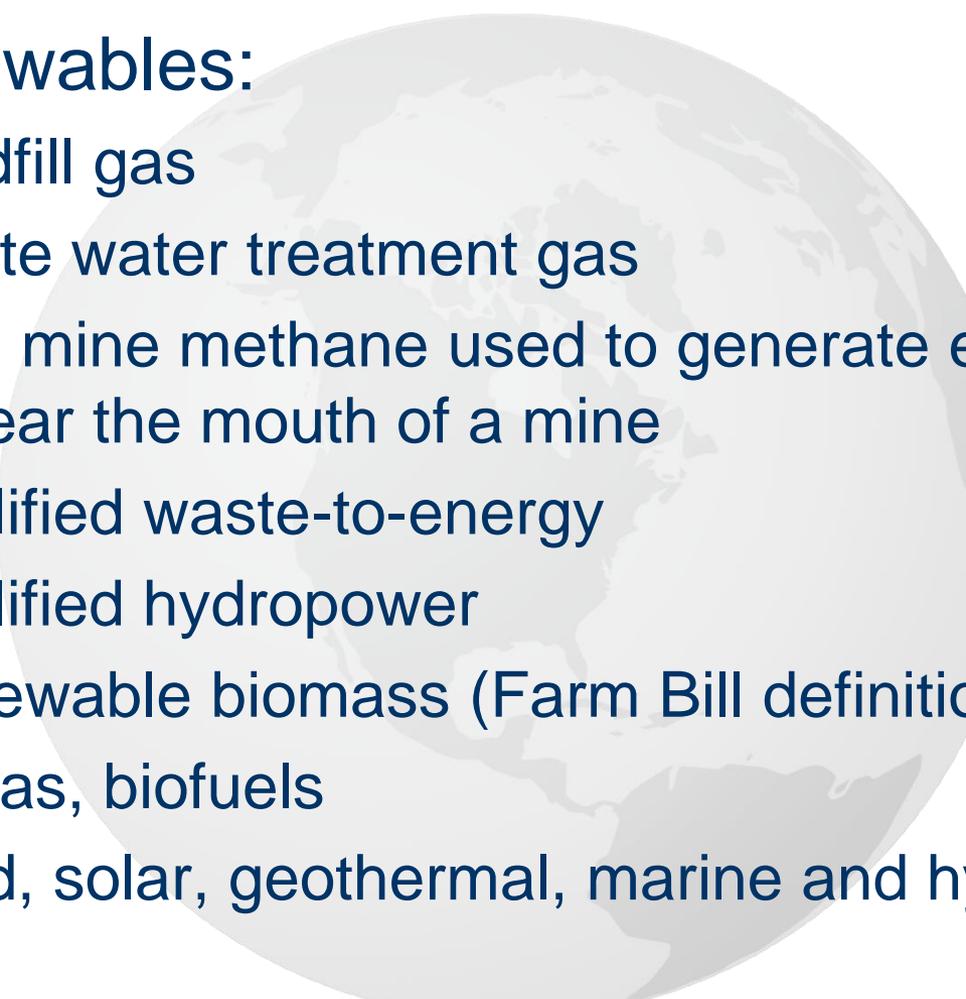
- Title I: Clean Energy
- Title II: Energy Efficiency
- Title III: Reducing Global Warming Pollution
- Title IV: Transitioning to a Clean Energy Economy
- Title V: Agricultural and Forestry Related Offsets

Title I: Clean Energy



- Combined Efficiency and Renewable Electricity Standard
 - 6% renewables by 2012, rising to 20% by 2020
 - Up to one-fourth can be met with efficiency (15% renewables and 5% efficiency)
 - Governors can petition to make it 12% renewables and 8% efficiency
 - Does not pre-empt stronger state standards
 - Incentives for small distributed generation (triple credit)

