

Direction of Federal Domestic Climate Change Efforts

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Obama Administration Goals

- Strong linkages between energy security, environmental protection, and economic growth
- Financial investments
 - American Recovery and Reinvestment Act of 2009
 - USEPA 2009 Budget, 2010 Budget
- Develop cap and trade program, request action From Congress
- EPA priorities: science, transparency, rule of law

USEPA Efforts to Address Climate Change

- Greenhouse Gas Reporting Rule - 3/09
 - *Reporting to start in 2011 for Calendar Year 2010*
- Proposed Endangerment finding – 4/09
 - *Expect Final Action Fall 2009*
- Proposed Renewable Fuels Standard - 5/09
 - *Comment period ends Sept. 25*
- Proposed GHG Standards for Light-Duty vehicles – 9/09
 - *EPA/DOT Joint Rulemaking*
- Proposed Geologic Sequestration of CO₂ Rule – 7/08
 - *Final Rule Late 2010/Early 2011*
- Waxman-Markey Bill
 - *House Waxman-Markey Bill: Adopted June 26*

Greenhouse Gas Mandatory Reporting Rule

- Finalized on Sept 22, 2009
- Applies to:
 - Suppliers of fossil fuels or industrial greenhouse gases
 - Manufacturers of vehicles and engines
 - Large-scale agricultural facilities
 - Other facilities that emit more than 25,000 mTCO₂-eq
- Encompasses ~85-90% of total US greenhouse gases
- Data verified by EPA, not third party

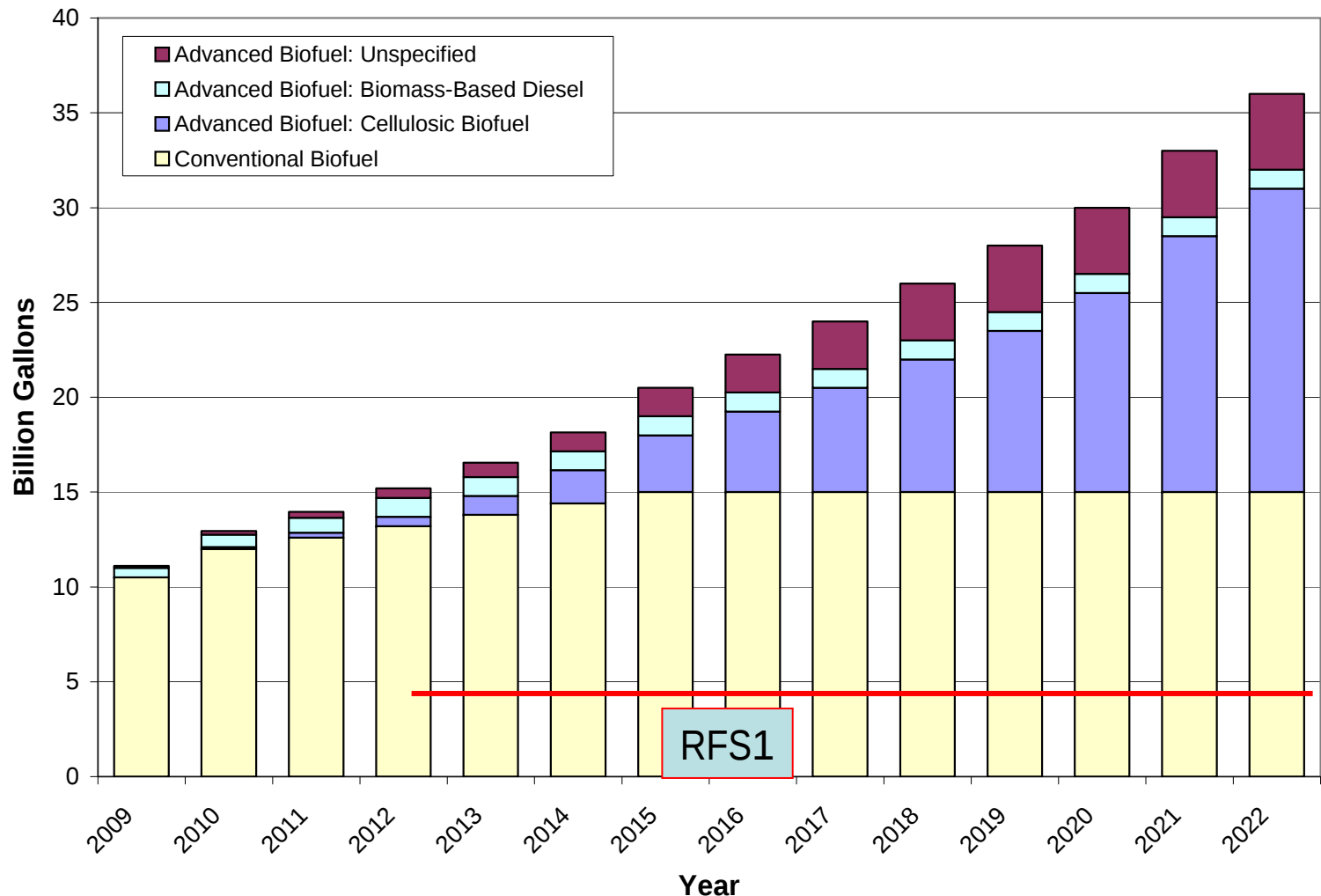
www.epa.gov/climatechange/emissions/ghgrulemaking.html