Title I: Clean Energy



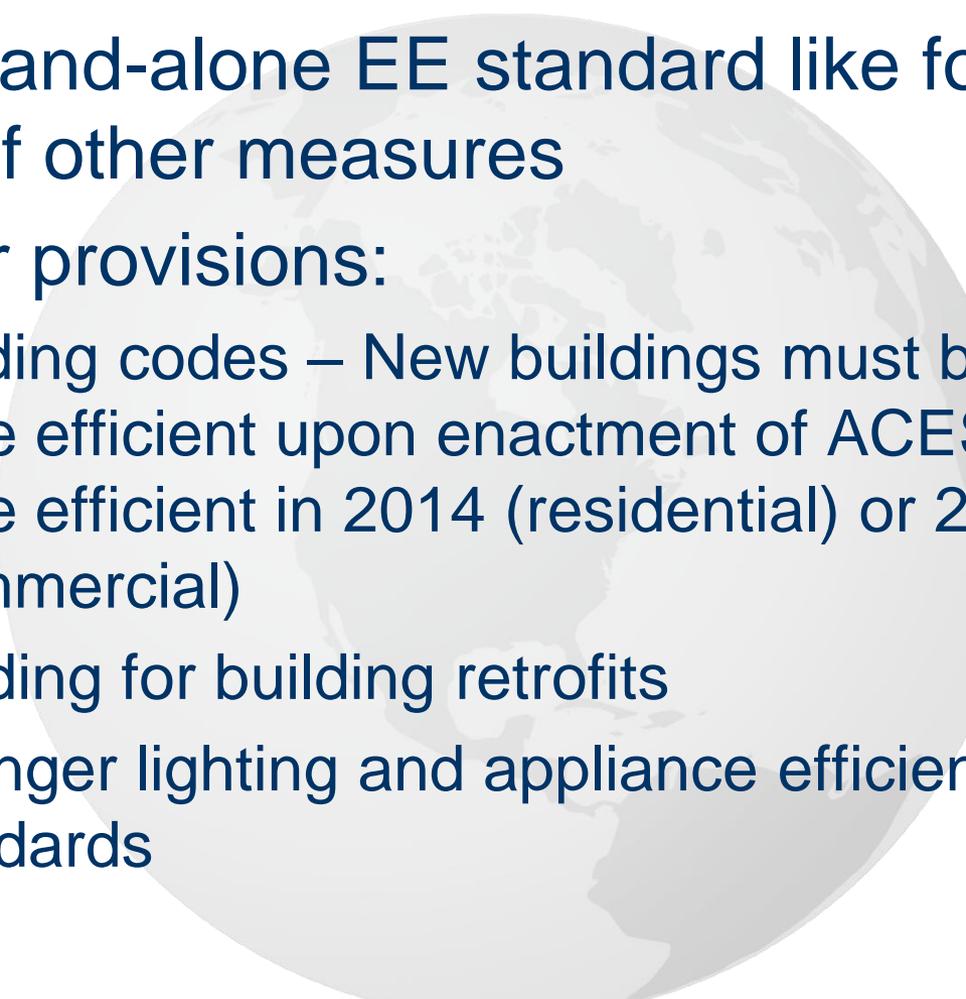
- Renewables:
 - Landfill gas
 - Waste water treatment gas
 - Coal mine methane used to generate electricity at or near the mouth of a mine
 - Qualified waste-to-energy
 - Qualified hydropower
 - Renewable biomass (Farm Bill definition)
 - Biogas, biofuels
 - Wind, solar, geothermal, marine and hydrokinetic

Title I: Clean Energy



- Other provisions:
 - Incentives for carbon capture and sequestration (CCS) and performance standards for new coal-fired power plants
 - Incentives for clean vehicles and fuels
 - Incentives and programs for deployment of smart grid technologies
 - Incentives and programs for clean energy transmission planning and siting

Title II: Energy Efficiency



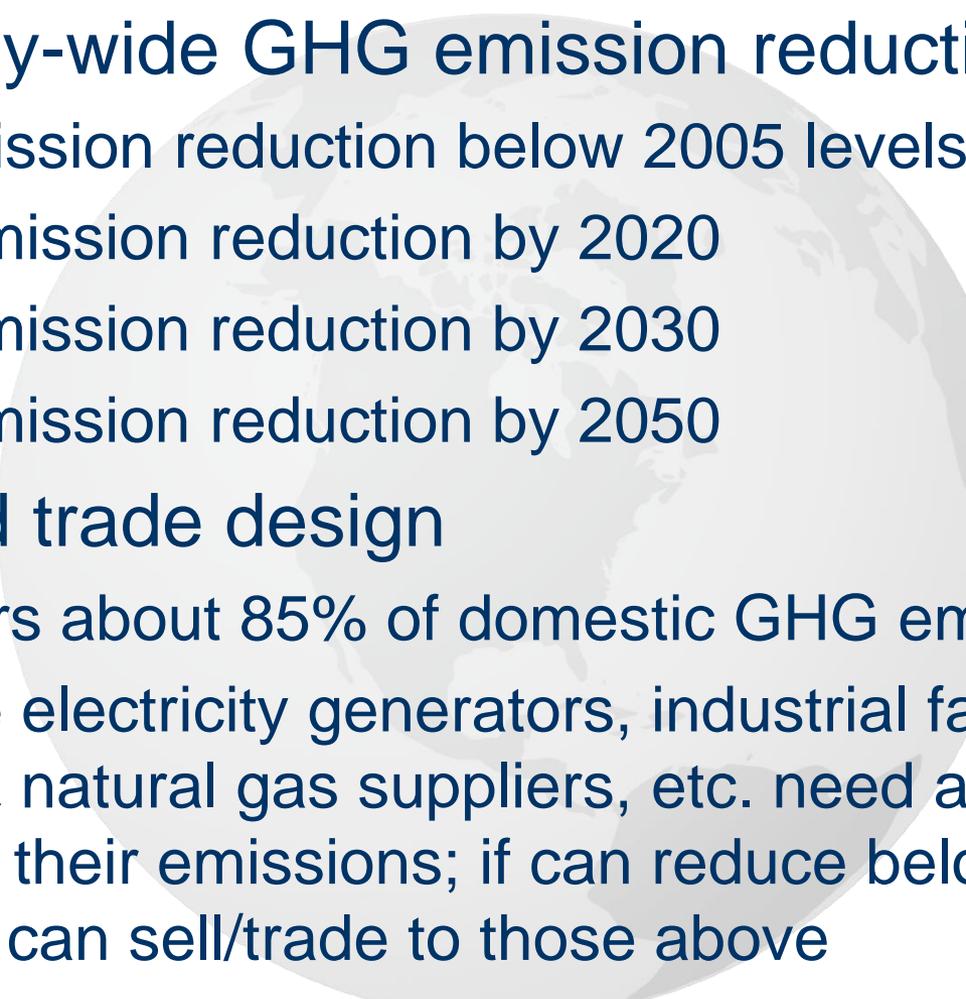
- No stand-alone EE standard like for RE, but lots of other measures
- Other provisions:
 - Building codes – New buildings must be 30% more efficient upon enactment of ACES, 50% more efficient in 2014 (residential) or 2015 (commercial)
 - Funding for building retrofits
 - Stronger lighting and appliance efficiency standards

Title II: Energy Efficiency



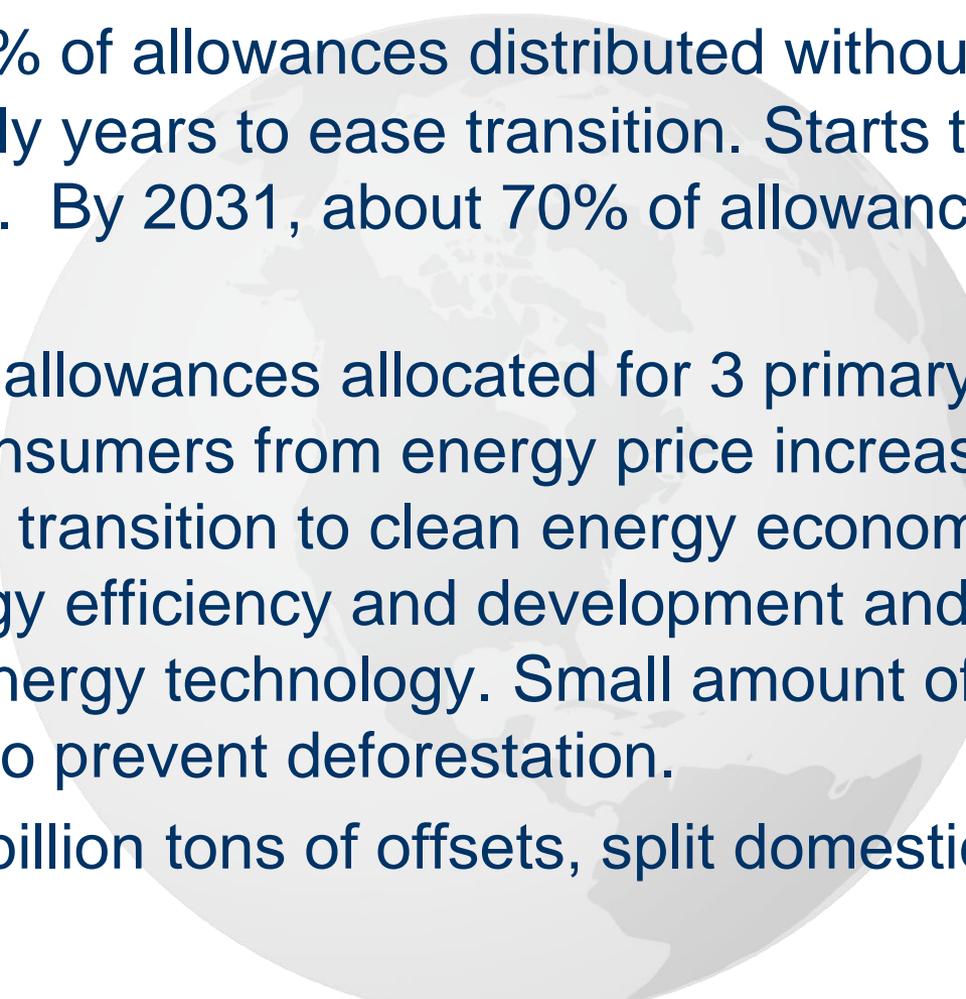
- Other provisions:
 - New vehicle GHG standards
 - States must establish goals to reduce GHGs from transportation sector in areas with large populations
 - Allows small communities to join together to create joint programs for electricity and transportation efficiency that qualify for Block Grants
 - Resources for energy efficient neighborhoods
 - Industrial efficiency programs