Proposed Endangerment Finding

- Proposed finding that
 - 6 GHGs threaten the public health and welfare &
 - 4 GHGs from new motor vehicles contribute to atmospheric concentrations
- “This finding confirms that greenhouse gas pollution is a serious problem now and for future generations. Fortunately, it follows President Obama’s call for a low carbon economy and strong leadership in Congress on clean energy and climate legislation,”
 - Lisa Jackson, EPA

www.epa.gov/climatechange/endangerment.html

Renewable Fuel Standard (RFS 2): Proposed May 5, 2009



* EPA proposes exercising a 10% adjustment allowance downward to as low as 40% for advanced biofuels

RFS 2: Mandated by the Energy Independence & Security Act of 2007

Lifecycle GHG Thresholds in EISA (reductions using 2005 baseline)	
Renewable fuel	20%
Advanced biofuel	50% *
Biomass-based diesel	50%
Cellulosic biofuel	60%

* EPA proposes exercising a 10% adjustment allowance downward to as low as 40% for advanced biofuels

Summary of EPA's Proposed Changes to the RFS 2

- Required GHG reductions over conventional gasoline apply only to new bio-fuel production facilities
- EPA proposes to lower the GHG reduction threshold for “advanced biofuels” to as low as 40%
- EPA estimates an annual GHG reduction of between 150-160 million tons of CO2 equivalent annually
- EPA, USDA and DOE have formed a “Biofuels Interagency Workgroup” to support the production of next generation biofuels
- Public comments accepted for 60 days.

Comparing Approaches: California and Nationally

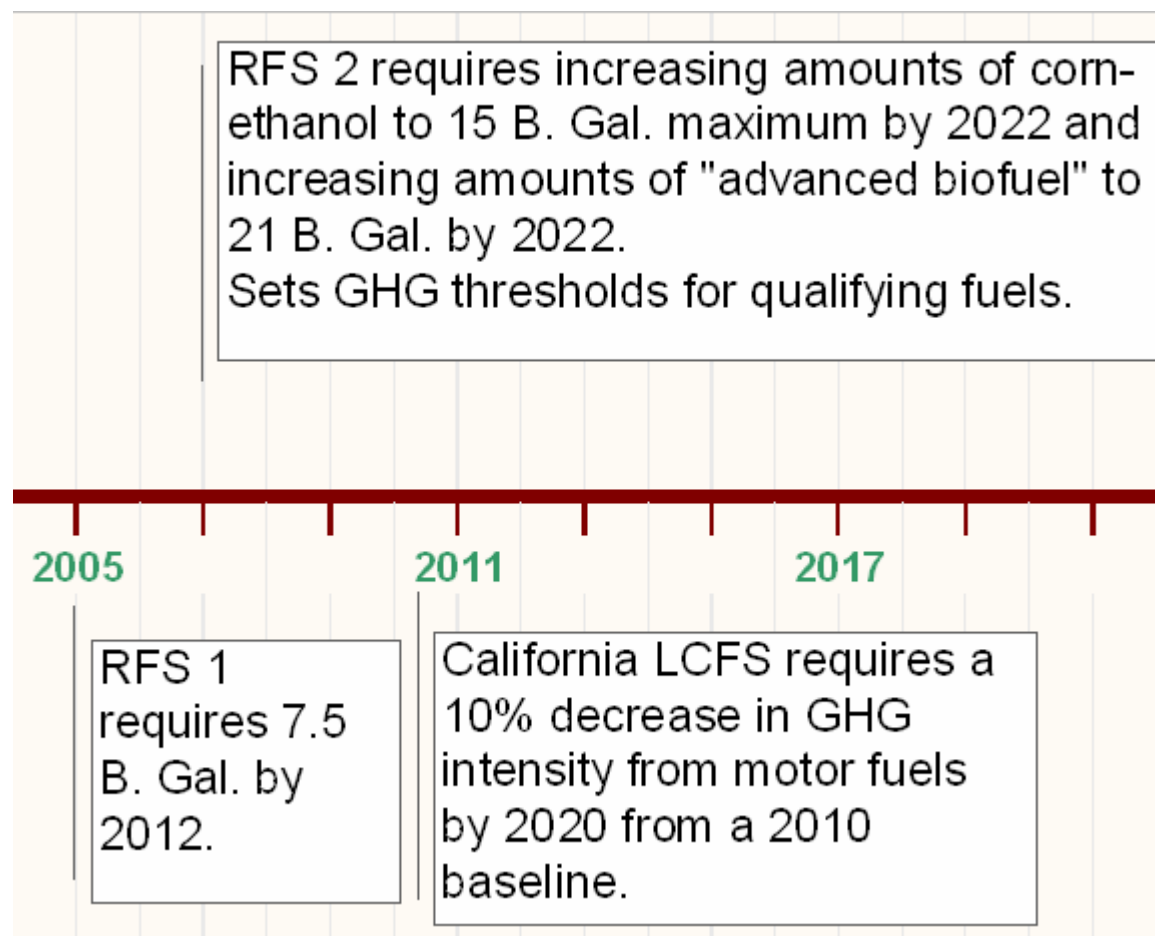
Low Carbon Fuel Std.

- California, other states considering it
- Fuel neutral
- 10% reduction in GHG intensity between 2011 and 2020
- Uses a 30 year timeframe and an annualized method for indirect GHG emissions

Renewable Fuel Std.

- Nationwide
- Biomass fuel focused
- 15 billion gal. corn-ethanol (2012-2022)
- 21 billion gal. “advanced” biofuel by 2022
- Proposes a 30 or 100 year timeframe and 0% or 2% discount rate for indirect GHG emissions
- Mandates GHG emission thresholds

Timeline of Fuel Standards



Proposed Greenhouse Gas Emissions Standards for Light-Duty Vehicles

- Proposed Sept 15 as a joint rulemaking between DOT and EPA
- Fuel Economy Standards to start in model year 2012, ramp up by 2016 to:

	Current CAFE Standards	Proposed 2012-2016 Goals
Passenger car	27.5 MPG	Average: 35.5 MPG
Light-duty Truck	23.1 MPG	

- Coupled with limits on tailpipe emissions
- Encompasses 60% US transportation emissions, which are 30% total US emissions – requires 5% reduction per year
- Technology shifts anticipated: downsized engines with turbochargers, advanced transmission, idle reduction, A/C improvements

www.epa.gov/otaq/climate/regulations.htm

Waxman-Markey Bill

Introduced	Voted on by House	Senate Action	Conference Committee	Considered by President	Bill Becomes Law
May 15, 2009	PASSED 219-212 June 26, 2009	?	?	?	?