Title III: Reducing Global Warming



- Economy-wide GHG emission reduction goals:
 - 3% emission reduction below 2005 levels by 2012
 - 17% emission reduction by 2020
 - 42% emission reduction by 2030
 - 83% emission reduction by 2050
- Cap and trade design
 - Covers about 85% of domestic GHG emissions
 - Large electricity generators, industrial facilities, liquid fuel & natural gas suppliers, etc. need allowances to cover their emissions; if can reduce below allowance level, can sell/trade to those above

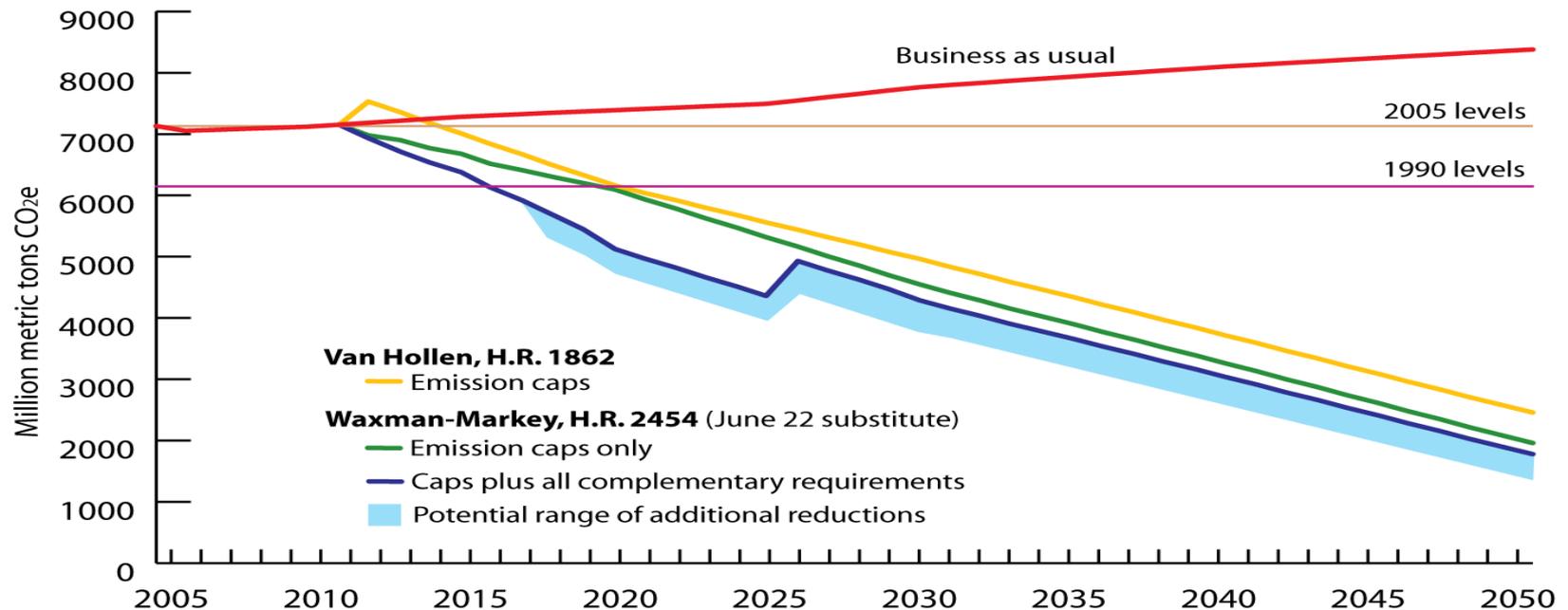
Title III: Reducing Global Warming



- About 80% of allowances distributed without charge during early years to ease transition. Starts to phase out after 2025. By 2031, about 70% of allowances are auctioned.
- Emission allowances allocated for 3 primary goals: (1) protect consumers from energy price increases; (2) assist industry in transition to clean energy economy; and (3) spur energy efficiency and development and deployment of clean energy technology. Small amount of allowances allocated to prevent deforestation.
- Allows 2 billion tons of offsets, split domestic / int'l

Title III: Reducing Emissions

Emission Reductions Under Cap-and-Trade Proposals in the 111th Congress, 2005-2050
June 25, 2009

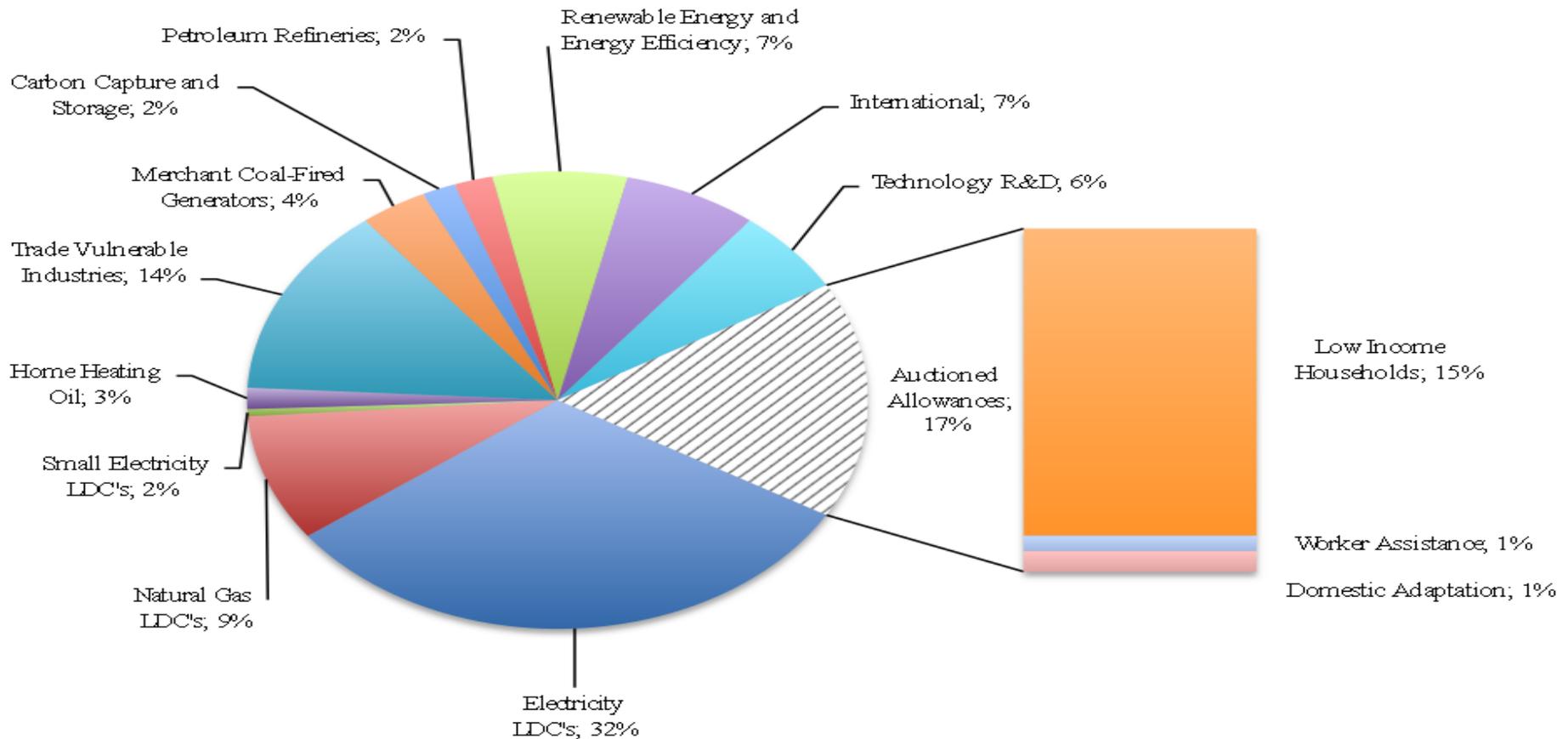


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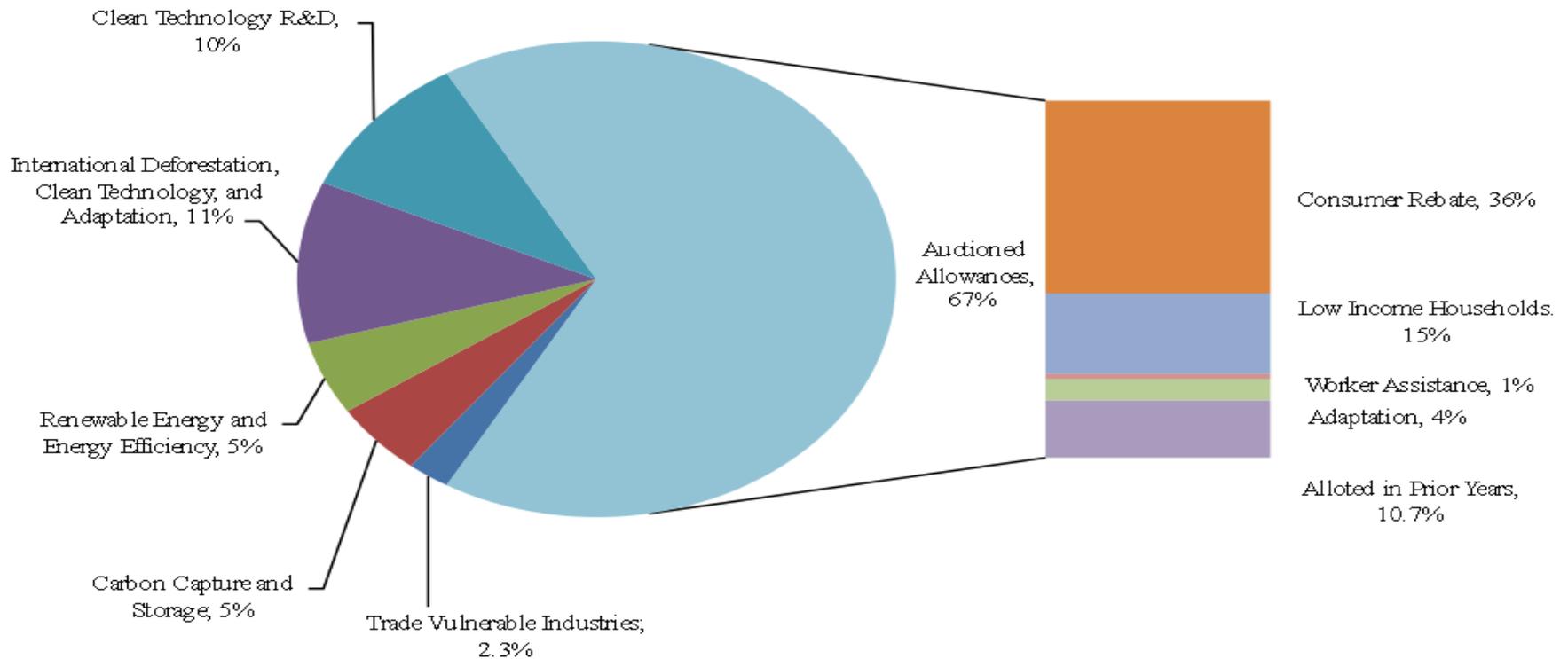
For a full discussion of underlying methodology, assumptions and references, please see <http://www.wri.org/usclimatetargets>.

David Gardiner
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Title III: 2016 Allocation



Title III: 2030 Allocation



Title IV: Transition

- Emissions allowances to protect vulnerable industries
- Green jobs worker training (grants to universities and colleges to develop programs)
- Funds to assist displaced workers
- Refunds to low-income households
- Adaptation program to assist U.S. in dealing with climate change impacts
 - funds state projects designed to respond to extreme weather events (e.g., flooding or hurricanes), changes in water availability, heat waves, sea level rise, ecosystem disruption, etc
 - programs and funds to address natural resource impacts