↑
EPA Economic Analysis June 23, 2009

Five Titles:

Title I – Clean Energy

Title II- Energy Efficiency

Title III – Global Warming Pollution Reduction Program (Cap & Trade)

Title IV – Transition to a Clean Energy Economy

Title V – Forestry and Agricultural Offsets (NEW)

W-M Title I – Clean Energy

- Combined Energy Efficiency/Renewable Energy standard for power plants
 - 6% in 2012; ramping up to 20% by 2020
 - 1/4 to 2/5: maximum contribution from energy efficiency
- Incentives and permitting authority for CCS technology deployment
 - Amends Clean Air Act and Clean Water Act
- Performance standards for coal-fired power plants
- Provisions to promote electric vehicles
- State Energy and Environment Development Accounts to support state RE/EE efforts
- Other: smart grid, transmission planning

W-M Title II – Energy Efficiency

- Establish building codes achieving higher energy efficiency of 30% by 2010 and 50% by 2016; EPA building labeling
 - Buildings currently represent 38% US GHG Emissions
- EPA, in consultation with U.S. DOT to establish:
 - National transportation-related GHG emission reduction goals
 - Standardized models and methodologies for states and Metropolitan Planning Organizations to use in developing required transportation-related GHG emission reduction targets and
 - Data collection methods
 - Competitive grant program
- Improves the DOE's process for setting energy efficiency standards, proposed light standards

W-M Title III – Global Warming Pollution Reduction Program

- **Emission reduction targets:**
 - 3% below 2005 levels in 2012
 - 17% below 2005 levels in 2020
 - 42% below 2005 levels in 2030
 - 83% below 2005 levels in 2050
- Sources covered include 85% of U.S. GHG emissions: the industrial sector, the electricity generation sector, the transportation sector, and the residential and commercial sectors
 - NOT included – the agricultural or forestry sectors
- 85% of allowances distributed for free at program inception, fall off over time
- Offset Provisions

W-M Title IV – Transitioning to a Clean Energy Economy

- Provision for rebates and assistance to eligible facilities and workers
- Requires Presidential oversight of cap and trade to ensure international co-participation
- Tax credits and energy refunds to low-income households to compensate for reduced purchasing power
- Establishes adaptation programs
 - Requires assistance to natural resources to adapt to climate change
 - Establishes an International Climate Change Adaptation Program within USAID

Title V – Agriculture and Forestry-Related Offsets (Peterson Amendment)

Separate offset program run by USDA

Includes in legislation a list of agricultural and forestry practices that shall be eligible to generate offset credits

- Agricultural, grassland and rangeland sequestration management practices, ie. no-till agriculture
- Changes in carbon stock attributed to land use change and forestry activities, ie. Afforestation or avoided deforestation
- Manure management and disposal

Term offsets: Apply to agricultural & forestry projects that can only demonstrate short-term emission reductions (rather than permanent)

- Covered entities must replace the term offset credits prior to it's expiration. Can replace with: allowances, permanent offsets or additional term offset credits

Voluntary Partnerships Targeting Major CO₂ Sources

- AgSTAR
- EnergySTAR
- WasteWise
- Combined Heat & Power (CHP) Partnership
- Coal Combustion Products Partnership
- Landfill Methane Outreach Partnership
- Natural Gas STAR
- Green Power Partnership
- Green Vehicle Guide
- Voluntary Diesel Retrofit Program
- Clean School Bus USA
- Green Suppliers Network
- WaterWise



Looking Forward

- USEPA Actions
 - Proposed Endangerment Finding
 - Proposed GHG Mandatory Reporting Rule
 - Proposed Renewable Fuels Standard
 - GHG Standards for Light-Duty Vehicles
 - Other Potential Regulatory Actions e.g. Respond to Petitions
 - Voluntary Partnerships
 - Federal Funds to Support “Green” Projects
 - American Recovery and Reinvestment Act
 - Community Showcase Climate Grants
- Congressional Debate Continues
- UNFCCC Copenhagen Meeting 12/09

For More Information

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- Additional Region 9 contacts
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 - Climate Change Partnerships/Policy
 - Sarah Rizk rizk.sarah@epa.gov

Web sites

EPA Notice of Proposed Rulemaking: Changes to the Renewable Fuels Program

<http://www.epa.gov/otaq/renewablefuels/#regulations>

EPA Renewable Fuels Program and RFS Program

<http://epa.gov/otaq/renewablefuels/index.htm> and
<http://www.epa.gov/OMS/renewablefuels/>

CARB Low Carbon Fuels Program

<http://www.arb.ca.gov/fuels/lcfs/lcfs.htm>

Waxman-Markey Climate Change Bill – House Version

http://energycommerce.house.gov/Press_111/20090701/hr2454_house.pdf