THANK YOU

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Offset Provisions

Jeffrey Frost
25x'25 Carbon Advisor



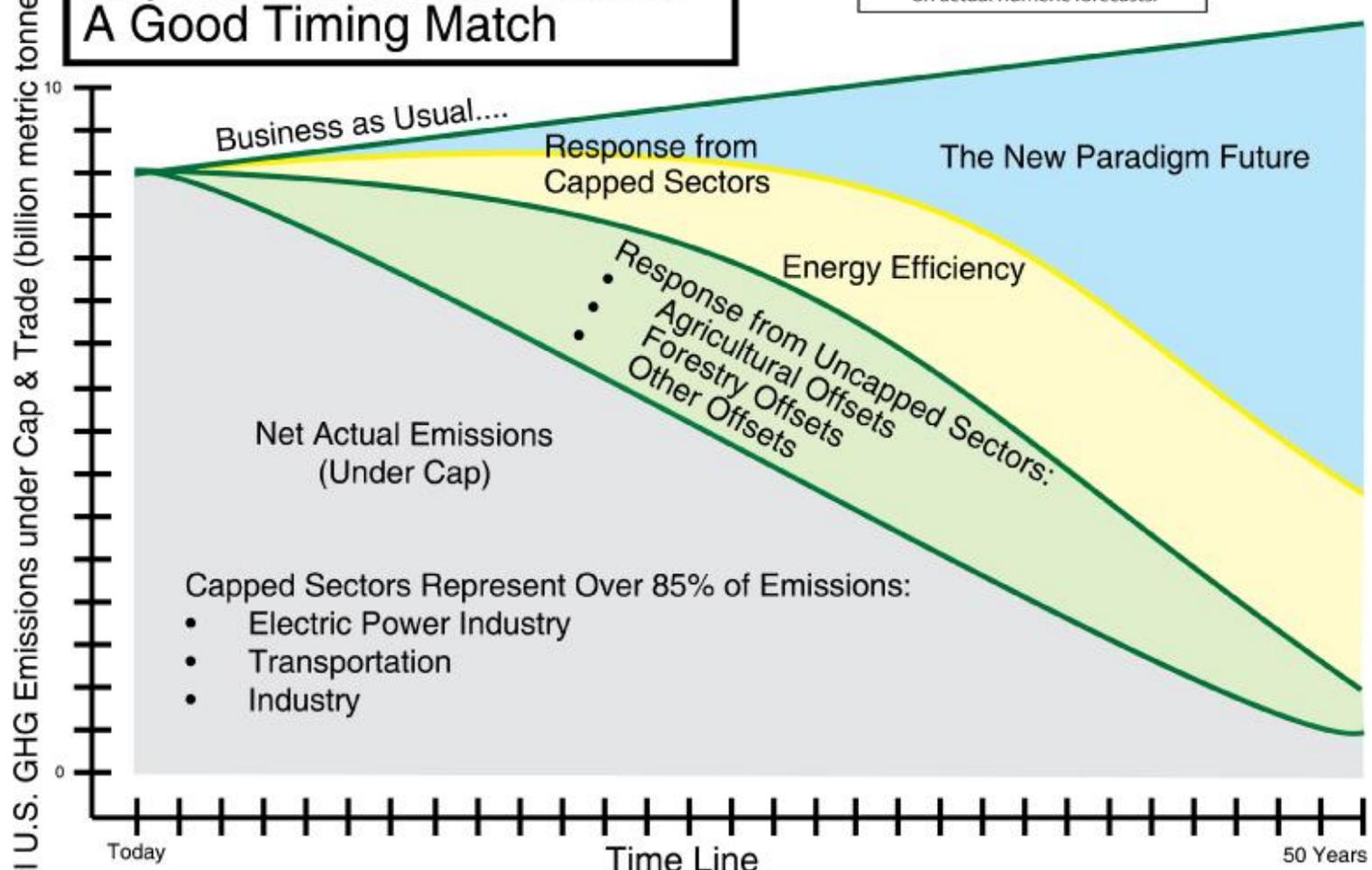
Offsets Are Critical for Cap & Trade

- Induces Change in Uncapped Sectors
- Reduces Program Costs
- Produces Large Volumes Earlier
- Fills the Timing Gap; Bridges to the New Energy Future



Cap-and-Trade with Offsets – A Good Timing Match

This is a visual portrait. It is NOT based on actual numeric forecasts.



Farm and forestry offset services – UNDER A PROPERLY DESIGNED PROGRAM - offer a great advantage to the capped sectors under cap-and-trade. Key benefits include: Immediate delivery of low-cost reductions to capped sectors; low-cost abatement opportunities that will reduce energy costs to American households; a growing volume of reductions as carbon prices rise over time in response to a declining cap; a saturation of the biological sequestration sources of emissions reductions at a time when the capped sectors have had ample opportunity to overcome capital turnover times, and the requisite technological solution development demanded by the fundamental paradigm shift to a low-carbon economy.



Reduction Opportunities

■ Sequestration

- Conservation tillage and crop rotations
- Cover crops
- Grazing practices
- Forestation, reforestation, forest management

■ Avoided emissions

- Biofuel production
- Thermal bio-power and bio-heat
- Renewable electrical power

■ Emission reductions

- Manure management
- Fertilizer practices



Critical Offset Program Issues - Waxman-Markey Perspectives

- 2 Billion Offsets
- Program Administration – USDA & EPA
- Early Action Provisions
- Quick Start Planning – Positives List
- Additionality and Baselines
- Crediting Period Renewals
- Allowance/Offset Fungibility
- Allowance Allocations



Critical Offset Program Issues - Waxman-Markey Perspectives

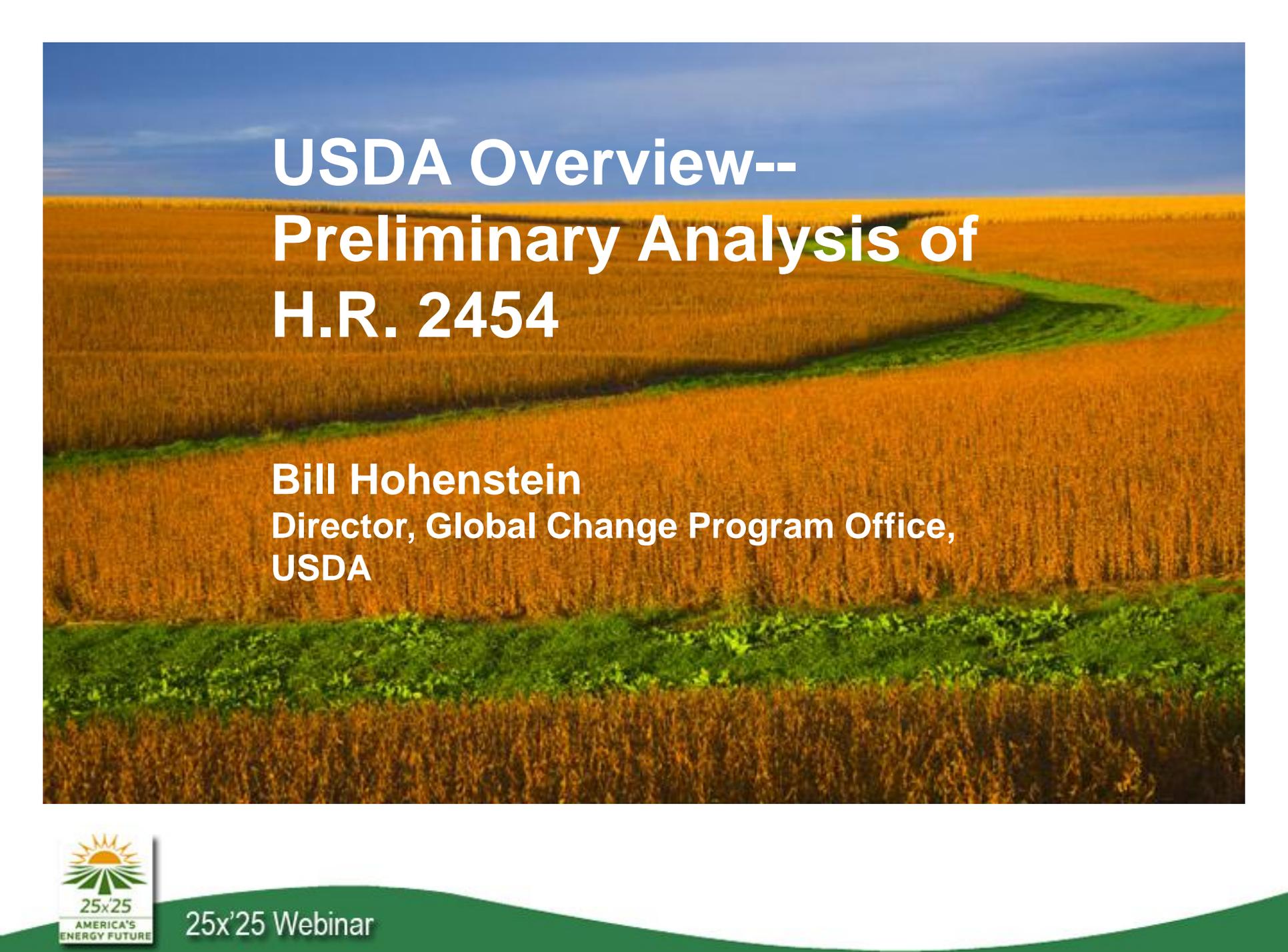
- Biological Sequestration Addressed
 - Permanence
 - Term Offset Credits
 - Risk Management
 - Reversals
- Domestic Offset Parity (Strategic Reserve)



Critical Offset Program Issues - Waxman-Markey Perspectives

- Indirect Land Use Change
- Renewable Biomass
 - Eligible Land Use Sources
 - Eligible Definitions





USDA Overview-- Preliminary Analysis of H.R. 2454

Bill Hohenstein
Director, Global Change Program Office,
USDA



Path Forward

Ernie Shea
25x'25 Project Coordinator



25x'25 Webinar

Senate Outlook

- Goal is to bring a combined energy and climate bill to the floor this fall.
- Energy & Natural resources Committee adopted a major energy bill in June
- Environment & Public Works Committee plans to release comprehensive climate bill on September 8th



Senate Outlook

- Majority Leader Reid has given other committees with jurisdiction until September 28th to complete work.
 - Agriculture
 - Commerce
 - Finance
 - Foreign Relations
- Much uncertainty over when and what type of legislation will emerge





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